

DOCUMENT RESUME

ED 045 011

HE 001 824

AUTHOR Ferber, Marianne; Loeb, Jane  
TITLE Rank, Pay, and Representation of Women on the Faculty at the Urbana-Champaign Campus of the University of Illinois.  
PUB DATE Nov 70  
NOTE 28p.; Report of the Committee on the Status of Women, presented to the Urbana AAUP Chapter, November, 1970  
EDRS PRICE MF-\$0.25 HC-\$1.50  
DESCRIPTORS Discriminatory Attitudes (Social), Employment Practices, \*Faculty, \*Females, \*Higher Education, Qualifications, Salaries, \*Social Discrimination, \*Women Professors  
IDENTIFIERS \*Illinois University

ABSTRACT

This report presents information on the employment status of women at the Urbana-Champaign campus of the University of Illinois. Discussed are: (1) the representation, rank, and pay of females on the faculty; (2) representation of women in administrative positions; (3) representation of women on the faculty versus representation in the labor market; (4) productivity of male and female faculty members; (5) publications by male and female faculty members; (6) teaching effectiveness of male and female faculty; (7) professional experience of male and female faculty; and (8) salary and rank as functions of experience, productivity and sex. The data indicate that women are hired less frequently than their availability in the labor market would lead one to expect, that they tend to hold lower ranks than men when hired, and that their salaries tend to be lower than those of men holding the same ranks. Women are underrepresented on administrative committees and hold few top administrative positions. A comparison of productivity indicated that there is little difference between the sexes in production of publications or in amount of professional experience. (AF)

ED0 45011

RECEIVED

OCT 27 1970

DEPT. OF HISTORY

Rank, Pay, and Representation of Women on the Faculty at the Urbana-Champaign Campus of the University of Illinois<sup>1</sup>

by

Marianne Ferber.

and

Jane Loeb

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Recently adopted federal guidelines require that colleges and universities with federal contracts be able to demonstrate that their employment policies afford equal opportunity to women (Logan, 1970). These guidelines require institutions to provide affirmative action plans designed to correct any sex-based inequities which may exist. The present report summarizes data bearing on the extent to which employment policies at the Urbana-Champaign campus of the University of Illinois comply with these guidelines. Specifically, representation of women on the faculty and in the administration is investigated, and the rank and pay of male and female faculty are compared. Because low publication rate and interrupted career patterns could themselves perhaps account for low representation of women on the faculty and administration, and relatively low rank and pay of those on the staff, the productivity of men and women is compared as well.

Representation, Rank, and Pay of Females on the Faculty

In the Spring of 1970, a preliminary report on the status of women at the UI was presented to the AAUP. That report dealt with the proportion of women holding academic positions, their distribution throughout the ranks, and their salaries compared to men of the same rank and college.

1. Report of the Committee on the Status of Women, presented to the Urbana AAUP Chapter, November, 1970.

117-001 824



These data were based on a report by Carey (1969) which summarized the status of women with regard to rank and salary during the 1968-69 academic year.

Carey (1969) found that in the fall of 1968, 11.8% of the academic faculty at Urbana were women. However, only 3.7% of the full professors and 9.4% of the associate professors were women, while the percentage for assistant professors was 16.8 and for instructors, 33.7. These data are summarized in Table 1.

Carey's data also indicated that the mean salary for women at each rank, whether on nine-month or eleven-month appointments, was lower than that for men. As seen in Table 2, the mean salary for women varied from 99.6% of the mean male salary down to 76.2% of the mean male salary, depending on rank and appointment type.

More recent data summarized by Tousey (1970) indicates that the same sorts of salary differentials existed for the 1969-70 academic year. From Tousey's data it is possible to compare the average 9-month salary, as of October, 1969, of men and women Ph.D.-holders within the colleges and in some cases, within departments. Table 3 presents such a comparison and indicates that in all colleges and in most departments for which adequate comparative data were available, salaries of male Ph.D.-holders exceed those of female Ph.D.'s holding the same rank.

Tousey addressed the question of speed of advancement through the ranks as well as that of salary. He found that the rate of advancement of women through the ranks was slower, on the average, than that of men in the same college. These data are summarized in Table 4.

The following questions which arise as a result of these preliminary findings are addressed in the present report: (1) Is the number of women

appointed to administrative positions commensurate with their number on the faculty? (2) Is the number of women on the faculty commensurate with the number available in the labor market? (3) Are women on the average less productive than men, so that rational recruitment and promotion policies might concentrate on men? (4) Are the salaries and ranks of women commensurate with their experience and productivity? (5) Is the rate at which women are advanced through the ranks commensurate with their experience and productivity?

#### Representation of Women in Administrative Positions

The extent of female representation in the administration was estimated from the number of males and females listed as holding administrative positions in the 1969-70 Staff Directory. Three percent of the positions held by Urbana faculty on University Boards and Committees were held by women. Of the Urbana Senate Committee positions, 5% were filled by women. A relatively high percentage of positions on General Boards and Committees, 7%, was held by women; however, 27% of these women served on the "New Student Week" committee. Five percent of the positions on Divisional Committees were held by women; 13% of the members of Boards of Control were women, with half of these women serving on the Illini Union Board.

Table 5 lists the percent of the faculty who were female in 1969 (Tousey, 1970) by college, and the percent of the positions on College Committees filled by women. Several colleges were omitted because they had very low percent female faculty, others because either staff count or committee membership data were not readily available. Generally, the rate of representation of women on the Committees is lower than their rates of existence on the faculty. Since many committees contain student members who may be female, the representation of women faculty may actually be overestimated by these figures. These data suggest inequities in committee

appointments. More conclusive data would need to take into account the rank of committee members, since women tend to hold lower rank than men, and the relative importance of the various committees, however.

Of the heads, directors, coordinators, deans, and chairmen of departments, offices, colleges, and other administrative units, their assistants (excluding assistants to) and associates, only 7% were female. Of the more than 85 teaching departments, only 4 had female chairmen or heads. In addition it should be noted that none of the Colleges had even one female dean. Since 4% of the full and 9% of the associate professors are women, it appears clear that women are underrepresented in these posts. Finally, it should be noted that the Chancellor's and President's staffs are exclusively male.

#### Representation of Women on the Faculty vs. Representation in the Labor Market

Table 6 lists the percent of doctorates awarded to women in selected fields in 1967-68 (Office of Education, 1968) and the percent of the faculty and of the assistant professors in Urbana departments who were female in the 1969-70 academic year, based on departmental lists. A number of departments have at least as many female assistant professors as would be expected if their assistant professors were hired randomly from the 1967 crop of Ph.D.'s. To conclude that these departments are nondiscriminatory in hiring would require study of the sex ratio among recently hired assistant professors, however, since the percent of women at that level is inflated by their tendency to stay there longer than men. In a number of other departments, the sex ratio among assistant professors is clearly below that among recent Ph.D.'s.

#### Productivity of Male and Female Faculty Members

The low rates of female assistant professors relative to degrees granted in many fields may not be discriminatory if women Ph.D.'s either (1) fail to seek work or (2) are less productive in their work than men. Similarly,

their low rate of appointment to administrative positions might not be discriminatory if women are less productive than men. The possibility that women may fail to seek work has been investigated for a national sample of Ph.D.'s and found to be untrue: the great majority of women with Ph.D.'s remain in the labor force (Simon et al., 1966).

In order to gather data allowing a comparison of the productivity of male and female faculty members, a questionnaire was distributed in the Spring of 1970 to 186 women holding rank of at least instructor at the University of Illinois, and to a sample of men matched to them on department and rank. Where several matches were possible, the male was randomly selected. The sample of women represented around half the women at academic rank, and all for whom a matching male was available. The requirement that a matching male exist eliminated a number of departments, including Home Economics, Library Science, and Social Work from the sample. Returned questionnaires numbered 278, or 75%.

Information requested included department; rank; number of years spent at each rank at the UI; highest degree; date of degree; age; sex; number of publications of seven types--books, books edited, bulletins and technical reports, reviews, papers read at meetings, articles, and other publications--both since 1965 and in the respondent's lifetime; number of full time equivalent years of academic and other professional experience; number of professional honors since 1967; information concerning the respondent's contract, namely 9 or 11 month and full or part time status; and salary for the 1969-70 year.

The question concerning honors was open-ended, and hence varying types of responses were encountered, including grants, editorial positions,

election to office in professional organizations, etc. Some individuals specified exact numbers while others referred to "several" or "many". Each type of honor encountered was scored from zero to two, with two meaning simply more than one, and a "total honors" measure was derived by adding an individual's scores on all types of honors encountered in the sample.

In response to the questions on publications, several ss reported "many" publications. These responses were arbitrarily assigned the highest value reported by individuals of the respondent's sex for the given type of publication.

Three indices of productivity were investigated for the current sample: number of publications, Advisor ratings, and years of professional experience. No effort was made to evaluate the quality of the publications because of the difficulties inherent in such evaluation. Here the burden of proof would appear to rest with those who would claim that publications of women tend to be of lower quality than those of their male peers.

Publications of Male and Female Faculty. The publications of the 186 men and 186 women in the sample listed in the three most recent annual UI reports on faculty publications (1966 through 1968) were compared. Table 7 indicates that women published slightly more bulletins and technical reports, books edited, and reviews, while men published slightly more books and articles. In interpreting these results, an additional factor should be taken into account: about 15% of the women in the sample work parttime, compared to about 1% of the men. If one assumes that research output of a parttime employee should legitimately be proportionally lower than that of the fulltime employee, women's productivity is underestimated by these data.

Lifetime productivity of articles was investigated using the questionnaire data. It was expected that date of degree, number of years of fulltime

academic experience and highest degree should be the major factors accounting for variability in total articles published. If sex were found to add to the predictability of this criterion after these other predictors had already entered a predictive equation, differential productivity would be indicated. Using the technique of step-wise multiple correlation, sex was found not to predict significantly the total articles published in lifetime, after highest degree, degree date, and years of fulltime academic professional experience had already entered the predictive equation. Further analysis of the data for the 197 subjects for whom all requisite data were available indicated that men with degrees dated 1964 or older were predicted significantly to outpublish women of the same degree date, age, and years experience. However, women with fresher degrees were predicted to outpublish men. Regression coefficients at two stages of the step-wise procedure are listed in Table 8.

It should be pointed out that date of degree may be somewhat confounded with department in the sample. It is conceivable, though not particularly likely, that young women are located in departments which publish heavily compared to the departments in which young men are located. Although these data will not be advanced in support of a policy which would recruit young women in preference to young men, they lend absolutely no support to the recruitment of men in favor of women. In terms of article production, an older woman is a known quantity, while a younger woman is, it appears, a good risk.

Teaching Effectiveness of Male and Female Faculty. In order to provide an index of teaching effectiveness, the mean ratings received by those members of the sample listed in the 1968 and 1969 Advisor were calculated. In 1968 the men's mean was 3.28, while women received a mean of 3.31. In

1969 the male mean was 3.08 and the female mean, 3.07. Apparently the sexes do not differ in teaching effectiveness, as perceived by their students.

Professional Experience of Male and Female Faculty. Fulltime equivalent years of total and of academic professional experience were examined for the 259 subjects who reported experience, degree date, and age. It was expected that degree date and age would be the primary factors accounting for variability in years of experience. If sex were capable of adding significantly to the predictability of this criterion after these other variables had been taken into account, then sex-based differences in professional experience would be indicated. If fewer years of experience were predicted for females than for males, the data would suggest that females either tend to work parttime or experience interrupted careers more frequently than males.

Using the technique of multiple correlation, sex was found incapable of adding significantly to the prediction of either measure of experience, when age and degree date were known. Regression coefficients are listed in Table 9. A 39 year old with a degree dated 1960 (coded 60 for the analysis) would be predicted to have accrued about one year more professional experience if male than if female. This statistically nonsignificant difference suggests that women do not experience parttime or interrupted careers as frequently as is generally assumed.

In sum, the data on publications, teaching effectiveness, and experience strongly suggest that women are neither less permanent nor less productive than men. Hence their relatively low representation on the faculty and in the administration cannot easily be justified as reflecting the use of valid selection techniques.

Salary and Rank as Functions of Experience, Productivity and Sex. Sex-based inequality in pay can be said to exist if sex as an independent variable

adds significantly to the predictability of salary after the average salary for the individual's department and rank and indices of merit and experience, such as publications, honors, etc., have already been used as multiple predictors. Sex-based discrimination in academic rank can be similarly defined. The existence and extent of such inequalities were investigated, using the questionnaire data described above.

Inequality might manifest itself in several fashions. On the one hand, the reward structure might be the same for both sexes, with a journal article advancing one's rank and pay at the same rate regardless of sex, while a constant salary or rank increment might be added for men. That is, the slopes of the regressions of salary and rank on the multiple predictors might be equal but the intercepts differ for the sexes. On the other hand, inequality might exist in the reward structure itself, with articles, books, honors, etc., advancing males at a higher rate than females. Both possibilities were investigated, using a step-wise multiple correlation procedure. Indices of merit and experience were used first, then sex was introduced into the equation. Finally, terms representing the interaction of sex and each of the experience and merit indices, i.e., sex times each index, were allowed to enter the equation according to their predictive power.

Predictors of salary were the mean 1968-69 nine-month salary for the department and rank (University of Illinois Board of Trustees, 1968), number of years at the University at that rank, highest degree, appointment type (9 or 11 month), fulltime equivalent years of professional experience, all seven types of publications since 1965, and total honors since 1967. Subjects for salary prediction were the 59 males and 69 females (N=128) who answered all requisite questions, exclusive of parttime and Physical Education faculty. Physical Education salaries may differ for reasons confounded with sex but not clearly sex based, having to do with funding of Physical Education for men by the Athletic Association.

Equality in rank was investigated in two manners. First, rank itself was predicted from merit and experience indices, sex, and interactions of the two. In order to investigate speed of advancement through the ranks, of which current rank may not be a particularly sensitive measure, a weighted total of the years spent at each rank was established. The weights ran from one for instructor to four for full professor. If two individuals have spent the same number of years at the University but differ in this weighted total, he with the larger total must have spent more years at higher ranks. Hence this variable was predicted from years at the University, experience and merit indices, sex, and the interactions of sex with the other predictors.

Subjects for both investigations of rank were the 148 fulltime faculty members--72 women and 76 men--who answered all requisite items. Predictors of both criteria included the total years of service to the UI at rank of at least instructor, highest degree, date of degree, lifetime publications of the seven varieties listed above, number of years of professional experience, and honors.

All three dependent variables proved to be highly predictable, suggesting that the self-reported data were of reasonable reliability. For example, self-reported 1969 salary for all Ss, including those with 11-month appointments, had a correlation of .77 with mean 1968 budgeted 9-month salary for department and rank.

Table 10 lists multiple correlations and unstandardized regression coefficients at two stages in the step-wise prediction of salary. Sex, coded two for males and one for females, significantly increased the predictability of salary ( $F=6.68$ ,  $df=1/113$ ,  $p < .05$ ) beyond that afforded by mean salary for department and rank, 9 or 11 month appointment information, and the multiple indices of experience and merit. The unstandardized regression coefficient for sex, 845.96, can be interpreted as the average yearly dollar value of masculinity in this sample.

Beyond sex, two interaction terms were capable of adding significantly to the prediction of salary: Sex X Bulletins ( $F=4.49$ ,  $df=1/112$ ,  $p<.05$ ) and Sex X Years at Rank ( $F=5.36$ ,  $df=1/111$ ,  $p<.05$ ). The positive regression coefficients for these predictors indicate that both a bulletin and a year at rank predict more salary dollars for men than for women. Table 11 lists the predicted salary differences for men and women as a function of bulletins and number of years at rank. It can be seen that for those not publishing bulletins and technical reports, the sexes are about equal in pay when they first enter a rank, but the predicted discrepancy is around \$800 after 5 years. For producers of bulletins and technical reports, the discrepancies are greater, of course.

Sex itself did not add to the prediction of rank, after degree date, years at the University and the merit and experience indices had already entered the equation ( $F<1.0$ ). One significant interaction emerged, however: Sex X Books ( $F=9.16$ ,  $df=1/133$ ,  $p<.01$ ). Table 12 lists unstandardized regression coefficients for the prediction of rank. It can be seen that a book is predicted to advance a female about a tenth of a rank, whereas a book is predicted to advance its male author around a fifth of a rank.

Sex was not able to add to the power of the experience and merit indices to predict weighted total years at the University ( $F=1.60$ ). However, three of the interaction terms did increase predictability of this criterion ( $p<.05$ ): Sex X Books, Sex X Books Edited, and Sex X Articles. Table 13 lists the coefficients and indicates that while books and articles tend to advance men through the ranks more quickly than women, books edited advance women more quickly than men.

Whether it is advantageous to be male or to be female will depend on one's pattern of publications. Hence, the publication record of the 206 individuals who answered the item on lifetime publications, many of whom

were not in this derivation sample, were examined and the contribution to predicted weighted total years of their books, books edited, articles, and sex was calculated twice, once assuming masculinity and once assuming femininity. Table 14 lists the results. A total of 10 men and 7 women edited sufficient books that they would be predicted to advance more quickly if female than male. Another 23 men and 38 women produced none of these three types of publications and hence sex was immaterial to their advancement, as the only difference between the predicted weighted total for males and females without these publications is the  $-.5$  weight for sex. Since sex itself is unable to predict the criterion and this particular weight is not significant, this difference in favor of women should probably be viewed as nonsignificant. Finally, 70 men and 58 women published enough books and articles relative to books edited to be expected to advance more rapidly if male than if female. Thus 62% of this group would be expected to advance more quickly if male, while 8% would advance more quickly if female.

If the derivation sample's means for the experience and merit indices are used to represent a typical individual and he is alternately assumed to be male and female, his two predicted weighted totals are 16.4 and 15.2, respectively. The mean years at academic rank at the UI, and hence the total years spent there by the hypothetical subject, was 6.9. His promotional pattern might have been, if male, 4.3 years as an assistant professor, weighted two, and 2.6 years as an associate professor, weighted 3. If female, on the other hand, he might have spent 5.5 years as an assistant professor and 1.4 years as an associate, since these years when weighted sum to 15.2 and when not weighted sum to 6.9.

The salary and rank analyses clearly suggest discrimination against

women. Several arguments might be raised to account for the significant interactions obtained without invoking discrimination as an explanatory concept, however. First, the bulletins and technical reports, books, and articles of the women may be inferior in quality to those of the men, while women for some reason edit superior books. A second argument that might be launched is that women who write books may be situated in departments in which technical reports are rewarded, while women writing the latter ought to be writing the former, and so on. Occam's razor would appear capable of cutting down these arguments while leaving a discrimination hypothesis untouched.

If complete data were available, i.e., data based on administrative records for the University as a whole, it is quite possible that somewhat different patterns of differential promotion and pay would emerge. For example, articles rather than books might interact with sex in predicting rank. Since in the present data men are rather consistently favored, however, it seems unlikely that evidence of inequities would be absent in a larger sample.

The mean salary in the derivation sample for the salary prediction was \$12,361.39 and the discrepancy predicted for the sexes was \$845.96. A raise of 7% for women might be looked at as a rough estimate of adequate salary equalization. Since women who publish bulletins and technical reports and women who have spent several years at one rank are more underpaid than others, however, careful review of individual cases will be necessary for proper correction of inequities. Correction of rank inequities will probably be an even more complicated process, demanding in all likelihood departmental explication of promotional procedures so that the presence or absence of discrimination can be judged with some approximation of objectivity.

An additional problem involved in estimating the magnitude of discrimination at the University is that opportunity to accrue evidence of merit may be differentially available to the sexes. For example, research grants, fellowships, journal editorships, and election to office in professional organizations may be honors which are more readily available to men than to women. To the extent that the merit and experience indices used in this study are themselves discriminatory, rank and pay inequities are underestimated by the present data.

#### Summary and Conclusions

The present report summarizes data which indicate that women are hired less frequently than their availability in the labor market would lead one to expect, that they tend to hold lower ranks than men when hired, and that their salaries tend to be lower than those of men holding the same ranks. The data suggest that women are underrepresented on administrative committees and indicate that they are appointed to administrative positions such as Department Head or Dean less frequently than their numbers on the faculty would allow. A comparison of the productivity of men and women on the faculty indicates that there is little difference between the sexes in production of publications or in amount of professional experience. Thus failure to recruit women as actively as men cannot be readily justified. Finally, the present report summarizes data which provide strong evidence of sex-based pay inequities and evidence highly suggestive of sex-based rank inequities, defined as residual differences between the sexes in rank and pay after indices of merit and experience have been partialled out. Because of the complicated relationships among sex, merit indices, and rank and pay, the correction of these sex-based inequities will undoubtedly require review of individual cases.

Table 1. Fulltime faculty, fall 1968, from Carey (1969)

Rank	Appointment Type	Men f	Women f	Women as Percent of Total
Professor	9-month	623	23	3.7%
	11-month	235	10	
Associate	9-month	318	41	9.4%
	11-month	175	10	
Assistant	9-month	317	56	16.8%
	11-month	142	39	
Instructor	9-month	99	36	33.7%
	11-month	72	51	

Table 2. 1968-69 mean salaries of fulltime faculty, from Carey (1969)

Rank	Appointment Type	Men	Women	Mean Female as Percent of Mean Male Salary
Professor	9-month	\$18,581	\$15,474	83.3%
	11-month	\$20,512	\$17,930	87.4%
Associate	9-month	\$13,256	\$11,654	87.9%
	11-month	\$14,845	\$14,790	99.6%
Assistant	9-month	\$10,983	\$10,050	91.5%
	11-month	\$12,900	\$11,628	90.1%
Instructor	9-month	\$ 9,043	\$ 7,708	85.2%
	11-month	\$10,722	\$ 8,168	76.2%

Table 3. Average 1969 Salary of Men and Women by College and Rank, from Tousey

<u>College</u>	<u>Instr</u>	<u>Rank</u>		
		<u>Asst</u>	<u>Assoc</u>	<u>Full Prof.</u>
Agriculture				
(male)	10993	11336	13266	16873
(female)		8200	11990	16374
Home Ec.				
(male)		12177	12400	
(female)			12139	16683
Education				
(male)		11890	13815	18815
(female)		11936	12522	16658
Special Ed.				
(male)		11688	15071	19651
(female)			14307	18950
Fine Arts				
(male)	9000	11795	12719	18346
(female)			12167	14006
LAS				
(male)	9587	11205	13705	20326
(female)	8282	10551	12794	17820
English				
(male)	9750	10445	13907	20365
(female)	9200	10255	11752	14600
Math				
(male)		10806	13180	20881
(female)	7200	10365	13643	
Speech				
(male)		11528	14021	17690
(female)		10639		18500
P.E.				
(male)		11184	13738	18885
(female)	10000	10902	12745	17730
Library				
(male)		10715	13665	18478
(female)	7790	10204	11029	16029
Grad. School				
(male)		12956		18041
(female)		10204		18200
Departmental Libraries				
(male)		10496	13530	
(female)	7790		11029	13858

Table 4, Rate of Rank Advancement

<u>College</u>	<u>Instr to Asst Prof</u>		<u>Asst Prof to Assoc Prof</u>		<u>Assoc Prof to Professor</u>	
	<u>Years</u>	<u>Sample</u>	<u>Years</u>	<u>Sample</u>	<u>Years</u>	<u>Sample</u>
Agriculture (female)	5.64	14	7.77	13	7.17	6
Agriculture (male)	3.71	51	5.40	166	5.53	123
Education (female)	5.33	3	6.27	15	3.50	4
Education (male)	3.88	16	3.68	60	4.50	50
F.A.A. (female)	5.80	5	7.00	10	6.00	7
F.A.A. (male)	4.51	61	4.80	97	5.58	83
LAS (female)	5.58	26	6.00	14	6.40	5
LAS (male)	3.06	144	4.35	266	4.75	183
PE (female)	6.00	7	7.67	6	2.00	1
PE (male)	4.39	23	6.57	14	5.10	10
Library (female)	7.27	26	9.42	12	8.60	5
Library (male)	5.53	19	4.62	13	10.67	6

**Table 5. Representation of women on college committees**

<b>College</b>	<b>Percent Female Faculty<sup>1</sup></b>	<b>Percent of Committee Positions Held by Females</b>
<b>Agriculture</b>	<b>15%</b>	<b>9%</b>
<b>Education</b>	<b>21%</b>	<b>7%</b>
<b>Fine Arts</b>	<b>10%</b>	<b>14%</b>
<b>Liberal Arts &amp; Sciences</b>	<b>12%</b>	<b>3%</b>
<b>Physical Education</b>	<b>32%</b>	<b>20%</b>
<b>Library Science</b>	<b>59%</b>	<b>50%</b>
<b>Graduate</b>	<b>5%</b>	<b>4%</b>
<b>Communications</b>	<b>2%</b>	<b>4%<sup>2</sup></b>
<b>Veterinary Medicine</b>	<b>4%</b>	<b>3%<sup>3</sup></b>

**1** From Tousey (1970).

**2** Without the Alumni Relations Committee, the percent becomes 0.

**3** Without the Library Committee, the percent becomes 1.

**Table 6. Comparison of percent of doctorates awarded to women (1967-68) and percent of UI faculty positions held by women**

Department	Percent of Doctorates Awarded to Women (1967-68)	Percent Women Employed with Rank of at least Assistant Prof.	Percent Women Employed as Assistant Professors
Anthropology	24%	0%	0%
Art	34%	4%	4%
Chemistry	8%	2%	7%
Ed. Administration	8%	0%	0%
Ed. Psychology	28%	11%	26%
Elem. Education	42%	18%	33%
English	27%	20%	28%
French	38%	12%	17%
German	24%	25%	25%
History	13%	3%	14%
Hist. & Phil. of Ed.	19%	9%	0%
Journalism	16%	0%	0%
Library Science	32%	43%	40%
Linguistics	21%	11%	0%
Mathematics	6%	9%	21%
Music	14%	9%	8%
Philosophy	9%	0%	0%
Political Science	11%	10%	20%
Psychology	22%	5%	7%
Secondary Education	17%	19%	0%
Sociology	18%	8%	8%
Speech	18%	24%	33%
Zoology	15%	5%	18%

**Table 7. Publications of 186 men and 186 women, from UI lists dated 1966-68**

Type of Publication	Number Published		Women's N as a Percent of Men's
	Men	Women	
Books	21	18	85.7%
Books Edited	4	7	175.0%
Articles	197	174	88.3%
Bulletins & Tech. Reports	8	21	262.5%
Reviews	48	53	110.4%

TABLE 8

## Regression Coefficients for Prediction of Articles Published in Lifetime.

<u>Variable.</u>	<u>Unstandardized Regression Coefficients</u>	<u>Unstandardized Regression Coefficients</u>
Highest Degree (4=Ph.D., 3=Post MA, 2=MA, 1=BA)	2.47*	2.28*
Degree Date (last 2 digits, e.g. 47)	-.30	1.19**
Years Academic Experience (FTE)	.76**	.66**
Age	-.24	-.22
Sex	3.60	67.83**
Sex X Degree Date		-1.05**
Dependent Variable Intercept	12.69	-76.74
Multiple R	.45	.52

\* p&lt;.05

\*\* p&lt;.01

TABLE 9

Regression Coefficients for the Prediction of Years of Professional Experience

<u>Variable</u>	<u>Unstandardized Regression Coefficients</u>	
	<u>Criterion:</u> Years Prof. Experience	<u>Criterion:</u> Years Academic Prof. Experience
Sex	-7.90	-3.90
Degree Date	- .19	- .26
Age	.64**	.34*
Sex X Degree Date	.06	- .01
Sex X Age	.13	.15
Dependent Variable Intercept	-1.90	11.08
Multiple R	.90	.84

---

\* p<.05  
 \*\* p<.01

Table 10

**Multiple Correlations and Unstandardized Regression  
Coefficients for Prediction of Salary**

Variable	Unstandardized Regression Coefficient	Unstandardized Regression Coefficient
Mean salary for department and rank	.81**	.79**
Years at rank	60.99	- 203.54
Highest degree (4=Ph.D., 3=post M.A., 2=M.A., 1=B.A.)	594.43**	537.84**
Appointment type (2=11 mo., 1=9 mo.)	1413.57**	1534.71**
Years of professional Experience	46.59	41.80
Books (since 1965)	- 278.73	- 215.57
Books edited	- 438.05	- 460.25
Bulletins and Technical Reports	10.91	- 307.29*
Reviews	- 36.21	- 36.18
Papers read at meetings	179.64**	139.74**
Journal articles	- 45.10	- 37.15
Other publications	4.35	5.44
Total Honors	335.91**	334.80*
Sex	845.96*	- 190.31
Sex X Bulletins		291.11*
Sex X Years at rank		198.54*
Dependent variable intercept	-3517.94	-1759.61
Multiple R	.87	.88

Table 11

Predicted Salary Differentials as a Function of  
Bulletins and Years at Rank

Number of Bulletins	Years at Rank				
	1	2	3	4	5
2	\$590.45	\$788.99	\$987.53	\$1186.07	\$1384.61
1	\$299.34	\$497.88	\$696.42	\$ 894.96	\$1093.50
0	\$ 8.23	\$206.77	\$405.31	\$ 603.85	\$ 802.39

Table 12

## Regression Coefficients for Prediction of Academic Rank

Variable	Unstandardized Regression Coefficient
Highest degree	.50**
Degree date	-.02*
Books (lifetime)	-.20*
Books edited	.05
Bulletins and Technical Reports	-.01
Reviews	-.00
Papers read at meetings	.03**
Articles	-.00
Other publications	.02*
Years professional experience	.02*
Years at Academic rank at the University of Illinois	.02
Total honors	.06
Sex	-.10
Sex X Books	.22**
Dependent variable intercept	1.56
Multiple R	.84

\* p&lt;.05

\*\* p&lt;.01

Table 13

Regression Coefficients for Predicting  
Weighted Total Years at the University

Variable	Unstandardized Regression Coefficient
Years at Academic rank at the University of Illinois	2.61**
Highest degree	1.32*
Degree date	.06
Books (lifetime)	-2.01*
Books edited	4.28*
Bulletins and Technical Reports	.08
Reviews	-.08
Papers read at meetings	.28
Journal articles	-.11
Other publications	.07
Years professional experience	.01
Total honors	.00
Sex	-.52
Sex X Books	2.03*
Sex X Books edited	-2.48*
Sex X Articles	-.18*
Dependent variable intercept	-13.03
Multiple R.	.97

\* p<.05

\*\* p<.01

Table 14

Predicted Rapidity of Advancement as a Function of Sex

Actual Sex	Number Expected to Advance more Rapidly if Male	Number for Whom Sex has no Effect	Number Expected to Advance more Rapidly if Female
Women	58	38	7
Men	70	23	10
Total	128	61	17

### References

Carey, Robert, A study of academic salaries at the University of Illinois, men compared with women, part II: fall 1968 salary. Unpublished manuscript, 1969.

Logan, A. A., Universities told they must grant equal opportunity to women. Chronicle of Higher Education, July 6, 1970.

Office of Education, Earned degrees conferred: part A--summary data. OE-54013-68-A.

Simon, Rita, Clark, Shirley, and Tift, Larry, Of nepotism, marriage, and the pursuit of an academic career. Sociology of Education, 39, 1966.

Tousey, Walter, Females at the Urbana campus of the University of Illinois. Unpublished manuscript, 1970.

University of Illinois Board of Trustees, Fifty-fourth Report, 1966-68 Supplement, Internal Operating Budget for 1968-69, University of Illinois Bulletin, vol. 66, 1968.