Career development and women in the public service: A modified DELPHI assessment.

Rachelle M. Solomon

University of Windsor

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CAREER DEVELOPMENT AND WOMEN IN THE PUBLIC SERVICE:
A MODIFIED DELPHI ASSESSMENT

by

Rachelle M. Solomon

A Thesis
Submitted to the
Faculty of Graduate Studies and Research
through the Department of
Political Science in Partial Fulfilment
of the requirements for the Degree
of Master of Arts at
the University of Windsor

Windsor, Ontario, Canada
1991
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ABSTRACT

CAREER DEVELOPMENT AND WOMEN IN THE PUBLIC SERVICE:
A MODIFIED DELPHI ASSESSMENT

Rachelle M. Solomon

By far, men outnumber women in management positions in both the federal and provincial public services in Canada. This Paper proposed to conduct a study into the factors affecting the career development and advancement of women in the public service, and possibly find reasons for the discrepancies between the number of men and women in management positions. This was accomplished through the utilisation of a modified DELPHI experiment. DELPHI experiments strive to achieve a consensus among experts as to the "desirability" and "probability" of the occurrence of certain events. Experts used in this study were public servants from across Canada. It was determined that the factors of employment equity/pay equity; socialisation/history of women at work; day care/family responsibilities; and, managerial competence, affect the prospects for advancement of women in the workplace. Thus, these factors were incorporated into the DELPHI experiment and subsequently form the basis of discussion throughout this Paper.

Results obtained from the DELPHI experiment suggested that the factors discussed require greater research and attention by governments, for the "probability" of these factors negatively influencing the career development and advancement of women in the public service far outweighed their "desirability".
Chapter 1 provides a review of literature which focuses upon factors affecting the career development and advancement of women in the workplace.

Chapter 2 supplies an enquiry into, and explanation of, the DELPHI technique including the reason for its use, as well as its advantages and disadvantages. In addition, the DELPHI process used in this Paper is illustrated.

Chapter 3 affords an explanation of the research design used in this Paper. The DELPHI process is discussed in terms of need, purpose, methodology and approach.

Chapter 4 provides a discussion of the results of the DELPHI experiment. Each Round i.e. I, II, III, is focused upon with respect to data generated, specifically the statistics of Mean, Median, Range and Standard Deviation.

Chapter 5 serves as the conclusion to this Paper, providing a summary of the DELPHI experiment and a selection of comments and opinions voiced by the participants in this experiment.
ACKNOWLEDGEMENTS

The undertaking and completion of this thesis would not have been possible without the assistance and encouragement I received from a number of people to whom I would like to express my profound gratitude and appreciation.

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I would also like to acknowledge the Advisory Panel members to the Delphi experiment: Dean Lois Smedick, Faculty of Graduate Studies and Research; Professors Janice Drakich and Mary Lou Dietz, Department of Sociology and Anthropology; Professors Joan Boase and Maureen Mancuso, Department of Political Science; and, Professor Olga Crocker, Faculty of Business Administration. The information received from them through interviews and subsequent meetings proved most helpful in the DELPHI experiment.
An extreme debt of gratitude is offered to the DELPHI participants. I would not have completed this thesis without the time and patience contributed by them throughout the duration of this project.

Finally, I would like to thank my family and friends for their continued support and understanding throughout the length of my studies at the University of Windsor.
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Introduction

In 1881, the First Report of the Civil Service Commission of Canada declared the manner by which women could be employed in the public service:

Female Clerks:

76. Whilst we see no reason whatever why female clerks should not be quite as efficient public servants as men, we are forced to confess that there are several obstacles in the way of their employment which we fear it will be very difficult if not impossible to overcome. For example, it would be necessary that they should be under the immediate supervision of a person of their own sex; but we doubt very much if sufficient work of similar character can be found in any one Department to furnish occupation for any considerable number of female clerks, and it would certainly be inadvisable to place them in small numbers throughout the Departments.

Should circumstances hereafter arise warranting the employment of female clerks, we see no objection to their being appointed as clerks of the third class, under such regulations as the Civil Service Commissioners may, with the sanction of the Governor in Council, make, as to competitive examinations, age, health and character.


By 1891, one in eight paid workers in Canada was a woman (Canada, Status of Women, 1970:53). In 1951, only 23.5% of Canadian women worked for pay outside the home (MacBride-King and Paris in Work and Family-The Crucial Balance, Ontario Women’s Directorate, 1991:8). The past 15 years have witnessed significant changes in women’s participation in the labour force. Today, almost 58% of all Canadian women work outside their homes, compared with 44% in 1975 (Beneath the Veneer, Volume 1, 1990:8). In 1989, 62% of mothers with pre-schoolers worked outside their homes and in 1990, almost 60% of mothers with children under the age of three were in
the work force (Beneath the Veneer, Volume 1, 1990:8). The Conference Board of Canada estimated that by 1993, the number of women in the paid labour force could reach 63.1% (MacBride-King and Paris, 1991:8).

Today, the federal government is Canada's largest single employer of women, who comprise 42% of the federal government's work force. However, most of these women are ghettoized in the lowest paid positions. These "pink collar ghettos", which include whole categories of relatively low-skilled clerical jobs (Public Service 2000, 1990:81), are where many women enter the work force and unfortunately, remain. Beneath the Veneer, The 1990 Report of the Task Force on Barriers to Women in the Public Service, provided statistics in respect to the composition of specific management categories. For the purpose of this Paper, Senior and Executive Management positions in the public sector encompass the following: Senior Management (SM) positions including Assistant Directors and Managers or Chief positions; and, Executive (EX) which include Directors, Director Generals and Assistant Deputy Minister positions. Of 2,448 Executive positions in the federal public service in 1989, 244 positions (10%) were held by women. In the Senior Management category, women held 258 of 1835 jobs (14.1%) (Beneath the Veneer, Volume 1, 1990:17).

The following Table is illustrative of the disparities between the numbers of men and women employed by the federal government in Management positions.
MANAGEMENT

<table>
<thead>
<tr>
<th>GEOGRAPHIC AREA</th>
<th>Men No.</th>
<th>%</th>
<th>Women No.</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Newfoundland</td>
<td>29</td>
<td>93.5</td>
<td>2</td>
<td>6.5</td>
<td>31</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>31</td>
<td>88.6</td>
<td>4</td>
<td>11.4</td>
<td>35</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>92</td>
<td>96.8</td>
<td>3</td>
<td>3.2</td>
<td>95</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>65</td>
<td>95.6</td>
<td>3</td>
<td>4.4</td>
<td>68</td>
</tr>
<tr>
<td>Quebec (except NCR)</td>
<td>178</td>
<td>90.4</td>
<td>19</td>
<td>9.6</td>
<td>197</td>
</tr>
<tr>
<td>Quebec (NCR)</td>
<td>661</td>
<td>82.8</td>
<td>137</td>
<td>17.2</td>
<td>798</td>
</tr>
<tr>
<td>Ontario (NCR)</td>
<td>1989</td>
<td>84.3</td>
<td>370</td>
<td>15.7</td>
<td>2359</td>
</tr>
<tr>
<td>Ontario (except NCR)</td>
<td>194</td>
<td>88.6</td>
<td>25</td>
<td>11.4</td>
<td>219</td>
</tr>
<tr>
<td>Manitoba</td>
<td>81</td>
<td>94.2</td>
<td>5</td>
<td>5.8</td>
<td>86</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>59</td>
<td>96.7</td>
<td>2</td>
<td>3.3</td>
<td>61</td>
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<tr>
<td>Alberta</td>
<td>87</td>
<td>90.6</td>
<td>9</td>
<td>9.4</td>
<td>96</td>
</tr>
<tr>
<td>British Columbia</td>
<td>129</td>
<td>94.9</td>
<td>7</td>
<td>5.1</td>
<td>136</td>
</tr>
<tr>
<td>Yukon</td>
<td>11</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>11</td>
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<tr>
<td>Northwest Territories</td>
<td>8</td>
<td>100.0</td>
<td>0</td>
<td>0.0</td>
<td>8</td>
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<tr>
<td>Total</td>
<td>3614</td>
<td>86.0</td>
<td>586</td>
<td>14.0</td>
<td>4200</td>
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Note: NCR denotes "National Capital Region"

Upon viewing these figures, one is struck by the overwhelming under-representation of women in Management in the federal public service of Canada. At the federal level, based upon current trends, it is estimated that by the year 2010, women will hold only 35% or one-third of the Senior-Management positions in the public service (Beneath the Veneer, Volume 1, 1990:45). Numerous attempts to obtain employment figures for the provinces proved fruitless; however, senior public servants from several provinces were adamant in their claims that the provincial situation was not any different than that found at the federal level. Thus, while comparative statistics were not available for the provinces, one can surmise that the provincial situation will not be any different from that
projected at the federal level.

The slow progress of career development and advancement experienced by women in public services across Canada must be rectified. In order to overcome the barriers to women in their quest for advancement in the public service and subsequently provide an environment conducive to future success, decisions must be made now which will reduce and hopefully eliminate barriers to career development and advancement as experienced by women. However, "future" decisions must be made upon the basis of current trends.

After reviewing the statistics and data available on women in the public sector, and finding the overwhelming under-representation of women in managerial positions, a simple question was asked: Why? Why are there so few women in these positions? What factors inhibit women from career development and advancement? To what extent are the careers of women affected? An additional area of concern was also identified; namely that of the lack of literature available on public sector work environments of the future, with respect to women and the roles they will assume. An abundance of material was available on women in the private sector, but very few major studies were available on barriers to advancement experienced by women in the public sector, specifically. With this as a starting point, we decided to commit ourselves to the undertaking of a study which would attempt to discover the factors affecting the career development and advancement of women in the public service.
Hence, the purpose of this Paper was to determine the future of women in public services in Canada through an exploration of factors which have affected and continue to affect their career advancement and development. This was accomplished through the implementation of a modified DELPHI experiment (see Chapter 2). The "factors" used in this Paper as the basis for a discussion of career development and advancement of women in the public sector were:

1. Employment Equity/Pay Equity;
2. Socialisation/History of Women at Work;
3. Day Care/Family Responsibilities; and,
4. Managerial Competence.

These "factors" were determined through a review of literature which focused specifically on problems encountered by women in their quest for career success in the workplace (see Chapter 1) and from interviews with persons considered to be knowledgeable (by persons consulted by the author) in women's issues (see Chapter 3).

These factors have in common the fact that by their very nature they cause discrimination of women in employment in the public services of Canada. The Abella Report, The Report of the Commission on Equality in Employment (1984:2), defines discrimination as it is referred to in this Paper:

Discrimination...means practices or attitudes that have, whether by design or impact, the effect of limiting an individual's or a group's right to the opportunities generally available because of attributed rather than actual characteristics. What is impeding the full development of their potential is not the individual's capacity but an
external barrier that artificially inhibits growth.

As previously alluded to, an abundance of literature was available on women in the public sector in Canada in general, and on obstacles affecting advancement of women in the workplace in the private sector (see Chapter 1); however, there was a limited amount of data available on public sector work environments of the future and the role of women in this environment. The Report of the Royal Commission on the Status of Women in Canada submitted its report on women in the labour force in general in 1970. The next major report to be undertaken at the federal level was in 1990. Beneath the Veneer, The 1990 Report of the Task Force on Barriers to Women in the Public Service, was aimed specifically at women in the public service of Canada and barriers to their advancement. While several provinces have undertaken projects of a similar nature, research on the topic of career development and advancement of women in the public sector is by no means exhaustive. Factors which were identified 20 years ago are still relevant today; thus, we chose to re-examine these factors in the hopes of offering solutions for the present and future of women in the public services of Canada at both the federal and provincial levels.

This Paper endeavoured to approach the issue of career development of women in the public service in a unique manner; that is, by incorporating the available information into a DELPHI experiment. Issues examined include: why are there so few women in management positions in the federal and provincial public services of Canada; are factors present which hinder the
advancement of women in Canada's public services; if yes, then what are these factors; and, how will these factors affect the advancement of women in the public service in the future?

The DELPHI technique (see Chapter 2) was chosen as an appropriate method by which to conduct an experiment on the future of women in the public service with respect to their career development and advancement. The DELPHI technique has been employed by long-term planners as one of several tools available for seeking insights into the future consequences of present decisions and thus examines the extrapolation of trends into the prospective future (Brown-John, 1990:366-7). The DELPHI essentially strives to achieve a consensus among "experts" as to the likelihood of events occurring by asking them their opinions as to the "desirability" and "probability" of the occurrence of certain events. Thus, the four factors mentioned above were incorporated into the DELPHI experiment through a series of questions which requested that participants determine the "desirability" and "probability" of certain events occurring (see Appendix 2). Participants were also asked to determine a "year" in which an event, e.g. sexual harassment, would occur or cease to occur. The "year" range offered was from 1991 to 2006.

This paper was originally titled "The Future of Women in the Public Service: A Modified Delphi Experiment" and thus this title appears on the cover page to the DELPHI experiment (see Appendix 2). However, as the experiment progressed, it was believed that both the questions posed in the DELPHI experiment and the results
received in the DELPHI experiment offered insight more into the
career development and advancement of women in the public service,
than to explicitly the future of women in the public service, per
verse. Subsequently, the title of the Paper was changed to reflect
this. Public service refers to both public and civil services in
Canada; and, public servant refers to both public and civil
servants in Canada.

For the purpose of this Paper, the "experts" used in this
DELPHI experiment were public servants from across Canada, whose
task was to determine the extent to which factors are present which
affect the career development and advancement of women in the
public service. These public servants became the final DELPHI
panel who participated in the experiment. Women and men were
included in the participant panel for the DELPHI exercise. These
persons all fell within the Management or Executive occupational
categories. Because men comprise a large majority of the decision-
makers (i.e. Managers) in the public services of Canada, it was
only fitting to include them in a questionnaire aimed at
determining the factors which affect the career development and
advancement of women in the public service. We felt that the best
method by which to examine the slow progress made by women in the
public services of Canada was to ask the opinions of those people
who are in the positions under question, namely that of management,
why women have not advanced into these positions with greater speed
and why women are not present in these positions in greater
numbers.
Thus, this Paper is structured in the following manner.

Chapter 1 provides a review of literature which focuses upon factors affecting the career development and advancement of women in the workplace. Questions examined include: why and how are the careers of women affected; and, what role does, or should, government play? Chapter 1 concludes with several suggestions from the literature reviewed on improving the future for women in the workplace.

Chapter 2 supplies an enquiry into, and explanation of, the DELPHI technique including the reason for its use, as well as its advantages and disadvantages. In addition, The DELPHI process used in this Paper is illustrated, thus providing background to the actual experiment.

Chapter 3 affords an explanation of the research design used in this Paper. The DELPHI process is discussed in terms of need, purpose, methodology and approach.

Chapter 4 provides a discussion of the results of the DELPHI experiment. Each Round i.e. I, II, III, is focused upon with respect to statistics generated, specifically the statistics of Mean, Median, Range and Standard Deviation. An overview of the experiment is also supplied.

Chapter 5 serves as the conclusion to this Paper, providing a summary of the DELPHI experiment and a selection of comments and opinions voiced by the participants in this experiment with respect to career development and advancement of women in the public services of Canada.
Chapter 1 - Factors Affecting the Career Development of Women: A Literature Review

The purpose of this Chapter is to explore issues affecting the career development and prospects for advancement of women in public sector employment at both the federal and provincial levels in Canada. Thus we examine questions such as: are factors present which hinder the advancement of women; how will these factors affect the advancement of women in the public sector in the future; and, whose responsibility is it to eliminate these hurdles, e.g. government or individuals? In order to answer these questions, the research will involve an enquiry into the following matters:

1. Why and how are the careers of potentially upwardly mobile women in the public services of Canada affected?
2. What role does/or should government play?

Factors Which Affect the Career Advancement of Women

The most significant studies examined for purposes of this Paper have in common suggestions that the following four factors affect prospects for advancement of women in the public sector:

1. Employment Equity/Pay Equity;
2. Socialisation/History of Women at Work;
3. Day Care/Family Responsibilities; and,
4. Managerial Competence.

It is necessary, of course, to distinguish between those persons who wish to advance and those who are content to remain in their present positions. Not all women who are capable of advancing wish to do so. The "double burden" women face; that is,
the problem of maintaining a balance between career and home, in
effect, is not a problem for all women. Hence this study focuses
upon literature which examines career-oriented women, those who
indeed feel the "double burden", as well as other factors, which
stand as obstacles to their successful careers.

Felice N. Schwartz (1989:66) discusses gender difference and
its relevance to advancement. She concludes that differences in
gender can be categorized in two ways: those related to maternity;
and, those related to differing traditions and expectations of the
sexes. This proved to be an interesting starting point for
reviewing the four factors mentioned above.

It is estimated that 80% of new entrants into the work force
in the next decade will be women, minorities and immigrants
(Schwartz, 1989:68). Women are definitely a force to be reckoned
with; however, it is imperative that problems of the past and
present are appraised before future problems can be anticipated and
dealt with successfully.

1. Employment Equity/Pay Equity

Employment equity may be defined as measures taken to improve
the status of women and other employment disadvantaged persons in
the work force. Pay equity refers to provision of equal pay for
work of equal value including implementation of pay/wage scales
equally applicable to both men and women.

Canadian companies, both public and private, have had two new
federal policies imposed upon them in the area of employment
equity. The Employment Equity Act (RSC 1985, Chapter 23, Second
Supplement) requires all federally regulated companies to set up employment equity programmes and to file annual reports on the demographic composition of their work force to ensure that companies are adhering to established programmes. These reports must indicate salaries and promotions for women and minorities. The information must be made public. An additional programme, the Federal Contractors Program, requires every company which has 100 or more employees and wants to bid on a contract of more than $200 000 with the federal government to prove its commitment to gender equity in terms of hiring, training, salary and promotions. If there is no employee equity plan, then there are no federal contracts (Kates, 1988:60). These are just two examples put forth by the federal government in an attempt to alleviate discrepancies in the number of men and women in public sector workplaces and the positions they hold. Each province has also formulated policies to assist women in career development and advancement by focusing on areas such as education and training programmes for women in the workplace; the provision of learning environments which increase the awareness of women's career development and planning; teaching programmes and aids to reduce sexism; and, programmes which strive to alter attitudes and perceptions of women in the workplace.

Joanne Kates (1988) discussed the issues of teamwork and gender harmony in the workplace. She suggested that three "invisible" factors were problematic for women in their quest for management positions: 1) some male managers have trouble working with women; 2) the difficulty women themselves have learning to
operate effectively as managers; and, 3) corporate cultures, which exclude women. Kates states that while the principles of employment equity programmes are supported by both genders, when actually put into practice, employment equity is not viewed in the same manner by both sexes. This point was echoed in two other studies.

Nina L. Colwill of the University of Manitoba, and Wendy L. Josephson (1983:90) found that men and women disagreed significantly in most of their perceptions about equal opportunity programmes. Opinions voiced by a majority of the men included:

- men and women with equal qualifications already had equal opportunities;
- that equal opportunity should evolve naturally; and,
- that women were getting, or were in danger of getting preferential treatment.

The study also found that women were more likely than men to believe that more women should be recruited to fill traditionally male held or dominated positions. A majority of the women stated that:

Women were more likely to see themselves as limited by their training and background, reflecting the fact that fewer women had taken specialized technical training and post-secondary degrees that could enhance their career advancement. In addition, women were more likely than men to say that their careers were limited by sex discrimination in recruiting, promotions, discipline, distribution of duties and assignments in their training (Colwill & Josephson, 1983:89).

The Task Force Report Beneath the Veneer (1990) also found a discrepancy between opinions of men and women. As part of its mandate the Task Force had the responsibility of identifying and ranking the principal barriers to employment of women in federal occupational categories. These occupational categories include:
Management; Scientific and Professional, Administrative and Foreign Service; Technical; Administrative Support; and, Operational.¹

The Task Force Report identified barriers to employment for women through a questionnaire sent to 20,000 public servants. The Task Force found that men and women demonstrated sharply divergent perceptions of the situation facing women in the federal public service. Fifty-four per cent of the men surveyed believed that employment equity programmes gave women an unfair advantage. (Beneath the Veneer, Volume 1, 1989:54). Fifty-nine per cent of the men in senior-level jobs believed that employment equity programmes had placed women beyond their training and expertise (Beneath the Veneer, Volume 1, 1989:54), thus alluding to a conclusion that women were given promotions for the sole purpose of meeting hiring and promotion "quotas".

In the same Report women generally voiced the opinion that men do not visualise women as ambitious, nor do men apparently believe that women are able to make decisions, prepare budgets, supervise men and, that women end-up making decisions based upon emotion (Beneath the Veneer, Volume 1, 1989:54).

The Summary Report of Executive Development (Stevenson, 1989:11) surveyed 97 provincial public servants and 36 federal public servants in senior management positions and asked them to estimate the extent to which employment equity hurts, helps or has no effect on executive development in their respective organizations.

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### Employment Equity

<table>
<thead>
<tr>
<th></th>
<th>Hurts</th>
<th>No Effect</th>
<th>Helps</th>
<th>No Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial</td>
<td>17.5%</td>
<td>35.1%</td>
<td>32.0%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Federal</td>
<td>25.0%</td>
<td>33.3%</td>
<td>36.1%</td>
<td>5.6%</td>
</tr>
</tbody>
</table>

The results in the category “no effect” illustrate that employment equity policies have yet to play a role in enhancing executive development.

2. **Socialisation/History of Women at Work**

Women's work has been undervalued throughout history. Women have always been associated with family oriented work, e.g. cooking and cleaning. Unfortunately, this stereotype of the role of women went unchallenged for far too long. Women have never been perceived as possessing the ability to achieve success in the workplace. Clerical work, all too often, have been the positions in which women have entered the work force (and frequently remained!).

The issue of socialisation and its effects upon the success of women in the workplace has generated an abundance of literature. Rather than examine specific psychological and sociological arguments we shall provide only an overview of the subject.

From birth the sexes are separated and labelled. These gender labels are retained into adulthood and subsequently influence career choices. Most females are destined from birth to travel a
different work path from males (Chusmir and Durand, 1987:35).

Kates (1988:61) suggests that women who work primarily in

groups, as is commonly the case in management categories at both

the provincial and federal levels of government, are subtly forced

into one of four traditional roles: mother (the nurturer);

seductress (the sex object); pet (the precocious child); or 'iron

maiden' (the tough asexual). A woman who takes on any one of these

roles will be accepted by men. What does this then tell us about
gender roles? In effect, both female and male gender roles need
to be redefined. Women generally have been the more sensitive,
nurturing and caring of the two sexes, but these are not traits
that should deter women from career advancement (Colwill quoted in

Tom Peters, co-author of In Search of Excellence, produces
and distributes a monthly newsletter, "On Achieving Excellence", which deals specifically with management issues. The July 1990
issue was devoted entirely to the issue of women in management.
The majority of persons quoted felt that both private and public
sector employers should learn to fully utilize the women members
in their organizations:

As the manager's role shifts to that of the teacher, mentor,
and nurturer of human potential there is even more reason for
corporations to take advantage of women's managerial
abilities, because these people-oriented traits are the ones
women are socialized to possess (Peters, 1990:3).

Managers who are aware of their employees and make a point of
taking the opportunity to remind employees they are valuable and
their work is appreciated will in most probability achieve greater
effort and results from their employees. Women have acquired and subsequently possess these people-oriented skills through the socialisation process. Thus government as employer should realise that managers who are women would be beneficial to their organization and the skills women possess may be utilized in a manner conducive to positive results in the work environment.

A significant focus in the literature in recent years has been on women and the concept of "glass ceilings". Glass ceilings refer to an invisible barrier which women encounter on their climb to the top. This barrier separates them from top management positions. Why do glass ceilings develop?

Ann Morrison and her colleagues concluded that "... glass ceilings apply to women as a group who are kept from advancing higher because they are women" (Morrison, et al., quoted in Friedman, 1988:33). Women who do manage to break this barrier often encounter another: a wall of tradition and stereotyping that keeps them out of the inner sanctum of senior management (Friedman, 1988:33). The "pink collar ghetto" has also gained attention: this refers to whole categories of relatively low-skilled clerical jobs (Public Service 2000, 1990:81). Once in these "ghettos", women find it very difficult to advance. Thus, it appears inevitable that women will encounter difficulties in consequence of traditional socialisation patterning and gender-role stereotyping.
3. **Day Care/Family Responsibilities**

Dana Friedman (1988) differentiates women from men in two respects: women who have made it into top management have had to make more sacrifices than men; and, those who have made it while trying to raise families have experienced greater psychological conflict and stress.

Last year, *Business Week* surveyed 50 top women in business and compared them with a group of equally successful men. Half of the women in these senior positions had never been married or were divorced. Half of those who were married had no children. About 95 per cent of the men in comparable positions were married and had children (Friedman, 1988:34).

These figures are not unusual. Women, because of socialisation patterning and stereotyping, have been expected to manage both work and family. This “double burden” has not been alleviated to any great extent. Sixty-two per cent of mothers with children are in the work force. Day care has become a major issue for these working mothers. The provision of on-site and off-site day care is essential in order for women to advance in their jobs. Alternatives to day care itself are also necessary. These include working from home, flex hours (working shifts that fit the employee’s schedule, i.e. 7am-3pm, rather than 9am-5pm), permanent part-time and job sharing. The lack of day care or its alternatives affects women in the work force, as well as those wishing to return to the work force.

The federal government has recognized the importance of part-time work in its report *Public Service 2000: The Renewal of the Public Service of Canada* (Government of Canada, 1990:80). This
Report proposes to introduce amendments to The Public Service Superannuation Act (RSC Chapter P36, 1985) which reflect the importance of flex-work arrangements by enabling part-time workers to contribute to the Public Service Superannuation Plan.

Chusmir and Durand (1987) addressed the issue of female employees and their ability to advance while avoiding sex-role stereotypes. They concluded that strong ties exist between a woman’s level of work commitment and her marital status, child responsibilities, husband’s supportiveness, husband’s earnings and her degree of satisfaction with her family life. Chusmir and Durand stated that the connection between family and work can be positive or negative, depending upon circumstances.

The longer a woman has been married, for example, the more work-committed she’s likely to be. At the same time, however, married women feel more conflict than single women due to their mixing of family and work roles, and they often are less satisfied with their jobs. And the widely held belief that married women without children are more committed to work than working mothers is false; research shows the opposite to be true (Chusmir & Durand, 1987:34).

Research does not suggest any relationship between a man’s job commitment and his family characteristics. This is a significant conclusion. Do gender-role stereotypes play a role here? It is highly probable that they do, for women are expected to shoulder their “double burden”.

With respect to child-bearing, the Census of Canada (1981) reported that only 62% of female managers were married, and of those who were married only 41% had children at home. If indeed 41% of women managers have children at home, then employers should
not be wary of hiring women, nor promoting them, for fear that women will leave the work force to have children and not return. This simply is not the case.

4. Managerial Competence

The *Summary Report of Executive Development* (Stevenson, 1989), identified seven factors of major contributing importance to managerial success:

1. leadership ability
2. personal productivity
3. problem solving ability
4. continuing education
5. professional expertise
6. technical expertise
7. creativity

This Report detailed results of a survey completed by 57 provincial and 36 federal public servants in senior management positions. Of the seven factors mentioned, respondents at both levels of government indicated that personal productivity was the single most significant contributor to their personal success (25.8% of provincial public servants; and, 27.8% of federal public servants).

Colwill and Josephson (1983) reported that education and training for women in the public sector was viewed with scepticism by women. Women were more likely to see themselves as limited by their training and background. This was reflected in the fact that fewer women had taken specialized technical training and post secondary degrees which could enhance their career opportunities.

Gender discrimination was also cited as an obstacle to advancement, especially in the areas of recruitment, promotions,
discipline, distribution of duties and assignments in their training (Colwill and Josephson, 1983:89).

The lack of natural ability in women, lack of interest in advancement or careers, lack of desire to accept responsibility and work long hours and a lack of ability to tolerate stress -- all stereotypes -- are still believed to exist (Colwill and Josephson, 1983:90). Women, on the other hand, believe that they were not encouraged to compete for better jobs, were not given the opportunity to train, were not accepted by co-workers and supervisors and were not viewed with confidence (Colwill and Josephson, 1983:90). Thus, differences in perceptions reinforce the differences between the sexes. Another point of interest is the manner in which women present themselves. Several articles which discussed "glass ceilings" were adamant in their view that women have to learn how to present and express themselves in a male dominated work force. Women must learn to show their assertiveness.

Mentoring is an issue which has also gained attention in the past several years. According to Kram (1985), a mentor is an experienced, productive, manager who relates well to a less-experienced employee and facilitates his or her personal development for the benefit of the individual as well as that of the organization (Kram quoted in Noe, 1988:65). Men have always had mentors; however, women seem to be encountering difficulty in finding mentors.

Noe observed that the "number of women seeking management
positions is increasing as a function of their greater participation in the labour force...but the number of mentoring relationships available to women does not appear to be keeping pace with the increasing number of women needing mentors" (1988:65).

Mentors are needed in order for women to understand the male-dominated business culture and to guide them in their career advancement. It has been found that women with a mentor achieved greater job success and job satisfaction than women who did not have a mentor. However, women are not always able to find mentors, because men perceive women as a threat, and women sometimes find that having women as mentors is not always an ideal situation due to jealousy and competition. However, the general consensus throughout the literature is that mentor relationships are beneficial to women, mainly due to the belief that women are able to "learn the ropes" from persons who have already had experience in climbing the organizational ladder.

The Role of Government

Thus far, we have discussed women managers in both the federal and provincial public services and the factors which hinder their advancement. The next step is to discuss the implications for government. Because the federal and provincial governments are the employers in question, it is an obligation for these governments to reduce barriers or obstacles discussed. What can be done to improve the current situation and to provide a future in which women have available to them the opportunity for advancement in the public sector? Rather than a complete detailed analysis of options
available, several suggestions from the literature reviewed can be suggested:

1. The acknowledgement that problems do exist and a commitment to further research into these problems.

2. Organizations should emphasize career development initiatives for all of their employees; these initiatives should especially include the use of bridging positions (positions from which managers are usually selected, e.g. leaders or supervisors); developmental assignment; and, on-the-job training (Colwill and Josephson, 1983:91).

3. Governments must develop policies and work environments which support family needs (Friedman, 1988); this would include day care and its alternatives.

4. Relieve the "double burden" as experienced by women; give women the same opportunities given to talented men in organizations; accept women as valued members of organizations; and, women with a potential for a career in management should be mentored and nurtured.

5. Improve the opportunities for women to be promoted from within organizations from secretarial and professional positions through top management levels (Bremer and Howe, 1988).

6. Assure a pool of qualified women applicants through recruiting strategies such as networking with other agencies and schools of higher education (Bremer and Howe, 1988).

7. Execution of these recommendations should not be oriented towards special privileges for women (Colwill and Josephson, 1983).

In the introduction of this Paper it was stated that women constitute a very small proportion of managers in the public sector. Does responsibility for change fall specifically upon these individual women? Should they take more training courses? Should they be more aggressive? Should they strive to alleviate gender-role differences? The answer to all of these questions is--yes! However, any marked changes require a co-ordinated effort among women, men and government. Perhaps the government, as
employer, should initiate the process. But, it would not necessarily follow that women in senior management and executive positions have overcome all obstacles constraining their career development; rather, these women are striving to cope with inequalities facing them.

The literature reviewed thus far has stressed a need for further study of problems experienced by women in their career pursuits. More specifically, the future of women at work needs to be studied. This Paper is concerned solely with the public sector. It is an area in which a limited amount of data on work environments of the future is available.

In order to fully comprehend and illustrate the extent to which factors are present which affect career development and prospects for advancement of women in the public sector, a study of the existing situation and its effect on future prospects for women in the public sector must be undertaken. An undertaking of this nature should try to explore several issues:

1. Do the factors of employment equity/pay equity, socialisation/history of women at work, day care.family responsibilities and managerial competence present and/or create problems for women in career advancement in the public sector?

2. Will the factors mentioned above have an affect on the advancement of women in the public service in the future; and, how will women be affected?

3. What are the perceptions of men and women with respect to factors which affect the advancement of women in the public sector; to what extent are perceptions similar or different?

To explore these issues we employed a modified Delphi.
These six occupational categories were established in 1967 under provisions of the Public Service Staff Relations Act to facilitate collective bargaining. Within the occupational categories there are some 170 occupational groups. It is around these groups that specific bargaining units are formed. According to the December 1990 White Paper "Public Service 2000" most occupational categories will be collapsed into one large category in order to permit greater management flexibility in human resources development. It is anticipated in the Public Service 2000 Report that such flexibility will facilitate breaking down the "pink collar ghettos" in which many capable women find themselves in the public sector.
Chapter 2 - The DELPHI Technique: An Introduction

A DELPHI is an interactive technique designed to provide a series of informed guesses.¹ DELPHIs are future oriented and thus strive to achieve a consensus among experts about what they think and anticipate may happen in respect to a given subject.

The future is no longer seen as unique, unforeseeable and inevitable (Helmer, 1968:116-122). The DELPHI technique employs the use of experts in order to arrive at a consensus on the likelihood and timing of specified future events (Preble, 1983: 75-88). Use of DELPHIs in the public sector has grown rapidly. Over 100 DELPHIs have been conducted on various subjects in the public sector.

The flexibility of the DELPHI allows it to be utilized as a tool for several distinct applications.

One of the first reported corporate applications was to explore the future external environment and to analyze evolutionary product lines. Delphi has been used to predict likely inventions, new technologies and product applications. In education, it has been used to design a new curriculum and to predict the impact of socioeconomic developments of future school systems. In retailing, Delphi was used to indicate future changes in department stores. Other applications of the method have been to predict the impact of land use policy, information systems relevant to the development of planning, and to identify problems in health care programs. Delphi has become a multiple-use tool, and has proved to be an effective method of forecasting future events in both business and government (Preble, 1983:75-88).

The DELPHI derives its importance from the realization that projections into the future, on which public policy decisions must rely, are largely based on the personal expectations of individuals rather than on predictions derived from a well-established theory.
Long-term planners utilize the DELPHI technique in order to seek insights into future consequences of present decisions. Studying the future can provide several tangible benefits such as:

a) providing an additional, informed spread for decision makers;
b) expanding one's operational time horizons;
c) providing some assurances against unanticipated consequences;
d) identifying a wider range of alternatives for problem solving and opportunity making decisions;
e) anticipating and evaluating "future shock" and risk situations;
f) mapping alternative courses of action; and,
g) essentially expanding one's ability to control one's own destiny (Brown-John, 1990:366-382).

The DELPHI technique was developed at the RAND Corporation in 1950 by Norman Dalkey and his associates to eliminate many of the negative effects related to the use of interacting groups for decision making (Riggs, 1983:89-94). This was especially true in long-range forecasting. Several major factors have been identified as inhibiting the performance of interactive groups (Van de Ven in Riggs, 1983:89). These include:

1) a tendency for low status members to "go along" with the opinions of high status members;
2) group pressures for conformity;
3) the unwillingness to abandon publicly expressed opinions; and,
4) dominant personalities tend to influence the group.
According to Preble (1983) the DELPHI overcomes many of these shortcomings by providing a structured format, systematic procedures, clear communication, statistical feedback and anonymity. Face-to-face contact is not required since participants utilize written responses. Anonymity is particularly desirable in public sector environments where policy making often requires the inputs of individuals with diverse backgrounds and interests.

DELPHIs allow for the establishing of possibilities about things occurring in addition to suggesting time frames within which things are likely to occur. The DELPHI employs the informed intuition of those who have been pre-determined to be "experts" in a specific field. Being defined as an "expert" reinforces one's belief in one's own expertise. DELPHIs are advantageous in several respects (Delbecq et al, in Brown-John, 1990:388-382):

1) as a means for developing a range of possible programme alternatives;

2) as a basis for exploring and exposing underlying assumptions inherent in differing judgements;

3) as a means for seeking information to be employed in consensus building among members of a respondent group;

4) as a device for correlating informed judgements on a topic spanning a wide range of intellectual disciplines;

5) as a means for educating the respondent group on the diversity and inter-related aspects of a subject area; and,

6) as a means for achieving a high degree of convergence among participants who cannot physically come together.

DELPHIs are by no means flawless and certain problems do arise.
First, DELPHIs tend to be administratively complex and often take several weeks or months to complete. In effect, this requires that participants donate both their time and interest to the completion of the DELPHI process.

Second, selection of experts may be problematic. Because expertise varies depending upon the topic of the DELPHI, one must ensure that the "experts" are indeed knowledgeable and familiar with the questions being asked.

Third, challenges arise in ensuring continuity of respondent ("expert") participation. Initial participants may find the task onerous, not fruitful or beyond their available time (Brown-John, 1990:366-382). The number of respondents tends to diminish as one passes through several rounds of the experiment.

Fourth, the actual determination of what questions to place on the DELPHI experiment can be time-consuming and frustrating. In addition, communication misunderstandings may occur if questionnaires are poorly structured. Thus, precision of questions and proper wording encourages a consistent pattern of responses.

Finally, DELPHIs tied closely to projecting changes involving science and technology require the incorporation of a third scale, in addition to the scales of "desirability" and "probability". This scale, "year" pertains to the "year in which it is anticipated that something will transpire." However, DELPHIs in areas involving behavioural questions invariably encounter problems with "year". This will become apparent in Chapter 4, where results of the experiment are discussed.
The DELPHI Process

This section illustrates a typical DELPHI process and that which was utilised in this Paper.²

A Flowchart of the Typical DELPHI Process

START
↓
Problem definition
↓
Determine expertise required
↓
Select experts
↓
Prepare questionnaire
↓
*Distribute questionnaire
↓
*Analyze questionnaire responses
↓
*Has consensus been reached?
↓
*no
↓
*Prepare the next questionnaire
↓
Compile final responses and disseminate results

*These five steps were repeated for Rounds II and III (see Chapter 3)

Both the selection of experts and the questions or statements to be included in the questionnaire are dependant upon the identification of a problem or hypothesis for which data must be obtained. The questionnaire requests estimates of the desirability and the probability of the occurrence of certain events, as well as the data by which the events will or may occur.
The DELPHI generally generates data over a three-round iterative process. Hence, the results of the first round are summarized, and the Median, Mean and Range of responses is computed and included in the second round questionnaire. The same procedure is followed for the third round of the DELPHI. Participants are then able to maintain or alter their responses based upon the information provided from the previous round. Thus, after the first round is completed, respondents are given two subsequent rounds in which they are able to reconsider or revise their earlier opinions or estimates. The purpose of this process is achievement of consensus among respondents.

In the attempt to determine future career prospects for women in the public service, it was imperative that the instrument utilized to achieve this goal be conducive to the extrapolation of future trends. The DELPHI technique was best suited to meet this demand. The DELPHI technique allowed for future career prospects of women in the public service to be determined based upon current trends. The DELPHI technique provided the opportunity to utilize the expertise of many capable Canadian public servants from the federal, provincial and territorial governments, by asking them to record their opinions as to the "desirability" and "probability" of the occurrence of certain events. The results of the DELPHI experiment are found in Chapter 4.

This Chapter has supplied an introduction to, and an explanation of, the DELPHI technique. Based on the information provided, the DELPHI technique was chosen as the appropriate device
by which to conduct a study of the career development of women in the public service and prospects for advancement of women in the public sector in the future.


Chapter 3 - The DELPHI Experiment: The Research Design

Background

Determining the extent to which factors which affect career development and prospects for advancement of women in the public sector now, or in the immediate future, is not a difficult task. However, making predictions which encompass the next 10 to 15 years required much more thoughtful consideration and analysis. The future can only be predicted based upon current trends.

This project sought to generate predictions inclusive of the year 2006. Predictions refer to informed "guesses" as to the extent to which the factors mentioned will affect the future work environment and the year in which it is anticipated that the factors will cease to negatively influence career advancement for women in the public sector.

The DELPHI experiment conducted for this project on issues affecting the prospects for the advancement of women in the public sector in the next decade employed a questionnaire consisting of 22 primary and 13 secondary statements, for a total of 35 questions.

Each question was phrased in "future" tense (see Appendix 2), thus, Question #1: "On-site day care will be available in all public sector workplaces". Each question was measured along two variable scales: "desirability" and "probability". Thus the question could have been be rephrased: "It is 'desirable or non-desirable' for on-site day care to be available in all public sector workplaces"; and, "how probable is it that on-site day care
will be available in all public sector workplaces?"

Respondents were provided with an opportunity to surmise in which year they anticipated the event might occur (the range offered was 1991 to 2006). "No Answer" and "Not Applicable" were also possible choices. The "year" scale proved to be problematic for many respondents due mainly to the fact that many found it difficult to imagine a possible year in which a behaviour might cease to occur. For example, Question #15, "Sexual harassment inhibits women from career development" was deemed difficult when attempting to surmise "year" because sexual harassment must be eliminated before this question can be resolved. The "year" scale was retained throughout the three DELPHI rounds however, in order to stress the future orientation of the project and its goals.

In practise the DELPHI experiment was a three-stage exercise; that is, three rounds of the questionnaire were undertaken. Thus, the same panel of participants were polled three times with the same set of questions. Thus, the actual DELPHI instrument was identified as "Round I; Round II; or, Round III," to correspond with the respective rounds.

While the DELPHI process is very simple, it is also very time-consuming. Respondents were sent the Round 1 instrument with its array of questions and scales. They were then requested to clearly mark on each scale under each question the "desirability", the "probability" and, when appropriate, the "year". Scales offered them six (6) alternatives ranging from "0" (No Answer) to 1,2,3,4,5,--respectively, "Not Desirable" to "Very Desirable".

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DELPHI instruments for Round 1 were sent to respondents on July 6, 1990 with a July 27, 1990 "deadline for return". In practice, responses came in over four weeks, with the final response being received August 3, 1990. Round II was sent to respondents on August 8, 1990 with an August 31, 1990 deadline for return, with the final response being received September 8, 1990. Round III was sent to respondents on November 3, 1990 with a November 23, 1990 deadline for return. The final response was received December 15, 1990. As a consequence of receipt of several "late" questionnaires for Round II (after the cut-off date) and because late questionnaires were unable to be used in tabulating the data, respondents were given a longer period of time in which to return the Round III responses.

The Round I instrument allowed respondents six choices for each of the three scales associated with the 35 questions. The Round II instruments took data from Round I and incorporated it into the Round II instrument. Thus, in Round II, each respondent had available in the instrument questionnaire the Range, the Median and the Mean for each scale from Round I. The "Range" refers to the range of responses received for each question (from 1 to 5); the "Mean" refers to the average of all responses received; and, the "Median" refers to the point at which 50% of the responses fall above and 50% of the responses are below the point of the Median.

In addition, each instrument recorded the location of the respondent's first responses from Round I. Therefore, there were four (4) pieces of information subsequently available for both
Round II and Round III.

What the DELPHI attempts to suggest is that while there is a wide range of opinions possible in respect to a question's "desirability" or "probability", there still exists a more narrow range of "majority" opinion (Brown-John, 1990). In each subsequent round (after Round I) those who are distant from the "majority" view are asked to reconsider their opinions. Providing the Mean, Median and Ranges for all questions assists respondents in determining where their informed estimates are in respect to all other DELPHI panel participants. This provides a reference point for an individual's views relative to all other experts.

Respondents, of course, are permitted to retain their estimates through the three rounds of the process; that is, they are not required to change their opinions. Those who do maintain their opinions are still incorporated into the Mean, Median and Range for each round, even though their opinions may be isolated in terms of the Median. Calculating the Standard Deviations for each respondent and question permits one to test the degree of congruity between the opinions of an individual respondent and the entire DELPHI panel.

Round III was handled in the same manner as Round II: Ranges, Means and Medians from Round II were provided along with respondent's previous choices. The data generated allowed for the calculation of various statistics, including that of the "Standard Deviations". The data analysis follows in Chapter 4.
The DELPHI Experiment: Advisory Panel Interviews

In February, 1990, seven professors from the University of Windsor, Windsor, Ontario who were knowledgeable in the area of women’s issues and studies were contacted for the purpose of conducting an interview in order to discuss the future of women in the workplace. These interviews were necessary in order to define relative parameters within which the DELPHI experiment was to be conducted. These professors subsequently became the Advisory Panel for the DELPHI experiment. Professors interviewed were from the disciplines of business administration, English literature, political science, public administration, and sociology.

The interview questions focused upon:

1. The existence of factors which influence both the work women choose and their career advancement;

2. The future of women in the workplace, in terms of their ability to reach middle and senior management positions; and,

3. Methods by which women might attempt to overcome obstacles to their advancement.

The interviews contributed significantly to the gathering of information which was subsequently incorporated into the DELPHI as desirability/probability questions.

Interviews were conducted between February 20, 1990 and March 7, 1990. The length of the interviews varied between 45 minutes and 65 minutes. Each member of the Advisory Panel was notified in advance of the types of questions and issues which it was planned would be discussed.

Each interview began with an explanation of the nature of
the proposed study. Advisory Panel members were informed that
the interviews constituted the preliminary step in a projected
six stage process, viz:
1. Completion of interviews;
2. Formulation of a "draft" DELPHI instrument;
3. Pre-testing of "draft" DELPHI on the Advisory Panel;
4. Final revisions to the DELPHI instrument;
5. Selection of the DELPHI "respondent" panel; and,
6. Administration of DELPHI instrument to the final Delphi
respondent panel.
These open-ended interviews were conducted in a non-structured
manner.

Interestingly, the Advisory Panel was generally in agreement
as to specific factors which appear to affect the advancement of
women. These factors included socialisation, especially with
respect to gender-role stereotyping and tradition. The educational
system was also considered to have a negative impact upon the
advancement of women in that females generally have not been
encouraged to take courses in the areas of mathematics and the
sciences. Consequently, to any large extent, women are not found
in occupations which require a strong background in these areas.
The area of equity, both in terms of pay and employment
opportunities was also cited as a problem. Family responsibilities
and day care were also mentioned as playing negative roles in
career advancement for women in that these areas are believed
(albeit incorrectly) to take precedence in the lives of women
(see Chapter 1). Subsequently, women are "passed over" for promotions or advancements in their careers, based upon the premise that because they bear children, they are therefore not interested in pursuing positions within which family responsibilities may interfere. In the area of managerial competence, several members of the Advisory Panel believed that women are thought of as being overly emotional and would therefore be incapable of making professional decisions.

Attitudes, especially those of men towards women in positions of seniority and authority was a topic of discussion among all Advisory Panel interviews. The opinion was expressed that women will continue to experience setbacks until the attitudes of men change to that of a greater acceptance of women in the workplace, especially with respect to women in positions of authority. It was also argued that attitudes of women must also change; women must learn to be more aggressive and competitive.

With respect to the future of women in the work force and what can be done to improve their situation, the Advisory Panel advised that until system wide changes occur, such as greater opportunities for advancement, changes in educational curricula, and the removal of gender-role stereotyping in general, women will continue to be restricted from advancement. While employment equity programmes attempt to alleviate some of the problems, these programmes alone are not enough. Attitudes must change; women must be encouraged and allowed career opportunities that are available to men.
Finally, as mentioned earlier, attitudes of women must also change in that women must continue to strive for career success and create positive work environments.

The DELPHI Experiment: The Instrument and the Experts

After the completion of the Advisory Panel interviews, the next step was to formulate a "draft" DELPHI instrument. This involved several "brain-storming" sessions with the Advisor to this research project. A series of questions were formulated which covered the issues and areas expressed by the Advisory Panel. This draft DELPHI included one open-ended question, which allowed respondents the opportunity to suggest areas which, in their opinion, should have been covered, or which were issues of concern to them. The draft Delphi also contained three questions that were used in other studies. These are Questions #8, 9, and 11 (see Appendix 2 for questions and references). The draft DELPHI was submitted to Advisory Panel members on June 18, 1990. Panel members were asked:

1. To review and offer comment upon the DELPHI project design;
2. To suggest areas or possible questions to be incorporated into the DELPHI; and,
3. To pre-test the DELPHI instrument before submission to the Respondent Panel.

Step 3 was included in order for Panel members to ensure that questions were "neutral" and did not lead respondents in their answers. The Advisory Panel was very helpful and contributed some excellent suggestions as to possible questions and DELPHI design.

While the draft DELPHI was being reviewed, the task of
choosing the final DELPHI panel or the "Respondent Panel" was underway. One hundred and three persons were identified from across Canada. We began with a large number of prospective panellists on the assumption that not all those approached would agree to participate. Prospective panellists all occupied middle, senior or upper management positions in the public sector at either the federal or provincial levels. Positions included Deputy Ministers, Assistant Deputy Ministers, Executive Directors, Directors, and Executive Assistants. Chairpersons of various Public or Civil Service Commissions were also contacted. The initial list of 103 persons was prepared via two processes: by random selection from the Government Employees' Directory (Spring, 1990), or by recommendation from persons interviewed and/or consulted.

A covering letter (see Appendix 1) was sent to all 103 persons on June 14, 1990. This letter outlined the nature of the project, including purpose and methodology, along with a request for their assistance as part of the Respondent Panel.

Of those persons contacted, 57 agreed to participate, 10 excused themselves for various reasons, 28 letters went unanswered and 8 letters were returned past the deadline date of July 1, 1990 (since the launch date for Round I of the DELPHI had been set already, "late" responders had to be turned away). A point of interest arises here in that members of the federal government were most lax in responding to the cover letter. Of 8 letters sent, only 1 received a response. From the remaining seven officials, nothing more was heard.

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A specific number of participants from federal and provincial governments was not aimed for; rather, it was hoped that at least one person from each area would agree to participate. Because of the nature of the DELPHI, one cannot be assured that those who agree to participate initially will do so until the end; therefore, there was no guarantee that every level of government would be represented.

The encouragement and interest expressed through letters of confirmation was overwhelming. Many respondents stated that the area of women's issues was very important at this point in time in the public service of Canada. Naturally, in keeping with the DELPHI technique, names of the Respondent Panel members will not be made known. All respondents were assured anonymity and that will be respected.

Demographically, members of the Respondent Panel for Round I were as follows:

Resident in:

<table>
<thead>
<tr>
<th>Province</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alberta</td>
<td>9</td>
</tr>
<tr>
<td>British Columbia</td>
<td>7</td>
</tr>
<tr>
<td>Manitoba</td>
<td>5</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>2</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>3</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>7</td>
</tr>
<tr>
<td>Ontario</td>
<td>7</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>3</td>
</tr>
<tr>
<td>Quebec</td>
<td>0</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>3</td>
</tr>
<tr>
<td>Northwest Territories</td>
<td>2</td>
</tr>
<tr>
<td>Yukon Territory</td>
<td>4</td>
</tr>
<tr>
<td>Federal Government</td>
<td>5</td>
</tr>
</tbody>
</table>

**TOTAL** 57

FEMALES: 39
MALES: 18
As is apparent, the Respondent Panel was much larger than anticipated. Because of the enthusiasm and because panel size is unrestricted, we incorporated all respondents into the experiment.

The Respondent Panel did not have any members from Quebec, mainly due to the fact that the initial covering letter was sent later than the rest due to a delay in translating the letter into French; and, the two public servants that were written to did not reply to the letter. The province of New Brunswick did not have any male respondents and the Northwest Territories did not have a female respondent. It was initially thought that these situations would pose problems; however, upon receiving responses from Round I of the DELPHI, it was found that this fear was ill-founded, for neither the questions nor the responses were province/territory specific (nor were they intended to be). In addition, as stated earlier, controlling for participation in all three rounds of the DELPHI is difficult, if not impossible.

The following Table depicts composition of the Respondent Panel for Rounds I, II, and III. It should be pointed out that a cover page was included with each questionnaire, setting forth instructions for completion of the DELPHI instrument. This cover page also had included on it a three-digit respondent identification code.
<table>
<thead>
<tr>
<th>Round</th>
<th>(F)</th>
<th>(M)</th>
<th>Total*</th>
<th>(F)</th>
<th>(M)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round I</td>
<td>39</td>
<td>18</td>
<td>57</td>
<td>29</td>
<td>17</td>
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<td>Round II</td>
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<td>46</td>
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<td>Round III</td>
<td>24</td>
<td>13</td>
<td>37</td>
<td>23</td>
<td>10</td>
<td>33</td>
</tr>
</tbody>
</table>

(F)=FEMALE  
(M)=MALE

NOTE - One Round I respondent removed the cover page from their questionnaire and therefore could not be identified as to gender.

Total* - Subsequent rounds involve only those who participated in the preceding round.

As is apparent from the preceding chart, 10 persons did not return the Round I questionnaire; 11 persons did not participate in the subsequent Round II; and, 4 persons did not participate in the final Round III questionnaire. Indeed, 58% of those who began the DELPHI saw the experiment through to its conclusion. One person returned their Round I questionnaire late and thus we were unable to include their responses in the data analysis for Round II.

**Developing the DELPHI Questionnaire: The Instrument**

The greatest threat to the validity of this entire project was a flawed instrument. The utmost care was taken to formulate an instrument which would cover the issues discussed, both in the
course of the Advisory Panel interviews and through the literature review outlined previously.

Upon receiving the draft DELPHI from the Advisory Panel, all comments were reviewed and changes and adjustments were made in both content and order of questions. It was imperative that all questions and/or statements be phrased in terms of "will", rather than "should". For example, if Question #1 were written, "On-site day care should be available in all public sector workplaces", rather than, "On-site day care will be available in all public sector workplaces", respondents would have been swayed in terms of their answer, or indeed compelled to provide a specific answer. This is not what is sought through the DELPHI technique.

Question #22, "Education and training in the following areas will be encouraged in order to enhance opportunities for women in the public service" was approached in a different manner with respect to the choices for responses to this question. The scales of "Desirability" and "Probability" were maintained, however, the "Year" scale was replaced with a scale which allowed respondents to determine the "Most appropriate educational/training location" for the specific skill in question. This was done in order to assess perceptions of the most appropriate institution for acquisition of the particular skill. For example, Question #22, "Education and training in the following areas will be encouraged in order to enhance opportunities for women in the public service," requested that the respondent determine where this skill might be best learned or acquired from five possible choices: "University";
“Community College”; “Pre-service; in-house training”; “In-
service; in-house training”; and, “In-service; private training”. This question was formulated in this manner in order to determine the institution from which women could best learn the skills under question. Both the Advisory Panel members and literature reviewed with respect to factors affecting the career development of women stressed a need for women to acquire certain management skills such as oral and written communication and problem-solving techniques. Rather than assuming that these skills could be learned or acquired in the workplace, or in school, we decided to ask respondents to determine where these skills could be best developed.

A second draft of the DELPHI was completed and re-submitted for evaluation to the Advisory Panel. This second draft was accepted by all Panel members and it became the final questionnaire. Added to the final draft was a "definitions" section which included several terms which we believed were potentially subject to misinterpretation. This section included definitions for "on-site day care"; "flex hours"; "job sharing"; "sexual harassment"; and, "In-service; private training".

The respondents were not made aware of the fact that questions referred specifically to four fundamental themes, those which were identified through Advisory Panel interviews and the literature reviewed in Chapter 2. Because of the limited number of questions asked, it was not considered essential that the order of questions be mixed for purposes of cross-checking the validity of responses. Thus, the final draft of the DELPHI was broken down into five
categories:

1. Employment Equity/Pay Equity (5 questions):
   Questions #6, 7, 8, 9 and 13;

2. Socialisation/History of Women at Work (9 questions):
   Questions #12, 14, 15, 16, 17, 18, 19, 20 and 21;

3. Day Care/Family Responsibilities (7 questions):
   Questions #1, 2, 3, 4, 5, 10 and 11;

4. Managerial Competence (13 questions):
   Question #22 a) to m); and,

5. Open-ended question (1 question):
   Question #23.

It is entirely possible that questions within the five categories might have been better arranged in another category, but this was the operational framework from which this experiment was conducted.

It was hoped that the DELPHI experiment would provide insights into the career development and advancement of women in the public service, in addition to long-term prospects for women in the public sector at both the federal and provincial levels. In the next Chapter we will explore results of the DELPHI experiment.
Chapter Four - The DELPHI Experiment: Results

Chapter 4 will focus upon results obtained in the DELPHI experiment. Each Round, i.e. I, II, III, of the experiment is discussed. An overview of the DELPHI experiment is also provided. The discussion focuses upon the four factors mentioned previously:

1. Employment Equity/Pay Equity;
2. Socialisation/History of Women at Work;
3. Day Care/Family Responsibilities;
4. Managerial Competence;

and, the questions encompassed by each category.

Detailed results of the DELPHI experiment are found in the "DELPHI Experiment: Results" section of Chapter 4 (see pages 72 through 76). The reader should be made aware that for purposes of data entry, the range of responses on the "desirability" and "probability" scales, i.e. 0 through 5, were made equivalent to the following: 0=00; 1=10; 2=20, 3=30, 4=40; and, 5=50. All data was analyzed based on this conversion.

As stated in Chapter 3, respondents in Rounds II and III of the DELPHI experiment had available to them the Range, Median and Mean responses of the preceding round. In addition, each respondent's previous choice was denoted on each scale. Therefore, respondents could easily determine how close or far their answers were from the answers of other respondents.

The Standard Deviation (SD) is the measure of variability; that is, how far the scores of the panel of experts are from the panel mean-or-average for the entire distribution. It is the
interpretation of the SD which tells us how close together the panel came on probability and desirability scales and whether they were converging or dispersing on those scales (Brown-John, 1990: 369). The smaller the SD, the greater the agreement as to the "desirability" or "probability" of the occurrence of a certain event. A Range of 30 to 50 is fairly close; and, a Median of 50 tells us that something is considered to be highly desirable or probable.

It was hoped that the DELPHI experiment would achieve its objective; that is, a consensus as to factors affecting career development and advancement for women in the public service, in the future. The same questions were posed over three rounds in order to allow respondents to "re-think" their opinions; thus causing respondents to maintain or change their previous response.

The extent to which the DELPHI experiment achieved its objectives is in large part subject to individual interpretation. The DELPHI experiment did raise some interesting issues for future study of women in the public service. A majority of questions demonstrated the gradual achievement of a consensus among DELPHI participants, meaning that the SD decreased from Round I to Round II; from Round II to Round III; and, after Round III. In several instances, the SD decreased after Round II, but increased again after Round III. These fluctuations in the SD were attributed to several reasons: 1) participants had a clearer understanding of the experiment after Round I and answered subsequent rounds accordingly; 2) participants did indeed "re-think" their opinions
in Round II upon receiving Round I data analysis; and/or, 3) the decreased number of respondents after each round may have eliminated those respondents whose opinions varied significantly from others, thus causing the Mean and SD to fluctuate.

For Questions #1 to #21, in addition to scales of "desirability" and "probability", respondents were asked to anticipate a "year" in which a particular event would occur or cease to occur. The range of responses for "year" was 1991 to 2006. The "year" scale proved problematic, mainly due to the fact that many respondents experienced difficulty in attempting to determine a year in which a behaviour, e.g. sexual harassment, would occur or cease to occur. Question #22, in addition to scales of "desirability" and "probability", requested that respondents determine the "best" institution from which aspects crucial to managerial competence could be achieved. This also proved to be problematic for several respondents, since they expressed the opinion that skills such as "oral communication" and "financial management", could be learned from any one of the institutions mentioned or a combination thereof. Hence, the "year" and "best" institution responses described in the following "Results" section are the averages or Mean responses of the panel of respondents. The Mean and SD scores discussed represent Rounds I, II and III, respectively.

**Results**

1. **Employment Equity/Pay Equity**

This section encompassed Questions #6, 7, 8, 9 and 13.
Question #6

"Women will occupy 50% of senior executive positions in the public service."

This was ranked as being highly desirable (Mean scores of 45, 44 and 46 for Rounds I, II and III, respectively) but not very probable (Mean scores of 26, 25 and 24). The SD of Question #6 (Desirability=9.75, 10.53 and 7.92 for Rounds I, II and III, respectively. Probability=11.97, 11.21 and 8.70 for Rounds I, II and III, respectively) demonstrated an increased consensus among respondents after Round III as to the desirability and lack of probability of women occupying 50% of senior management positions. It was estimated by respondents that if indeed women were to hold 50% of senior management positions, this would not be achieved until at least the year 2004.

Question #7

"Pay discrepancies between the salaries of men and women will diminish as an issue in the public service."

This was ranked as highly desirable (Mean scores of 44, 45 and 44) and probable (Mean scores of 33, 34 and 34). DELPHI respondents did not demonstrate a widespread consensus with regard to this question, since the SD in terms of both desirability (SD=11.25, 10.67 and 12.19) and probability (SD=13.34, 11.73 and 11.61) was high, which indicated a large amount of disagreement among respondents. However, it was estimated that by 1998, pay discrepancies would be eliminated as an issue in the public service.
Question #8

"Employment equity and affirmative programs will eliminate unfair career advantages as enjoyed by men in the public service."

This was ranked as highly desirable (Mean scores of 43, 45 and 46) but not highly probable (Mean scores 26, 28 and 28). In terms of probability, the SD decreased by four points from Round I to Round III (SD=12.52, 10.52 and 8.89). This illustrated an increase in the opinion that employment equity programmes and affirmative action programmes will most probably not eliminate unfair career advantages as enjoyed by men in the public service. It was estimated that if these programmes did indeed eliminate unfair career advantages, this would not occur until at least the year 2001.

Question #9

"In the future, men and women will be evaluated for career purposes in the same way in the public service."

This was ranked as highly desirable (Mean scores of 47, 48 and 49) and probable (Mean scores of 34, 35 and 33). The SD in terms of desirability (SD=6.28, 4.62 and 3.31) demonstrated a three point increase in the desire of respondents to have men and women evaluated in the same manner for career purposes. The SD in terms of probability (SD=10.39, 10.37 and 9.82) indicated a lack of consensus among respondents as to the probability of equal evaluation criteria for men and women in the future. It was estimated that this would be achieved by the year 1999.
Question #13

"Women with relatively similar work experience and qualifications will advance in management positions now held by men."

This was ranked as highly desirable (Mean scores of 47 for Rounds I, II and III) and probable (Mean scores of 36, 37 and 36). The SD in terms of desirability (SD=6.63, 5.97 and 6.12) stayed relatively constant, whereas the SD in terms of probability (SD=10.33, 8.30 and 8.86) decreased by two points, which suggested an increase in the probability of women advancing in management positions now held by men. It was estimated that this would be achieved by the year 1998.

2. Socialisation/History of Women at Work

This section encompassed Questions #12, 14, 15, 16, 17, 18, 19, 20 and 21.

Question #12

"Expectations about traditional male career patterns will change."

This was ranked as desirable (Mean scores of 40, 42 and 43) but not highly probable (Mean scores of 26, 27 and 26). The SD in terms of probability (SD=10.59, 7.57 and 8.16) demonstrated a two point decrease, which suggested that an increased number of DELPHI respondents believed that expectations about traditional male career patterns will not change. It was estimated that if indeed this did change, it would not occur before the year 2000.
**Question #14**

"Governments will provide greater incentives to encourage women to enter the public service."

This was ranked as desirable (Mean scores of 36, 37 and 39) and almost probable (Mean scores of 27, 29 and 29). The SD for both desirability (SD=12.51, 10.52 and 10.36) and probability (SD=10.26, 9.42 and 8.78) remained relatively the same throughout the three rounds of the DELPHI. These high figures suggested a lack of consensus among respondents with respect to Question #14. It was estimated that governments would not provide greater incentives to encourage women to enter the public service until at least the year 1998.

**Question #15**

"Sexual harassment inhibits women from career advancement."

This was ranked as not desirable (Mean scores of 10 for Rounds I, II and III). The probability of sexual harassment inhibiting women from career development fluctuated from a Mean of 29 in Round I, to a Mean of 30 in Round II, to a Mean of 10 in Round III. The SD in terms of desirability was 0.00 after Round III, which indicated among respondents that it was not desirable for sexual harassment to inhibit women from career development. In terms of probability (SD=13.49, 11.22 and 10.80), the SD indicated that while respondents thought it was probable that sexual harassment inhibits women from career development, respondents were not in agreement as to the extent to which sexual harassment plays a role
in the career advancement of women. Many respondents found it
difficult to determine a year in which sexual harassment would
cease to inhibit women from career development since any estimate
of this nature required that respondents determine a year in which
a behaviour would cease to occur.

**Question #16**

"Sexual factors e.g. looks/body language, will continue to be
considerations in evaluations for career advancement in the public
service."

This was ranked as not desirable in Round I and Round II (Mean
scores of 11 and 10, respectively); however, in Round III, this was
ranked as being desirable, with a Mean of 30. This may be
attributed to the fact that several respondents were at the "high"
end of the desirability scale with ranks of 40 to 45 and thus
causd the final mean to be higher in Round III than in the
previous rounds. This question was ranked as probable in Rounds
I and II (Mean scores of 29 and 30, respectively); however, in
Round III, this was ranked as being not probable, with a Mean of
11. Once again, this was attributed to several responses which
were far from the Mean of the majority of the respondents. The SD
in terms of desirability (SD=2.88, 2.08 and 2.16) demonstrated a
consensus among respondents with regards to the undesirability of
using sexual factors as considerations in career advancement in the
public service. The SD in terms of probability (SD=13.01, 12.19
and 11.26) remained high, which suggested a lack of consensus among
respondents with regards to the probability of sexual harassment
being used as a consideration for advancement in the public

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service. As was the case in Question #15, the determination of a year in which a behaviour would cease to occur proved problematic for many respondents.

Question #17

"Provincial education curricula will be modified to reduce sexism and stereo-typing."

This was ranked as very desirable (Mean scores of 46, 48 and 49) and relatively highly probable (Mean scores of 34, 39 and 38). The SD in terms of desirability (SD=6.90, 4.47 and 4.21) demonstrated a consensus among respondents as to the desirability of the modification of provincial education curricula. The SD for probability (SD=9.61, 8.90 and 8.87) demonstrated that consensus was not widespread among respondents with respect to the probability of provincial education curricula being modified. It was estimated that modifications to provincial education curricula would not occur until at least the year 1997.

Question #18

"Men will continue to have a greater advantage because they have more role models than women do."

This was ranked as not desirable (Mean scores of 11, 10 and 10) but probable (Mean scores of 30, 32 and 33). The SD in terms of desirability (SD=2.57, 2.12 and 1.96) demonstrated a large consensus among respondents with regards to the undesirability of men having a greater advantage because of more role models. The SD in terms of probability (SD=10.96, 9.54 and 10.06) demonstrated a lack of consensus among respondents with respect to the probability that men do indeed have a greater advantages because
of more role models. It was estimated that the advantage enjoyed by men will not change until at least the year 1998.

**Question #19**

"Male/female role stereo-typing will continue to be a problem in the foreseeable future."

This was ranked as not desirable (Mean scores of 11 for Rounds I, II and III) but probable (Mean scores of 35, 34, and 36). The SD for both desirability (SD=2.81, 3.04 and 3.10) and probability (SD=10.79, 9.41 and 9.77) fluctuated over the three rounds, with a greater consensus being achieved for a lack of desirability of male/female role stereotyping than for the probability that this indeed does occur. It was estimated that if indeed male/female role stereotyping ceased to occur, this would not be achieved until at least the year 1999.

**Question #20**

"The advancement of women in the public service will generate male backlash."

This was ranked as not desirable (Mean scores of 12, 10 and 11) but probable (Mean scores of 35, 33 and 36). In terms of desirability (SD=6.79, 2.46 and 2.70), the SD demonstrated a large consensus among respondents with regards to the undesirability of male backlash. The SD in terms of probability (SD=10.70, 10.54 and 9.88) demonstrated a lack of consensus among respondents with respect to the probability that the advancement of women in the public service would generate male backlash. It was estimated that this backlash would continue until at least the year 1996.
Question #21

"The future of women in the public service will be more promising."

This was ranked as very desirable (Mean scores of 47, 49 and 49) and highly probable (Mean scores of 42 for Rounds I, II and III). The SD for desirability (SD=6.54, 3.15 and 3.31) demonstrated a large consensus among respondents with respect to the desirability of a promising future for women in the public service. The SD for probability (SD=9.00, 9.18 and 8.91) did not demonstrate a large consensus with respect to the probability that the future of women in the public service will be more promising. It was estimated that the future for women in the public service will not become more promising until at least the year 1996.

3. Day Care/Family Responsibilities

This section encompassed Questions #1, 2, 3, 4, 5, 10 and 11.

Question #1

"On-site day care will be made available in all public sector workplaces."

This was ranked as highly desirable (Mean scores of 38, 40 and 40) but not very probable (Mean scores of 21, 20 and 22). The SD for desirability (SD=11.86, 9.05 and 8.60) demonstrated a gradual consensus from Round I to Round III among respondents with respect to the desirability of having on-site day care available in all public sector workplaces. The SD for probability (SD=10.08, 10.26 and 11.77) did not demonstrate a consensus as to the probability of on-site day care being made available in all public sector workplaces. It was estimated that on-site day care would
not occur until at least the year 1999.

**Question #2**

"Flex hours will be made available in all public sector workplaces."

This was ranked as desirable (Mean scores of 34 for Rounds I, II and III) and probable (Mean scores of 31, 30 and 31). However, the SD in terms of both desirability (SD=11.12, 10.80 and 11.76) and probability (SD=12.04, 12.53 and 12.11) did not demonstrate a consensus among respondents with respect to having flex hours made available in all public sector workplaces. It was estimated that flex hours would not be made available until at least the year 1996.

**Question #3**

"Public sector managers will have available to them the option of a mix of on-site day care, flex hours, and job sharing."

This was ranked as highly desirable (Mean scores of 42, 44 and 45) and probable (Mean scores of 30 for Rounds I, II and III). The SD for desirability (SD=9.34, 8.01 and 7.45) demonstrated an increased consensus among respondents from Round I to Round III with respect to having various work options available to them. The SD for probability (12.05, 11.57 and 10.90) demonstrated a lack of consensus among respondents with respect to the probability of having various work options made available to public sector managers. It was estimated that these options would not be made available until at least the year 1998.
Question #4

"Day care, in the public service, will cease to be an issue by the year 2000."

This was ranked as desirable to highly desirable (Mean scores of 35, 39 and 38) but not probable (Mean scores of 22, 19 and 19). The SD for both desirability (SD=15.36, 12.32 and 13.17) and probability (SD=14.82, 11.77 and 12.14) demonstrated a lack of consensus among respondents as to the desirability and probability of day care ceasing to be an issue by the year 2000.

Question #5

"Computerized home 'work stations' for public servants will become practical."

This was ranked as desirable (Mean scores 32, 32 and 33) and almost probable (Mean scores of 25, 25 and 26). The SD for both desirability (SD=9.87, 9.17 and 7.61) and probability (SD=11.65, 11.30 and 11.20) demonstrated very little consensus among respondents with respect to the desirability and probability of the practicality of computerized home 'work stations'. It was estimated that home work stations could become practical by the year 1999.

Question #10

"Women's careers in the public service will continue to be affected because of family responsibilities."

This was ranked as not desirable (Mean scores of 17, 15 and 16) but highly probable (Mean scores of 38, 40 and 44). The SD for desirability (SD=11.35, 9.27 and 10.70) did not demonstrate a consensus among respondents with respect to a desirability to not
have women's careers affected by family responsibilities. The SD for probability (SD=11.29, 8.81 and 6.50) demonstrated an increasing consensus among respondents from Round 1 to Round III with respect to the probability that women's careers will continue to be affected because of family responsibilities. It was estimated that women would continue to be affected until at least the year 1998.

Question #11

"Variations in traditional patterns of parenting will require more individually designed employee benefit packages."

This was ranked as highly desirable (Mean scores of 43, 44 and 46) and probable (Mean scores of 33 for Rounds I, II and III). The SD in terms of desirability (SD=8.82, 8.68 and 7.70) demonstrated an increasing consensus among respondents from Round I to Round III with respect to the desirability that more individually designed employee packages will be created as a result of variations in traditional patterns of parenting. The SD for probability (SD=10.36, 9.13 and 9.47) did not demonstrate a consensus among respondents with respect to the probability that individually designed employee packages would occur. It was estimated that if indeed this did occur, it would not do so until at least the year 1998.

4. Managerial Competence

This section encompassed Question #22 sub-sections a) through m). This question had one general statement which was applied to thirteen sub-statements.
Question #22

"Education and training in the following areas will enhance career opportunities for women."

All thirteen statements were ranked highly in terms of desirability with Mean scores ranging from 34 to 47. In terms of probability, all statements were ranked from at best, probable, to "more than" probable with Mean scores ranging from 26 to 33. The SD for desirability demonstrated a gradual consensus among respondents from Round I to Round III for all statements except those of: "interpersonal/human relations"; "advanced computer techniques"; "statistical analysis"; and, "ability to handle change". The SD for probability demonstrated a gradual consensus among respondents from Round I to Round III for all statements except those of: "oral communication"; "statistical analysis"; and, "team building and management skills". The lack of consensus suggested that respondents were not in agreement as to the desirability and probability that education and training in these areas would necessarily result in career opportunities for women.

Question #22 also requested that respondents determine the institution from which the skills encompassed by the sub-statements a) through m) could be best achieved. The range of responses covered all possible choices: "University"; "Community College"; "Pre-service; in-house training"; "In-service; in-house training"; and, "In-service; private training". It was estimated that almost all of the skills could be acquired through either "Pre-service; in-house training" or "In-service; in-house training". Question
#22 i) "statistical analysis" was surmised as being "best" learned at the "University" level; and, statements c), e) and h), "written communication", "logical and abstract thinking" and "advanced computer techniques", respectively, were surmised to be "best" learned at the "Community College" level. The general consensus of the respondents was that these skills are important to managerial competence.

Question #23 allowed respondents the opportunity to provide comments or opinions with respect to the areas covered by the DELPHI experiment. The comments and opinions obtained are provided in Chapter 5.

**Overview of the DELPHI Experiment**

As stated previously, the DELPHI experiment conducted for this paper could have been analyzed in several ways based upon individual interpretation. The extent to which the experiment provided insights into the future of women in the public service is debatable. However, the DELPHI experiment did serve the purpose of identifying issues which should be of concern to public sector managers now and in the future. The DELPHI experiment provided several interesting areas for discussion, with several observations noted from the results obtained. Before expanding upon these observations, the reader should be made aware of a DELPHI "phenomenon"; that is, the fact that it is very common for respondents to rank an issue as being desirable, but not probable. (The reverse may also be true: high probability and low desirability, dependant upon the nature of the question.) This is
mainly due to the fact that many of the issues covered in the DELPHI process are future oriented. While respondents may have desired that a certain event occur, the probability of that event occurring was deemed remote. An additional reason for the disparity between desirability and probability may be attributed to the fact that participants may have responded to questions based upon the current situation of the environment to which they belong. While the statements incorporated by the DELPHI experiment were not intended to be province specific, it would be correct to assume that several of the DELPHI participants responded to the statements with their own public service in mind. The answers provided in the DELPHI experiment allowed for estimations of the future for women in the public service in terms of career development and advancement, for it allowed for the determination of factors which should be examined by public sector managers now in order to make future decisions that are conducive to the advancement of women in the workplace. These factors are discussed below.

1. Employment Equity/Pay Equity

The issues encompassed by this section: women in positions of seniority and authority; equal pay for work of equal value; work evaluations; advancement and promotion based upon work experience and qualifications; and, policies based not on gender (gender neutral), were placed in the DELPHI experiment based on the fact that since employment equity programmes and affirmative action programmes are in place at both the federal and provincial levels of government, then the inequities inherent in the public service
before these programmes were implemented, e.g. discrepancies in: number of men and women in positions of authority; pay scales; and, criteria for promotion and advancement, would thus be eliminated.

The responses of the DELPHI participants to questions in this section generally displayed a high desirability for the achievement of the goals and objectives of employment equity programmes and affirmative action programmes. Of greater importance, however, was the fact that respondents estimated the probability of women occupying 50% of senior management positions as not probable; the diminution of pay discrepancies in salaries of men and women in the public service was ranked as just probable; that employment equity programmes and pay equity programmes would not in all probability eliminate unfair career advantages as enjoyed by men in the public service; women and men being evaluated for career purposes in the same way in the public service as just probable; and, it was ranked probable that women with relatively similar work experience and qualifications will advance in positions now held by men. What does this suggest? Would it be fair to conclude that employment equity legislation is relatively recent and thus any potential merits of the legislation have yet to be realised? It may also be true that recent cut-backs in the white-collar work forces of both federal and provincial public services led many respondents to be hesitant to suggest that women will be employed in management positions. Perhaps it was possible that employment equity legislation has not resulted in a change in attitudes or perceptions with respect to these issues. Do men resent these
programmes? Are these programmes providing women with incentive and encouragement to excel in their present positions or to aspire to advance into higher positions? Whatever the case may be, it is obvious that employment equity programmes must be allowed more time in which their merits may be experienced and evaluated.

2. Socialisation/History of Women at Work

Questions in this section focused upon the historical perceptions of men and women, as "bread-winner" and "home-maker", respectively. Questions which involved expectations about traditional male career patterns; government provision of greater incentives to encourage women to enter the public service; the modification of provincial education curricula to reduce sexism and stereotyping; and, a more promising future for women in the public service, were ranked from desirable to very desirable. Questions involving expectations about traditional male career patterns; and, government provision of greater incentives to encourage women to enter the public service, were ranked as not very probable. This implied that respondents did not believe that attitudes towards these issues would change. Changes to provincial education curricula were encouraged; however, and estimated as highly probable that governments would produce the changes needed. These changes would include modifications to courses which generally relegate men and women in specific roles and changes to these courses would in turn reduce sexism. Changes to education curricula would stress the fact that women are capable of occupying the same positions as men, with the same degree of proficiency and
success.

Sexual harassment was ranked as not desirable but probable. This was an unfortunate result, for women continue to bear the burden of having to gain acceptance in a work force whose powerholders are male. Gender was also a key factor in questions concerning greater advantages for men because they have more role models than women; the problems of male/female role stereotyping continuing into the future; and, the generation of male backlash as a result of advancement of women into management positions in the public sector workplace. These questions were ranked as not desirable but probable. Do attitudes play a role here? Will men learn to accept women in positions of seniority and authority? Will women be thought of as more than "mothers" or "home-makers"? Will women themselves aid other women in advancing in the public sector by hiring other women, or promoting women already in the public service into management positions if they are qualified?

Stereotypes have been allowed to foster and grow. Realistically, these perceptions will not change overnight. Attitudes towards women must continue to be encouraged to change. Not only must men perceive women as equal in abilities and qualifications. Women themselves must believe that they are capable: Women must assist in the advancement of other women.

3. Day Care/Family Responsibilities

Questions in this section focused upon the effects of family responsibilities on women in the public service who desire to advance into management positions. Questions concerning the issues
of on-site day care; flex hours; job sharing; computerized home 'work stations'; and, employee benefit packages geared more towards variations in traditional patterns of parenting were ranked as being desirable and probable. Exceptions included day care being made available in all public sector workplaces, and day care ceasing to be an issue by the year 2000. The occurrence of these issues was estimated as not probable. The results demonstrated that women's careers will continue to be affected because of family responsibilities. Perceptions and attitudes towards male career patterns have yet to change. Thus, the perception that women should bear a larger amount of responsibility for family life and child-raising has yet to be changed. The lack of compensation and allowances for women because of increased family responsibilities has yet to be recognized by government as an employer. The onus is on women as well, for they must not allow themselves to be discriminated against.

4. **Managerial Competence**

Question #22 had as its purpose an examination of skills estimated to be crucial to managerial competence. The general consensus among respondents was that these skills are important to excelling in management positions. However, the probability of women (or men, for that matter) achieving all of these skills was estimated as unlikely. In addition, several respondents questioned the need for women to acquire all of the skills listed in order to function in a managerial capacity. Several respondents stated the opinion that women should not be singled out for acquiring
particular management skills and further questioned education and training required of men in the areas covered by Question #22. Many respondents were adamant in their claims that gender was the main if not only reason for a lack of women in management positions.

It was surmised at the outset of this experiment that the gender of the DELPHI participants would play a significant role in their responses. Interestingly enough this was not the case. The majority of the questions demonstrated no marked differences in the responses of men and women. Several exceptions were noted however. In Question #10, male respondents ranked an effect on women's careers because of family responsibilities as less probable than the ranking given this question by female respondents. Male respondents were also less prone to perceive a probability of women's careers being affected because of family responsibilities than were female respondents. This was found in Round I, II and III. In both cases, the average difference between the perceptions of male and female respondents was 6 points. In the area of sexual harassment, male respondents were less likely than female respondents to perceive a probability of sexual harassment prohibiting women from career advancement. The average difference between male and female respondents was 6 points. This was demonstrated in Round I, II and III. Do men not perceive the "juggling" of work and family life as inhibiting the career development and advancement of women to the degree that women perceive these areas? The DELPHI experiment would conclude that
men and women have differing perceptions in this area.

Overall, the results of the DELPHI experiment proved both interesting and enlightening, for the data derived demonstrated that the factors covered in the DELPHI experiment will remain obstacles to the career development and advancement of women in the public services of Canada for several years to come. The implications of the results of the DELPHI experiment are discussed in Chapter 5.
DELPHI Experiment: Results
<table>
<thead>
<tr>
<th>QUESTION</th>
<th>RANGE</th>
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<th>MEAN</th>
<th>STANDARD DEVIATION</th>
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<td>RD. II</td>
<td>RD. III</td>
<td>RD. I</td>
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<td>flex hours will be made available in lieu of on-site day care in the public service.</td>
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<td>3. It is desirable:</td>
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<td>10.90</td>
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<td>public sector managers will have available to them the option of a mix of on-site day care, flex hours, and job sharing.</td>
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<td>day care, in the public service, will cease to be an issue by the year 2000.</td>
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<td>computerized home &quot;work stations&quot; for public servants will become practical.</td>
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<td>women will occupy 50% of senior executive positions in the public service.</td>
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<td>in the future, men and women will be evaluated for career purposes in</td>
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<td>variations in traditional patterns of parenting will require more</td>
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<td>women with relatively similar work experience and qualifications will</td>
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<td>sexual harassment inhibits women from career advancement</td>
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<td>sexual factors e.g. looks, body language, will continue to be considerations in evaluations for career advancement in the public service.</td>
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<td>provincial education curricula will be modified to reduce sexism and stereotyping.</td>
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<td>men will continue to have a greater advantage because they have more role models than women do.</td>
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<td>the advancement of women in the public service will generate male backlash.</td>
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<td>the future of women in the public service will be more promising.</td>
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74
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<td>22. Education and training in the following areas will enhance career opportunities for women:</td>
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<td>22.a Interpersonal/human relations</td>
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<td>50 47.5</td>
<td>47.5</td>
<td>41 41 42</td>
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<td>40 40</td>
<td>40 37</td>
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<td>22.b Oral communication</td>
<td>30–50; 30–50; 30–50</td>
<td>45 50</td>
<td>50 42</td>
<td>44 44</td>
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<td>50 50</td>
<td>50 45</td>
<td>45 45</td>
</tr>
<tr>
<td>It is desirable:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is probable:</td>
<td>10–50; 10–50; 20–50</td>
<td>30 30</td>
<td>30 34</td>
<td>34 33</td>
</tr>
<tr>
<td>22.d Problem-solving techniques</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>22.e Logical and abstract thinking</td>
<td>20–50; 30–50; 30–50</td>
<td>40 40</td>
<td>40 38</td>
<td>40 40</td>
</tr>
<tr>
<td>It is desirable:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is probable:</td>
<td>10–50; 10–50; 10–50</td>
<td>30 30</td>
<td>30 28</td>
<td>28 27</td>
</tr>
<tr>
<td>22.f Financial management</td>
<td></td>
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<tr>
<td>22.g Human resource management</td>
<td></td>
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<tr>
<td>22.h Advanced computer techniques</td>
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<tr>
<td>22.i Statistical analysis</td>
<td></td>
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<tr>
<td>It is desirable:</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>It is probable:</td>
<td>10–50; 10–50; 10–50</td>
<td>30 30</td>
<td>30 28</td>
<td>27 26</td>
</tr>
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<td>QUESTION</td>
<td>RANGE</td>
<td>MEDIAN</td>
<td>MEAN</td>
<td>STANDARD DEVIATION</td>
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<td>------------------------------------------------------------------------</td>
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<tr>
<td>22. Education and training in the following areas will enhance career opportunities for women:</td>
<td></td>
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<td>22.j Team building and team management skills</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>It is desirable:</td>
<td>30-50</td>
<td>30-50</td>
<td>50</td>
<td>44</td>
</tr>
<tr>
<td>It is probable:</td>
<td>10-50</td>
<td>10-50</td>
<td>40</td>
<td>37</td>
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<tr>
<td>22.k Initiatives e.g. innovation and risk-taking</td>
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<td></td>
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<td>It is desirable:</td>
<td>10-50</td>
<td>30-50</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>It is probable:</td>
<td>10-50</td>
<td>10-50</td>
<td>30</td>
<td>29</td>
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<tr>
<td>22.1 Conflict management</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>It is desirable:</td>
<td>20-50</td>
<td>30-50</td>
<td>50</td>
<td>44</td>
</tr>
<tr>
<td>It is probable:</td>
<td>10-50</td>
<td>10-50</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>22.m Ability to handle change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is desirable:</td>
<td>30-50</td>
<td>30-50</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>It is probable:</td>
<td>10-50</td>
<td>10-50</td>
<td>30</td>
<td>34</td>
</tr>
</tbody>
</table>

76
Chapter 5 - Conclusion

Chapter Five provides summary observations to the DELPHI experiment. A selection of comments made by DELPHI respondents is also supplied.

The purpose of this Paper was to enquire into the career development and advancement prospects for women in the federal and provincial public services in Canada. This was attempted through the implementation of a DELPHI experiment which sought to achieve a consensus among DELPHI participants as to factors which affect the advancement of women now and in the future. The Paper focused upon women wishing to advance into management positions and those already in management positions.

The public servants who participated in the DELPHI experiment undertaken for this Paper were members of the Management or Executive occupational categories in various public services across Canada. Because these public servants are in positions which allow them the opportunity to make decisions relevant to the advancement of women in the public service, it was felt that knowledge and expertise gained from their employment experience would be beneficial in the process of the DELPHI experiment.

The DELPHI technique was chosen as an appropriate tool by which to conduct an experiment on career development and advancement of women in the public service because of its future orientation. In addition to providing data on current issues concerning women in the public service, the DELPHI experiment suggested future trends, referring to areas in which decisions must
be made now in order to provide a work environment of the future which is conducive to increased and on-going career development and advancement for women and men.

Women must be allowed to overcome obstacles in the way of their impending success, namely that of stereotypes and attitudes towards women in the workplace with respect to their abilities. Existing employment equity legislation provides one means by which the aspirations of women in the public service may be realized. However, the onus is also upon women to create a more acceptable work environment. Do women wish to advance in the workplace? Will women provide opportunities for advancement to other capable women? Will men perceive women to be capable of successfully managing career and family responsibilities? We hope that the answers to these questions will become and remain an enthusiastic "yes"!

The factors considered for this Paper:

1. Employment Equity/Pay Equity;
2. Socialisation/History of Women at Work;
3. Day Care/Family Responsibilities; and,
4. Managerial Competence,

were demonstrated by DELPHI participants to create inequities which must be examined by public sector managers and decision-makers if women are to achieve equity in career opportunities.

Employment equity programmes are relatively recent and their true potential has yet to be realised. There is no doubt that these programmes eventually will achieve their objectives including equal work opportunities for men and women; pay equity; and,
representation of women in management positions. However, several
DELPHI respondents voiced the opinion that while employment equity
programmes provide women with access to employment opportunities,
these programmes do not provide women with the acceptance that is
needed for women to become respected members of the work
environment. Thus, this suggests that governments need to
re-evaluate their employment equity programmes and make
modifications which would ensure that women are treated with the
same respect as their male colleagues.

Will women ever occupy 50% of senior management positions?
It was stated in the Introduction of this Paper that women would
occupy only one-third of senior management positions by the year
2010. What should women do in the meantime? Women should continue
to build upon the knowledge and experience available to them
through their occupations. However unfair it may be, women must
continually strive to prove their worth and importance in
organizations. Negative attitudes towards the abilities of women
and stereotypes of women solely as "home-makers" must be altered.

Individuals are destined practically from birth to follow a
particular life-style or career pattern. Socialisation patterns
of the past have reinforced male and female roles in society, with
the male being directed towards positions of authority and
superiority, both in the home and workplace. If indeed women
worked, clerical positions were where most women could be found
employed. Because basic male/female role stereotypes have been
present throughout history, they have proven difficult to reduce.

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However, with more women entering the labour force and advancing into positions not traditionally held by women, e.g. supervisors, managers, the former stereotypes attributed to men and women are being diminished. Women are proving that they are fully capable of functioning successfully in positions generally held by men; namely that of senior and executive management positions.

Family responsibilities have always been prevalent as a concern for women who wish to advance in their job positions. The provision of day care and flexible work schedules is necessary in order for women to successfully deal with the stress experienced by their "double burden" of balancing family life and career. Subsidized day care is crucial to persons, especially the growing number of single mothers who require a place in which their children will be attended to while they are at work. Family responsibilities will always be of concern to women, and thus the onus is on government, as the employer, to help alleviate the difficulties experienced by women in their attempt to balance career and family. The need for flexible work arrangements cannot be overlooked by government. Women should not be passed over in consideration for job advancement because of family responsibilities.

Women continually make decisions which are in agreement with their "quality of life" aspirations. Women should not be expected to neglect their family or personal life in order to advance in the workplace. Women are constantly aware of sacrifices which must be made in order to advance in the workplace. However, government as
an employer must be made aware of the fact that many women wish to be employed in positions which allow them to strike a balance among their various responsibilities. Both women and men in the workplace who have families to whom they must tend will not want managerial positions which require that they work many overtime hours and possibly work on weekends as well. This does not mean that the woman or man does not want to work, it just means that they have a life outside of the workplace. Concessions must be made by governments which allow women and men to fulfil both the requirements of their positions and their responsibilities outside of the workplace.

In the area of managerial competence, if indeed those factors listed in Question #22 are crucial to functioning successfully as a manager, then not only is it up to women to obtain these skills, but for governments as employers to provide the opportunity for women to acquire these skills. The potential merits of "people-oriented" traits which women possess should be taken advantage of by government by placing women in managerial positions. In addition, young girls must be encouraged in their early years to study courses which in time will prove conducive to future success in the work force. In the area of education, governments must encourage development of curricula which are gender-free in order to reduce and hopefully even eliminate sexism and stereotyping.

If the DELPHI experiment was indicative of the future, then perhaps the strongest theme to be derived from the data obtained was the importance of "attitudes": Women must believe that they
are capable of obtaining success in the workplace, and men must allow women the opportunity to prove their worth. It must also be remembered however, that women must want to aspire to positions in which they can excel and continue to advance. Women who have experienced set-backs in their career development and advancement and women who are at present experiencing obstacles to their success must make their cases heard. Above all, women must not become discouraged. The DELPHI experiment indicated that serious changes would take years to occur; therefore, women should be striving to make changes occur sooner and faster by increasing their knowledge and competency and continually demanding that they be provided with opportunities to display and prove their abilities. Qualified women should be allowed the same opportunities as qualified men. Discrimination, as experienced by women solely because of gender must be eliminated. The Abella Report, *The Report of the Commission on Equality in Employment* (1984:4) provided a meaningful definition of equality in employment for women:

For women, equality in employment means first a revised approach to the role women play in the workplace. It means taking them seriously as workers and not assuming that their primary interests lie away from the workplace. At the same time, it means acknowledging and accommodating the changing role of women in the care of the family by helping both them and their male partners to function effectively both as labour force participants and as parents. And it means providing education and training to permit women the chance to compete for the widest possible range of job options. In practice this means the active recruitment of women into the fullest range of employment opportunities, equal pay for work of equal value, fair consideration for promotions into more responsible positions, participation in corporate policy decision-making through corporate task forces and committees, accessible childcare of adequate quality, paid parental leaves for either
parent, and equal pensions and benefits.

Governments at both the federal and provincial levels must continue to talk to the people most negatively affected by the present system: Women. Governments must also do their part by continuing to conduct research in the area of career development and advancement of women in their respective public service. The importance of mentors was cited in both the literature reviewed in Chapter 1 and in comments made by the DELPHI participants. Thus, perhaps governments should undertake studies which determine the feasibility of mentors within their respective public sector environments. Without this research, progress cannot be determined and the necessary changes or alterations to the system are not undertaken. Many DELPHI participants echoed this sentiment. The four factors discussed throughout this paper require continued attention and improvement.

Question #23 from the DELPHI experiment allowed DELPHI participants to suggest additional areas for present and future study, in addition to questions or comments concerning the career development and advancement of women in the public services of Canada. What follows are some of those comments grouped according to issue area.

1. Employment Equity/Pay Equity

"...have gender neutral policies been developed for hiring, use of language, addressing work-family relationships issues, etc?"

2. Socialisation/History of Women at Work

"... career patterns are what happens in organizations: Roles are what happens in life."
...number nineteen is interesting! I don't think that role stereotyping is a problem as long as the stereotypes acknowledge male/female differences in an honest way. We are learning the benefits of female leadership styles and if these become a stereotype that will be very positive and desirable.

......

"As we are already seeing, the backlash will be against the employment of visible minorities. In the future women will be most like the present power holders."

......

"What about harassment in general, just because you're a woman?"

3. Day Care/Family Responsibilities

"Men's careers are also affected because of family responsibilities."

......

"...Question Eleven...these types of benefit packages are very expensive and will not likely be seen in the public sector while deficits are a problem."

......

"How to address the problem of the overloaded female in terms of the 'double day' of paid and unpaid labour."

......

"...Question Ten...I do not want women to be like men who accept no responsibility for family. Having "family" does affect one's life, time, energy level, emotional state, etc."

4. Managerial Competence

"What education and training is required for men to assist in eliminating women's barriers to advancement?"

......

"...the importance of availability of career members who are our mentors; are they men or women?"

......

"...on the training side: training in strategic planning, and customer service..."
"...discussed Question Twenty-two with senior staff (who happen to be female), and none of us feel that there is a need to pitch these various types of training courses at women in the public service, as opposed to men. On the contrary, it is our collective experience that upwardly-mobile women today already have these skills (many of them obtained through existing public service training programs). And if a problem exists, it is simply one of attitude on the part of those who are forming their judgements and perceptions about women in the service."

......

"...what about inter-relationships between men and women working together as a management team?"

......

"...training; how government works...public service ethos?"

......

"...work experience versus academic qualifications re: hiring in the public service?"

......

"...questions concerning the aspirations of young women regarding their own career. For example, will young girls in high school regard a Deputy Minister's job as a realistic objective for themselves?"

......

"Women do not apply for Assistant Deputy Minister and Deputy Minister positions: Why not? How can they be assisted in seeing themselves in those positions?"

......

"Studies at Labour Canada; young girls in elementary school have very limited objectives regarding their future roles in life."

......

"...desirability of women in general: Do they want to be in higher positions?"

......

"...non-traditional jobs in public service - will they open up for women? e.g. engineers, building maintenance, chauffeur, material management etc."

......

"...colleague support...importance of networking?"
"Will women managers hire women? How do women learn the unwritten rules?"

......

"...recent research and experience clearly indicates many women are tempering career choices based on quality-of-life decisions, not only on limited advancement opportunities."

......

As is apparent by comments made by DELPHI participants, women have far to go in their quest for achieving equality with men in the workplace, both in terms of their physical presence in positions of authority and seniority, and in the manner in which they are perceived by others.

"If I'd known this is what it would be like to have it all, I might have been willing to settle for less." (Lily Tomlin, The Search For Signs of Intelligence in the Universe.)

Do women have to settle for less? Are aspirations of family and career success unrealistic? We hope not. In the search for success trade-offs are inevitable. Women cannot disregard the fact that coping with work and family life is difficult and thus women may be forced to compromise aspects of personal life for a professional career. However, this should not signify the end to indeed, having it all.

Women cannot wait for changes to occur; they must continue to provide the catalyst which initiates change. Only then can women be guaranteed a future which is conducive to continuing career development and advancement.
Appendix 1
COVER LETTER

Dear _____:

My name is Rachelle Solomon and I am a candidate year student for a Master of Arts degree in Political Science at the University of Windsor, in Windsor, Ontario. I am currently conducting preliminary research for the eventual preparation of my thesis. I am working under the supervision of Professor C. Lloyd Brown-John of the Department of Political Science at the University of Windsor.

The research focuses upon issues affecting the prospects for the advancement of women in public sector employment in the next decade.

The method I am employing in order to gather the required data is a modified Delphi experiment, which entails a three round questionnaire, phrased in probability and desirability, with some references to year. Delphis have used extensively by long range planners as one tool for seeking insights into future consequences of present decisions.

The Delphi will consist of approximately twenty questions and, if you agree to participate, you would receive three rounds of questions with the ranges, medians and means from the preceding rounds indicated.

The Delphi will be submitted to a panel of thirty-five persons from across Canada, who, in the opinion of those I consulted are considered knowledgeable in the area of human resource management. The Delphi panel is therefore considered to be a panel of experts.

I would be delighted if you would agree to serve on the panel as part of my research experiment. It should not consume more than ten to fifteen minutes of your time on three occasions over the next four months.

If you are prepared to assist me with this experiment on women in the public sector, I would be most grateful if you could notify me as soon as possible, as I hope to have the first round of the Delphi out by the first week of July. The confidentiality of responses is ensured.

I may be contacted at _____, or at the following address if you have any questions or comments. I thank you in advance for your time and look forward to hearing from you.

Sincerely,

Rachelle M. Solomon
Appendix 2
THE FUTURE OF WOMEN IN THE PUBLIC SERVICE:
A MODIFIED DELPHI EXPERIMENT

Code Number

Respondent
Name: __________________________

DEADLINE FOR RETURN:
JULY 27, 1990

Instructions

There are a total of twenty-two statements in this questionnaire. Please answer all statements as best you are able by ranking each statement according to three scales:

1) Desirability;
2) Probability; and
3) Year, when feasible.

Please mark your answers on (or near) each scale by putting an "X" on the number or year that best represents your answer. See the following example.

Example

Example Statement:

This questionnaire will provide insights into trends in the public sector human resources field.

<table>
<thead>
<tr>
<th>Desirability</th>
<th>Probability</th>
<th>Year (if probable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

Once you have completed as many statements as possible please return the questionnaire in the enclosed pre-stamped envelope. Should you wish to discuss the project, the questionnaires or a particular statement please call me at: 

Rachelle M. Solomon  OR  Rachelle M. Solomon
Department of Political Science
University of Windsor
Windsor, Ontario
N9B 3P4

Thanks for your help and time

90
1. On-site day care* will be available in all public service workplaces.

2. Flex hours* will be made available in lieu of on-site day care in the public service.

3. Public sector managers will have available to them the option of a mix of on-site day care, flex hours, and job sharing*.

4. Day care, in the public service, will cease to be an issue by the year 2000.

5. Computerized home ‘work stations’ for public servants will become practical.

6. Women will occupy 50% of senior executive positions in the public service.

7. Pay discrepancies between the salaries of men and women will diminish as an issue in the public service.

*Definitions are provided on next to last page.
8. Employment equity and affirmative action programs will eliminate unfair career advantages as enjoyed by men in the public service (Beneath the Veneer, 2:55).

9. In the future, men and women will be evaluated for career purposes in the same way in the public service (Beneath the Veneer, 2:55).

10. Women's careers in the public service will continue to be affected because of family responsibilities.


12. Expectations about traditional male career patterns will change.

13. Women with relatively similar work experience and qualifications will advance in management positions now generally held by men.

14. Governments will provide greater incentives to encourage women to enter the public service.
<table>
<thead>
<tr>
<th>No.</th>
<th>Desirability</th>
<th>Probability</th>
<th>Year (if probable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3</td>
<td>1962 1964 1966 1968</td>
</tr>
<tr>
<td>15</td>
<td>Sexual harassment inhibits women from career development.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>N/A</td>
</tr>
<tr>
<td>16</td>
<td>Sexual factors e.g. looks/body language, will continue to be considerations in evaluations for career advancement of women in the public service.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>N/A</td>
</tr>
<tr>
<td>17</td>
<td>Provincial education curricula will be modified to reduce sexism and stereotyping.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>N/A</td>
</tr>
<tr>
<td>18</td>
<td>Men will continue to have a greater advantage because they have more role models than women do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>N/A</td>
</tr>
<tr>
<td>19</td>
<td>Male/female role stereotyping will continue to be a problem in the foreseeable future.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>1962 1964 1966 1968</td>
</tr>
<tr>
<td>20</td>
<td>The advancement of women in the public service will generate male backlash.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>1962 1964 1966 1968</td>
</tr>
<tr>
<td>21</td>
<td>The future of women in the public service will be more promising.</td>
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<td></td>
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<tr>
<td>0</td>
<td>1 2 3 4 5</td>
<td>0 1 2 3 4 5</td>
<td>1962 1964 1966 1968</td>
</tr>
</tbody>
</table>
22. Education and training in the following areas will be encouraged in order to enhance opportunities for women in the public service. Please mark your answers using the following scales for Question 22, A-M.

### Desirability

<table>
<thead>
<tr>
<th>Not Desirable</th>
<th>Desirable</th>
<th>Very Desirable</th>
<th>No Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</table>

### Probability

<table>
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<th>Probable</th>
<th>Very Probable</th>
<th>No Answer</th>
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<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Most appropriate educational/training location (please choose one)

- University
- Community College
- Pre-service; in-house training
- In-service; in-house training
- In-service; private training

<table>
<thead>
<tr>
<th>a) interpersonal/human relations</th>
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</thead>
<tbody>
<tr>
<td>Not Desirable</td>
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<tr>
<td>C</td>
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<table>
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<tr>
<th>b) oral communication</th>
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<tbody>
<tr>
<td>Not Desirable</td>
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<td>C</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th>c) written communication</th>
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<tbody>
<tr>
<td>Not Desirable</td>
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<td>0</td>
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<tr>
<th>d) problem-solving techniques</th>
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<tbody>
<tr>
<td>Not Desirable</td>
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<tr>
<td>0</td>
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<tr>
<th>e) logical and abstract thinking</th>
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<tbody>
<tr>
<td>Not Desirable</td>
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<tr>
<td>0</td>
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<tr>
<th>f) financial management</th>
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<tbody>
<tr>
<td>Not Desirable</td>
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<tr>
<td>0</td>
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</tbody>
</table>
### Desirability vs Probability

<table>
<thead>
<tr>
<th></th>
<th>No Answer</th>
<th>Not Desirable</th>
<th>Desirable</th>
<th>Very Desirable</th>
</tr>
</thead>
<tbody>
<tr>
<td>g) human resource management</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h) advanced computer techniques</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i) statistical analysis</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>j) team building and team management skills</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>k) initiatives e.g. innovation and risk taking</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>l) conflict management</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>m) ability to handle change</td>
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<td>2</td>
<td>3</td>
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Most appropriate educational/training location (please choose one):

- University
- Community College
- Pre-service; in-house training
- In-service; in-house training
- In-service; private training
23. What additional question(s) should I have asked?

Definitions

on-site day care - day care available in the employees' workplace

flex hours - Employees are given the opportunity to choose their work schedule. Employees can select the time they start and finish their work day, as long as they work the required number of hours (Fernandez, 1986).

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(a) any unwanted sexual attention of a persistent or abusive nature, made by a person who knows or ought reasonable to know that such attention is unwanted; or

(b) any implied or expressed promise of reward for complying with a sexually oriented request; or

(c) any implied or expressed threat of reprisal, in the form either of actual reprisal or the denial of opportunity, for refusal to comply with a sexually oriented request; or

(d) any verbal or physical conduct that emphasizes sexuality, sexual identity or sexual orientation in what reasonably may be perceived as a hostile, intimidating or offensive manner (University of Windsor, Sexual Harassment, 1987).

In-service; private training - in-house training provided by outside consultants.
References


DELPHI QUESTIONNAIRE – ROUND II

INSTRUCTIONS

This is the second round of the Delphi questionnaire. Your answers from Round I appear in red. Please mark your new answers in any colour but red. The mean, median and ranges from Round I are also included. Deadline for return of Round II is August 31, 1990.
THE FUTURE OF WOMEN IN THE PUBLIC SERVICE:
A MODIFIED DELPHI EXPERIMENT

Instructions
There are a total of twenty-two statements in this questionnaire. Please answer all statements as best you are able by ranking each statement according to three scales:

1) Desirability;
2) Probability; and
3) Year, when feasible.

Please mark your answers on (or near) each scale by putting an “X” on the number or year that best represents your answer. See the following example.

Example Statement:

This questionnaire will provide insights into trends in the public sector human resources field.

Once you have completed as many statements as possible please return the questionnaire in the enclosed pre-stamped envelope. Should you wish to discuss the project, the questionnaires or a particular statement please call me at: or write,

Rachelle M. Solomon  or  Rachelle M. Solomon
Department of Political Science
University of Windsor
Windsor, Ontario
N9B 3P4

Thanks for your help and time

99
### Desirability

<table>
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<table>
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</table>

<table>
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<tr>
<th>Year (If probable)</th>
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<tr>
<td>N/A</td>
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</table>

#### 1. On-site day care* will be available in all public service workplaces.

#### 2. Flex hours* will be made available in lieu of on-site day care in the public service.

#### 3. Public sector managers will have available to them the option of a mix of on-site day care, flex hours, and job sharing*.

#### 4. Day care, in the public service, will cease to be an issue by the year 2000.

#### 5. Computerized home ‘work stations’ for public servants will become practical.

#### 6. Women will occupy 50% of senior executive positions in the public service.

#### 7. Pay discrepancies between the salaries of men and women will diminish as an issue in the public service.

*Definitions are provided on next to last page.
8. Employment equity and affirmative action programs will eliminate unfair career advantages as enjoyed by men in the public service (Beneath the Veneer, 2:55).

9. In the future, men and women will be evaluated for career purposes in the same way in the public service (Beneath the Veneer, 2:55).

10. Women's careers in the public service will continue to be affected because of family responsibilities.


12. Expectations about traditional male career patterns will change.

13. Women with relatively similar work experience and qualifications will advance in management positions now generally held by men.

14. Governments will provide greater incentives to encourage women to enter the public service.
15. Sexual harassment* inhibits women from career development.

16. Sexual factors e.g. looks/body language, will continue to be considerations in evaluations for career advancement of women in the public service.

17. Provincial education curricula will be modified to reduce sexism and stereotyping.

18. Men will continue to have a greater advantage because they have more role models than women do.

19. Male/female role stereotyping will continue to be a problem in the foreseeable future.

20. The advancement of women in the public service will generate male backlash.

21. The future of women in the public service will be more promising.
22. Education and training in the following areas will be encouraged in order to enhance opportunities for women in the public service. Please mark your answers using the following scales for Question 22, A-M.

**Desirability**

<table>
<thead>
<tr>
<th>No Answer</th>
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**Probability**

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</tbody>
</table>

Most appropriate educational/training location (please choose one)

- University
- Community College
- Pre-service; in-house training
- In-service; in-house training
- In-service; private training

**RANGE INCLUDES ALL POSSIBLE RESPONSES**

<table>
<thead>
<tr>
<th>University</th>
<th>Community College</th>
<th>Pre-service; in-house training</th>
<th>In-service; in-house training</th>
<th>In-service; private training</th>
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</thead>
</table>

**a) interpersonal/human relations**

**b) oral communication**

**c) written communication**

**d) problem-solving techniques**

**e) logical and abstract thinking**

**f) financial management**
### Desirability vs. Probability

<table>
<thead>
<tr>
<th>No Answer</th>
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Most appropriate educational training location (please choose one):
- University
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- In-service; private training

#### g) Human Resource Management

#### h) Advanced Computer Techniques

#### i) Statistical Analysis

#### j) Team Building and Team Management Skills

#### k) Initiatives e.g. Innovation and Risk Taking

#### l) Conflict Management

#### m) Ability to Handle Change
23. What additional question(s) should I have asked?

Definitions

on-site day care - day care available in the employees' workplace

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In-service; private training - in-house training provided by outside consultants.
References


DELPHI QUESTIONNAIRE - ROUND III

INSTRUCTIONS

This is the third and final round of the Delphi questionnaire. Once again, your answers from Round 2 appear in red. Please mark your new answers in any colour but red. The mean, median and ranges from Round II are also included. Deadline for return of Round III is November 23, 1990.
THE FUTURE OF WOMEN IN THE PUBLIC SERVICE: A MODIFIED DELPHI EXPERIMENT

Instructions

There are a total of twenty-two statements in this questionnaire. Please answer all statements as best you are able by ranking each statement according to three scales:

1) Desirability;
2) Probability; and
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Please mark your answers on (or near) each scale by putting an “X” on the number or year that best represents your answer. See the following example.

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Once you have completed as many statements as possible please return the questionnaire in the enclosed pre-stamped envelope. Should you wish to discuss the project, the questionnaires or a particular statement please call me at: or write,

Rachelle M. Solomon  or  Rachelle M. Solomon
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University of Windsor  University of Windsor
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N9B 3P4  N9B 3P4

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### Probability

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**Most appropriate educational/training location (please choose one)**

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#### d) problem-solving techniques

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#### e) logical and abstract thinking

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#### f) financial management

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BIBLIOGRAPHY


VITA AUCTORIS

Rachelle Marie Solomon, born on the seventeenth day of October 1966 to Radwin and Marie Solomon at Windsor, Ontario.


Received Bachelor of Public Administration (Honours) from the University of Windsor, Windsor, Ontario in June 1989.

Registered as a graduate student at the University of Windsor, and a candidate for the degree of Master of Arts in Political Science. Paper submitted June, 1991.