DALHOUSIE UNIVERSITY

January, 1979

# **Report of the Committee on the Status of Women** at Dalhousie University

Phase I: Full-time Faculty

Special Edition

UNIVERSITY

### CONTENTS

NEWS

With the exception of the summary in the adjoining columns, the full text of the report of Phase I of the Committee on the Status of Women at Dalhousie University, forms the content of this special edition of University News.

#### Acknowledgements ..... 2

Status of Full-time Dalhousie	Faculty Women at

**Data analysis** 

CONTEXT

Discussion

Pensions	4
Administration	4
Hiring practices	4
Promotion	4
Maternity leave	4

Recommendations.....5

Tables ..... 5-8

- I. Average salaries of male and female full-time faculty at Dalhousie for the academic year 1977-1978.
- II. Distribution of salaries by sex.
- III. Distribution of rank by sex.
- IV. Tenure status by sex.
- V. Tests of significance for salary differences between males and females.
- VI. Multiple regression analysis:
  - a. Overall faculty.
  - b. Overall males.
  - c. Overall females.
  - d. Arts & Science.
  - e. Arts & Science males. f. Arts & Science females.

  - Medicine. h.
  - Medicine males. Medicine females.
  - Administrative Studies.
  - Dentistry.
  - Health Professions.
- VII. Predicted average salaries using regression equation for opposite sex; a. Overall males using overall female
  - equation. b. Overall females using overall male
- equation. VIII. Average age by sex within rank.
- IX. Average years-to-date in rank by sex.

# Women are discriminated against, says committee

Women faculty at Dalhousie **University:** 

- Are paid less than their male counterparts;
- Are concentrated in the lower academic ranks;
- Spend more time in each rank before being promoted; and
- Are significantly fewer than the males.

These are the major conclusions of the President's Committee on the Status of Women.

The study of the status of women at Dalhousie was prompted by the Dalhousie Women's Faculty Organization which, after noting the results of similar studies done elsewhere in Canada, approached the president, Dr. Henry D. Hicks, in the spring of 1976, requesting that he establish a committee to study the position of women on campus.

Dr. Hicks agreed, and the committee was formed in April, 1976, with a mandate to review the status of women in academic positions, in administration, in the academic support staff, and as students.

Data collected were for the academic year 1977-78. The report presented to the president in December is for Phase 1, which covers full-time faculty only. Other phases of the study will include data about members of the administration, academic support staff and students. Analyses of the data in the report included salaries, rank and tenure.



Virginia Miller, of the Department of Sociology and Social Anthropology; she headed the committee from October, 1977, and wrote the report.

(Wilkins Slopek Photo)

While the report says that statistical analysis "has demonstrated clearly that full-time women faculty are indeed discriminated against in salary because of their sex" and in other areas, it goes on to say that "the discrimination suffered ... is, of course, not unique to this institution.

"But it is the obligation of the university as a centre of enlightenment to set the example for the larger society and lead in the field of equalizing the position of women with that of men.'

The committee put forward nine recommendations in its report.

The president is now considering the report.

978

ye of

er-

to dnd

/e r n

0

e

#### ACKNOWLEDGEMENTS

A great many individuals have facilitated preparation of this report, and it is possible to cite and thank only a few specifically. First, a meaningful report would have been impossible without the solid data base provided by the Administration, and the Committee is grateful for the trust displayed in this regard. The Committee would also like to acknowledge the assistance of the Administration in bearing the costs of the study. Additional data were gathered directly from university offices, and here thanks are due to all heads of departments and schools and members of office staffs who assisted in this regard. Committee numbers have declined since the Committee was established in 1976, but all members, past and present, have contributed to the report and deserve mention here. Past Committee members include: Dorothy Broderick, School of Library Service, who headed the Committee from 1976 to June, 1977, and who has since left the University; Sonia Jones, Department of Spanish, on sabbatical leave 1978 -1979; and Jaye Horrocks, School of Nursing, on leave of absence 1978 - 1979. Committee members remaining in 1978 - 1979 include: Forbes Langstroth, Department of Physics and the Adminstration's

representative on the Committee; John Aldous, Department of Pharmacology; David Sutherland, Department of History; and Virginia Miller, Department of Sociology and Social Anthropology, and head of the Committee from October, 1977, to the present. The diligent research assistants were Barbara Marshall and Penny Hoover.

The report was written by Virginia Miller with the advice, comment, and approval of John Aldous and David Sutherland.

# The Status of Full-time Faculty Women at Dalhousie

### Introduction

With an increase in general social consciousness concerning women in the past dozen or so years has come a corresponding increase in attention paid women in academia: their numbers, the ranks and positions they occupy, and their salaries. The Royal Commission on the Status of Women sponsored one of the very first studies made of academic women. This was based on data supplied the Dominion Bureau of Statistics by universities across Canada for the academic year 1965 - 1966. The study found not only far fewer women than men in academia, but that the average female academic salary in Canada was \$2,262 less per annum than the average male academic salary; slightly more than half of this amount (\$1,199) was directly attributable to sex. Even more disturbing was the finding that the gap between female and male salaries had actually widened during the previous nine years. Furthermore, the study also revealed that women were concentrated in the lower ranks and non-administrative positions even when they had the same degree of training and experience as their male counterparts, who dominated the higher academic ranks and administrative positions. And finally, the study found that women progressed upward through the academic ranks more slowly than men.<sup>1</sup>

Since publication of the Royal Commission's study, a number of Canadian universities have carried out their own studies of women on their campuses;<sup>2</sup> full-time and part-time female faculty, librarians, non-academic staff, and women students at both graduate and under-

graduate levels have all been subjects for study. Without exception, all these studies obtained results similar to those of the Royal Commission, namely, that there were very few women faculty compared to men faculty, that these women were concentrated in the lower ranks, that they spent more time in rank before being promoted, and that they were paid lower salaries on the average than their male counterparts.

Such findings at other Canadian universities prompted the Dalhousie Women's Faculty Organization to approach President Hicks in the spring of 1976 with the request that he establish a committee to study the position of women at Dalhousie. President Hicks agreed, and in April of 1976 established a committee consisting of seven members including four women faculty, two men faculty, and one male representative of the Administration. The mandate President Hicks gave the committee was as follows:

The Committee will review the status of women in their roles as members of the academic faculty, members of the Administration and academic support staff and students. The Committee will make whatever recommendations it deems necessary and apporpriate to ensure that women members of the faculty of the University community receive equitable and non-discriminatory treatment in all aspects of the University's operations. The Committee decided to carry out its work in several phases, commencing with a study of female and male full-time faculty; studies of part-time faculty, librarians, non-academic staff, and students would follow. It was anticipated that as each phase of the work progressed, composition of the Status of Women Committee would change to incorporate representatives of the group under study.

Once this course of action was decided upon, the greatest single problem the Committee encountered was the collection of accurate, up-todate, and comprehensive data for the full-time faculty. Without belabouring the obstacles encountered in the process of data collection, suffice it to say that two years later, in the spring of 1978, with the co-operation of the Administration and a number of helpful individuals around campus, a data file acceptable to Committee members was finally assembled and analysis could begin. Data collected were for the academic year 1977 --1978. Deans of the various Faculties were excluded from the analysis because of the largely administrative nature of their duties. Heads of departments were included.

 A Comparison of Men's and Women's Salaries and Employment Fringe Benefits in the Academic Profession, prepared by R.A.H. Robson and Mireille LaPointe for the Royal Commission on the Status of Women in Canada, Ottawa: Queen's Printer, 1971.
 For example, British Columbia, Toronto, McGill, York, McMaster, Acadia Universities.

Here and a set of the set of the

in the second same in the second

ing factory malu

Anter selfing

#### UNIVERSITY NEWS Special Edition

# Full-time Faculty at Dalhousie: An Overview

Preliminary statistical techniques were first applied to the data in order to ascertain whether differences did indeed exist between female and male full-time faculty salaries at Dalhousie. Table I reveals that overall at Dalhousie, at every rank average salaries of males exceed average salaries of females. The difference is most marked in the highest and lowest ranks: male Full Professors make, on the average, \$4,185 more than their female counterparts, while the differences between male and female Lecturers and male and female Instructors are \$7,362 and \$3,965 respectively. At the rank of Assistant Professor, the average difference between male and female salaries is least, although it still exceeds \$2,000. As Table I also reveals, these differences between male and female average salaries hold up through all Faculties and almost all ranks; in only four situations do women make higher salaries on the average than their male counterparts. Possible interpretations of these situations are included in the discussion section.

Another way of examining the situation of female vs. male salaries at Dalhousie may be seen in Table II, which reveals the distribution of salaries by sex. Women are clearly concentrated in the lower salary ranges; 71.2% of all women at Dalhousie make less than \$22,000, while only 29.1% of the men make less than that amount. 85.3% of the women make less than \$26,000, while approximately half of the men make less than that amount. Only 5% of the women faculty at Dalhousie make salaries greater than \$34,000, while 23% of the male salaries exceed this amount. And it is worth noting that no woman at Dalhousie makes a salary greater than \$42,000, while 8.0% of the men's salaries exceed this amount.

Linked with salary are the ranks women occupy, and this topic is addressed by Table III. Here we see that only 5.4% of the women at Dalhousie occupy the rank of Full Professor, while 28.6% of the men hold that rank. The bulk of women are concentrated at the ranks of Assistant Professor (40.3%) and Lecturer (28.7%). This may be compared with the situation of the male faculty, where only 29.2% are Assistant Professors and only 3.1% are Lecturers.

Tenure status of women vs. men may be seen in Table IV, which shows that overall, 68.5% of the male faculty at Dalhousie is tenured, while only 37.4% of the female faculty is tenured. This distinction holds up in every rank except the rank of Assistant Professor, where the percentage of tenured women exceeds that of tenured men. A possible explanation for the heavier concentration of tenured women as compared to tenured men in the Assistant Professor rank will be offered in the discussion section.

The data in Tables I-IV have served to document the secondary status of full-time women faculty at Dalhousie and to corroborate the findings of other Canadian universities. Tests of statistical significance were then applied to the average salary figures to determine whether the differences found could be explained by chance. The results are presented in Table V, which reveals that the differences in salary averages are statistically significant at the overall level and through most of the Faculties and ranks. This suggests that sex is indeed a crucial variable associated with salary at Dalhousie.

# DATA ANALYSIS Explaining the Differences

To what extent can the lower salaries received by women at Dalhousie be explained by such factors as the highest degree a woman possesses, or her experience, or her age? Indeed, a number of factors combine to determine an individual's salary. To take these multiple factors into account, the statistical technique of multiple regression was next applied to the data file. The fundamental assumption of multiple regression is that a dependent variable (in this case, salary) is the result of a number of components, and that these components may vary in their importance. Thus, rank may be more influential than highest degree in determining an individual's salary, or more important than years' experience. Multiple regression analysis ascertains the relative importance of the various components and determines an average value in dollars for each component. It produces an equation containing these values, and the equation may then be used with any set of components to determine any given individual's salary with reasonable accuracy. By convention, components are included in the multiple regression equation only when they contribute more than 1% to the determination of the dependent variable.3

At this point, by means of statistical correlations of a number of possible factors with salary and examination of findings of studies done at other universities, the Committee isolated a number of factors which it considered potentially important in salary determination. These were:

academic rank years in rank years at Dalhousie highest degree age at which obtained highest degree age at which obtained first degree age marital status

tenure status

publications.

Sex was added to the list as another possible determinant of salary.

Multiple regression analysis was then carried out on the faculty overall, on male and female faculty separately, and on each individual Faculty.<sup>4</sup> The results of the analysis are contained in Tables VI(a) through VI(1). Table VI(a) presents an overall analysis of full-time faculty salaries at Dalhousie and indeed, reveals rank, highest degree, and age as the most important components determining salary. However, these components are followed closely by sex as a contributing component. What the multiple regression analysis shows is that all other factors being equal, the average full-time female faculty member at Dalhousie is paid \$1,179 less than her male counterpart. Tables VI(d), VI(g), VI(j), VI(k), and VI(1) reveal that when each Faculty is considered separately, sex is still an important determinant of salary. Sex is shown to have the smallest effect on salaries in the Faculty of Arts and Science, where the

## **Reversing the Sexes**

The statistical calculations were then carried a step further with the calculation of male salaries according to the female multiple regression equation and the calculation of female salaries according to the male multiple regression equation. In other words, the question asked was, if the male faculty at Dalhousie were women, what would their salaries be, and vice versa. Tables VII(a) and VII(b) reveal the results. Overall, at every rank and through every Faculty, male salaries would be reduced, while at every rank in every average difference between equally qualified females and males is \$833. Sex has the largest effect in the Faculty of Dentistry, where women average \$2,061 less than their equally qualified male counterparts. Intermediate between Arts and Science and Dentistry are the other Faculties: in Administrative Studies, women average \$1,048 less than their equally qualified male counterparts; in Health Professions, women average \$1,400 less than their equally qualified male counterparts; and in Medicine, women average \$1,549 less than their equally qualified male counterparts.

Marital status was found to be another significant component of salary. Overall, Table VI(a) shows that just being married adds, on the average, \$405 to one's salary. However, when looked at more closely, marital status is shown to have differing effects on salaries of men and of women. As Tables VI(b) and VI(c) reveal, being married adds an average of \$636 to a male faculty's salary at Dalhousie, while being married subtracts \$259 from a female's salary. In two of the Faculties, Medicine and Arts and Science, marital status remains a significant component to the advantage of married males and to the disadvantage of married females. In Medicine, this difference is truly spectacular, with males gaining \$3,104 by being married, and females losing \$5,565 if married. In Arts and Science, both sexes gain if married, although the gain is greater for males (\$579) than for females (\$292). Marital status has also been found to be a significant component of salaries at other Canadian universities, always to the advantage of males and the disadvantage of females.

3. For a more detailed explanation of multiple regression and its uses, see Chapter 20 "Multiple Regression Analysis: Subprogram Regression" in Nie, Norman H., C. Hadlai Hull, Jean G. Jenkins, Karin Steinbrenner, and Dale H. Bent, Statistical Package for the Social Sciences, 2nd ed. New York: McGraw-Hill Book Company, 1975.

4. It was not possible to carry out a multiple regression analysis in the Faculty of Law because in 1977-78, there was only a single full-time female faculty member.

Tenure status as a possible component of salary had to be discarded from the regression analysis. Tenure status produced only negative values for the regression equation, saying essentially that one loses money by being tenured at Dalhousie. It is possible that the great number of tenured Associate and Assistant Professors compared to a smaller number of tenured Full Professors produced this effect.

Publications also had to be discarded as a component. In all cases, number of books published yielded a negative value, while in all cases but one, number of articles published yielded a negative value, saying essentially that the more one publishes, the lower one's salary becomes. This situation probably was caused by the outdated publications records which the Committee was forced to rely on; in one case, an individual's vita was thirty years old! What apparently happens is that as their careers progress, faculty members are lax about updating their vitas on file with the university, making it appear that Full Professors have published fewer books and articles than their junior colleagues.

Faculty, female salaries would be increased. These differences showed up most dramatically at the highest and lowest academic ranks: male Full Professors would lose \$2,968 on the average if they were females, while female Full Professors would gain \$3,907 on the average merely by being males. Male Instructors would lose \$3,894 if they were female; female Instructors would gain \$1,893 if they were male. Potential differences were least at the rank of Assistant Professor, where males would lose \$212 on the average, and females would gain \$436.

# DISCUSSION

The Committee's mandate was to study full-time female and male faculty to determine whether females were discriminated against because of their sex. The preceding statistical analysis has demonstrated clearly that full-time women faculty at Dalhousie are indeed discriminated against in salary because of their sex. But the lower salaries that women receive represent only one aspect of the university's general attitude toward women. Other types of discrimination are also suggested by the preceding tables.

#### **Hiring practices**

The disproportionately low number of women in the full-time faculty at Dalhousie suggests that, among other things, there may be discrimination in hiring practices. In 1977-1978, only 127 of the 777 full-time faculty, or 16%, were female. More than one-third of these (38.6%) were in the Faculty of Health Professions, concentrated in the traditional female fields of nursing and related professions. Almost another third (29.9%) were concentrated in the Faculty of Arts and Science, most of these in the traditional female fields of language, education, and social science. Even in academic disciplines where women earn large percentages of the Ph.D.'s granted nowadays, they are disproportionately represented at Dalhousie; surely it is not unreasonable to expect that the ratio of female to male faculty within a department reflect the ratio of female to male Ph.D.'s granted in that particular discipline. While one might argue that positions in most departments are now filled with tenured male faculty and that vacancies arising are few, some attempt at improving the ratio of female to male faculty might be made by actively pursuing qualified female candidates whenever a vacancy does occur.

#### Promotion

The clustering of women in the lower ranks at Dalhousie suggests the possibility of promotional disadvantages for women. Because of the limitations of the data collected, this study could not analyse how long women and men spend in one rank before being promoted to the next rank. However, Table VIII corroborates findings at other Canadian universities that women on the average are often older than their male counterparts in rank. At Dalhousie, this age difference shows up in the three top ranks of Full, Associate, and Assistant Professor, suggesting that, other things being equal, promotions come more slowly for women than for men. The same conclusion is suggested by Table IX depicting average years-to-date in rank, which shows that the women who are now Assistant Professors have spent more time at this rank than the men who are Assistant Professors. And Table IV supports this finding by revealing that only at the rank of Assistant Professor does the percentage of tenured females exceed the percentage of tenured males: 36.0% of all female Assistant Professors are tenured compared with only 28.8% of male Assistant Professors, suggesting strongly once again that males are promoted from the rank of Assistant Professor more quickly than are females.

The longer time spent in the Assistant Professor rank by women suggests an explanation for the smallest discrepancy between female and male salaries occurring at this rank, pointed out earlier. If women Assistant Professors have been at that rank longer than their male counterparts, then they have been accruing annual salary increments for a longer time. This means that even though their basic salaries may be lower, with the greater number of annual increments their salaries on the average should approach or even exceed the salaries of male counterparts who have not been Assistant Professors as many years, but who have higher basic salaries. This seems a likely explanation for two of the anomalous situations seen in Table I, where female Assistant Professors in Arts and Science and in Law have higher average salaries than their male counterparts.

The association between rank and salary is especially pernicious since being kept in a lower rank means generally being paid a lower salary. The absence at Dalhousie of objectivelydetermined written, publicized procedures for promotion makes it extremely difficult for any individual, male or female, to know and to demonstrate that he or she is being treated unfairly. This situation must be rectified as one aspect of an anti-discrimination programme at Dalhousie. Further, lack of written procedures for promotion may be one explanation for the extremely few women in the highest academic ranks.5 Women may be more reluctant than men to put themselves forward for promotion, especially in a situation where there are no clearcut standards. The few women at Dalhousie who are Full Professors have largely been hired in from the outside at this rank; very few, if any, of them have achieved their rank after spending much or all of their careers at Dalbousie and being promoted through the ranks. Being hired in from the outside for these women means being paid a relatively high salary; this seems to be the explanation for the other two anomalous situations in Table I, where women Full Professors in Arts and Science and in Health Professions receive higher average salaries than their male counterparts.

- 5. Here it is interesting to note the distribution of women Full Professors among the Faculties:
  - Administrative Studies has three women Full Professors out of a total of ten women faculty, or 30%.
  - Arts & Science has two women Full Professors out of a total of 38 women faculty, or 5.3%. Health Professions has one woman Full Professor out of a total of 49 women faculty, or 2.0%.
  - Medicine, the second largest Faculty at Dalhousie with 186 men and 20 women full-time faculty, has no women Full Professors. Neither does Dentistry nor Law.

### Administration

Looking above the rank of Full Professor and into the highest administrative positions at Dalhousie, we see extremely few women: all of the seven Deans of Faculties are men, all of the Vice-Presidents are men, as is the President. More than 75% of the Board of Governors are men. Membership on the university's standing committees is overwhelmingly male. In other words, women are all but invisible in the decision-making positions and processes at Dalhousie. This situation cannot help but be noticed by and have its effect on both male and female students, whose years in university are critical in formulating career aspirations and lifetime goals. Seeing that no women achieve top-level decision-making positions certainly cannot serve as an inspiration for women students.

to produce the same

a transmission and a second and a second s

#### Pensions

Other, more subtle, aspects of the discrimination faced by women at Dalhousie are not seen directly in the tables presented in this report, but may be inferred. For example, the lower salaries women receive follow them right into retirement, as pensions and disability benefits are based on earned salaries during the productive years. If those salaries have been less than the salaries of equally qualified males, then essentially women are losing out all through their lives.

### **Maternity leave**

A final, but not unimportant, aspect to consider in redressing discrimination by sex stems from our basic biology. Women are necessarily child bearers, if not always child rearers, in our society. Women who opt for careers in addition to being mothers should not be penalized any more than they should be coddled, but social systems should be flexible enough to accommodate them. Flexibility operates only to the benefit of all society. Flexibility at Dalhousie would include at a minimal level a uniform policy of paid maternity leave for a reasonable length of time.

The discrimination suffered by women full-time faculty at Dalhousie is, of course, not unique to this institution. Women are relegated to secondary status not only in universities, but throughout our society. However, this does not excuse Dalhousie's treatment of its full-time women faculty, and, given the information presented in this report, Dalhousie can no longer afford to be naive or complacent about its treatment of its women faculty. The fact that discrimination does exist does not necessarily imply a conscious conspiracy against women, but rather a state of laxness resulting from having no one responsible for ensuring that discrimination does not exist. Dalhousie may not be able to solve the problems of the larger society, but it is the obligation of the university as a centre of enlightenment to set the example for the larger society and lead in the field of equalizing the position of women with that of men. The university cannot remain silent and passive; a positive commitment is needed from Dalhousie for a programme of positive action to eliminate discrimination and to see that it does not recur.

ueb ueb artica to a sing to the to di artica to a sing to the sing of artica to a sing of the sing of pecommendation in port with 22

UNIVERSITY NEWS is published by Dalhousie University.

The Editor, University News, Information Office, Old Law Building, Dalhousie University, 1236 Henry Street, Halifax, Nova Scotia, B3H 3J5; Tel: 902-424-2517.

Registered as third-class mail; permit number, Dartmouth, N.S. 59.

### RECOMMENDATIONS

- 1. That the university publicly declare a policy of equal opportunity and equal treatment for all women at Dalhousie.
- 2. That a committee be established to study the salaries of all full-time female faculty and empowered to correct anomalies:
  - a. that this committee be composed of members chosen jointly by the administration and the Dalhousie Women's Faculty Organization, and that at least 50% of the committee composition be female;
  - b. that the committee set its own guidelines and procedures and make these public;
  - c. that individuals whose salaries are found to be anomalous be compensated for past loss in salary;
  - d. that the committee note individuals whose cases appear to be anomalous with regard to promotion or other matters, and call attention to these with a view to having them rectified;
  - e. that provision be made for reconsideration of any individual's case if that individual is not satisfied with the committee's decision on the case;
  - f. that the committee report to the administration and to the Dalhousie Women's Faculty Organization at regular intervals on its progress;
  - g. that the committee be established within one month of the acceptance by the President of this report.
- 3. That search committees for high academic and administrative positions be required to seek out and consider qualified female candidates and that these committees be required to report on their success in doing SO.
- 4. That nominating committees for university committee positions be required to seek and include qualified female candidates.
- 5. That departments be required to seek and consider qualified female applicants for all vacancies which may occur and report on their success in doing so.
- 6. That appointments to the Board of Governors be made with a view to increasing the number of females on the Board.
- 7. That tenure and promotional procedures be formalized in writing, and that these procedures be publicized.
- 8. That a high administrative position be established which is responsible only to the President, and which deals with all matters concerning women on the Dalhousie campus, such matters concerning full-time faculty women to include: developing a programme of affirmative action; implementing the recommendations of this report; scrutinizing all hiring, tenure, and promotional practices; being responsible for an annual review of salary increments to ensure that discrimination does not creep back in once it is removed; ensuring equality in matters of pension and disability benefits; developing a uniform university policy on maternity leave; overseeing grievances of female faculty. This position should be filled with a woman.
- 9. That the Status of Women Committee be reconstituted within 30 days of the acceptance of this report by the President, and directed to continue its investigation of women on campus.

#### TABLE I

F

#### Average salaries of male and female full-time Faculty at Dalhousie for the academic year 1977-78

ACULTY	OVERALL AVERAGE	MALES	FEMALES
0			
Overall Overall Mean Instructor Lecturer Asst. Professor Assoc. Professor Full Professor	\$26,598 (777)*	\$27,924 (650) 15,902 (5) 22,815 (20) 22,680 (191) 27,196 (248) 35,153 (186)	\$19,808 (127) 11,937 (7) 15,453 (37) 20,571 (52) 24,191 (25) 30,968 (6)
Administrative Studi	ies		
Instructor Lecturer Asst. Prof. Assoc. Prof. Full Prof.		(1)** 19,645 (18) 25,087 (26) 30,573 (14)	$\begin{array}{c} \\ 19,566 & (6) \\ & (1)^{**} \\ 27,800 & (3) \end{array}$
Arts & Science			
Instructor Lecturer Asst. Prof. Assoc. Prof. Full Prof.	·	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{cccc} 11,937 & (7) \\ 16,073 & (6) \\ 18,262 & (16) \\ 22,807 & (7) \\ -H- & (2) \end{array}$
Dentistry			
Instructor			
Lecturer Asst. Prof. Assoc. Prof. Full Prof.		27,665 (8) 31,900 (12) 41,257 (7)	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Health Professions			
Instructor			
Lecturer Asst. Prof. Assoc. Prof. Full Prof.		$\begin{array}{ccc} 18,142 & (5) \\ 20,378 & (16) \\ 24,467 & (8) \\ 29,137 & (8) \end{array}$	$\begin{array}{cccc} 14,778 & (22) \\ 19,327 & (18) \\ 21,767 & (8) \\H- & (1) \end{array}$
Law			
Instructor Lecturer Asst. Prof. Assoc. Prof. Full Prof.		18,810 (3) 25,046 (12) 33,592 (17)	 H (1) 
Medicine <sup>6</sup> Instructor Lecturer Asst. Prof. Assoc. Prof. Full Prof.	A B A B A B A B A B A B A B A B A B A B	$\begin{array}{c} & (1) \\ 30.299 & (8) \\ 30.714 & (57) \\ 33.532 & (75) \\ 44.053 & (45) \end{array}$	23.825 (3) 26.704 (9) 27.275 (8)

\*Figures in parentheses indicate number of cases involved.

\*\*Average salaries are not given where only one or two individuals are involved. "H" and "L" indicate that the average salary in such cases is higher or lower than the corresponding average for the opposite sex.

Salary differences in the Faculty of Medicine do not, as one might initially suspect, merely reflect the so-called "clinical" vs. "pre-clinical" distinction, clinical departments being those containing the largely-male medical doctors while pre-clinical departments are more likely to contain largely-female Ph.D.'s. Even when the clinical departments are considered separately from the pre-clinical departments, sex differences in salary remain, as follows:

	Avera	ge Salaries
Rank	Clinical Depts.	Pre-clinical Depts
Instructor	NA PARATO TA	un alla tra sara
Male	(1)*	a distant a set of the
Female	1 . M. B. M. 1.	Star A THE STAR STAR STAR
Lecturer		and the second second
	30,299 (8)	A Shanger Contraction
Female sloizivo	1 JHL-10 (2)	nontes - ebros (1
h measure	han amnitioner	
Asst. Professor		
Male	32.562 (41) 28,701 (5)	20,285 (10
	28,701 (5)	—H— (2
Assoc. Professor		14,74
		24.607 (25
Female	29,280 (3)	22.341 (4
· · · · · · · · · · · · · · · · · · ·	The Part of the	21 Jan
Full Professor	the weat of the second states of the	
Male	48.887 (20)	38.091 (20
Female		

\* Figures in parentheses indicate number of cases involved.

a the cat and the group of the state

Proventie and and the second of the second of En en meger la slate statt. En la la sector de la sector de la su

\*\* Average salaries are not given where only one or two individuals are involved. "H" and "L" indicate that the average salary in such cases is higher or lower than the corresponding average for the opposite sex.

#### UNIVERSITY NEWS Special Edition

January, 1979

	<b>CO</b> 1	Same 1	1. 1
IA		Same and	
TA		1.1.1.1.1.1	

		Free	quency	Perce	entage	Cumulative	e Percentage
TABLE II	Salary	Male	Female	Male	Female	Male	Female
	0 - 9,999	4	2	.6	1.6	ana si si sa a	
	10,000 - 13,999	6	. 15	.9	11.7	1.5	13.3
Distribution	14,000 - 17,999	59	44	9.0	34.4	10.5	47.7
of coloriso	18,000 - 21,999	122	30	18.6	23.5	29.1	71.2
of salaries	22,000 - 25,999	• 138	18	21.1	14.1	50.2	85.3
by cox	26,000 - 29,999	94	9	14.4	7.0	64.6	92.3
by sex	30,000 - 33,999	82	3	12.5	2.4	77.1	94.7
	34,000 - 37,999	56	5	8.5	3.9	85.6	98.6
	38,000 - 41,999	42	2	6.4	1.6	92.0	100.2
	42,000 - 45,999	21	-	3.2	sting - he	95.2	
	46,000 - 49,999	13	in the second second	2.0	10 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -	97.2	-
	50,000 - 53,999	· 11		1.7		98.9	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
	54,000 - 57,999	7		1.1		100.0	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1

TADLE III			equency	Per	centage	Cumulati	ve Percentage
TABLE III	Rank	Male	Female	Male	Female	Male	Female
Distribution	Instructor	6	7	.9	5.4	bata agi-	and the second
Distribution	Lecturer	20	37	3.1	28.7	4.0	34.1
of ronk by cox	Asst. Prof.	191	. 52	29.2	40.3	-33.2	74.4
of rank by sex	Assoc. Prof.	250	26	38.2	20.2	71.4	94.6
a general second second second second	Full Prof.	187	7	28.6	5.4	100.0	100.0
the second from the second second						· · · · · · · · · · · · · · · · · · ·	
			1 same				
						•	

	-		Manager .		-
1 1	8 3				
			States		
	-	See.	-	1 N	7

**Tenure status** by sex and rank

Dard	
Rank	
Overall	
Overan	
Instructor	
instructor	
Lecturer	
Lecturer	
Asst. Prof.	
Assoc. Prof.	
Full Prof.	

nt Ten	ured		
III I CII	ureu		
		.1	

Perce Males

68.5 66.7

25.0 28.8 79.6 93.0

emales			
37.4			
8.6			
36.0			
70.8			
83.3			
		•	

**T-Test** 

\*\*

\*\*

\*\*

F

### TABLE V

Tests of significance for salary differences between males and females

<b>Category</b> Overall	
Faculty	
Administrative Studies	
Arts & Science	
Dentistry	
Health Professions	
Medicine	
Rank	
Instructor	
Lecturer	
Asst. Professor	
Assoc. Professor	
Full Professor	

\*\* significant at .01 level

(It was not possible to carry out tests of statistical significance on male and female salaries in the Faculty of Law, because in 1977 - 1978, there was only a single female full-time faculty member).

N.

-

**F-Test** 

\*\* \*\*

\*

### **TABLE VI**

### Multiple regression analysis

<b>OVERALL FACULTY</b>			
Base salary	13,861	e. ARTS & SCIENCE MALES	
Add	13,276 if Full Professor		13,817
Add	6,174 if Assoc. Professor	Add	13,103 if Full Professor
	2,546 if Asst. Professor		5,910 if Assoc. Professor
	2,069 if Ph.D. highest degree		1,127 if Asst. Professor
	2,009 II FILD. Ingliest degree		847 if Ph.D. highest degree
	13.374 if M.D. highest degree		406 if Master's highest degree
	1,576 if Master's highest degree		6,214 if undergraduate diploma highest degree
	5,414 if graduate diploma highest degree		62 x age above 20
	57 x age obtained highest degree		16 x age obtained highest degree
	129 x age above 20	in the second	47 x age obtained first degree
	405 if married		318 x age promoted to current rank
	167 x age promoted to current rank		579 if married
Subtract	3,840 if Instructor	Subtract	174 x age began at Dalhousie
	992 if professional level - no degree		5,420 if M.D. highest degree
	12 x age obtained first degree		2,567 if Instructor
The state of the state of the state	95 x age began at Dalhousie	78.9% variance explained	
	1,179 x sex (male 1, female 2)	283 cases	
3.1% variance explained			
95 cases		f. ARTS & SCIENCE FEMA	IFS
		Base salary	8,333
OVERALL MALES		Add	7,858 if Full Professor
	10.262	Adu	
Base salary	10,363	•	10,117 if Assoc. Professor
Add	17,207 if Full Professor		5,640 if Asst. Professor
	10,204 if Assoc. Professor		3,757 if Lecturer
	6,281 if Asst. Professor		5,028 if Ph.D. highest degree
	3,440 if Lecturer		5,395 if Master's highest degree
	11,204 if M.D. highest degree		374 x age promoted to current rank
	3,649 if graduate diploma highest degree		415 x age obtained highest degree
A PART A MANAGER	1,012 if undergraduate diploma highest degree		292 if married
	160 x age above 20	Subtract	216 x age began at Dalhousie
a second a second have	74 x age obtained highest degree		271 x age obtained first degree
	162 x age promoted to current rank		3,616 if bachelor's highest degree
	636 if married	89.3% variance explained	
Subtract	287 if Master's degree highest degree	30 cases	and the second
	2,507 if bachelor's degree highest degree		
	3,259 if professional level - no degree	g. MEDICINE	
	118 x age began at Dalhousie	Base salary	10.991
	34 x age obtained first degree	Add	18,212 if Full Professor
69.5% variance explained	or x uge obtained mist degree	Auu	9,177 if Assoc. Professor
581 cases			7,373 if Asst. Professor
	The second se		1,450 if Lecturer
			10,258 if M.D. highest degree
<b>OVERALL FEMALES</b>			
Base Salary	9.271		2,256 if Ph.D. highest degree
	16,017 if Full Professor		317 x age above 20
Add			59 x age obtained highest degree
	9,813 if Assoc. Professor		105 x age promoted to current rank
	7,944 if Asst. Professor		1,153 if married
	4,637 if Lecturer	Subtract	9,580 if undergraduate diploma highest degr
	624 if Ph.D highest degree		112 x age began at Dalhousie
	12,147 if M.D. highest degree		95 x age obtained first degree
	60 x age above 20		1,549 x sex (males 1, females 2)
	55 x age obtained first degree	58.6% variance explained	
	152 x age began at Dalhousie	179 cases	
	64 x age promoted to current rank	177 cuses	
Subtract	759 if bachelor's degree highest degree		
	3,460 if professional level - no degree	h. MEDICINE MALES	
and a factor and a second second second	2,435 if undergraduate diploma highest degree	Base salary	9,581
1	64 x age obtained highest degree	Add	18,237 if Full Professor
	259 if married	and in the second se	9,182 if Assoc. Professor
8.5% variance explained			7,092 if Asst. Professor
14 cases			3,781 if Lecturer
	and the second sec		7,721 if M.D. highest degree
			406 x age above 20 118 x age promoted to current rank
a state for the second			3,104 if married
ARTS & SCIENCE		Subtract	139 x age obtained first degree
Base salary	12,543	Subtract	94 x age began at Dalhousie
Add	16,526 if Full Professor	Lill a	The age of gan at Damousie
	9,073 if Assoc. Professor	55.1% variance explained	
	4,234 if Asst. Professor	161 cases	
	2,173 if Lecturer	i i i cuses	
	543 if Ph.D. highest degree	i. MEDICINE FEMALES	
	322 if Master's highest degree	Basic salary	-7.747
	49 x age above 20		23,071 if M.D. highest degree
	21 x age obtained first degree	Add	18,458 if Ph.D. highest degree
	6 x age obtained highest degree		4,073 if Asst. Professor
	341 x age promoted to current rank		1,265 x age above 20
	451 if married		79 x age began at Dalhousie
	ior in married		Thage organ at Daniousie

79.4% variance explained 313 cases

Subtract

93.7% variance explained 18 cases

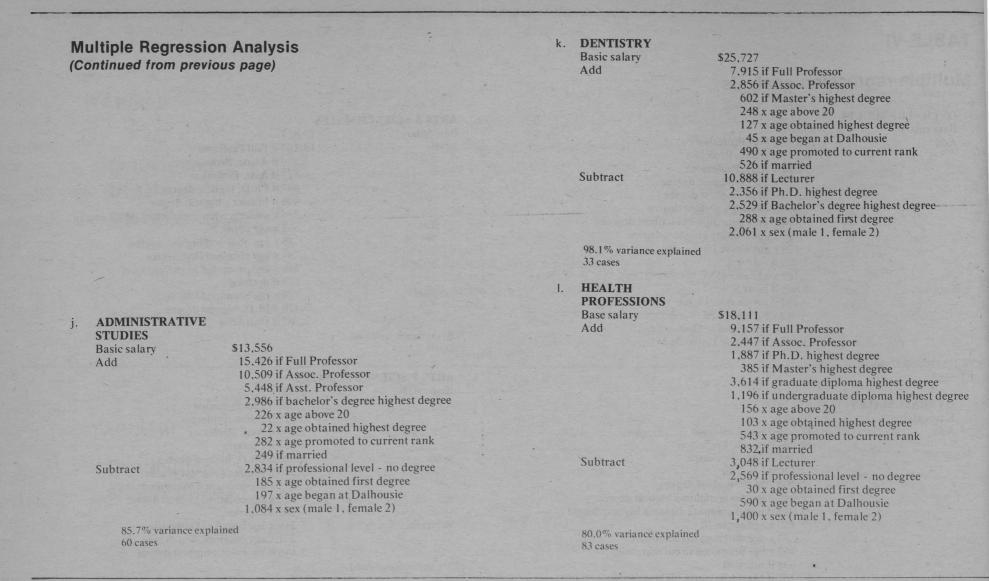
- 1,020 x age obtained highest degree 1,385 if Lecturer
- 17,513 if undergraduate diploma highest degree 1,190 x age promoted to current rank 1,021 x age obtained first degree 5,565 if married

Subtract

5,585 if M.D. highest degree 1,267 if bachelor's highest degree

•

164 x age began at Dalhousie 833 x sex (males 1, females 2)



#### TABLE VII

Predicted average salaries using regression equation for opposite sex

#### a. OVERALL MALES USING OVERALL FEMALE EQUATION

ases

Category	Average Difference	No. of Ca
Overall	- \$1,824	581
Instructor	- 3,894	3
Lecturer	- 1,452	12
Asst. Professor	- 212	161
Assoc. Professor	- 2,073	229
Full Professor	- 2,968	176

#### b. OVERALL FEMALES USING OVERALL MALE EQUATION

Category	Average Difference	No. of Cases	
Overall	\$1,187	114	
Instructor	1,893	ĺ	
Lecturer	1,100	34	
Asst. Professor	436	50	
Assoc. Professor	2.279	24	
Full Professor	3,907	5	

#### TABLE VIII

Average age by sex within rank

Average Age		
Male	Female	
36.4	29.4	
35.6	31.4	
35.7	39.8	
40.8	44.7	
49.8	52.7	
	36.4 35.6 35.7 40.8	

#### TABLE IX

Average years-to-date in rank by sex

Rank	Male	Female
Instructor	1.2	2.1
Lecturer	2.4	2.2
Asst. Professor	2.9	3.1
Assoc. Professor	4.1	3.8
Full Professor	7.2	4.6