



November 20, 2015

Dear Colleagues:

I am pleased to share the Virginia Tech Instructional Faculty Salary Equity Study, which was conducted during the 2014-15 academic year. My colleagues from the Office of Institutional Research and Effectiveness—Raifu Durodoye, Kristen Bush, and Jacob Pleitz—successfully completed the study this past summer. The Virginia Tech study was modeled on recent salary equity studies conducted by the University of Virginia and the University of California-Berkeley.

The primary predictors of salary were discipline, faculty rank, Eminent Scholar or University Distinguished Professor status, department head status, years in rank, and years at Virginia Tech. According to this methodology, gender and race/ethnicity did not have significant effects on salary at Virginia Tech.

The results are reassuring. Virginia Tech's focus on equity, which was a major theme of AdvanceVT, has guided administrators to provide salaries that are commensurate with discipline, rank, service, and major accomplishments. However, we must remain vigilant during annual faculty salary merit processes that we apply our standards fairly and equitably.

All studies have limitations and the current salary equity study is no exception to that rule. Future equity studies will benefit from inclusion of performance measures. We are working on an electronic faculty activity reporting system that has the potential to provide such performance measures.

The study also emphasized the limited number of faculty members from underrepresented minority groups and the limited number of women, especially at the rank of full professor or distinguished professor. The goals of InclusiveVT include enhancing the number of underrepresented faculty across the university and diversifying the university's leadership. The Provost's Office plans to partner with the colleges to make progress.

Virginia Tech is committed to competitive faculty salaries and we will continue to focus on enhancing faculty salaries while maintaining equity.

Sincerely,

Jack W. Finney
Vice Provost for Faculty Affairs

Attachment

VIRGINIA TECH INSTRUCTIONAL FACULTY SALARY EQUITY STUDY 2014-15

Raifu Durodoye, Kristen Bush, Jacob Pleitz
Institutional Research and Research

Executive Summary

The *Virginia Tech Instructional Faculty Salary Equity Study* was modeled after similar analyses conducted at like institutions.¹ In both of those cases, the linear regression analyses approximated a methodology recommended by NSF and developed by AAUP (*Paychecks: A Guide to Conducting Salary Equity Studies for Higher Education Faculty*, by Lois Haignere, AAUP, 2002). In the Virginia Tech study, the regression analyses were supplemented with a hierarchical analysis that incorporated nested information (a faculty member is in a department and that department is in a college). The intent behind this multi-pronged approach was to support a more holistic understanding of compensation patterns at Virginia Tech (VT).

One-thousand three-hundred fifty-four full-time tenured/tenure-track instructional faculty were included in the analysis. Instructional faculty on leave without pay, or not working in academic departments were not included in this population. Nine-month equivalent salary was the independent variable in the models. Gender, minority status, years at Virginia Tech, years in rank, rank, and department were the primary factors considered. From the analyses, we were able to conclude that as mediating factors are introduced into the models, the influence of gender, as well as race/ethnicity, on salary seems to dissipate to negligible levels. In addition, years at Virginia Tech, years in rank, rank, and college seem to be the best predictors of salary.

Introduction

Vice Provost Jack Finney asked the Office of Institutional Research and Effectiveness to conduct a salary equity study similar to the study conducted at the University of Virginia. The objective of the study is to determine if there is evidence that suggests that salaries are unduly influenced by race/ethnicity or sex.

Population

One-thousand three-hundred fifty-four full-time tenured/tenure-track instructional faculty were included in the analysis. Instructional faculty on leave without pay, or not working in academic departments were not included in this population. The study population included 964 (71.2%) men and 390 (28.8%) women. One-hundred three (7.6%) faculty members in the population were from underrepresented racial or ethnic groups. The University of Virginia study noted that “institutional history and pattern of faculty hiring has shaped the age and gender distribution of University faculty” (page 2). The same is true for Virginia Tech and should be considered when interpreting the results of this study.

Faculty members were classified into one of three academic rank categories (assistant professor, associate professor, professor). In the past, we have include a fourth rank category of “Eminent Scholar” to distinguish those professors with the Eminent Scholars status from other full professors. Within the population for *this* year’s study, there were some associate professors with Eminent Scholar status. Thus, we did not make a fourth rank category this year. The distribution of the faculty over the instructional ranks varied by gender. Just over 42% of female faculty members hold the rank of Associate Professor, compared to 34% of male faculty. Nearly 46% of male faculty members hold the rank of Full Professor, compared to 26% of female faculty members (Figure 1).

¹ The University of Virginia and University of California-Berkeley both recently conducted salary equity studies from which this study was loosely modeled.

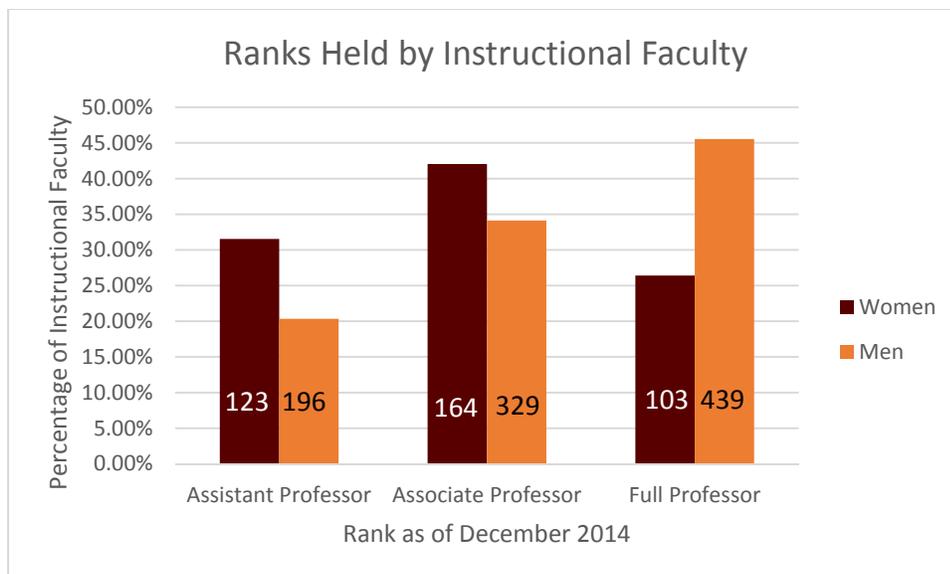


FIGURE 1. RANKS OF INSTRUCTIONAL FACULTY AS OF DECEMBER 2014

While the number of observations is considerably smaller, the instructional rank pattern of underrepresented minorities is somewhat similar to the pattern experienced by women. Underrepresented minorities are more likely to be associate professors than assistant or full professors (Figure 2). Sixty-nine (7.2%) of the male faculty members and 34 (8.7%) of female faculty members were underrepresented minorities.

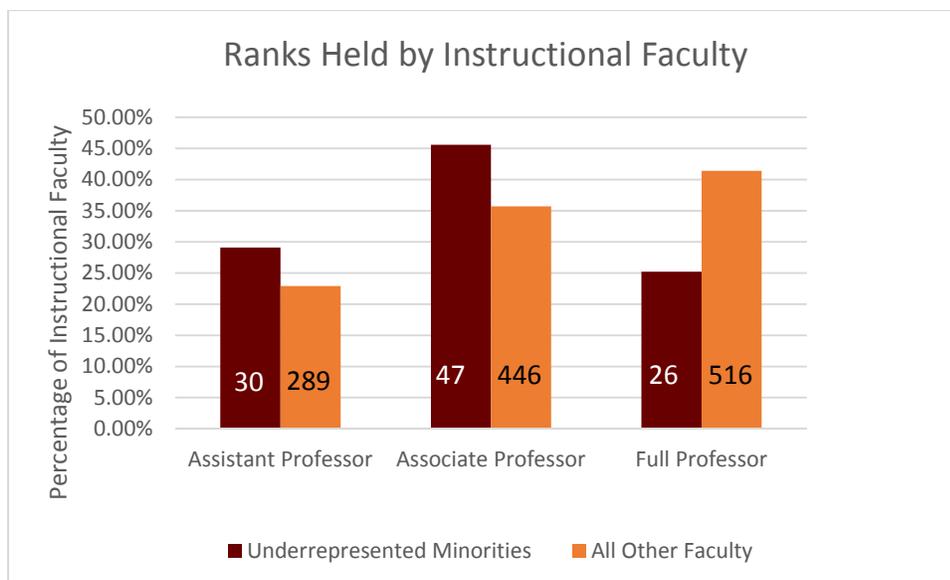


FIGURE 2. RANKS OF INSTRUCTIONAL FACULTY AS OF DECEMBER 2014 (UNDERREPRESENTED MINORITY STATUS)

Women in the study, on average had earned their highest degrees more recently than men in the study (Table 1). Therefore, it was not surprising that female faculty members had been at Virginia Tech for fewer years than their male counterparts. The average length of time since earning their highest degrees for female faculty members was 16 years. For the male faculty, the average was 22 years. Men in the study, on average, had been at Virginia Tech 17 years while women in the study had been at Virginia Tech, an average of 12 years.

Table 1. Descriptive measures for work experience

	Number	Average Time Since Earning Highest Degree (years)	Average Time at Virginia Tech (years)
Women	390	16.3	12.4
Men	964	21.6	16.7

As expected, at the assistant professor rank, male and female faculty members are similar in terms of the number of years spent in rank (Table 2). On average, male associate professors have been in rank 2.8 years longer than female associate professors. Similarly, time in rank for male full professors averages about 3.2 years more than time in rank for female full professors. Two white male associate professors had served in that rank for over 35 years each. Six white male full professors were promoted to that rank more than 35 years ago.

Table 2. Average, minimum, maximum time in rank by sex and rank

	Assistant Professor	Associate Professor	Full Professor
Women	3.1	7.3	10.2
minimum	0.8	0.8	0.8
maximum	7.8	28.8	30.9
Men	2.8	10.1	13.4
minimum	0.7	0.8	0.8
maximum	8.5	45.8	45.9

Consistent with historical trends, the College of Liberal Arts and Human Sciences employed the largest number of women faculty members with 108 female faculty members (Table 3). This comprised 28% of the female faculty population (Figure 3). The college employed practically the same number of male faculty members: 106. This comprised only 11% of the male faculty population (Figure 4). The College of Engineering employs roughly 28% of the male faculty (273 faculty members) while the 47 women in the college constitute only 12% of the female faculty population. The distribution of faculty from underrepresented racial and ethnic groups reflects that over 60% of the faculty members from underrepresented racial and ethnic groups are located within the College of Liberal Arts and Human Sciences (36%) and the College of Engineering (25%). Only 3 out of 94 faculty members from the College of Business, traditionally one of the highest paying colleges, are from underrepresented populations.

Table 3. Distribution of faculty population across colleges, by sex

	CALS	CAUS	PCoB	CoE	CLAHS	CoS	CVM	CNRE	Total
Male	141	67	67	273	151	162	50	53	964
Female	52	44	27	47	144	44	17	15	390
Total	193	111	94	320	295	206	67	68	1354
Underrepresented	12	9	3	26	37	9	4	3	103

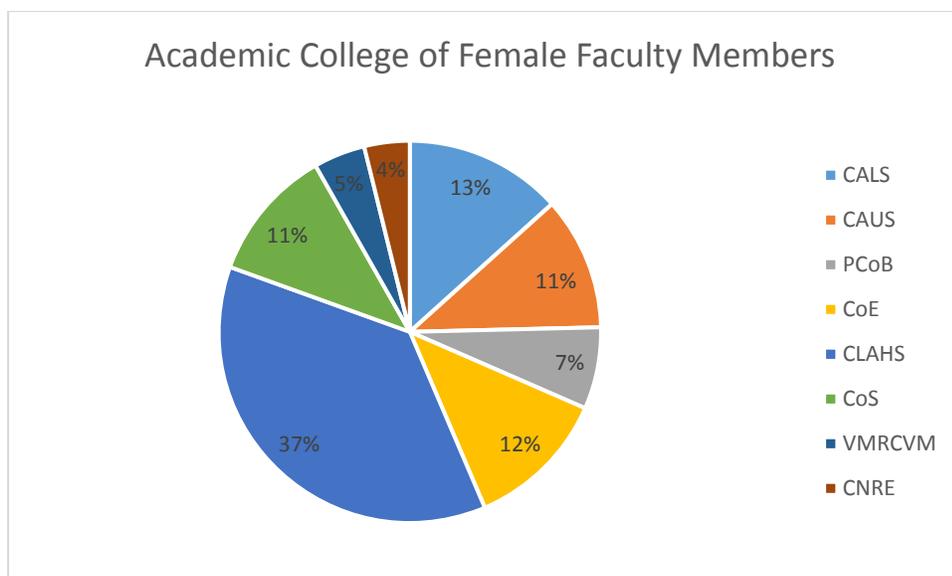


FIGURE 3. HOME COLLEGE OF FEMALE FACULTY IN STUDY POPULATION

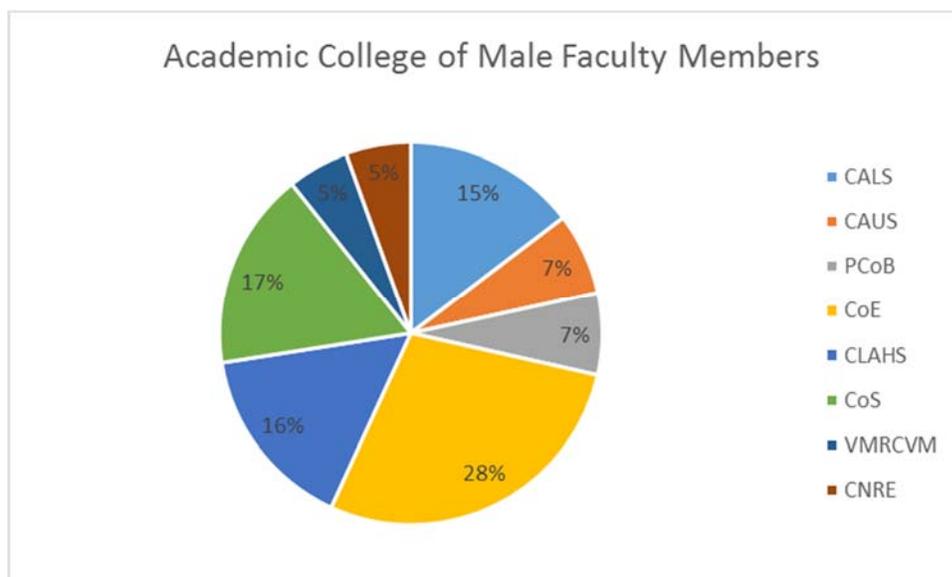


FIGURE 4. HOME COLLEGE OF MALE FACULTY IN STUDY POPULATION

Preliminary descriptive statistics indicate that the average nine-month equivalent salary for males within the population is approximately \$108,400, compared to roughly \$92,900 for females. Thus, without controlling for other factors, male salaries average 17% higher than female salaries. The average salary for underrepresented minorities (\$92,270.80) is 88% of the average salary for other faculty members (\$104,913.94).

Regression Analyses

Linear regression was used to analyze factors that potentially impact faculty salary. Sex, minority status, citizenship, years since earning highest degree, years at Virginia Tech, years in rank, rank, department, department head status, and University Distinguished Professor/Eminent Scholar status were the primary factors considered. From the analyses, we were able to conclude that as mediating factors are introduced into the models, the influence of gender, as well as race/ethnicity, on salary seems to dissipate to negligible levels.

Lastly, salary discrepancies in individual departments were analyzed to validate the descriptive and inferential statistics gathered. Departments with large differences between male and female average salaries, or disparities in underrepresented minority average salaries versus average salaries for all other faculty, were identified for this additional analysis. With respect to gender, disparities in salary usually can be attributed to rank differences. In many cases, women were more likely to be junior faculty while men were more concentrated at the senior level. In addition, the small numbers of women within some departments made it difficult to conduct meaningful within department analyses. However, this was not always the case and there were instances where salary discrepancies could not easily be explained through systematic patterns in the data.

Virginia Tech's faculty population includes only small numbers of faculty from underrepresented racial/ethnic minority groups. Roughly 40% of the departments analyzed in the study do not have underrepresented minority faculty. Additionally, a number of departments that have underrepresented minority faculty have only one. With such small numbers of underrepresented minority faculty, all departments with five or more underrepresented faculty members were analyzed. As with the gender studies, salary discrepancies within department most often appear to be dependent on rank differences, specific cases where this does not necessarily hold true exist and additional information is needed to fully understand the rationale for salary discrepancies.

It is important to note that the study is limited in some respects. The data analyzed do not fully reflect faculty productivity or merit. Years in rank only accounts for years while at Virginia Tech, failing to account for previous experience. Furthermore, analyzing average salaries can at times be misleading, especially when accounting for outliers that potentially skew distributions. Finally, the analysis does not account for other factors that may impact compensation such as research or job performance

A linear regression approach was used to develop a model of faculty salary. The dependent variable was nine-month equivalent salary and the independent variables included:

- Female, an indicator variable. For females, this variable has the value of 1. For all others, this variable has the value of 0.
- Under_minority, an indicator variable. For faculty who have identified as a member of a racial or ethnic group other than white or Asian, this variable has the value of 1. For all others, this variable has the value of 0.
- Citizen_resident, an indicator variable. For faculty who are citizens or resident aliens of the United States, this variable has the value of 1. For all others, this variable has the value of 0.
- Years_at_VT, a continuous variable. Calculated based on data in the Banner system.
- Years_since_high_degree, a continuous variable. Calculated based on data in the Banner system.
- Years_in_rank, a continuous variable. Calculated based on data in the Banner system.
- Associate_ind, an indicator variable. For faculty who are associate professors, the value of this variable is 1. For all others, this variable has the value of 0.
- Fullprof_ind, an indicator variable. For faculty who are full professors, the value of this variable is 1. For all others, this variable has the value of 0.
- Es_dp, an indicator variable. For faculty who hold Eminent Scholar of University Distinguished Professor status, this variable has the value of 1. For all others, this variable has the value of 0.
- Ddhi, an indicator variable. For faculty who are department heads, this variable has a value of 1. For all others, this variable has the value of 0.
- Indicator variables for all departments, except for Accounting and Information Systems
- Two interaction effects were included under_minority * years_at_VT and female * years_at_VT.

Significant effects

The model explained 76.4% of the variation in salaries as indicated by the adjusted R^2 . Most department indicator variables had significant effects. The few that did not were Finance and Business Law (p-value of 0.71), Management (p-value of 0.06) and Marketing (p-value of 0.85). All three of these departments are in the College of Business as is the reference department of Accounting and Information Systems. Neither interaction effect was significant.

Other variables that tested as significant at the 0.05 significance level were years_at_vt, years_in_rank, associate_ind, fullprof_ind, es_dp, and ddhi. For each of these $p < 0.0001$. For nearly all department indicator variables with significant effects, the regression coefficients were negative. This was not surprising given that the Accounting and Information Systems department has one of the highest salary averages in the university. The lone exception was the Office of the Dean of Business with a regression coefficient of 11978, suggesting that people in the business dean's office make roughly \$12,000 more in salary than faculty members in Accounting and Information Systems. Years_at_vt was significant and had a negative coefficient, suggesting the existence of some salary compression or retention of faculty who are "floating" until retirement. Other variables with significant effects had positive regression coefficients.

The regression coefficient for the fullprof_ind was 40,153 and the regression coefficient for associate_ind was 9991. So, it is reasonable to expect that all other significant factors being equal, a full professor would make a little over \$40,000 more than an assistant professor (again, all other significant factors being equal). This is particularly important to note given the differing distributions of men and women across instructional ranks as discussed earlier.² The regression coefficient for es_dp was 31,646. Thirteen percent (122) of the study's men hold Eminent Scholar/University Distinguished Professor status compared to 6% (23) of the study's women. The regression coefficient for ddhi was 24,399, suggesting that department heads earn about \$24,400 more than others in the department, all other significant factors being equal. Roughly 4% of the men (52) and 4% of the women (16) are department heads.

The regression coefficient for years_in_rank was also positive with each year of service worth about \$1000 in pay. Among the study population, men had been in their current ranks a little over 10 years and the women averaged a little under seven years in terms of time in rank.

A second regression analysis using the log transform of salary was also conducted and yielded similar results. The log transform was used to attempt to improve the normality of the data. Because the log-transform yielded similar results, additional testing was conducted with the linear model. Additional models with various interaction effects were considered but effects were not significant.

A hierarchical analysis was also performed to examine salary equity accounting for the natural nesting of the data. Specifically, this method incorporated information regarding a person being within a department, and a department being nested within a given college. After controlling for department, college, years at rank, rank, and Eminent Scholar status, the results showed no significant difference in gender pay. Additionally, results showed no significant difference in the pay of the different race/ethnicity categories. These results provided further validation of the linear regression results.

There are some individual departments that we need to look at further, but the numbers of faculty members are small and it is difficult to identify systemic bias in few observations.

² Just over 42% of female faculty members hold the rank of Associate Professor, compared to 34% of male faculty. Nearly 46% of male faculty members hold the rank of Full Professor, compared to 26% of female faculty members.

Conclusion

Gender does not have a significant effect on salary when discipline, rank, Eminent Scholar or University Distinguished Professor status, department head status, years in rank and years at Virginia Tech are also considered. The same is true for race/ethnicity.

While women comprise a relatively small proportion (28%) of the full-time instructional faculty population at Virginia Tech, this does reflect an increase over the proportions achieved in the early 2000's. Women are achieving parity in salary when compared with male faculty with similar characteristics. However, factors that did contribute significantly to explaining differences in salary were attained more often for men than for women. Holding the rank of full professor and holding the Eminent Scholar/University Distinguished Professor status were two factors that significantly affected salary, but were achieved by a greater percentage of men than women. Part of this is reflective of the historical hiring patterns at the university, specifically, the predominance of men in the faculty thirty to forty years ago.

Appendix

VT Salary Equity OLS Results

Model: MODEL1
Dependent Variable: salary

Number of Observations Read	1354
Number of Observations Used	1354

Analysis of Variance					
Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	83	1.288375E12	15522589923	53.78	<.0001
Error	1270	3.665477E11	288620266		
Corrected Total	1353	1.654923E12			

Root MSE	16989	R-Square	0.7785
Dependent Mean	103952	Adj R-Sq	0.7640
Coeff Var	16.34293		

Parameter Estimates								
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Heteroscedasticity Consistent		
						Standard Error	t Value	Pr > t
Intercept	1	138302	4467.34696	30.96	<.0001	6238.61778	22.17	<.0001
female	1	-444.95033	1769.71253	-0.25	0.8015	1410.65560	-0.32	0.7525
under_minority	1	-.2335.48415	3061.29817	-0.76	0.4457	2166.55646	-1.08	0.2813
citizen_resident	1	-.719.57926	2495.02674	-0.29	0.7731	1565.30223	-0.46	0.6458
years_at_vt	1	-.1143.38430	108.01580	-10.59	<.0001	139.37039	-8.20	<.0001
years_since_high_degree	1	247.98441	100.67743	2.46	0.0139	128.18249	1.93	0.0533
years_in_rank	1	1154.22305	142.47219	8.10	<.0001	195.58423	5.90	<.0001
associate_ind	1	9991.12951	1575.11530	6.34	<.0001	1295.51403	7.71	<.0001
fullprof_ind	1	40153	2296.59252	17.48	<.0001	2573.70983	15.60	<.0001
es_dp	1	31646	1756.33609	18.02	<.0001	3066.89909	10.32	<.0001
ddhi	1	24399	2229.44547	10.94	<.0001	2854.36406	8.55	<.0001
ARI	1	-17665	17438	-1.01	0.3112	6068.12832	-2.91	0.0037

Males are the reference gender

All other faculty are the reference for underrepresented minorities

Assistant professor is the reference rank

ACIS is the reference department

es_dp = Eminent Scholar/University Distinguished Professor Indicator

ddhi = Department Head Indicator

under_vtenure_int = Underrepresented Minority - Years at VT Interaction Term

gender_vtenure_int = Gender - Years at VT Interaction Term

Least Squares / Level - Level Analysis

Results are comparable to the Log - Level Analysis

VT Salary Equity OLS Results

Model: MODEL1
Dependent Variable: salary

Parameter Estimates								
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Heteroscedasticity Consistent		
						Standard Error	t Value	Pr > t
AOE	1	-.45950	5183.89178	-8.86	<.0001	6670.29746	-8.89	<.0001
AGLCE	1	-.62940	7445.97657	-8.45	<.0001	7416.09834	-8.49	<.0001
AGECON	1	-.53719	5352.80613	-10.04	<.0001	7338.01516	-7.32	<.0001
APS	1	-.60079	5137.57225	-11.69	<.0001	6546.83107	-9.18	<.0001
AHRM	1	-.70351	6130.41926	-11.48	<.0001	7414.05606	-9.49	<.0001
ARCH	1	-.65688	4480.97560	-14.66	<.0001	6258.88468	-10.50	<.0001
ART	1	-.68735	5706.93606	-12.04	<.0001	6549.65196	-10.49	<.0001
BIOCHEM	1	-.60157	5642.04145	-10.66	<.0001	8042.19046	-7.48	<.0001
BIOSCI	1	-.62893	4679.19636	-13.44	<.0001	6374.88714	-9.87	<.0001
BSE	1	-.54167	5613.36795	-9.65	<.0001	6515.69172	-8.31	<.0001
BMEM	1	-.39838	4857.69055	-8.20	<.0001	7494.12779	-5.32	<.0001
BMSCI	1	-.51879	5011.92138	-10.35	<.0001	7288.83954	-7.12	<.0001
BC	1	-.55157	7430.95812	-7.42	<.0001	13559	-4.07	<.0001
BIT	1	-.21493	5328.13727	-4.03	<.0001	8386.81959	-2.56	0.0105
CALSR	1	-.56782	17585	-3.23	0.0013	6710.46776	-8.46	<.0001
CenGer	1	-.59785	12682	-4.71	<.0001	10319	-5.79	<.0001
CHEMENG	1	-.40079	6049.09657	-6.63	<.0001	7151.69309	-5.60	<.0001
CHEM	1	-.52400	5039.16583	-10.40	<.0001	7039.18645	-7.44	<.0001
CENG	1	-.49598	4570.94882	-10.85	<.0001	6258.74708	-7.92	<.0001
COMM	1	-.72773	6050.95921	-12.03	<.0001	6302.83456	-11.55	<.0001
CS	1	-.43578	4730.65619	-9.21	<.0001	6347.74486	-6.87	<.0001
CSES	1	-.72472	5147.48236	-14.08	<.0001	6466.89015	-11.21	<.0001
CenInfoTech	1	-.46727	17515	-2.67	0.0077	6340.34143	-7.37	<.0001
DS	1	-.70050	6801.56728	-10.30	<.0001	8630.09378	-8.12	<.0001
DeanARCH	1	-.54147	10634	-5.09	<.0001	9489.48789	-5.71	<.0001
DeanENG	1	-.28470	17456	-1.63	0.1032	6169.46913	-4.61	<.0001

Males are the reference gender

All other faculty are the reference for underrepresented minorities

Assistant professor is the reference rank

ACIS is the reference department

es_dp = Eminent Scholar/University Distinguished Professor Indicator

ddhi = Department Head Indicator

under_vttenure_int = Underrepresented Minority - Years at VT Interaction Term

gender_vttenure_int = Gender - Years at VT Interaction Term

Least Squares / Level - Level Analysis

Results are comparable to the Log - Level Analysis

VT Salary Equity OLS Results

Model: MODEL1
Dependent Variable: salary

Parameter Estimates								
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Heteroscedasticity Consistent		
						Standard Error	t Value	Pr > t
DeanBUS	1	11978	17447	0.69	0.4925	6043.99116	1.98	0.0477
RLC	1	-.70153	6229.31639	-11.26	<.0001	6680.05747	-10.50	<.0001
ENGEDU	1	-.55588	6412.50946	-8.67	<.0001	7357.44885	-7.56	<.0001
ECON	1	-.46051	6222.11041	-7.40	<.0001	7176.04222	-6.42	<.0001
ECE	1	-.46736	4356.23082	-10.73	<.0001	6497.81209	-7.19	<.0001
ENG	1	-.65574	4761.13281	-13.77	<.0001	6602.34279	-9.93	<.0001
ENT	1	-.67616	6078.00056	-11.12	<.0001	6992.64828	-9.67	<.0001
EMA	1	-.57452	12625	-4.55	<.0001	24823	-2.31	0.0208
FIBL	1	4867.45120	5659.88523	0.86	0.3900	13058	0.37	0.7094
FWC	1	-.60509	5820.13706	-10.40	<.0001	6695.49673	-9.04	<.0001
FST	1	-.57678	6380.73301	-9.04	<.0001	6248.91644	-9.23	<.0001
FREC	1	-.66924	4983.02778	-13.43	<.0001	7020.77462	-9.53	<.0001
FORLANG	1	-.77887	5102.95755	-15.26	<.0001	6208.81716	-12.54	<.0001
GEOGR	1	-.64529	6580.63330	-9.81	<.0001	6495.98557	-9.93	<.0001
GEOSCI	1	-.52009	5296.98138	-9.82	<.0001	8494.57638	-6.12	<.0001
HIST	1	-.72233	5061.44628	-14.27	<.0001	6369.70917	-11.34	<.0001
HORT	1	-.69319	6379.52160	-10.87	<.0001	6895.21933	-10.05	<.0001
HT	1	-.36179	6583.07074	-5.50	<.0001	6689.13925	-5.41	<.0001
HD	1	-.66085	5428.80022	-12.17	<.0001	6278.24849	-10.53	<.0001
HNFE	1	-.52580	5330.49365	-9.86	<.0001	6500.43874	-8.09	<.0001
ISE	1	-.50039	5074.96519	-9.86	<.0001	6210.27227	-8.06	<.0001
LACL	1	-.51555	6083.75452	-8.47	<.0001	6632.00082	-7.77	<.0001
MGT	1	-.14129	5489.85064	-2.57	0.0102	7636.76261	-1.85	0.0645
MARK	1	-.2099.09093	7087.90991	-0.30	0.7672	11031	-0.19	0.8491
MSENG	1	-.50639	5883.45143	-8.61	<.0001	6545.59426	-7.74	<.0001
MATH	1	-.61499	4708.18976	-13.06	<.0001	6658.99308	-9.24	<.0001

Males are the reference gender

All other faculty are the reference for underrepresented minorities

Assistant professor is the reference rank

ACIS is the reference department

es_dp = Eminent Scholar/University Distinguished Professor Indicator

ddhi = Department Head Indicator

under_vttenure_int = Underrepresented Minority - Years at VT Interaction Term

gender_vttenure_int = Gender - Years at VT Interaction Term

Least Squares / Level - Level Analysis

Results are comparable to the Log - Level Analysis

VT Salary Equity OLS Results

Model: MODEL1
 Dependent Variable: salary

Parameter Estimates								
Variable	DF	Parameter Estimate	Standard Error	t Value	Pr > t	Heteroscedasticity Consistent		
						Standard Error	t Value	Pr > t
ME	1	-.44163	4480.88778	-9.86	<.0001	6330.51994	-6.98	<.0001
MME	1	-.38661	7080.56120	-5.46	<.0001	8269.30953	-4.68	<.0001
MLSC	1	-.45445	12700	-3.58	0.0004	6303.96256	-7.21	<.0001
PHIL	1	-.69837	7474.41412	-9.34	<.0001	8277.04411	-8.44	<.0001
PHY	1	-.64289	5001.62612	-12.85	<.0001	7350.61569	-8.75	<.0001
PPPW	1	-.64882	5613.70422	-11.56	<.0001	7287.32445	-8.90	<.0001
PS	1	-.71379	5243.29162	-13.61	<.0001	7038.95214	-10.14	<.0001
POP	1	-.46207	7492.56083	-6.17	<.0001	7709.25737	-5.99	<.0001
PSY	1	-.59019	5156.44620	-11.45	<.0001	7226.44825	-8.17	<.0001
SchEDU	1	-.67352	4562.29008	-14.76	<.0001	6355.16310	-10.60	<.0001
SchPA	1	-.72627	4876.24603	-14.89	<.0001	6439.10666	-11.28	<.0001
SchIA	1	-.63101	4854.35686	-13.00	<.0001	7100.81097	-8.89	<.0001
STS	1	-.70320	6378.21993	-11.03	<.0001	6320.92697	-11.12	<.0001
SACS	1	-.54526	5529.05577	-9.86	<.0001	7258.54567	-7.51	<.0001
SOC	1	-.67744	5079.67918	-13.34	<.0001	6529.65813	-10.37	<.0001
STAT	1	-.51557	5630.82413	-9.16	<.0001	6571.91198	-7.84	<.0001
SBMT	1	-.68526	5930.95853	-11.55	<.0001	7246.29386	-9.46	<.0001
WRRC	1	-.55486	12637	-4.39	<.0001	7466.05581	-7.43	<.0001
under_vtenure_int	1	121.40013	198.30916	0.61	0.5405	173.41186	0.70	0.4840
gender_vtenure_int	1	-.69.99469	105.06475	-0.67	0.5054	105.91915	-0.66	0.5088

Males are the reference gender

All other faculty are the reference for underrepresented minorities

Assistant professor is the reference rank

ACIS is the reference department

es_dp = Eminent Scholar/University Distinguished Professor Indicator

ddhi = Department Head Indicator

under_vtenure_int = Underrepresented Minority - Years at VT Interaction Term

gender_vtenure_int = Gender - Years at VT Interaction Term

Least Squares / Level - Level Analysis

Results are comparable to the Log - Level Analysis