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

## Special Edition

Phase I: Full-time Faculty

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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.

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Women faculty at Dalhousie University:

- Are paid less than their male counterparts;
- Are concentrated in the lower ácademic 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.

## 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 Adminstration 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. ${ }^{1}$

Since publication of the Royal Commission's study, a number of Canadian universities have carried out their own studies of women on their campuses $;^{2}$ 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.

1. 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.
2. For example, British Columbia, Toronto, McGill. York. McMaster. Acadia Universities.

## 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 axorth 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. ${ }^{4}$ The results of the analysis are contained in Tables VI(a) through VI(1). Table $\mathrm{VI}(a)$ 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 $\mathrm{VI}(\mathrm{d}), \mathrm{VI}(\mathrm{g}), \mathrm{VI}(\mathrm{j}), \mathrm{VI}(\mathrm{k})$, and $\mathrm{VI}(1)$ 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
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 $\mathrm{VI}(\mathrm{b})$ and $\mathrm{VI}(\mathrm{c})$ 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.
It was not possible to carry out a multiple regression It was not possible to carry out a multiple regression
analysis in the Faculty of Law because in 1977-78, analysis in the Faculty of Law because in 1977-78,
there was only a single full-time female faculty there was only a single full-time female faculty
member. 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.

## 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

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 $\$ 436$.

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 Dalhousie 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, with 186 men and
has no women Full Professors. Neither does has no women Full
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.

## 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 penșions 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 reasonablę 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.

## UNIVERSITYNEWS

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## 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

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

| FACULTY | OVERAL <br> VERAG |  | MALES |  | FEMALES |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Overall |  |  |  |  |  |  |
| Overall Mean | \$26.598 | (777)* | \$27.924 | (650) | \$19,808 | (127) |
| Instructor |  |  | 15.902 | (5) | 11,937 | (7) |
| Lecturer |  |  | 22.815 | (20) | 15,453 | (37) |
| Asst. Professor |  |  | 22.680 | (191) | 20.571 | (52) |
| Assoc. Professor |  |  | 27,196 | (248) | 24.191 | (25) |
| Full Professor |  |  | 35.153 | (186) | 30.968 | (6) |
| Administrative Studies |  |  |  |  |  |  |
| Instructor |  |  | -- |  | -- |  |
| Lecturer |  |  |  |  |  |  |
| Asst. Prof. |  |  | 19,645 | (18) | 19,566 |  |
| Assoc. Prof. |  |  | 25,087 | (26) | $-\mathrm{L}-$ | (1)** |
| Full Prof. |  |  | 30.573 | (14) |  |  |
| Arts \& Science |  |  |  |  |  |  |
| Instructor |  |  | 13,627 | (4) | 11,937 | (7) |
| Lecturer |  |  | 18,840 | (5) | 16,073 | (6) |
| Asst. Prof. |  |  | 18,244 | (89) | 18,262 | (16) |
| Assoc. Prof. |  |  | 23.465 | (115) | 22,807 | (7) |
| Full Prof. |  |  | 31,884 | (92) | -H- | (2) |
| Dentistry |  |  |  |  |  |  |
| Instructor |  |  | - |  | - |  |
| Lecturer |  |  | -- |  | 13,123 | (6) |
| Asst. Prof. |  |  | 27,665 | (8) | -L- | (2) |
| Assoc. Prof. |  |  | 31,900 | (12) | -L- | (1) |
| Full Prof. |  |  | 41,257 | 7 (7) | 2010 |  |
| Health Professions |  |  |  |  |  |  |
| Instructor |  |  |  |  | -- |  |
| Lecturer |  |  | 18,142 | (5) | 14,778 | (22) |
| Asst. Prof. |  |  | 20,378 | (16) | 19,327 | (18) |
| Assoc. Prof. |  |  | 24,467 | (8) | 21,767 | (8) |
| Full Prof. |  |  | 29,137 | (8) | - H - | (1) |
| Law |  |  |  |  |  |  |
| Instructor |  |  | - |  | - |  |
| Lecturer |  |  |  |  |  |  |
| Asst. Prof. |  |  | 18.810 | (3) | - $\mathrm{H}-$ | (1) |
| Assoc. Prof. Full Prof. |  |  | 25.046 33.592 | $\begin{aligned} & (12) \\ & (17) \end{aligned}$ | -- |  |
| Full Prof. |  |  | 33.51 |  |  |  |
| Medicine ${ }^{\text {d }}$ |  |  |  |  |  |  |
| Instructor |  |  | -- | (1) | -- |  |
| Lecturer |  |  | 30.299 | (8) | 23.825 | (3) |
| Asst. Prof. |  |  | 30.714 | (57) | 26.704 | (9) |
| Assoc. Prof. |  |  | 33.532 | (75) | 27.275 | (8) |
| Full Prof. |  |  | 44.053 | (45) | -- |  |

*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.
6. 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 departtors while pre-clinical departments are more likely to contain largely-female $\mathrm{Ph} . \mathrm{D}$.'s. Even when the clinical dep
ments are considered separately from the pre-clinical departments, sex differences in salary remain. as follows:

| Rank | Average Salaries |  |  |
| :---: | :---: | :---: | :---: |
|  | Clinical Depts. |  | Depts. |
| Instructor |  |  |  |
| Male - - \% (1)* |  |  |  |
| Female |  |  |  |
| Lecturer |  |  |  |
| Male | $30.299 \quad$ (8) | - - |  |
| Female vidiatme | 3-L-6 (2) | +- | (1) |
|  |  |  |  |
| Asst. Professor ${ }^{\text {di }}$ tors |  |  |  |
| Male | 32.562 (41) | 20.285 | (10) |
| Female | 28.701 (5) | - H | (2) |
| Assoc. Professor |  |  |  |
| Male | 38.272 (42) | 24.607 | (25) |
| Female | 29.280 | 22.341 | (4) |
| - |  |  |  |
| Full Professor |  |  |  |
| Male | 48.887 | 38.091 | (20) |
| Female | -- | - - |  |

* 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.


## TABLE II

Distribution
of salaries
by sex

| Salary | Frequency |  | Percentage |  | Cumulative Percentage |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female |
| 0- 9.999 | 4 | 2 | . 6 | 1.6 | - |  |
| 10,000-13,999 | 6 | 15 | . 9 | 11.7 | 1.5 | 13.3 |
| 14.000-17.999 | 59 | 44 | 9.0 | 34.4 | 10.5 | 47.7 |
| 18.000-21,999 | 122 | 30 | 18.6 | 23.5 | 29.1 | 71.2 |
| 22,000-25,999 | 138 | 18 | 21.1 | 14.1 | 50.2 | 85.3 |
| 26.000-29.999 | 94 | 9 | 14.4 | 1.7 | 64.6 | 92.3 |
| 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 | . | 95.2 | . |
| 46,000-49.999 | 13 | - | 2.0 | - | 97.2 |  |
| 50,000-53,999 | 11 | - | 1.7 |  | 98.9 |  |
| 54.000-57.999 | 7 | - | 1.1 |  | 100.0 |  |

TABLE III
Distribution
of rank by sex

| Rank | Male | Frequency <br> Female | Male | Percentage <br> Female | Cumulative Percentage <br> Male |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Female |  |  |  |  |  |


| TABLEIV | Rank | Percent Tenured <br> Males |
| :---: | :--- | :--- |
| Tenure status | Fverall | 68.5 |
| by sex and rank | Instructor | 66.7 |
|  | Lecturer | 25.0 |
|  | Asst. Prof. | 28.8 |

## TABLE V <br> Tests of significance for salary differences between males and females

Category
Overall
$\quad$ Faculty
Administrative Studies
Arts \& Science
Dentistry
Health Professions
Medicine
$\quad$ Rank
Instructor
Lecturer
Asst. Professor
Assoc. Professor
Full Professor

| Levels of significance: |
| :--- |
| $\quad$ * not significantly different |
| $\quad$ ** significant at .05 level |
| $\quad$ 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).

## TABLE VI

## Multiple regression analysis

OVERALL FACULTY
Base salary
Add

Subtract
$73.1 \%$ variance explained 695 cases
b. OVERALL MALES

Add

Subtract
$69.5 \%$ variance explained 581 cases
13.861
13.276 if Full Professor

6,174 if Assoc. Professor
2.546 if Asst. Professor

2,069 if Ph.D. highest degree
13,374 if M.D. highest degree
1,576 if Master's highest degree
5,414 if graduate diploma highest degree
$57 \times$ age obtained highest degree
129 x age above 20
405 if married
167 x age promoted to current rank
3,840 if Instructor
992 if professional level - no degree 12 x age obtained first degree
$95 x$ age began at Dalhousie
$1,179 \mathrm{x}$ sex (male 1, female 2 )

## 10,363

17,207 if Full Professor
10,204 if Assoc. Professor
6,281 if Asst. Professor
3,440 if Lecturer
11,204 if M.D. highest degree
3,649 if graduate diploma highest degree
1,012 if undergraduate diploma highest degree 160 x age above 20
74 x age obtained highest degree
162 x age promoted to current rank
636 if married
287 if Master's degree highest degree
2,507 if bachelor's degree highest degree
3,259 if professional level - no degree
118 x age began at Dalhousie
$34 x$ age obtained first degree
c. OVERALL FEMALES Base Salary
Add

Subtract
$78.5 \%$ variance explained 114 cases

9,271
16,017 if Full Professor
9,813 if Assoc. Professor ${ }^{4}$
7,944 if Asst. Professor
4,637 if Lecturer
624 if Ph.D highest degree
12,147 if M.D. highest degree
60 x age above 20
55 x age obtained first degree
152 x age began at Dalhousie
64 x age promoted to current rank
759 if bachelor's degree highest degree
3.460 if professional level - no degree

2,435 if undergraduate diploma highest degree 64 x age obtained highest degree 259 if married
d. ARTS \& SCIENCE

Base salary
Add

Subtract
$79.4 \%$ variance explained 313 cases
e. ARTS \& SCIENCE MALES

Base salary
Add

Subtract
$78.9 \%$ variance explained
283 cases
f. ARTS \& SCIENCE FEMALES
$58.6 \%$ variance explained 179 cases
h. MEDICINE MALES Base salary
Add

Subtract
$55.1 \%$ variance explained 161 cases

1. MEDICINE FEMALES

Basic salary

5,585 if M.D. highest degree
1,267 if bachelor's highest degree 164 x age began at Dalhousie $833 \times \operatorname{sex}$ (males 1 , females 2 )
12,543
16,526 if Full Professor 9,073 if Assoc. Professor
4,234 if Asst. Professor
2,173 if Lecturer
543 if Ph.D. highest degree 322 if Master's highest degree 49 x age above 20
$21 \times$ age obtained first degree
$6 \times$ age obtained highest degree
341 x age promoted to current rank 451 if married

| Base salary | 8,333 |
| :--- | ---: |
| Add | 7,858 |

## Add

Subtract
$9.3 \%$ variance explained
$89.3 \%$ va
30 cases
g. MEDICINE

Base salary
Add

Subtract
8,333
7,858 if Full Professor
10,117 if Assoc. Professor
5,640 if Asst. Professor
3,757 if Lecturer
5,028 if Ph.D. highest degree
5.395 if Master's highest degree

374 x age promoted to current rank
415 x age obtained highest degree
292 if married
$216 \times$ age began at Dalhousie
271 x age obtained first degree
3,616 if bachelor's highest degree

Subtrat
10,991
18,212 if Full Professor
9,177 if Assoc. Professor
7,373 if Asst. Professor
1,450 if Lecturer
10,258 if M.D. highest degree
2,256 if Ph.D. highest degree
317 x age above 20
59 x age obtained highest degree
105 x age promoted to current rank
1,153 if married
9,580 if undergraduate diploma highest degree
112 x age began at Dalhousie
95 x age obtained first degree
$1,549 \times$ sex (males 1 , females 2 )
9.581

8,237 if Full Professor 9.182 if Assoc. Professor
7.092 if Asst. Professo
3.781 if Lecturer
7.721 if M.D. highest degree 406 x age above 20
118 x age promoted to current rank
3,104 if married
139 x age obtained first degree
94 x age began at Dalhousie

Add

Subtract
$93.7 \%$ variance explained
$-7.747$
23.071 if M.D. highest degree
18.458 if Ph.D. highest degree

4,073 if Asst. Professor
$1,265 \mathrm{x}$ age above 20
79 x age began at Dalhousie $1,020 \mathrm{x}$ age obtained highest degree 1,385 if Lecturer
17,513 if undergraduate diploma highest degree $1,190 \mathrm{x}$ age promoted to current rank 1.021 x age obtained first degree 5.565 if married

## Multiple Regression Analysis (Continued from previous page)

j. ADMINISTRATIVE STUDIES Basic salary Add

Subtract

## \$13.556

15.426 if Full Professor

10,509 if Assoc. Professor
5.448 if Asst. Professor

2,986 if bachelor's degree highest degree $226 \times$ age above 20
22 x age obtained highest degree
$282 x$ age promoted to current rank 249 if married
2.834 if professional level - no degree 185 x age obtained first degree
197 x age began at Dalhousie $1.084 \times$ sex (male 1, female 2)
$85.7 \%$ variance explained 60 cases
k. DENTISTRY

Basic salary
Add
\$25,727
7.915 if Full Professor

2,856 if Assoc. Professor
602 if Master's highest degree
248 x age above 20
127 x age obtained highest degree
45 x age began at Dalhousie
$490 \times$ age promoted to current rank 526 if married
10,888 if Lecturer
2.356 if Ph.D. highest degree
2.529 if Bachelor's degree highest degree-

288 x age obtained first degree
$2.061 \mathrm{x} \operatorname{sex}$ (male 1 , female 2 )
$98.1 \%$ variance explained 33 cases

1. HEALTH

PROFESSIONS
Base salary
Add
Subtract

$$
2,061 \times \operatorname{sex}(\text { male } 1, \text { female } 2)
$$

- 

9,157 if Full Professor


2,447 if Assoc. Professor
1,887 if Ph.D. highest degree
385 if Master's highest degree
3,614 if graduate diploma highest degree
1,196 if undergraduate diploma highest degree
156 x age above 20
103 x age obtąined highest degree
$543 \times$ age promoted to current rank
832.if married

3,048 if Lecturer
2,569 if professional level - no degree
30 x age obtained first degree
$590 \times$ age began at Dalhousie
$1,400 \times \operatorname{sex}$ (male 1 , female 2 )
$80.0 \%$ variance explained 83 cases

## TABLE VII

## Predicted average salaries using regression equation for opposite sex

a. OVERALL MALES USING OVERALL FEMALE EQUATION

| Category | Average Difference | No. of Cases |
| :--- | :---: | :---: |
|  |  |  |
| Overall | $\mathbf{-} 1,824$ | 581 |
| Instructor | $-3,894$ | 3 |
| Lecturer | $-1,452$ | 12 |
| Asst. Professor | -212 | 161 |
| Assoc. Professor | $-2,073$ | 229 |
| Full Professor |  | 2,968 |

b. OVERALL FEMALES USING OVERALL MALE EQUATION

Category
Overall
Instructor
Lecturer
Asst. Professor
Assoc. Professor
Full Professor

Average Difference
$\$ 1.187$
1.893
1.100

436
2.279

2,279
3,907

No. of Cases
114
1
14
50
Rank
Instructor
Lecturer
Asst. Professor
Assoc. Professor
Full Professor

| Average Age <br> Male | Female |
| :--- | :---: |
|  |  |
| 36.4 | 29.4 |
| 35.6 | 31.4 |
| 35.7 | 39.8 |
| 40.8 | 44.7 |
| 49.8 | 52.7 |

## 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 |

