

# Update

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## Full-Time Non-Tenure-Track Faculty: Gender Differences

### Introduction

Over the past two decades a significant change has been taking place in the structure and composition of full-time faculty on American college and university campuses. Between 1975 and 1993 the size of the full-time contingent of faculty increased from 435,000 to 545,700.<sup>1</sup> Within this 25 percent increase, the proportion of tenured faculty decreased from 52.3 to 51.7 percent, untenured but tenure track decreased from 29.1 to 20.8 percent, and those classified as non-tenure-track increased from 18.6 to 27.3 percent. Within these overall changes in the size and tenure composition of the full-time professoriate important changes in the gender mix of the faculty also have taken place.

Males experienced an overall increase of 11 percent with a growth of 14.5 percent in tenured appointments, a decrease of 24.3 percent in tenure track slots, and an increase of 54 percent in non-tenure-track appointments. During the same period, the proportion of women faculty increased by nearly 70 percent including growth of 67 percent in tenured positions, 21.6 percent in tenure track appointment, and 142 percent in non-tenure-track positions (Table 1).

In the Fall Semester 1975, women

<sup>1</sup> Ernst Benjamin, "Changing Distribution of Faculty By Tenure Status and Gender," Memorandum to AAUP Executive Committee, January 29, 1997.

Table 1

### CHANGE IN FACULTY DISTRIBUTION BY GENDER AND TENURE STATUS, Fall 1975–Fall 1993

	1975	1993	Change*
Tenured Males	81.9%	75.6%	+14.5%
Tenured Females	18.1%	24.4%	+67.0%
Tenure-track Males	69.4%	58.6%	-24.3%
Tenure-track Females	30.6%	41.4%	+21.6%
Non-tenure-track Males	66.2%	55.5%	+54.0%
Non-tenure-track Females	33.8%	44.5%	+142%

\* Based on change in actual numbers of faculty in each category from 1975 to 1993  
Source: Benjamin, AAUP, 1997

made up 24.7 percent of full-time faculty while in the Fall Semester 1993 they were 33.4 percent of the total. Thirty-eight percent (38.4) of the female faculty were tenured in 1975 compared to 37.8 percent in 1993. Thirty-six percent of females were untenured but tenure-track in 1975 compared to 25.8 percent in 1993. Among all full-time female faculty members in Fall 1975, 25.5 percent were non-tenure-track in comparison with 36.4 percent non-tenure-track in Fall 1993.

Women have made a significant increase in their representation in full-time faculty appointments, but the area with the most profound increase has been in non-tenure eligible positions.

### Where Are Full-Time NTT Faculty Employed?

In Fall 1992 there were 128,456 full-

time non-tenure-track faculty with some instructional responsibilities employed in American colleges and universities, of whom 53.6 percent were male and 46.4 percent were female. The distribution of NTT faculty varies by type of institution (See Table 2). Among full-time NTT female faculty the larger percentages were employed at public two-year in-

The remainder of this report uses data from the 1993 National Study of Postsecondary Faculty (NSOPF-93) to compare and contrast male and female faculty employed in full-time non-tenure-track faculty positions on selected demographic, employment, and attitudinal variables. This analysis includes all full-time non-tenure-track faculty who had some instructional responsibility. The data therefore includes administrators with non-tenure-track faculty rank who teach at least one course. Not included are graduate students who served as teaching assistants.

stitutions (31.5 percent) and research universities (21.7 percent). Among full-time NTT male faculty the largest percentages were employed at public two-year colleges (25.8 percent) and research universities (21.5 percent).

When NTT faculty within specific types of institutions are analyzed by gender, female NTT faculty are in the majority at comprehensive (52.0 percent) and public two-year institutions (51.4 percent). Male faculty are in the majority at research (53.4 percent), doctoral (58.1 percent), liberal arts (56.6 percent), and Other<sup>2</sup> institutions (72.1 percent).

### NTT Faculty by Program Area

Not surprisingly, the gender distribution of full-time NTT faculty differs across academic fields/program areas. NTT females are most likely to be employed in the health sciences or the humanities. NTT males are most likely to be employed in the natural sciences or the health sciences.

Within program areas (Table 3), females are in the majority in education (56.2 percent), fine arts (52.9 percent), health sciences (53.2 percent), and humanities (54.7 percent). Although women NTT faculty are in the majority in four broad academic areas, in no case are they as large a percentage as are males in fields like engineering (93.5%), agriculture/home economics (90.0%), and natural sciences (79.1%).

### Academic Preparation

The academic preparation of males and females differs somewhat by highest level of degree attainment. Among all full-time male NTT faculty, approximately 33 percent hold the doctorate as their highest degree. Among all full-time female NTT faculty, slightly more than 21 percent hold the doctorate. A similar pattern holds true for professional degrees

<sup>2</sup>Public liberal arts, private two-year, and religious and specialized institutions, excluding medical.

**Table 2**

### WITHIN GENDER DISTRIBUTION OF FULL-TIME NON-TENURE-TRACK FACULTY ACROSS TYPES OF INSTITUTIONS, Fall 1992

Type of Institution	PERCENTAGE	
	Female	Male
Research	21.7%	21.5%
Doctoral	13.2%	15.9%
Comprehensive	19.9%	15.9%
Baccalaureate	8.8%	10.0%
Public Two-Year	31.5%	25.8%
Other	4.9%	10.9%
<b>Total</b>	<b>100.0%</b>	<b>100%</b>

Source: NSOPF-93

where 16 percent of male NTT faculty and 9.5 percent of female NTT faculty hold such a degree. A larger proportion of female NTT faculty (57.9 percent) hold the masters as their highest degree than do males (39.3 percent).

### Age

Male and female NTT faculty do not differ greatly by age with mean ages of approximately 46 and 44 respectively. This small difference in mean age is constant across all types of institutions. When the mean age is analyzed by program area males continue to have a higher mean age in all fields except health sciences and humanities. The only substantial difference was in business where males had an average age of 49.28 while females had an average age of 40.84.

### Years in Current Position

Average number of years in the current position did not differ substantially by gender, with means of approximately eight years for males and seven years for females. On average, males had a higher number of years in current position regardless of type of institution of employment with means ranging from 10 years at two-year institutions to 6.5 years at comprehensive institutions. For females those averages ranged from a high of nearly eight years at two-year col-

leges to a low of 5.3 years at comprehensive institutions. The difference in males' and females' years in current position was most pronounced at two-year colleges where males had an average of 10.12 years and females had an average of 7.82 years. When analyzed by program areas, females have slightly higher mean years of employment in their current position than males in engineering (6.96 vs 5.82) and humanities (6.60 vs 6.54). Males had more years in the current position in the remaining program areas, especially in agriculture/home economics (10.62 vs 3.22).

### Workload

There is no major difference in the average total number of classes, or of credit classes, taught per week by male and female NTT faculty. Female faculty tend to have slightly higher average total class and credit class teaching loads than males at research and doctoral institutions and slightly lower loads at comprehensive, baccalaureate, and two-year institutions. Females tend to carry slightly higher teaching loads than males in agriculture/home economics, education, engineering, and health sciences, while the teaching loads of males are higher in business, fine arts, humanities, natural sciences, and social sciences. Females have, on average, a larger number of credit classes than males in education, engineering, health sciences, and natural sciences.



**Table 3**

**PERCENT DISTRIBUTION OF FULL-TIME FEMALE AND MALE NON-TENURE-TRACK FACULTY BY PROGRAM AREAS, 1992-93**

Program Area	PERCENTAGE	
	Female	Male
Agriculture/Home Economics	10.0%	90.0%
Business	30.8%	69.2%
Education	56.2%	43.8%
Engineering	6.5%	93.5%
Fine Arts	52.9%	47.1%
Health Sciences	53.2%	46.8%
Humanities	54.7%	45.3%
Natural Sciences	20.9%	79.1%
Social Sciences	39.9%	60.1%
Other	41.5%	58.5%

Source: NSOPF-93

**Table 4**

**AVERAGE SALARIES OF FULL-TIME MALE AND FEMALE NON-TENURE-TRACK FACULTY BY TYPE OF INSTITUTION, 1992-93**

Type of Institution	Male	Female
Research	\$48,847	\$37,840
Doctoral	54,706	37,922
Comprehensive	33,582	30,495
Baccalaureate	36,330	28,266
Public Two-Year	34,475	31,147
All	41,113	33,195

Source: NSOPF-93

Males report spending slightly more hours per week on paid activities (39.3) at their institution than do females (37.8). Both males and females report spending approximately an additional 4.5 hours per week on unpaid activities at the institution.

**Scholarly Productivity**

Scholarly productivity measures are consistently slightly higher for male than female NTT faculty. For example, across their careers male NTT faculty have higher rates of productivity for refereed articles, books and chapters, and book reviews. The average number of career publications for males at 15.7 is more than twice the number for females at 6.7.

An analysis of scholarly productivity for the two year period immediately prior to the survey found that total productivity for this period was 3.2 for males and 1.9 for females. Males were more heavily represented in research and doctoral institutions and in the disciplines of engineering and natural sciences which may have higher expectations for scholarly productivity. While males were more productive than females at research institutions (6.40 vs 3.12), doctoral institutions (4.00 vs 2.24), and baccalaureate institutions (2.79 vs 1.67), total productivity rates were similar for males and females at comprehensive institutions and two-year institutions. Females were slightly more productive than males for the two year period only at

comprehensive institutions. Last two years total productivity was higher for males than females in agriculture/home economics (18.58 vs 4.70), health sciences (6.51 vs 3.93), and natural sciences (5.25 vs 3.67). Females exceeded males in total average productivity across program areas for the two years only in fine arts (1.52 vs 1.34).

**Compensation**

Male and female full-time NTT faculty differ substantially in basic salary. As shown in Table 4, males had a mean academic year salary of \$41,113 and females had a mean academic year salary of \$33,195. Males at doctoral institutions had the highest average salaries and also the greatest differential in average salary when compared to females. Males also had higher average salaries than females in the same program fields. The largest differences were in agriculture/home economics where the differential was \$47,335 vs \$28,667, and health sciences with a differential of \$64,648 vs \$44,172. Only in the social sciences and fine arts did females' salaries approach those of males, and even there the difference was more than \$3,000.

**Job Satisfaction**

In evaluating the job satisfaction of the NTT faculty, two perspectives are provided. The first relates to what may be termed instructional aspects of their job, while the second deals with broader topics such as benefits, salary, security, etc.

The NTT faculty report being relatively satisfied with the instructionally related aspects of their job with a rating of approximately 3.0 on a four point scale for nearly each of the assessed areas (Table 5). Males provide a higher satisfaction rating in all areas but one, quality of undergraduate students.

Both male and female full-time non-tenure-track faculty report being satisfied with their overall jobs (mean=3.12). The areas of least satis-



faction are: 1) time to keep current in their field (M=2.43); 2) opportunity for advancement (M=2.44); and 3) salary (M=2.47). Although there are no major differences between male and female faculty on their satisfaction ratings of the variables, female faculty means were slightly lower than the means of males in all areas except benefits and spousal employment opportunity. This consistent pattern of slightly lower satisfaction for females on various aspects of their jobs is noteworthy. It is also interesting to note that the overall job satisfaction rating for both males and females is higher than any of the individual variables assessed.

### Summary and Conclusions

As the size of the faculty has increased in the last 18 years, the proportion of those faculty who are not eligible for tenure has gone up from 18.6 percent to 27.3 percent. During this same period the percentage of women faculty has increased overall, but by far the most significant increase has been in non-tenure-track positions. Non-tenure-track women are still in the minority at all types of colleges and universities except two-

**Table 5**

### MEAN INSTRUCTIONAL DUTIES SATISFACTION RATINGS BY FULL-TIME NON-TENURE-TRACK FACULTY BY GENDER, Fall 1992

Satisfaction With:	Mean Satisfaction Rating*	
	Male	Female
Authority to make decisions about content and methods for the courses I teach	3.59	3.58
Authority to make decisions about non-instructional aspects of my job	2.98	2.95
Authority to make decisions about what courses I teach	3.19	3.14
Time available to work with students as advisor, mentor, etc.	3.08	2.94
Quality of undergraduate students I teach	2.85	2.97
Quality of graduate students I teach	3.17	3.17

\* Based on a scale of 1 (Very Dissatisfied) to 4 (Very Satisfied).  
Source: NSOPF-93

year and masters level institutions where they make up 51.4 percent and 52.0 percent of the total faculty respectively. Women NTT faculty are most likely to be employed in traditionally female fields such as education and health sciences (not medicine), to make less money than men, and to publish less frequently. Fewer NTT women hold doctorates or professional degrees; more than half (57.9

percent) report the masters as their highest degree. Women and men continue to have different experiences in higher education that appear to be closely related to their gender. Academic leaders and policy makers should monitor these differences to insure that all faculty, including those in non-tenure-track positions are treated equitably and given the support necessary for professional growth.



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