# Study III. Women in Modern Language Departments, 1972–73: A Report by the Commission on the Status of Women in the Profession

Study III, undertaken in 1973–74 by the Commission on the Status of Women in the Profession, is the most far-reaching of the Commission's three studies. Unlike Study I and Study II, which were based on responses from selected department chairpersons to a questionnaire prepared by the Commission, Study III is based on responses from individuals in English and foreign language departments.1 These individuals are in institutions selected by the American Council on Education (ACE) for its study of teaching faculty in American colleges and universities in 1972-73.2 Like the two earlier studies, Study III examines the status of women in the modern language profession, but it furnishes a more comprehensive profile of the profession as well as comparative profiles of the two major fields within the modern language profession, English and foreign languages.

Study III is divided into six sections. Section I gives an overview of women and men in modern language departments in 1972–73: the types of institutions where they teach, the degrees they hold, their rank, and whether they have tenure. Section II compares the status of women in the profession in 1969–70 and 1972–73. Sections III and IV examine rank, tenure, and salary, three conventional measures of success in the profession (Section III, rank; Section IV, tenure and salary). Section V assesses the effect of type of institution on these measures of success. And Section VI compares the values of the modern language profession with the personal values of its members.

For its 1972–73 survey of teaching faculty in American colleges and universities, the American Council on Education used the responses to its questionnaire returned by some 42,000 teaching faculty in all fields, distributed among 301 institutions (78 universities, 181 four-year colleges, and 42 two-year colleges). These responses were then weighted by thirty-five different values to ensure that they reflected, as accurately as the ACE could determine, an estimated 519,000 teaching faculty in 1972-73, their characteristics, and their distribution by region and by type of institution.<sup>3</sup> The ACE data thus provide an accurate, authoritative, and extensive picture of teaching faculty in American colleges and universities. For Study III the Commission obtained from the ACE the responses to the 1972–73 survey of approximately 5,500 faculty in English and

foreign language departments (the latter including linguistics).

I. Women and Men in Modern Language Departments, 1972–73

In the first phase of Study III the distribution of responses to all questionnaire items was obtained for women and men in English and foreign languages at all institutions taken together and then at universities, four-year colleges, and two-year colleges taken separately. Of these 5,500 faculty, approximately 60% are in English departments, 40% in foreign language departments. Women comprise a little over one third of the faculty in modern languages: 34% of the faculty in English, 35% in foreign languages.

The distribution of women and men in modern language departments at universities, four-year colleges, and two-year colleges varies considerably, as is shown in Table 1. Most women (44%) teach at four-year colleges; the rest are divided equally between universities (28%) and two-year colleges (28%). Men are divided almost equally between universities (41%) and four-year colleges (42%); only 17% teach at two-year colleges. As a result, only in four-year colleges does the percentage of women on the modern language faculty (35%) reflect the percentage of women in the profession (34%); women are underrepresented in universities (26% of the modern language faculty), over-represented in two-year colleges (46%).

Table 1. Distribution of Women and Men in Modern Language Departments and Composition of Faculty by Sex (in percentage points\*)

Type of Institution	Distribution		Composition		
	Women	Men	Women	Men	Total
University	28	41	26	74	100
Four-Year College	44	42	35	65	100
Two-Year College	28	17	46	54	100
All Institutions	100	100	34	66	100

<sup>\*</sup> Percentages throughout Study III have been rounded; not all columns will total 100 because of this procedure.

Table 2 shows the distribution of degrees in English and foreign languages. There is a larger percentage of Ph.D.'s among faculty in foreign languages (40%) than among faculty in English (35%), and this difference is borne out when women are compared with women, men with men. A larger percentage of men than women in each discipline holds the Ph.D., as well as a larger number. Men outnumber women in both disciplines by approximately 2 to 1. Thus, though the percentage of men with the M.A. in each discipline is smaller than the percentage of women, men with the M.A. outnumber women with the M.A.

Table 2. Highest Degree Currently Held by Faculty in English and Foreign Language Departments by Sex (in percentage points)

Highest Degree Held	English			Foreign Languages			
	All	All Women Men		All	Women	Men	
Ph.D.	35	22	41	40	28	46	
M.A.	56	68	51	47	62	40	
Other*	9	10	8	13	10	14	
Total	100	100	100	100	100	100	

<sup>\*</sup> Other includes none, the B.A., and doctorates other than the Ph.D.

The distribution of women and men with Ph.D.'s at universities, four-year, and two-year colleges differs from that indicated by the percentages in Table 2. At universities, both in English and in foreign languages, 50% of the faculty hold the Ph.D. At four-year colleges, 44% of the faculty in English and 39% of the faculty in foreign languages have the doctorate, but at two-year colleges the Ph.D. is held by only 6% of the faculty in English and 3% of the faculty in foreign languages. Although the percentage of men with Ph.D.'s is higher at universities than at other types of institutions, the same is not true for women. The percentage of women with Ph.D.'s is higher at four-year colleges than the percentage of men. These patterns of distribution of modern language faculty by type of institution reflect the careers of women and men in the modern languages. Most women, with and without Ph.D.'s, are at fouryear colleges, where the ACE data indicate that teaching loads are heavier, more preparation is required, and time for research and writing is more limited than at universities.

Table 3 shows the type of appointment by rank by sex for faculty in English and foreign language departments. In English, 23% of women and 44% of men are in the upper ranks, 62% of women and 47% of men in

the lower. In foreign languages, 33% of women and 49% of men are in the upper ranks, 61% of women and 47% of men in the lower. Within the upper ranks of both fields, however, women are more likely to be associate professors than professors, men more likely to be professors; within the lower ranks, women are more likely to be instructors/lecturers than assistant professors, and men more likely to be assistant professors.

Table 3. Type of Appointment by Rank by Sex in English and Foreign Language Departments (in percentage points)

Academic Rank		English		Fore	eign Lang	uages
	All	Women	Men	All	Women	Men
Professor	19	9	24	22	14	26
Associate	18	14	20	21	19	23
Assistant	25	22	27	· 27	26	28
Instructor/ Lecturer	26	40	20	24	35	19
Other*	11	14	10	5	7	5
Total	99	99	101	99	101	101

<sup>\*</sup> Other includes other rank and no rank designation.

Comparing the percentages for type of appointment by rank by sex at universities (as opposed to all institutions, above) intensifies the pattern of men outnumbering women in the upper ranks. At universities, 13% of women in English are to be found in the upper ranks (7% professors, 6% associate professors), 81% in the lower ranks (21% assistant professors, 60% instructors/lecturers); the comparable figures for men are 53% in the upper ranks (33% and 20%), 43% in the lower (27% and 16%). In foreign languages, 24% of women are in the upper ranks (9% professors and 15% associate professors), 76% in the lower (25% assistant professors and 51% instructors/lecturers); the comparable figures for men are 57% in the upper ranks (36% and 21%), 42% in the lower (25% and 17%). Thus it appears that, at most universities, most women are in the lower ranks.

These differences in the percentages of women and men at various ranks are reflected in differences in the percentages of women and men with and without tenure, as indicated in Table 4. The percentages of women with tenure at universities and at four-year colleges differ widely: only 36% are tenured at universities, compared to 55% at four-year colleges. The percentages of men with tenure at universities and at four-year colleges are virtually identical: 63% and 62%. The

highest percentages of both women and men with tenure are to be found at two-year colleges: 65% of women, 76% of men.

Table 4. Distribution of Tenured and Untenured Women and Men in Modern Language Departments by Type of Institution (in percentage points)

Type of Institution	Women				Men	
	Ten- ured	Un- tenured	Total	Ten- ured	Un- tenured	Total
University	36	64	100	63	37	100
Four-Year	55	45	100	62	38	100
Two-Year	65	35	100	76	24	100

# II. The Status of Women in Modern Language Departments, 1969–70 and 1972–73

The Commission conducted Study I (its own survey of women and men in modern language departments in 1969–70) in the spring and summer of 1970. Study I was based on questionnaires returned by 595 modern language department chairpersons (60% of the sample queried) and included data for approximately 8,800 faculty. The data for Study I and Study III are not compatible in all respects, and the data for part-time faculty in Study III, in particular, are negligible: part-time faculty comprise 15% of the sample in Study I, only 4% in Study III. Nevertheless, a number of significant comparisons can be made between the status of women in modern language departments in 1969–70, as indicated by Study I, and in 1972–73, as indicated by Study III.

During this period the gains by women were slight. Moreover, the percentages of women—and the numbers of them—acquiring the Ph.D. have been steadily increasing since the mid-1960's. In 1966–67 women accounted for 23.5% of the doctorates awarded in English (199 out of 848) and 28.2% in foreign languages (163 out of 578). By 1970–71 (the most recent figures available) these percentages had increased to 29.9% in English (412 out of 1,378) and 38.0% in foreign languages (297 out of 781).

There was little change in the percentage of women full-time faculty in modern languages between 1969–70 and 1972–73, as Table 5 indicates: women comprised 33% of the full-time faculty in 1969–70, 32% in 1972–73.6 The changes in the percentages of women full-time faculty in modern languages at the various ranks between 1969–70 and 1972–73 were also small, as Table 5 indicates.<sup>7</sup>

Table 5. Type of Appointment by Rank by Sex for Full-Time Faculty in Modern Language Departments in 1969–70 and 1972–73 (in percentage points)

Academic Rank	1	1969–70			1972–73			
	Women	Men	Total	Women	Men	Total		
Professor	18	82	100	19	81	100		
Associate	28	72	100	29	71	100		
Assistant	32	68	100	31	69	100		
Instructor/ Lecturer	47	53	100	49	51	100		
Total	33	67	100	32	68	100		

The loss of 1 point in the percentage of women fulltime faculty between 1969-70 and 1972-73 corresponds to a loss of 1 point in the percentage of women with tenure: in 1969-70, 30% of faculty with tenure in modern languages were women, 70% men; in 1972-73, 29% of those with tenure were women, 71%men. The losses of 1% in the percentages of women hired and tenured are unimportant but the fact of no gain is not. The 1970's is the critical decade for remedying the inequitable status of women in higher education; as the Carnegie Commission emphasizes, changes must occur in this decade if they are to occur in the foreseeable future.8 The opportunities offered by the growth of higher education in the 1960's were lost; there will be no growth in the 1980's. Thus, unless women in modern languages are hired and tenured at a faster rate than men in the remainder of this decade, their present situation will be perpetuated.

Between 1969-70 and 1972-73, however, women with Ph.D's in modern languages made some gains in rank (see Table 6).9 The percentage of women with Ph.D.'s at the rank of instructor/lecturer declined substantially, from 10% to 3%, held steady at the rank of assistant professor at 36%, and increased at the rank of associate professor from 27% to 33%. From this, one may infer that substantial numbers of women were promoted from instructor/lecturer to assistant professor, and from assistant to associate professor. During the same period, the figures indicate that significant numbers of men were also promoted, from assistant to associate professor, and particularly from associate professor to full professor. As a result, the difference of 11 percentage points between the percentages of women and men with Ph.D.'s at the rank of full professor in 1969-70 widened to 15 percentage points in 1972-73. And when the percentages for women and the percentages for men in the ranks of

Academic Rank	,	With Ph.D.	or Equivalent		Without Ph.D. or Equivalent					
	1969	<b>)</b> –70	1972–73		1969–70		1972–73			
	Women	Men	Women	Men	Women	Men	Women	Men		
Professor	27	38	28	43	3	4	5	12		
Associate	27	25	33	27	9	11	14	19		
Assistant	36	34	36	28	29	33	27	33		
Instructor/Lecturer	10	3	3	2	59	52	54	36		
Total	100	100	100	100	100	100	100	100		

Table 6. Type of Appointment by Rank by Sex for Faculty in Modern Language Departments with and without the Ph.D. in 1969-70 and 1972-73 (in percentage points)

associate professor and full professor for 1969–70 and 1972–73 are combined, sex differences remain constant: in 1969–70, 54% of women and 63% of men with Ph.D.'s were in the upper ranks, a difference of 9 percentage points, and in 1972–73, 61% of women and 70% of men, still a difference of 9 percentage points.

In terms of academic rank, women without Ph.D.'s fell behind their male colleagues (see Table 6). They gained less than women with Ph.D.'s while their male colleagues without Ph.D.'s gained more than men with Ph.D.'s. As a result, the difference of 1 percentage point between the percentages of women and men full professors without Ph.D.'s in 1969-70 widened to 7 percentage points in 1972-73. When the percentages for women and the percentages for men in the ranks of associate professor and full professor for 1969-70 and 1972-73 are combined, sex differences also show an increase: in 1969-70, 12% of women and 15% of men without Ph.D.'s were in the upper ranks, a difference of 3 percentage points, but in 1972-73 these figures were 19% women and 31% men, a difference of 12 percentage points. The data suggest that while promotion of women and men with Ph.D.'s has been about the same, women without the Ph.D. remain at a disadvantage.

Finally, a comparison of median salaries of faculty in modern languages by rank by sex in 1969-70 and 1972-73 is shown in Table 7. Salaries of both women and men increased during this period, but the differences between their salaries continued. The exception was at the rank of associate professor, where salaries became equal. The median salaries of professors, both women and men, increased \$4,000, but the difference of \$3,000 between them remained; the median salaries of assistant professors, both women and men, increased \$2,000, but the difference of \$1,000 between them remained. The median salary of women associate professors, however, increased \$3,000 and the median salary of men associate professors \$2,000. It thus appears that women's salaries are more likely to be adjusted upward when they are promoted to the rank of associate professor.

III. Predictors of Success and Their Influence on Rank for Women and Men in Modern Language Departments

The data gathered by the American Council on Education for 1972–73 enabled the Commission to try to ascertain whether a person's sex affects three con-

Table 7. Median Salaries by Rank by Sex for Faculty in Modern Language Departments in 1	969-70 and 1972-73
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Academic Rank	1969	9–70	1972-	-73 <sup>10</sup>
	Women	Men	Women	Men
Professor	\$13,000–13,999	\$16,000-16,999	\$17,000–17,999	\$20,000-20,999
Associate	\$11,000–11,999	\$12,000–12,999	\$14,000–14,999	\$14,000-14,999
Assistant	\$9,000- 9,999	\$10,000–10,999	\$11,000-11,999	\$12,000–12,999

ventional measures of academic success: rank, tenure, and salary. In order to examine differences between women and men for each of these three measures of success, stepwise multiple regression analysis was used. This statistical technique permits a comparison of the ability of different factors to explain academic success. First, the correlation between each measure of success and a wide range of items (including professional, institutional, and personal characteristics) was obtained for the total sample of responses. All items with a correlation coefficient of .05 or greater with a measure of success were entered into the multiple regression equations for women and for men. The regression results indicate the cumulative explanatory or predictive power of all items in the equation and the relative ability of each item to predict the measure under study after all other items have been taken into consideration, or held constant.

Tables 8 and 9 show the results of the multiple regression analyses of rank for women and for men. The twenty-one items that were correlated with rank for the total sample are listed in each table in the order of their entry into the equations for women and for men. Order of entry is dependent both on the correlation of the item with rank and on the ability of the item to add a dimension to the equation not represented among the items already included. The R<sup>2</sup> (multiple correlation squared) figures—.49 and .57—at the bottom of each table indicate the cumulative explanatory or predictive strengths of these twenty-one items. The statistics indicate that, taken together, the variables included explain 49% of the variation in rank for women, 57% of the variation for men. The other 51% of the variation for women and 43% for men remain unexplained. Such variables as chance, politics, and personalities, though potent, are unmeasured here.

The figures in the first column of Tables 8 and 9, Zero-Order R's (Pearsonian product-moment correlation coefficients), indicate the association between each item and rank. The figures in the second column, Standardized Beta Weights, indicate the explanatory or predictive strength of each item by itself when all other items in the table are held constant. These figures are useful for comparing the strength of each item that predicts rank in relation to the strength of all other items. For example, number of articles published has the highest association with rank for women among the twenty-one items (R = .43). When the other variables are taken into consideration, however, number of articles published declines considerably in predictive importance (Beta = .11). Number of articles published also has the highest association with rank for men (R = .57). When the other variables are taken into consideration, it also delcines, though less considerably, in predictive importance (Beta = .24).

The figures in the third column, Unstandardized

Table 8. Factors Explaining Rank for Women Faculty in Modern Language Departments

			Stan-	Unstan-
Order of Entry	Explanatory Factors	Zero- Order R	dard- ized Beta Weight	dardized Regres- sion Co- efficient
1	Number of articles published	.43	.11	.11**
2	Age	.40	.33	.14**
3	Highest degree held	.36	.23	.45**
4	Type of institution	.20	.24	.35**
5	Interrupted career	08	12	33**
6	Number of publications in last 2 years	.34	.16	.22**
7	Time spent in administration	.22	.09	.06**
8	Year started in current position	.00	.15	.03**
9	Year started in continuous service	24	13	01**
10	Number of books published	.36	.10	.13**
11	Time status: full- or part-time	20	09	21**
12	Married	16	06	13**
13	Time spent in teaching	08	07	06**
14	Have dependent children	12	05	10*
15	Research university	.02	06	16*
16	Social life with colleagues	04	03	06
17	Engaged in research	.12	03	07
18	Race of institution	07	.01	.06
19	Highest level of mother's education	09	.01	.00
20	Ever awarded scholarship	.04	.01	.02
21	Time spent in research	.08	.00	.00

 $R^2$  (Items 1–21) = .49

 $R^2$  (Items 1-9) = .47

(Constant = -.47)

Table 9. Factors Explaining Rank for Men Faculty in Modern Language Departments

Order of Entry	Explanatory Factors	Zero- Order R	Stan- dard- ized Beta Weight	Unstan- dardized Regres- sion Co- efficient
1	Number of articles published	.57	.24	.15**
2	Age	.52	.38	.18**
3	Highest degree held	.38	.20	.39**
4	Time status: full- or part-time	15	13	37**
5	Year started in continuous service	29	15	01**
6	Number of books published	.46	.11	.12**
7	Have dependent children	.13	.10	.22**
8	Ever awarded scholarship	.17	.06	.14**
9	Time spent in administra- tion	.18	.06	.04**
10	Social life with colleagues	.13	.05	.10**
11	Year started in current position	19	.06	.01**
12	Engaged in research	.20	.05	.13*
13	Time spent in teaching	19	02	02
14	Married	.10	03	07
15	Number of publications in last 2 years	.34	03	03
16	Type of institution	22	.03	04
17	Time spent in research	.17	.02	.01
18	Race of institution	08	.00	07
19	Research university	17	.01	.03
20	Interrupted career	.17	.00	01
21	Highest level of mother's education	05	.00	.00

(Constant = .19)

Positive and negative figures indicate the direction of the association: positive figures indicate an association between high rank and high values for a particular item, negative ones an association between high rank and low values. For coded items, the positive figures for highest degree held indicate that women with high rank are likely to have the Ph.D. (no Ph.D. or equivalent is coded 1, a Ph.D. or equivalent is coded 2); the negative figures for interrupted career indicate that women with high rank are less likely to have experienced an interruption in their careers (no interruption is coded 1, an interruption of one year or more is coded 2). And the positive figures for type of institution indicate that women are most likely to have high rank at two-year colleges (with a value of 3 in the code) than at four-year colleges (coded 2) or universities coded 1). 11

A double asterisk (\*\*) indicates those items with regression coefficients statistically significant at the .001 level. A single asterisk (\*) indicates items significant at the .01 level. All other items are nonsignificant at the .05 level. All significance tests were computed using unweighted sample sizes. A double line separates those items in Tables 8 and 9 that make a substantial contribution to the explained váriation in rank from those items that, taken individually, add less than 1% to the variation explained. Thus the nine items above the line in Table 8 explain 47% of the variation in women's rank; knowledge about the remaining twelve factors adds only 2% to the explained variation when items above the line are held constant. For men, the seven items above the line in Table 9 explain 55% of the variation in their rank; knowledge about the remaining fourteen factors adds only 2%.

Regression Coefficients, indicate the strength of each item in terms of its direct translation into higher rank, after taking into consideration all the other items in the equation. Table 8 indicates that if two women with identical values on all items in the table except number of articles published were to be matched, the woman with one to two articles would be likely to have a higher rank (Regression Coefficient = .11) than her female colleague with none. Similarly, in Table 9, if two men were to be so matched, the man with one to two articles would be "further along" in rank (Regression Coefficient = .15) than his male colleague with none. The Unstandardized Regression Coefficients are also used to compare the explanatory power of each item for women and for men. One to two articles are "worth" more for men (.15) than they are for women (.11), after all other factors have been held constant. Similarly, three to four articles, as opposed to one to two, are worth more to men than to women (.15 for men, .11 for women), etc.

Tables for the factors explaining tenure and salary for women and men are not shown. Twelve items were correlated with tenure, twenty-three with salary (see pp. 131–133). For tenure, the twelve factors explain 27% of the variation for women, 26% for men; only about one fourth of the variation in tenure is predictable, and it is equally predictable, or rather equally

 $R^2$  (Items 1–21) = .57

 $R^2$  (Items 1–7) = .55

unpredictable, for both sexes, as opposed to almost one half the variation in rank for women and somewhat more than one half for men. For salary, the twenty-three factors explain 32% of the variation for women, 51% for men. Thus, the largest difference in cumulative explanatory ability between regressions for women and for men is in the regressions for salary. In sum, rank is somewhat less predictable in terms of these data for women than for men, salary considerably less predictable for women than for men, and tenure equally unpredictable for both.

In the multiple regression analyses for each measure of success, the same items do not have the same predictive strength for both sexes. Institutional items have greater predictive strength for women than for men in all three measures of success: for example, two-year colleges provide better rank, tenure, and salary for women than either four-year colleges or universities do. In Table 8, type of institution is item 4 for women. Its association with rank, .20, increases when other variables are taken into consideration, so that its Beta, .24, makes it the second strongest predictor of rank and it is worth .35 in rank for a woman to be at a two-year college rather than at a four-year college or a university. For men (Table 9), type of institution is item 16. Its association with rank, -.22 (negative to indicate a four-year college or a university), decreases markedly when other variables are taken into consideration, so that it is not among the seven items that substantially explain variation in rank for men.

Since rank is the measure of success best explained by the multiple regression analyses and since it is usually correlated with both tenure and salary, either as cause or effect, Tables 8 and 9 will serve to illustrate the different career patterns of women and men. Age is the strongest predictor of rank for both sexes. Highest degree held is the third strongest predictor. But other strong predictors are not the same. For women, type of institution is the second strongest predictor; for men it adds less than 1% to the explained variation. For men, number of articles published is the second strongest predictor; for women, it is the eighth. For women, number of publications in last two years is the fourth strongest predictor; for men, it is not among the seven items that substantially explain variation in rank. For men, year started in continuous service is the fourth strongest predictor; for women, it is the sixth. And so on—there are innumerable permutations and combinations to scrutinize.

To comprehend more fully differences by sex in predictors of rank, it is necessary to go back to the first phase of Study III, the statistics for faculty in English and foreign language departments derived from the responses to the ACE questionnaire. Age, for example, is the strongest predictor of rank for both sexes. Women in the field, however, are younger than men: 22% of

women in English and 18% of women in foreign languages are under thirty, as opposed to 14% of men in English and 12% of men in foreign languages. <sup>12</sup> In addition, these younger women are concentrated at universities (22% in English, 20% in foreign languages) and at two-year colleges (26% in English, 21% in foreign languages).

The third strongest predictor of rank for both sexes is highest degree held. Although fewer women than men in the field hold the Ph.D. (see Table 2), the percentage of doctorates who are women has increased over the last decade. If age and highest degree held continue to be strong predictors of rank for women, then the percentages of women in the upper ranks will increase, provided that those women who have recently earned the Ph.D. are hired and tenured.

Table 10 shows the number of articles published by faculty in English and foreign languages. The difference between women and men is not whether or not they publish but the number of articles they have published: substantial percentages of both men and women have not published articles. The percentages of men and women who have published one to four articles are similar, but a considerably greater percentage of men have published five or more articles. This difference may be related to the distribution of women and men by type of institution. Only 28% of women are at universities, where the teaching loads are lighter and, consequently, greater opportunities for research and writing exist (see Tables 1, 14, and 15).

Table 10. Number of Articles Published by Faculty in English and Foreign Language Departments by Sex (in percentage points)

Number of Articles	English			Foreign Languag		uages
	All	Women	Men	All	Women	Men
None*	54	73	45	48	60	42
1–4	27	21	31	29	28	29
5–21 or more	18	6	25	24	12	30
Total	99	100	101	101	100	101

<sup>\*</sup> None includes no answer; 1–2, 3–4 are combined; 5–10, 11–20, and 21 or more are combined.

When the relative percentages of women and men holding the Ph.D. are compared with the percentages of women and men publishing articles (as opposed to not publishing them), they are roughly equivalent, particularly in foreign languages. In English, 22% of women hold the Ph.D. and 27% have published articles, while 41% of men hold the Ph.D. and 56% have pub-

lished articles. In foreign languages, 28% of women hold the Ph.D. and 40% have published articles, while 46% of men hold the Ph.D. and 59% have published articles (see Table 2). As a predictor of rank, published articles are worth slightly less among women (Regression Coefficient = .11) than among men (Regression Coefficient = .15).

For women, the aspect of their publication record that is the strongest predictor of rank is number of publications in last two years; it is the fourth strongest variable, followed by number of articles published (the eighth) and number of books published (the ninth). For men, number of publications in last two years has a negative value when other factors are held constant (Beta = -.03 and Regression Coefficient = -.03) and its explanatory power is low. The aspects of their publication record that are strong predictors of rank are number of articles published, the second strongest, and number of books published, the sixth. It is interesting that recent publication, in relation to other factors, should seem to count so much for women (Beta = .16 and Regression Coefficient = .22). The data indicate that the percentages of women and men who have published, articles and books, and the percentages of women and men who have published in the last two years remain relatively constant, with one small but interesting exception: there was a slight increase in the percentages of women in English at universities and four-year colleges who published in the last two years. Another interesting fact is that substantial numbers of women with Ph.D.'s were promoted between 1969-70 and 1972-73 (see Table 6). It thus seems likely that their recent publications and promotions were related.

The fourth strongest predictor of rank for men is year started in continuous service (year started in current position and interrupted career each add less than 1% to the explained variation in rank). For women, all three predictors are among the nine that substantially explain their rank: year started in current position is the fifth strongest, year started in continuous service the sixth, interrupted career the seventh. Interrupting one's career is associated considerably more with rank for women than for men, though in fact a higher percentage of men have interrupted their careers, for military or family reasons: 22% of men in English and 23% of men in foreign languages, as opposed to 20% of women in English and 16% of women in foreign languages. These data contradict a common misconception that women interrupt their careers more often than men do. Nevertheless, career interruption is an important variable in explaining differences of rank among women.

Although for both sexes rank is more strongly associated with professional and institutional factors than with personal factors, two personal items, *married* and

have dependent children, are noteworthy. Married is item 12 for women, item 14 for men; have dependent children is item 14 for women and item 7 for men. In both instances, the correlation with rank (R) is negative for women and positive for men: that is, women are more likely to succeed in terms of rank when they are not married and do not have dependent children. Although neither of these factors is among the nine that substantially explain variation in rank for women, the factor have dependent children is among the seven that substantially explain variation in rank for men. Interrupted career, however, is among the nine for women and in many instances serves as a proxy for either marriage or childbearing. The former factor is more likely, given the difference between the percentages of women in the profession who are married and those who have children: 55% of women in English are married, 38% have dependent children; and 59% of women in foreign languages are married, 41% have dependent children.

It should be noted that the Betas for the twenty-one items correlated with rank for women in Table 8 drop in predictive strength in a closer sequence than do the Betas for the corresponding twenty-one items correlated with rank for men in Table 9. As a result, the cumulative explanatory power or predictive strength of these items is more spread out over all twenty-one for women, and rank for them consequently depends more upon each item than rank for men. This pattern reappears when those items that make a substantial contribution to the explained variation in rank are separated from those items that, taken individually, add less than 1% to the variation explained: nine factors explain 47% of the variation for women, seven explain 55% of the variation for men. And the cumulative predictive strength of all twenty-one items is 49% for women, 57% for men; thus other factors unmeasured by the data play a larger part in determining rank for women than for men.

IV. Predictors of Success and Their Influence on Tenure and Salary for Women and Men in Modern Language Departments

When the measure of success is tenure, there are twelve factors correlated with it, ten of which are also correlated with rank; the new factors entered into the equations are *year highest degree received* and *race of individual*. These twelve factors, taken together, have a cumulative predictive strength of only 27% for women, 26% for men; other items unmeasured by the data play a much larger part in determining tenure.

For women, six of these items, taken together, explain 25% of the variation in tenure for them: in order of importance, type of institution, year started in

continuous service, number of articles published, year highest degree received, race of institution (predominantly white rather than predominantly black), and highest level of mother's education.

For men, five of these items, taken together, explain 25% of the variation in tenure for them. Again, as in the equations for rank, the same twelve items do not individually have the same predictive strength for both sexes. The five strongest predictors of tenure for men, in order of importance, are year highest degree received, number of articles published, year started in continuous service, type of institution, and number of books published.

Higher percentages of both women and men are tenured at two-year colleges than at either four-year colleges or universities (see Table 4). However, type of institution, the strongest predictor of tenure for women, is the fourth strongest for men, while year highest degree received, the strongest predictor of tenure for men, is the fourth strongest for women. Thus, for women tenure is more closely associated with the type of institution than it is for men.

When the measure of success is salary, there are twenty-three factors correlated with it, eighteen of which are also correlated with rank; of the five new factors entered into the equations, two, both institutional items, have substantial explanatory power. Control of institution—public rather than private—is the second strongest predictor of salary for women, the fifth strongest for men. Both receive higher salaries at public institutions, women considerably higher ones (Regression Coefficient = -.93 for women, -.69 for men). Region is the seventh strongest predictor of salary for both women and men; both receive higher salaries in the East than in other regions of the country (Border and South, Midwest, and West). Again, however, this institutional item is a stronger predictor for women (Regression Coefficient = -.67 for women, -.46 for men).

For women, the twenty-three factors, taken together, have a cumulative predictive strength of 32%. Ten items, taken together, explain 30% of the variation in salary for them; the remaining thirteen, taken individually, add less than 1% to the variation explained. The ten items, in order of importance, are: time status: full- or part-time, control of institution, age, number of books published, year started in current position, region, highest degree held, year started in continuous service, time spent in administration, and have dependent children.

For men, the same twenty-three factors, taken together, have a cumulative predictive strength of 51%. Seven items, however, taken together, are sufficient to explain 49% of the variation in salary for them. They are, in order of importance: number of articles published, number of books published, age, year highest

degree received, control of institution, time spent in administration, and region.

Number of books published is a stronger predictor of salary for both sexes than it is of either rank or tenure. For women, number of books published is the fourth strongest predictor of salary; for men, the second. Books, however, are worth slightly more in terms of salary to women than to men (Regression Coefficient = .46 for women, .40 for men), while number of articles published, the strongest predictor of salary for men, adds less than 1% to the explained variation in salary for women. Articles, then, are worth substantially less in terms of salary to women than to men (Regression Coefficient = .15 for women, .40 for men).

Table 11 shows the number of books published by faculty in English and foreign languages. Substantial percentages of men and women have not published books. But the percentages of women and men who have, in the range of one to two and in the range of three or more, are similar.

Table 11. Number of Books Published by Faculty in English and Foreign Language Departments by Sex (in percentage points)

Number of Books	English			Fore	eign Lang	uages
	All	Women	Men	All	Women	Men
None*	63	77	55	54	63	50
1–2	25	18	29	28	23	30
3–5 or more	12	5	16	18	14	20
Total	100	100	100	100	100	100

\* None includes no answer; 3-4 and 5 or more are combined.

It should be emphasized that the cumulative predictive strength of the twenty-three items correlated with salary is only 32% for women, whereas it is 51% for men; other items unmeasured by the data play a much larger part in determining salary for women. This pattern reappears when those items that make a substantial contribution to the explained variation in salary are separated out: ten factors explain 30% of the variation for women, seven explain 49% of the variation for men.

To summarize Sections III and IV, the multiple regression analyses for rank, tenure, and salary seem to indicate that these measures of success are more closely associated with particular professional and personal variables than with the sex of the individual. These variables are less closely associated with rank for wo-

men than for men and considerably less associated with salary for women than for men; tenure remains largely unexplained by the data used in this study. The particular variables associated with rank, tenure, and salary are somewhat different for women and men. Age and highest degree held are important variables for both sexes. When these are excluded, however, the measures of success for women would seem to be more closely related to institutional items such as type of institution and control of institution and the measures of success for men more closely related to professional items, most notably publication.

## V. Predictors of Success for Women and Men in Modern Language Departments by Type of Institution

Because type of institution is so closely associated with rank, tenure, and salary, multiple regression analyses were performed for each measure of success by type of institution (universities, four-year colleges, and two-year colleges). In the third phase of Study III, respondents in English and foreign languages were grouped together by type of institution and analyses of rank, tenure, and salary were obtained for the total sample in each type of institution, and then for women and for men.

In each analysis of the total sample (i.e., faculty of both sexes) by type of institution, there were striking institutional variations in the cumulative predictive strength of the factors having the greatest degree of correlation with rank, tenure, and salary. Table 12 shows the cumulative predictive strength of these factors (the R<sup>2</sup> figures written as percentages) for rank, tenure, and salary for modern language faculty in all institutions together and by type of institution. All three measures of success are notably more predictable at the university and somewhat more predictable (except for salary) at the four-year college than at all institutions taken together; they are least predictable at the two-year college.

Table 12. R<sup>2</sup> Figures for Rank, Tenure, and Salary of Faculty in Modern Language Departments in All Institutions and by Type of Institution (in percentage points)

Type of Institution	Rank	Tenure	Salary
All Institutions	53	25	48
University	67	38	65
Four-Year	59	28	46
Two-Year	39	15	46

Sex was then added to the list of factors having the greatest degree of correlation with rank, tenure, and

salary at each type of institution. For each of the variables (rank, tenure, and salary) a stepwise multiple regression analysis was performed with the factor "sex" forced to enter the equation last. This procedure was used to determine the effect of sex on each measure of success after the influence of all other relevant predictive items had been taken into consideration. The most conservative estimate of the impact of sex is obtained by this procedure because any predictive strength resulting from covariance between sex and other items (such as number of publications) is assigned to sources other than sex. Table 13 shows the predictive strength of sex, in and of itself, when all other predictive items have been taken into consideration. Negative Betas (for the two-year college) indicate the degree of correlation between being a woman and the three measures of success; positive Betas (for the university and the four-year college), the degree of correlation between being a man and the three measures of success.

Table 13. Betas for Sex for Rank, Tenure, and Salary of Faculty in Modern Language Departments by Type of Institution

Type of Institution	Rank	Tenure	Salary
University	.12	.04	.12
Four-Year	.05	.01	.09
Two-Year	18	10	01

Men have an advantage at universities, particularly when rank and salary are decided, and something of an advantage at four-year colleges, particularly when salary is decided. Women have an advantage at two-year colleges, particularly when rank is decided. Only at two-year colleges, then, where women comprise 46% of the modern language faculty (see Table 1) do the signs of sex discrimination apparent in these data for other types of institutions disappear. For example, women at two-year colleges do well with respect to rank and tenure and hold their own with respect to salary. (However, the figures for rank at two-year colleges must be partially discounted since 25% of the women in the sample and 34% of the men teach at two-year institutions where the faculty are unranked.)

In the third phase of Study III, multiple regression analyses of rank, tenure, and salary by type of school were performed separately for women and for men. An examination of the two strongest predictors of each measure of success reveals some interesting variations, particularly between universities and four-year colleges; at this point, the samples by sex for two-year colleges make the cumulative and individual predictive strengths of items unreliable and they are omitted.

When the measure of success is rank, the cumulative predictive strength of factors correlated with rank for women at universities is 58%, for men, 66%; for women at four-year colleges, 61%, for men, 62%. The two strongest predictors of rank for women at universities are number of publications in last two years and number of articles published; for men, they are age and number of articles published. For women at four-year colleges, they are highest degree held and age; for men, they are age and highest degree held.

When the measure of success is tenure, the cumulative predictive strength of factors correlated with tenure for women at universities is 26%, for men, 40%; for women at four-year colleges, 26%, for men, 30%. The two strongest predictors of tenure for women at universities are number of articles published and year started in continuous service; for men, they are number of articles published and year highest degree received. For women at four-year colleges, they are married (the positive predictor is unmarried) and, equally, number of articles published and year started in continuous service; for men, they are year highest degree received and, equally, number of articles published and year started in continuous service.

When the measure of success is salary, the cumulative predictive strength of factors correlated with salary for women at universities is 37%, for men, 65%; for women at four-year colleges, 41%, for men, 49%. The two strongest predictors of salary for women at universities are age and number of articles published; for men, they are number of articles published and age. For women at four-year colleges, they are region and year started in current position; for men, they are control of institution and number of articles published.

These factors have predicted rank, tenure, and salary in the past; they may not predict them in the future. But what comparisons between the careers of women and men can be drawn from them? First, the careers of men have a stronger degree of predictability than the careers of women, except perhaps for those of women at two-year colleges. Women are more likely to succeed

in terms of rank, tenure, and salary if they have a Ph.D., teach at a four-year college in the East, do not interrupt their career, remain single, and publish. Men are more likely to succeed at a university if they have a Ph.D. and publish; at a four-year college if they have a Ph.D., teach at a public institution, remain there, and publish. Thus publication, important at the university as well as at the four-year college, provides a predictable route to success for both sexes, albeit somewhat less predictable for women than for men.

#### VI. Professional Values and Personal Values

It appears from the data presented above that publication, whether of articles or books, figures greatly in the reward system of the modern language profession. Because the vast majority of those in the profession teach in addition to engaging in research and writing, it is important to compare the number of hours per week women and men teach and then to consider what time remains for other pursuits, including research and writing. Table 14 shows the number of hours per week of scheduled teaching for faculty in English by type of institution by sex; Table 15, the number of hours per week for faculty in foreign languages.

Presumably those who spend a great deal of time teaching do not have time for research and consequently publish less. If the teaching done by the profession were to be more equally divided between women and men, one might expect women to publish more. Or, alternatively, if teaching were valued more and became a stronger predictor of rank, tenure, and salary, women would be more likely to attain equal status without publishing more than they do at present.

These changes are not likely to occur, however, for the value and reward system of the modern language profession is that of academe itself and not the unique creation of those in this field. Nevertheless, placing a higher value on teaching would be consistent with the

Number of Hours per Week	University			Four-Year			Two-Year		
	All	Women	Men	All	Women	Men	All	Women	Men
18*	44	27	50	26	24	27	7	11	4
9–12	49	62	45	58	56	59	28	24	31
13–17 or more	6	11	5	15	20	13	65	65	65
Total	99	100	100	99	100	99	100	100	100

Table 14. Number of Hours per Week of Scheduled Teaching for Faculty in English Departments by Type of Institution by Sex (in percentage points)

<sup>\*</sup> None or no answer have been eliminated (the percentages are fractional, except for foreign languages at two-year colleges); 1–4, 5–8 are combined; 13–16 and 17 or more are combined.

Number of Hours per Week	University				Four-Year			Two-Year		
	All	Women	Men	All	Women	Men	All	Women	Men	
1-8*	41	29	46	19	18	19	0	0	0	
9–12	44	49	42	49	40	55	4	10	4	
13-17 or more	14	22	12	33	42	26	88	83	96	
Total	99	100	100	101	100	100	92	93	100	

Table 15. Number of Hours per Week of Scheduled Teaching for Faculty in Foreign Language Departments by Type of Institution by Sex (in percentage points)

personal values of many members of the modern language profession. According to the responses to the ACE questionnaire, members of the modern language profession value teaching more than research and writing; teaching gives many women and men their sense of personal accomplishment. Respondents to the ACE questionnaire were asked to indicate what they considered their single outstanding accomplishment. Table 16 shows the responses of faculty in English and foreign languages. Women and men, in striking proportions, indicated that it was teaching; the ratios for teaching as opposed to research and writing begin at approximately 2 to 1 for men in foreign languages and reach 7 to 1 for women in English.

About half the women in modern languages derive a greater sense of personal accomplishment from teaching than from research and writing. The value and reward system of the profession and of academe, however, would seem to run counter to their personal values and not to compensate them for their accomplishment. But it also runs counter to the personal values of many men. They spend more time than women do on research and writing, and may do so of necessity, since they too derive a greater sense of personal accomplishment from teaching.

Further, those in the modern languages would seem to be less content with this value and reward system than those in other fields. The ACE data show that for faculty in all fields, only 28% (35% of women, 27% of men) indicated performance as a teacher to be their single outstanding accomplishment.

### Conclusion

The data analyzed in Study III are of considerable concern to the Commission on the Status of Women in the Profession. The comparative data in Section II show that gains by women in the profession between 1969–70 and 1972–73 were slight, Affirmative Action notwithstanding. When they are measured against the corresponding gains made by men, it seems that men

gained rather more in rank and tenure than women. The percentage of women full-time faculty in modern languages hardly changed; women remain underrepresented in the upper ranks, particularly at the rank of full professor, and at universities. The chief encouragement is the number of women with Ph.D.'s who were promoted to associate professor and the more equitable distribution of salary at that rank; otherwise, salary differentials between women and men remained constant.

In Section III and Section IV the analyses of factors affecting rank, tenure, and salary are particularly significant to the Commission because they indicate that the factors that most affect the careers of women differ markedly from the factors that most affect the careers of men. For women, institutional factors, most notably type of institution and control of institution, play a far larger role. A man's achievement depends more on publication, both articles and books. Publication of articles is also important for women, but books occur as an important predictive factor only for women's salaries, not for their rank or tenure. Their personal lifestyles are also in contrast: women who are unmarried and have no dependent children are more likely to succeed than women who are married and have children. Finally, in terms of the two main professional functions of any teacher-scholar, teaching and scholarship as measured by hours in the classroom and number of publications, women often do more than their share of the teaching in the modern language field (Tables 14 and 15), especially when one realizes that more women teach at institutions where teaching loads are heavier. In addition, a high percentage of both women and men find more satisfaction in their performance as teachers than they do in their achievements in research and writing (Table 16), pointing up a real dilemma for all engaged in teaching and publishing in the field of modern languages. This discrepancy between the value system of individuals and the reward system of institutions leads to a greater degree of dissatisfaction in this particular field than in most others. Women suffer more than men

<sup>\*</sup> None or no answer have been eliminated (the percentages are fractional, except for foreign languages at two-year colleges); 1-4, 5-8 are combined; 13-16 and 17 or more are combined.

Table 16. Outstanding Accomplishment of Faculty in	English
and Foreign Language Departments by Sex	
(in percentage points)	

Outstanding Accomplishment	1	English		Foreign Languages			
	All	Women	Men	All	Women	Men	
Achievement in research/writing	13	7	16	15	9	17	
Performance as a teacher	43	51	40	39	48	35	
Other*	44	42	45	46	42	48	
Total	100	100	101	100	99	100	

<sup>\*</sup> Other includes attainment of professional credentials or position, performance as a college administrator, performance in nonacademic activities, all others, and no answer.

from this discrepancy, but all are involved in this problem to some degree.

Therefore, the Commission argues, it is appropriate for the profession to question its value and reward system and to initiate change. Given shrinking enrollments and the scarcity of funds, however, such change seems unlikely to occur; rather, the Commission feels, more institutions will model themselves on the research university, where, it has been noted, the disequilibrium between women and men is greatest. This trend bodes ill for the future of women in the profession, especially women without the Ph.D., who tend to get squeezed out, particularly at the level of promotion from assistant to associate professor and at the time of tenure decisions. The Commission hopes to continue to monitor the status of women in the modern language profession by following Study III with comparable data from the next ACE survey, tentatively scheduled for 1976–77.

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Notes

<sup>5</sup> The source of these statistics is *Earned Degrees Conferred*; see *ADFL Bulletin*, 6 (Sept. 1974), 17, for the percentages of women awarded Ph.D.'s in each foreign language and in linguistics during this most recent 5-year period.

<sup>6</sup> This loss of 1% is compatible with the slight gain of .9%, reported by Bayer for women in all fields between the ACE 1968–69 survey and the 1972–73 survey.

<sup>7</sup> None of these differences in the proportion of women at each rank between 1969-70 and 1972-73 are statistically significant. All tests were performed using the chi-square test of independence and the .05 level of significance.

<sup>8</sup> Carnegie Commission on Higher Education, Opportunities for Women in Higher Education: Their Current Participation, Prospects for the Future, and Recommendations for Action (New York: McGraw-Hill, 1973), p. 6. "It will take until about the year 2000," the Carnegie Commission predicts, "under reasonable assumptions, before women are likely to be included in the national professoriate in approximately the same proportions as they are in the total labor force—this is a task for a generation of effort." The Carnegie Commission's prediction, gloomy as it sounds, may be optimistic for modern languages in view of these comparative statistics.

 $^9$  Sex differences in the distribution of women and men by rank are statistically significant (p < .001) at each degree level for both time periods. Changes in the rank distribution from 1969–70 to 1972–73 are also significant (p < .001) at each degree level for both women and men. All tests were performed using the chi-square test of independence.

<sup>10</sup> In the 1972-73 data, a larger percentage of women than men failed to respond to the salary question: 16% and 4% of professors, 13% and 2% of associate professors, and 8% and 2% of assistant professors.

11 Coding Key

Highest degree held (1 = no Ph.D. or equivalent; 2 = Ph.D. or equivalent)

Type of school (1 = university; 2 = four-year; 3 = two-year) Interrupted career (1 = no; 2 = yes)

Time status (1 = full-time; ...; 4 = less than half-time)

Married (1 = no; 2 = yes)

Have dependent children (1 = no; 2 = yes)

Research university (1 = yes; 2 = no)

Social life with colleagues (1 = no; 2 = yes)

Engaged in research (1 = no; 2 = yes)

Race of institution (1 = predominantly white; 2 = predominantly black)

Ever awarded scholarship (1 = no; 2 = yes)

<sup>12</sup> Faculty in all fields are substantially older than faculty in ours; only 6% of the men and 11% of the women in the total ACE sample are under thirty. The modern language field thus constitutes an exception to the rule, noted by Bayer, that the faculty of American colleges and universities was older in the aggregate in 1972–73 than it was in 1968–69.

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<sup>&</sup>lt;sup>1</sup> Study I, "The Status of Women in Modern Language Departments," *PMLA*, 86 (1971), 459-68; Study II, "Affirmative Action for Women in 1971," *PMLA*, 87 (1972), 530-40.

<sup>&</sup>lt;sup>2</sup> Alan E. Bayer, *Teaching Faculty in Academe: 1972-73* (ACE Research Reports, Aug. 1973); Bayer, "College Faculties: 'Le Plus ça change...,' "Change, 6 (March 1974), 49-50, 63-64; Bayer and Helen S. Astin, "Sex Differentials in the Academic Reward System," *Science*, 188 (23 May 1975), 796-802.

<sup>&</sup>lt;sup>3</sup> The data were weighted in order to correct for differences in response rates by type of degree, region, and institution.

<sup>&</sup>lt;sup>4</sup> The results of the first phase of Study III are contained in a 62-page document, which may be obtained from the Commission (at 62 Fifth Ave., New York, N. Y. 10011) for \$10, to cover the cost of reproduction and mailing.