

**Figure 4.3a. EXPLORATORY DATA ANALYSIS: Comparison of Female and Male Occupations**

EM9028: The Globe and Mail, March 10, 1990, page A13

# Women's occupations still lowest-paying, Statscan study says

**BY VIVIAN SMITH**

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More Canadian women than ever are tapping out the nation's letters, keeping its books and standing behind its check-out counters, Statistics Canada reports.

In a report released yesterday called *Women and the Labour Force*, Statscan reported that despite small gains in the number of women managers, most women over the age of 15 are concentrated in a few occupations that are generally low-paying and have little room for advancement.

It also showed a huge jump in the number of married women with pre-schoolers at home who have joined the work force: their numbers went from 36.5 per cent in 1976 to 62.1 per cent 10 years later.

"In addition to their work in the labour force, married women continue to be responsible for child care and household work," said the report's authors, Patricia Connelly and Martha MacDonald of St. Mary's University in Halifax.

And over a 15-year period, from 1970 to 1985, the average earnings of women crawled up to just 66 per cent of what men were paid from 60 per cent.

Women also had a higher unemployment rate than men in 1986 and did two-thirds of all part-time work.

"This just confirms what we've found in our own report," said Alice de Wolff, executive coordinator of the National Action Committee on the Status of Women.

She was referring to a parallel study the NAC has prepared that paints a less rosy picture of Canadian women's lives than did a recent federal government submission to the United Nations.

"In terms of the wage gap, the government's attempt at employment-equity laws has not shifted the trends. Not only is the concentration of traditional work increasing, but the terms are deteriorating," Ms. de Wolff said.

She cited low wages, a lack of benefits and job security for part-timers and what she called "a killing need" for more day-care spaces. "Our report shows that the proportion of child-care spaces has not increased since 1977," she said.

According to the Statscan report, which takes its data from the 1986 census, more than half of all Canadian women (55.4 per cent) were employed or looking for work in 1986, an increase from 39.9 per cent in 1971 and only 24.1 per cent in 1951. Most of these women were married.

Between 1971 and 1986, the number of men in the labour force was fairly stable at about 77 per cent, so that by 1986 5.6 million women and 7.5 million men were employed or job-hunting.

While women made up 42.6 per cent of the employed work force in 1986, they made up 61.1 per cent of that force in community, business and personal service industries.

In 1971, the report said, 55 per cent of women working outside the home were in clerical, sales and service jobs, compared with 58.1 per cent in 1986. These three areas had the largest gains in numbers of women workers over the 15-year period, reflecting an expansion of the service sector and women's dominance in clerical work.

In both 1971 and 1986, the top three occupations for women were secretary, bookkeeper and salesperson.

In the managerial category, women's share of jobs doubled from 15.4 per cent in 1971

to 31.5 per cent, or 249,270 women.

This is a large gain, but only in three areas: finance, insurance and real estate; community, business and personal services; and agriculture.

Men made some inroads into female-dominated occupations during the time studied. More men became nurses, dancers, telephone operators, elementary school teachers, cashiers, tellers and waiters.

Where women made some advances in non-traditional areas such as mining and fishing, it was usually still in clerical positions in those industries.

Technology has played a part in some job changes. Eighteen occupations showed a decrease in the number of women participating, but many of those were declining occupations themselves, such as typist and clerk-typist.

The report's authors showed that in jobs where women's numbers increased the most, income was low. For instance, in the services category, women received an average of \$13,418 in 1985 while men in the same job group were paid an average of \$24,151.

In the managerial sector, however, a typical woman made \$27,014, compared with \$45,170 for a man.

Finally, the report said, women do not work for pin money. "There are indications that most women are working to support themselves and others," the authors wrote. Nearly 40 per cent of women in the labour force are single, and of those 18.5 per cent are single parents.

Of those with a husband or partner present, one-third had a mate whose total income was less than \$20,000 a year. Sixty per cent had a partner whose income was less than \$30,000 in 1985.

- 1 What do you infer, from the article EM9028 reprinted above, was the *principal* Question the Statscan report was intended to answer? Explain briefly.
- 2 What is the most common type of population *attribute* mentioned in the article EM9028 reprinted above?
  - Is the corresponding *variate* continuous or discrete? Explain briefly.
- 3 List the values quoted for *measures of location* that are given in the article EM9028 reprinted above; identify the paragraph from which you take each value.
  - What Question(s), if any, does each value answer?
    - As well as measures of location, what *other* information is desirable? Briefly explain why this information would be useful.
- 4 There was an appreciable *delay* between the collection of the census data (April, 1986) and the publication of the report (March, 1990); suggest reason(s) for this delay.

(continued overleaf)

- 5 In the third paragraph of the middle column, the article EM9028 reprinted overleaf on page 4.9 mentions that the Statscan report was based on data from the 1986 *census*. As a basis for answering Questions, what are the advantages of census data:
- in theory;
  - in practice?
- Explain briefly in each case, with particular emphasis on the *difference(s)* between theory and practice.

- 6 In the final paragraphs of the article EM9028, several average income figures are quoted. What factor(s) might impose limitations on these values as Answers?
- Would the factor(s) you identify be more likely to make the averages quoted *too high* or *too low*? Explain briefly.

The article EM9028 reprinted overleaf on page 4.9 is also used in Statistical Highlight #99.