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**CORRELATES OF ATTITUDES TOWARDS WOMEN IN
MANAGEMENT AND EMPLOYMENT EQUITY PROGRAMS FOR
WOMEN IN THE PUBLIC SERVICE**

by

CAROLYN GIROUX, B.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of the requirements

for a Masters of Management Studies

School of Business
Carleton University
Ottawa, Ontario

January 04, 1995.

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**CORRELATES OF ATTITUDES TOWARDS WOMEN IN MANAGEMENT AND
EMPLOYMENT EQUITY PRPOGRAMS FOR WOMEN IN THE PUBLIC SERVICE**

submitted by Carolyn Giroux, B.Arts.
in partial fulfilment of the requirements for
the degree of Master of Management Studies

Thesis Supervisor

Director, School of Business

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January 04, 1995

ABSTRACT

This research looked at attitudes towards women in management, and employment equity programs for them, within the Federal Public Service. In this research, five independent variables were examined: the number of women in management, the length of time that managerial women had been in the department in significant numbers, exposure to employment equity programs, the gender of the leadership of the department, and gender of the respondent. With one exception (attitudes towards equality of treatment), women had more positive attitudes than men. Gender also had a moderating effect on the relationship between attitudes and the situational factors. The most important variable in explaining women's attitudes was exposure to more women managers. For men both the number of women managers and the length of time they had been in the department had significant effects.

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CHAPTER 1 INTRODUCTION

Discrimination against women in the workplace has been both widespread and enduring (Firth-Cozens & West, 1991). Frost, Mitchell and Nord (1986) give some insight as to why this has occurred. They state that people and organizations have a difficult time accepting people and ideas that are new or different from what they consider to be the norm. The increased participation of women in the workplace in recent years could certainly be called a new stimuli. Perhaps Firth-Cozens (in Firth-Cozens & West, 1991) put it best with her suggestion of where we need to go from here, by making "... (men) feel that women in the workplace, at all levels, are no longer a frightening or disturbing concept - or less strongly a problem " (p. 193).

Vast amounts of research support the conclusion that gender discrimination is detrimental for both the organization and the individual (for example Colwill, 1982; and Loden, 1985). In 1985 Dubno supported this view, stating: "Stereotypic attitudes held by both males and females towards women managers have been shown to be quite detrimental to women executives' prospects for promotion and salary gains" (p 235). As far as a company is concerned, employing only men in management means bypassing half the available talent, and therefore reducing competitiveness (Colwill, 1982; Schwartz,

1992; Wentling, 1992). Discrimination is costly to organizations and to women. Therefore, programs aimed at reducing discrimination, such as employment equity, have an important impact on organizational effectiveness.

To fully understand the ability of employment equity to effect change, we must understand how behaviour is affected by employment equity. Fishbein and Ajzen (1975) claim in their book that the intention to behave is manifested in overt behaviour. Intention, in turn, is affected by one's attitudes and subjective norms (a perception of what one's reference group thinks) which in turn are affected by one's beliefs. An employee's attitude towards women in management would predispose him/her to have intentions to behave in a certain manner. Attitudes are affected by what the employee's reference group believes about women in management, and intentions are influenced by such situational elements as women being present in the organization or whether employment equity policies exist. At the same time, an employment equity philosophy could directly affect belief strengths, which are the basis of attitude and behaviour change. Thus one would expect that behaviour towards women in management would change depending on the influence that employment equity, a situational factor, has on intentions, beliefs, attitudes and subjective norms. This research will only be looking at the effects on attitudes.

The Federal Government, over the years, has initiated various programs to improve the opportunities for women, such as the 1983 Affirmative Action Program and the 1984 Equal Pay Program. Yet in 1989, when Treasury Board researchers examined the attitudes of Public Service employees towards women in management and employment equity programs for women, their initial tabulations indicated the presence of strong negative attitudes. Despite all the interventions that had been developed over the years to change employees' behaviour, their attitudes towards women in management were still very negative.

The purpose of this research was twofold: to examine the correlates of attitudes towards women in management in the Federal Public Service; and to examine the correlates of attitudes towards employment equity programs for women in the Federal Public Service.

CHAPTER 2 LITERATURE REVIEW

This literature review provides the logic for the research. An introduction to the area of women in management and employment equity will be presented in order to understand the issues that are of concern today. The research relevant to each of the five independent variables will be examined in order to support the model and hypotheses discussed in Chapter 3.

2.1 An Overview of Research on Women in Management

There are increasing numbers of women entering the labour market and competing for management jobs today. Looking at recent statistics, an estimated 57% (Statistics Canada, 1992) of women over the age of 16 are working. This is up from 51% in 1983 (Abella, 1984). In the next several years women will make up the majority of entrants into the workforce (Wentling, 1992).

The Canadian Advisory Council on the Status of Women (1985) found nearly 60% of all female workers are employed in "pink ghettos" and other low paying dead-end jobs, such as sales and service. Based on that figure it is understandable that women have made very little progress in recent years within the

corporate world (Friedman, 1988). Women make up only a small number of the top paid executives in the United States. Fortune magazine (Fierman, 1990) examined some 799 top corporations in America. It found only 0.5% of the 4000 top paid managers were women. Fortune had done the same analysis in 1978 and found of the 6400 top paid people from 1300 companies, only 0.2% were women (Fierman, 1990). As Wentling (1992) suggests, there is an obvious increase of female participation in the workforce, yet there are many "unanswered questions as to why so few women reach senior management positions in business" (p.47).

According to some researchers, this lack of mobility up the corporate ladder is due to women hitting what is often termed a glass ceiling. This is an invisible barrier that keeps women out of the upper levels of management (Friedman, 1988; Morrison & Von Glinow, 1990). This barrier is made up of biases and stereotypes about women that keep women out of the upper echelons. A survey carried out by Fortune magazine found that 82% of 201 chief executives believe that women would not hold the position of CEO for their respective companies for another 10 years or more (Fisher, 1992). In Fisher's (1992) research she quotes a Department of Labour employee as stating that, "The glass ceiling in most companies is a lot lower than we thought it was" (p. 45). Morrison et al (1987) concluded

that women will not be in top management positions in Fortune 500 companies in significant numbers for at least 50 years.

There is ample evidence today that women are feeling discriminatory attitudes pushing down on them, and they acknowledge that it is holding them back in their careers (Fisher, 1992; Brenner et al, 1989; Sutton & Moore, 1985). A study by Bassett (1985) found that a total of 88% of women agreed that sex discrimination had negatively affected their career progression. Wentling (1992) interviewed 30 managers and asked them to identify what factors they felt were important for the advancement of their careers. Women said that a major barrier was the perceived sex discrimination that resulted in slowed career progress, less respect, being banned from certain jobs and receiving less pay for equal work.

There are different views on how to reduce these negative attitudes and increase the number of women in all levels of management. One view states that it is necessary to play the game the way males do (Perry, 1992). Follow the same rules as the men and ignore any possible discrimination that is encountered along the way. This may work for some women, but ignoring the inequalities will not make them disappear. Brenner (1989) believes that changing the behaviour superficially will not eliminate the subtle discrimination that occurs at the top of organizations. Rather, there is

support that structural changes need to be made and maintained, if entrenched discrimination is to be changed (Brenner et al, 1989; Agocs et al, 1992). This leads one to the conclusion that employment equity and programs promoting that philosophy are necessary if both attitudes and behaviour are to be changed.

2.2 An Overview of Employment Equity

The rationale behind employment equity is to ensure that everyone is treated fairly in the workplace (Swimmer & Gollesch, 1987) and that there is, "equal freedom from discrimination" (Abella, 1984). Its goals are to remove barriers that cause discrimination, remedy and prevent discriminatory injustices, and improve the representation of designated groups (Agocs et al, 1992).

The federal Employment Equity Act was enacted in 1986 and is aimed at removing those employment barriers for four designated groups: women, visible minorities, disabled people, and persons of aboriginal ancestry. According to the Abella report (1984) equality does not mean the same thing for all people. Different people have different barriers restricting them. For women, the Abella report recommends that: women be perceived as full participants in the workplace; accessible training and education be provided so that women can compete

at all levels of the organization; and women have more access to the decision making processes that affect them.

Although the general issue of employment equity is controversial in both the public and private sectors (Slack, 1987), it is still necessary to implement new structures in the workplace that will ensure the removal of discriminatory practices. Whereas changing the attitudes of future workers is imperative, making changes to education alone is not sufficient to change the attitudes that underlie the discriminatory practices of today (Abella, 1984). Educational content is slow to change and affect attitudes, thus one effective method is to attack the structures that support discrimination through employment equity practices.

2.3 Attitudes towards Women in Management and Programs for Women

The intent of this research was to examine some variables that affect the attitudes that federal public service employees hold towards women in management and employment equity programs for women. In this research, attitudes towards employment equity programs for women were treated as a single variable. For the purposes of this research, attitudes towards women in management were broken down into three subgroups: equality of treatment, effects of women's family

responsibility on their work role, and women's ability to manage. These three variables measure different aspects of employees' attitudes towards women in management. Albeit there are many aspects that were not studied in this research. For the purpose of simplifying the subsequent discussion, I will refer to attitudes towards women in management rather than each separate cluster.

2.4 The Correlates of Attitudes

Research suggests that several independent variables affect attitudes towards women in management and towards employment equity programs for women. The following section will explore this research in order to support the development of the research model.

2.4.1 The Effects of Gender on Attitudes

Over the years there has been considerable research supporting the view that men have held negative opinions about women's abilities and desires to work. Studies have suggested that men believed that women did not belong in the corporate world (Rosen & Jerdee, 1979) or that women were not as committed to a career as men were (Harlan & Weiss, 1982). Research has suggested that men have held gender stereotypic attitudes about women's abilities to manage (Brenner et al, 1989;

Schein, 1975; Schein, 1973) and that men still do not want to work for women (Sutton & Moore, 1985).

There is some evidence that suggests that a few men are beginning to temper their negative attitudes towards women in business. Baron (1989), replicated her 1981 survey of business executives and found men had improved their opinion of women in management in the intervening 8 years. Yet, she found men still had more negative attitudes than the women. Sutton & Moore (1985) replicated a study done in 1965 on executive's opinions of women in business. They sampled 1900 men and women executives in 1985, and compared their attitudes with those that were measured in the 1965 survey by Garda et al (1965). They found that only 5% of male executives held a unfavourable attitude about women executives in 1985, compared to 41% of men in 1965. They also found that 21% of male respondents believed that male executives felt comfortable working for a woman, while in 1965 that number was only 9%.

Sutton & Moore suggest the change in the male executives' attitudes since 1965 may be due to respondents replying with what they considered a socially correct response. In this case, the men said they held a favourable attitude towards women executives. The question is whether their attitudes have really changed towards women in management, or have men only become more discreet in what they say. Other research

supports the idea that male managers' attitudes have not become significantly more positive over the years. Brenner et al (1989) reexamined the association between sex role stereotypes and the perceived requisite management characteristics held by managers. Comparing their 1989 data to Schein's comparable data from 1975, they concluded that despite the increased presence of women in management over the years, men still held the view that males possess characteristics associated with successful managers while women do not. Meanwhile, they found that women respondents viewed women and men as both possessing the characteristics associated with successful managers.

Men may publicly agree to the idea of women being executive managers, however, they do not believe in that view privately. Sutton and Moore (1985) find male managers answered questions about their views towards women in management in a socially correct manner. This suggests that data from attitudinal questionnaires may present an idealistic picture of men's attitudes. Thus it would be more accurate to state that men's attitudes today are still negative towards women in management, although not as extreme as they were.

On the other hand women's attitudes towards women in management are more positive (Terborg et al, 1977). Stevens and DeNisi (1980) reported that female business undergraduate

students had a more positive attitude towards women as managers than the male undergraduates in their study. A longitudinal study by Dubno (1985) found that between 1975 and 1983 male and female MBA students maintained distinct views of women in management. He found that after eight years, men still held much more negative opinions about women in management than the women. Dubno's results suggest both that men still do have negative views about women in management and women generally have positive views. Further support for gender differences comes from Beutell's study (1984), where significant differences between male and female student attitudes towards women as managers were found. Males had a more negative attitude than did their female counterparts.

Within the federal civil service, differences in attitudes between the sexes have also been found. Colwill & Josephson (1983) surveyed all employees in one government department in one geographical area in order to make recommendations for a proposed employment equity program. They found a large variation in workers' attitudes towards women in management and their work. In eleven different questions related to attitudes about women in management, male respondents had more negative views than the women surveyed.

The research presented suggests that there is a difference between the sexes in attitudes towards women in management.

Women possess a more positive attitude towards women in management than do their male counterparts. These differences were expected to affect the attitudes studied in this research. For example, one would expect to find that the male population would have a more negative attitude towards managerial women than women, regardless of other factors influencing attitudes.

Turning to study attitudes towards employment equity programs for women, one finds similar results in the research, as can be seen in Heilman and Herlihy's (1984) study of reactions to differing proportions of females in different occupations. They found that male high school students attributed women's corporate positions to non-merit job placement when they were given no information and the women constituted 26% of the employees in that position. The female subjects expressed a dramatically different opinion when given the same scenario. They believed that the women had achieved their position based on merit.

Further support that men hold negative attitudes with regards to employment equity programs, was found in Rosen and Jerdee's (1979) study of 884 men in management positions. All of the companies these men worked in had employment equity programs. The results suggested that approximately 20% of the men felt that women were being given preferential treatment in areas

such as conflict resolution and general job assignments. Fifty percent of the men felt that women received preferential treatment in promotions; and 14% of men resented women's efforts to obtain more power within the organization. Rosen and Jerdee claimed that, "(Men's) frustration and negative attitudes engendered by affirmative action policies may be manifested in ... higher turnover, reduced support for employment equity programs and even conflict between gender groups" (p.18).

Colwill and Josephson's (1983) study of Canadian government employees also suggests that men and women view employment equity programs for women differently. The majority of men in the department believed that: a) women were getting or were about to get preferential treatment, b) past efforts at employment equity were sufficient, c) employment equity should be ignored because it would evolve on its own, and d) qualified women had already achieved equal opportunity. Women did not share these perceptions. The women, in fact, felt that the department should recruit more women than men for non-traditional jobs, that they were limited in their careers by external factors, and that they had been discriminated against in a number of ways.

Although the research presented demonstrates that males have more negative reactions towards employment equity programs

than do women, some women also have negative attitudes. Female employees may view employment equity programs as undermining their ability if they believe they were selected on the basis of sex rather than merit. Women have been found to have less commitment to the organization and less satisfaction with their job when they perceived that their job position was attained because of their sex rather than on merit (Chacko, 1982).

While some women may have negative attitudes towards employment equity, women generally have more positive attitudes towards employment equity than do men. According to Faludi's (1991) examination of male and female attitudes in the 1980's, men and women were found to have different views towards employment equity programs. In fact there was a growing chasm in attitudes between the two sexes. In the past decade, as the employment equity issue became more prominent, Faludi found support by women for affirmative action grew and became more radical, while men's remained the same or diminished (Keen and Ladd, 1982; Women's College Coalition 1990).

Together the studies presented suggest measurable differences in the views that men and women hold towards employment equity programs for women. Men maintain a more negative attitude than women towards employment equity programs for women.

Consequently, one would expect a gender gap in the attitudes studied in this research.

2.4.2 The Effects of Experience with Women in Management

Prejudice, bias or discrimination are often the result of fear of the unknown. People feel comfortable with what they know, with what they have experience with. Things that people do not understand may be compartmentalized in order to more easily comprehend them. Although the label attached to an event or person may not always be correct, it is the only way people can keep the confusion of information in some semblance of order. In the case of women managers, if a person has no experience working with or for a woman manager, they will base their perception on what others say and their own personal unsupported views and inexperience. Much of the information they use to label or define what women managers are, is likely to be incorrect because it is not based on experience, but rather stereotypes. Once these employees are able to work with and for women managers, their previous attitudes will be modified to better fit the real information they have gathered from their experience (Taylor & Ilgen, 1981; Noe, 1988; Terborg & Ilgen, 1975; Seymour & Voss, 1988). They will reduce their stereotypic impressions and have more accurate opinions about women managers.

This concept of prior experience affecting one's perceptions has been supported by research in the classroom setting. Two separate studies (Frandt & Stevens, 1991; Frandt, Lewis, & Sutton, 1990) examined whether previous classroom experience with a female professor affected students' preconception's of the effectiveness of female professors. They found that the evaluation of the female professor was higher in the areas of credibility, effectiveness, and organization skills, when the student had previous positive classroom experience with a female professor.

Research by Ezell et al (1981) supports the contention that people will hold negative opinions when they have no experience. They found that the men and women managers in a state public service department who had worked with women had more positive attitudes towards supervisory women than those managers that never had a woman supervisor. Therefore, in order to overcome stereotypes and discrimination it is important to increase the experience employees have with women in management. Baron (1989) supports this view when she states that, "Behavioral change precedes attitudinal change, and attitudinal change must wait until more men have had an opportunity to work with competent women" (p. 52).

The theory of cognitive dissonance is useful in understanding the relationship between attitudes and behaviour with respect

to experience in working with women. This theory, first proposed by Festinger (1957), refers to the psychological tension a person feels due to a discordance between two elements of their knowledge or belief system (Brehm & Cohen, 1962). The level of commitment that a person holds towards an attitude will affect whether it produces dissonant feelings and the magnitude of resistance that attitude has to change. A person who acts on a particular conviction will be more committed to that attitude and will incur a stronger dissonant feeling if they have to go against that attitude, than someone who has not acted on the same particular attitude.

We can deduce from Brehm and Cohen's work on cognitive dissonance that a person who is asked to behave in an equitable way towards a specific group, has made a commitment to that behaviour by acting on it. This person may then feel conflict or dissonance if their personal attitudes run in a different direction than the attitudes associated with the behaviour they just acted out. If, however, a person is coerced into that behaviour they would have little dissonant feelings. They rationalize their behaviour as something they would not choose to do if they were given an option, thus their attitudes are not affected.

At work, where an employee is told to work with women, one could assume that they are not being coerced, they still have

a choice to quit or get a transfer. Dissonant feelings would thus develop because the tension between their attitudes and behaviour is due to their own decision and not coercion. Take for example a man, who for clarity sake will be called 'John', who has recently worked with a woman as a partner on a new project. The length of the project was only a week and he really did not see the woman very much. He holds very poor attitudes towards women in management, so he may experience some slight dissonance between his actions and his attitudes. However, the dissonance felt may be very small because John holds a strong commitment to his attitudes and his actions were not very intrusive to him.

If John is now assigned to a year long project where more of the managers in the group are women and he is forced to work closely with them, he may feel severe dissonance between his forced behaviour and his strong attitudes. The attitudes represented by his behaviours will have a high resistance to change because he has acted on them. Therefore, John will be forced to reduce this conflict. This reduction will occur by the route that offers the least resistance. In this case, John is committed to continue working with the women by the company's decision regarding job assignments and his own desire to progress in his career. The cognitive dissonance that he feels is so overwhelming that he must alter his old attitudes in order to feel at ease with his new behaviour.

By working with women in management, an employee with negative attitudes will feel dissonance between their actions and feelings.. If an employee continues working with women they will have to lessen these dissonant feelings by the simplest route. Thus they will change their negative attitudes towards women in management to match their behaviour working with women and then reduce their dissonant feelings. In other words, the more experience they gain with managerial women, the stronger the tension in their attitudes and behaviours will be. To reduce that tension they will change their attitudes towards women in management in order to correspond with their new behaviours.

Another possible route to change their dissonant feelings is if their male peers made positive comments and their peers' attitudes changed towards managerial women. They would feel at odds with their primary social group and would need to alter their feelings towards women to come more in line with their social reference groups' attitudes.

There are two ways of increasing experience with women managers and changing attitudes. The first method is by increasing the number of women in management that a person works with. By having more than one or two women working in management or nontraditional jobs, an employee will come to perceive women less as an oddity and more as capable

individuals, able to manage any job. They will develop more positive attitudes about women in management. According to Kanter (1977 a,b) employees' attitudes change towards women in management when they gain work experience with not just a few token managerial women, but a significant number of women. As she puts it, " As proportions (of women) begin to shift, so do social experiences" (1977 a, p.207). In other words, Kanter suggests that as employees obtain experience with increasing numbers of managerial women, their attitudes about women's abilities will change as well.

The second technique to increase experience with women managers and thus affect attitudes to them is by increasing the length of time an employee works with managerial women. The more time an employee spends with female managers, the less they will rely on stereotypic views. They will develop realistic opinions based on their experience and not on their stereotypic assumptions. In this case, gaining experience with a significant number of women managers will result in their negative view being replaced by more positive ones.

The following two sections will expand on the idea that experience working with women in management will alter an employee's attitude towards women in management, and employment equity programs for them.

2.4.2.1 The Effect of Tokenism on Attitudes

The first method of increasing an employee's experience with women managers is by increasing the number of women managers that they work with or for. If a person has experience with only one woman in management, who may not be very representative of women managers, the employee will get an unbalanced perception of women as managers. If, however, employees had more than a token few women to gain work experience with, they would form a more accurate impression of women as managers. Kanter (1977 a,b) develops this concept in her theory of tokenism. The rest of this section further discusses the issue of experience with women working in management from the standpoint of tokenism.

Kanter's (1977 a,b) research was based on a field study of one of the sales divisions in a Fortune 500 company. In general, the majority perception of a token individual was negative and had detrimental effects on the token's ability to succeed. She suggested that the group ratio (minority : majority) would affect how the token group performed, as well as how they were perceived by the majority. Although Kanter's research focused on women, she claimed that the token effect would occur for any group. A token can be defined as a subgroup within a group that is distinctive from the majority both in numbers and in some ethnic, racial or gender difference.

Kanter states that as the number of the women within the work group increases, their ability to demonstrate achievement increases. Correspondingly, as the number of women increases, men will view the female minority as less stereotypic of their gender and their achievements as reflections of their abilities. Kanter believes that the majority's perception of the token person(s), affects how they treat them and in turn affects how the tokens react to discrimination.

Kanter describes three perceptual phenomena that take place in heterogenous groups based on the proportion of women in the group. The first is called "assimilation", which occurs when the ratio of women in the group is at its lowest. The token's behaviour is generalized to fit into stereotypes that the majority holds of women. The token person then accommodates these stereotypic perceptions in her behaviour, because it is easier than contradicting them. As the number of women in the group increases they are able to dispel stereotypic perceptions about themselves held by the majority.

The second phenomena is called visibility, or more accurately high visibility. In a group that has only a small percentage of women, the women stand out as unique compared to the male members. Kanter suggests that as the number of women in the group increases, the uniqueness of the women will diminish and they will receive less attention.

The third consequence of tokenism is polarization or exaggeration. The dominant group contrasts all the similarities and differences between themselves and the minority group. The dominant group exaggerates these differences and tries to isolate the minority group because it is not representative of the group as a whole. As the number in the minority group increases, this polarization will fade. Kanter describes this contrast as a "heightening of dominant culture boundaries" (1977 a, p.212).

Kanter ascertained from her research that work groups could be partitioned into four categories based on their sex ratio composition. The Male:Female ratios for these groups were made up of 100:0, 85:15, 65:35, and 50:50 compositions. Depending on which category the woman's work group fell into, she would encounter the above phenomena to varying degrees. These four categories will be discussed in more detail below.

The first group is called "dominant". This occurs when all members of the work group are of the same type or have all the same "master status", for example: colour, sex, or ethnic origin. The ratio of dominant group members to minority group members is 100:0. Since all members are of the same status, none of the perceptual distortions associated with tokens would appear.

The second group is "skewed" and has a ratio of approximately 85:15. Here the dominants control the culture of the group. This is the group that has the highest level of stereotyping and discrimination. The increased visibility, assimilation and polarization are due to the uniqueness of the tokens. Tokens are viewed as symbols rather than as individuals. The tokens are seen by members of the group, to exaggerate the similarities and differences between themselves and the dominant members of the group.

The third group is called "tilted" with a ratio of approximately 65:35. The minority members are seen less as tokens. They have more power within the group to alter the culture. They are not seen in the same stereotypic light, nor are assimilation, high visibility or exaggeration occurring to the same degree for the minority group.

The fourth group is "balanced", with a ratio ranging from 60:40 to 50:50. The women now lose their yoke of tokenism, and are no longer seen as stereotypically representing their gender group. There is now a balance of power in the group between the men and the women. The negative perceptions which existed in the previous two groups are eliminated.

Kanter claims that women begin to have an influence over a group when they reach a significant percentage of a group. An

alternative way of conceptualizing this is that women need to reach a "critical mass" within the group to effect change. Critical mass can be defined as the point when a minority subgroup achieves a large enough percentage of the group to have comparable influence and power with the majority of the group. Weiss and Harlan (1982) suggest that critical mass involves achieving an equal opportunity balance for minority members of the group. Although there is much debate as to what exact percentage the critical mass phenomenon occurs at, the range is generally considered between 25% - 35%. Women who make up a smaller percentage of a group than critical mass will have trouble being treated equitably by the dominant members of the group. These women will also be seen as conforming to stereotypic expectations about their behaviour that the majority of workers have about them. Only when the percentage of women reaches critical mass in a department, do attitudes about their abilities change towards more realistic and objective attitudes.

There has been much testing of Kanter's hypotheses in the literature. In a review by Staley (1984) she summarizes research that documents Kanter's tokenism effect. The research generally supports Kanter's findings. The findings suggest that sex operates as a status characteristic, and women in mixed groups have little power to influence the group. Another piece of evidence comes from Taylor et al

(1978) who found increased discrimination by observers, based on the decreasing number of women in the work group.

Spangler, Gordon and Pipkin (1978) examined the sex ratio effect at two law schools to determine if women's achievements were affected by their representation within the group. They concluded that tokenism was operating for the women at the law schools. Specifically, the women who were in the skewed group had low achievement in such areas as class performance, social interaction and had traditional aspirations in what they studied and for their careers. Spangler et al concluded that this was due to the fact that the women were minority members in the law schools that they attended. They concluded that because the women were tokens they underachieved in work related activities.

The research cited above seems to lend support to Kanter's concept of group composition affecting attitudes towards women in management. As one increases the number of women in a workgroup, one increases the amount of experience that employees will gain from working with so many women. As an employee's experience increases, the employee's attitudes will become less stereotypic and more positive about women in management.

As an extrapolation from the above concept, employees that work in departments that have more women in management should have more positive attitudes towards employment equity programs for women in management than a department that has fewer women managers. Specifically, experience with a critical number of women in management should be related to men having fewer negative attitudes towards women in management. As men gain more experience with a critical number of women, they will see that women are not a threat to their careers and that they do contribute to the success of the organization. Men who work with only a token few women in management will maintain their old stereotypes about women in management and consequently may feel that employment equity gives women an unfair advantage. Thus men who work with a critical number of managerial women would see that employment equity for women is useful for women and is equitable in how it treats all employees. They would also feel that employment equity is a benefit to the organization because it allows capable women to take up management positions and contribute to the organization.

2.4.2.2 The Effect of Length of Experience on Attitudes

Employees who have little experience working with other different employees may hold stereotypic attitudes about them. Employees who gain more experience with these other workers

might alter their attitudes since they will be able to base their opinions on experience, rather than biased presumptions. In this research it is proposed that increased experience gained through increased length of time one works with managerial women may result in attitudes that are more positive about women in management. An employee that has spent little time working with women managers will have less positive attitudes about them than another employee who has spent more time with managerial women.

This concept of length of experience is valid when there are a critical number of women managers in the department. If employees work with a token few women for ten years, they may still have biased opinions. The concept of tokenism suggests that when women are in the role of token, they may act in accordance with stereotypic views that employees hold. These women would then not be representative of women managers. Thus, it is important that a critical number of women managers are present in an organization, if length of experience is to affect attitudes of employees. The longer the length of experience with a critical number of managerial women, the more positive attitudes employees should hold towards women in management.

A study by Schein (1973) supports the concept that the length of experience may affect attitudes employees hold towards

women in management. She looked at requisite management characteristics. In general, Schein's results supported her hypothesis that male middle managers perceived successful managers to possess those characteristics and attitudes most closely related to men. One of her findings suggested that the older the respondent was, the less stereotypic was the perception of women in management that the respondent held. She explained the findings related to age by suggesting that experienced managers (those over 49 years old) had more opportunities to work with women and thus had softened their stereotypic views. Schein also proposed, that as the number of women managers increased, people would change their stereotypic views of what constitutes typical managerial characteristics.

As people increase their experience over time with women managers or as they gain positive information about women working in management that contradicts their stereotypes, people will alter their attitudes towards women in management. Thus, employees exposed to women managers in significant numbers for more years should have more positive attitudes towards women in management.

The same conclusions can be drawn about the attitudes towards employment equity for women. As employees gain experience working with managerial women they will see that women are

capable of being managers and they are not interested in taking jobs away from male employees, but merely to have the opportunity to work at the levels that their abilities allow. The more time employees spend with a critical number of women in management the more likely it is that they will come to see that employment equity creates diversity and places capable people in the right positions. They should have more positive experience that employment equity is effective in allowing successful people to move up in the organization. Thus, employees that have worked with a critical number of women for a longer time will have more positive attitudes towards employment equity because they will see how their department has so many more successful female managers than other departments. Employees that have worked with the same number of women managers but for less time will not see employment equity with the same positive attitude, because they will see fewer successful women managers.

2.4.3 Employment Equity Programs and their Effects

The philosophy of employment equity is to ensure that all employees are treated fairly in the workplace. Its purpose is to remedy the discrimination and disadvantages that have accrued in the past to various groups of workers. This is done by identifying areas in the organization that are barriers for workers and then correcting these problems.

Merenivitch and Reigle (1979) suggested from a study of Proctor and Gamble that firms with an employment equity program consisting of only a few initiatives conforming to the law, had not achieved an equitable workplace. It was when the organization had implemented a complete spectrum of programs that focused on all aspects of discrimination and fair treatment that they achieved equitable workplaces in which they effectively utilized their diverse work force. In order for employment equity to work, an organization needs to have a considerable number of initiatives in place to alter attitudes and eliminate all forms of discrimination.

An employee who is exposed to only a couple of employment equity initiatives does not necessarily understand the benefits of employment equity nor how they are affected individually by these programs. Programs that are not multifaceted in their coverage, may not be effective in reducing discriminatory practices. When only a few programs are implemented that are rather restrictive in their scope, employees may resent women for what they see as their receiving unfair advantages in moving up the corporate ladder. These employees would then have negative attitudes towards women in management based on their limited exposure to a couple of employment equity programs.

Employees that are exposed to numerous programs may have a better idea of the gains that employment equity gives people. They would not necessarily view women as receiving an unfair advantage but instead see them as receiving benefits from these initiatives. Thus workers who work in departments that have more employment equity programs will have more positive attitudes towards women in management.

Employees from departments with a higher number of employment equity programs should have more positive attitudes towards employment equity than employees from a department with fewer programs. The more initiatives that are put in place by a department the more comprehensive and effective the overall package will be in changing attitudes. People will have more opportunities to benefit from the initiatives when there are more of them. Employees would see that employment equity is beneficial to all employees and does not create unfair advantages.

An alternate way of looking at these attitudes is from the perspective of cognitive dissonance. An organization that has one small employment equity initiative will produce employees that do not feel much dissonance between their attitudes and the reference group beliefs and any new behaviours that the initiative encourages. As the number of employment equity initiatives increases, an employee will feel stronger

dissonance between their attitudes and both the change in the attitudes in their reference group and any new behaviours they must perform because of employment equity. As most people do not have the luxury of quitting or getting transfers at will, employees will have to deal with feelings of dissonance by adjusting their attitudes. Therefore, as a department puts more programs into place, the employees' attitudes towards both women in management and employment equity programs for women should become more positive as they try to reduce the cognitive tension they feel.

Consequently, it is important when an organization takes the initiative to incorporate employment equity into its culture, that it supports the initiative with a complete set of programs that cover all aspects of equitable treatment, so that it does not create any attitudinal backlash from the employees.

2.4.4 Organizational Leadership and its Effects

Socialization is a means for new members to learn the values, norms and informal rules of a new company. It is a method of indicating what the corporate culture is to new members, so they know what behaviour is acceptable. One way of changing the culture of a group could be by altering the leadership of the group (assuming different leaders could create noticeably

different cultures). According to Smircich and Morgan (1982) being a leader means a person generates a point of reference for employees on what the "feeling" of the organization is. In other words, the leader of an organization helps define the culture of the company. Schein (1990) suggests that one of the ways that culture is initially created is by employees identifying with the leader of the organization. The leader is a model for the employees and the employees then internalize the leader's values. At the same time culture affects attitudes that people hold. So, leaders have an effect on the attitudes that employees hold. Thus, a leader contributes significantly to the type of culture a department will develop and the attitudes that employees have.

In time attitudes may be affected by the culture employees hold. If a leader models the culture for the organization, then the leader will also model the right attitudes that employees should hold.

There are numerous types of leadership styles. The focus in this research is on two varieties that can be labelled for simplicity sake, masculine and feminine styles. It is proposed that these two diverse styles produce two distinct cultures within an organization which can be measured by the attitudes of the employees. The masculine style would create a culture that is less accepting of different people. It

would also be more competitive. On the other hand, the feminine style could be considered open and would promote cooperation and acceptance. The following discussion will elaborate on these concepts.

According to Loden's research (1985), there is support for the view that both men and women believe that there are two distinctive styles of managing that are termed feminine and masculine. As well there is the assumption that these two styles are most likely to be used by members of the relevant sex. Men are believed to generally use the masculine approach, while women are assumed to use the feminine style, given the opportunity.

Empirical research on leader behaviour supports these differences. Major and Deaux (1982) found in their study of college students that women consistently rewarded the subordinates, and followed a norm of equality; men did not. Petty and Bruning (1980) demonstrated that female managers were more considerate than their male counterparts. Heller (1982) studied male and female leaders and surveyed their peers and subordinates. She found that men were viewed as focusing on procedure rather than people. They were not as supportive as the female leaders but rather more rigid and inflexible. The male leaders were labelled sexist and more aggressive. Further research proposes that females may manage

differently than males. Statham (1987) interviewed men and women managers and their secretaries in manufacturing, finance and technical firms. She found that the women were not only person-oriented (typically a female trait) but were also task-oriented (typically a male trait), while the men focused on the importance of their job. She found the women to be as effective as the male managers. She concluded that although the women's leadership styles were different from the men's, the results were the same. Rosener (1990) also concluded that women can lead effectively while not exhibiting the traditional male leadership attributes. Interestingly both studies found that the styles that the women used were most often admired and appreciated by female subordinates. These studies imply that there are two generally distinguishable styles of leadership that seem to be related to gender.

Helgesen (1990) suggests that women use a different model to manage than men do. She believes that women leaders, when given the opportunity to manage in the style that they feel most comfortable with, will use a much more people oriented approach. Helgesen describes it as a "web" structure where everyone is welcome to offer advice and suggestions, in other words a participative style. The woman leader is able to network and disseminate information. This style allows easy access to the leader and allows the leader easy access to different areas of the organization. Women using this style

encourage cooperation over competition. Helgesen believes that the web style of management would permeate a company, if women were allowed to manage in their own fashion.

Rosener (1990) claims that the second generation of women leaders are using a non traditional style of management that is successful and responsive to women managers. She calls this style transformational leadership or an interactive style, because the leader is able to transform the subordinates to work for the benefit of the organization. They use their personality, hard work, shared power and a view that participation is better than controlling subordinates. In a study she conducted, women were more likely to use this style than were men. As well, the women used personal power to succeed in an organization, rather than structural power as the men did. A female led department would be more open to all people, and would have a positive attitude towards women in management positions, and to employment equity programs that help remove barriers that hold women back.

An alternate way of describing this culture is by the concept of 'inclusion'. This style would encourage diversity among people and invite input from all groups. This type of culture would accept differences between employees. Since this style would discourage discrimination, it would thus support the philosophy of employment equity for all employees. Compare

this to male hierarchies that can be characterized by the concept of 'exclusion'. These cultures would reject people that do not fit a strict mould. It is not an open culture where different ideas and people are accepted, but rather it would discourage differences. Thus, it would not be accepting of women managers, nor employment equity.

Most organizations are probably organized in a hierarchical form, dominated by men in decision making roles, and thus reproduce male values (Powell, 1988; Morrison, 1982; Asplund, 1988; Loden, 1985). One could argue that if the norms and informal rules are male based, then so is the culture and management style. Or in other words the "...values of the corporate culture are shaped by those who control it" (Loden, 1985, p. 22). Turning to traditional examples of male hierarchical organizations such as the military, christianity, and team sports (hockey, football), one sees examples of traditional masculine culture characterized by competition, elitism, loyalty, politics, ruthlessness, self-reliance, initiative and team spirit (Asplund, 1988; Grant, 1988). Loden (1985) in her study of male and female leadership, considers these traits to fall under the traditional model of male leadership.

Historically, men have been the dominant managers and workers in the organization. They therefore structured orgar zations

in the fashion they felt most comfortable with - a masculine, hierarchical form. This philosophy is supported by the fact that when male managers are surveyed, they consistently chose stereotypic masculine traits as the best ones for a manager to emulate (Schein, 1973, 1975; Brenner et al, 1989).

The evidence supports the idea that male and female led organizations are different. Since leaders model values for employees, female led organizations would accept diversity more than male led departments. A male style of management would not be a favourable culture for women (Konrad, 1990; Powell, 1988). Examine the conclusion already made that men have more negative attitudes towards women in management. If a male is leading a department and it is assumed he encourages a traditional male culture, then the values he models are ones that are negative towards women in management. According to Grant (1988), "organizations clearly reproduce themselves. People in power (who are mostly men) mentor, and advance people who are most like themselves" (p.57). Therefore, one would expect that the department led by a male would have a negative view towards women in management.

According to a report by Konrad (1990), some executives in corporations are coming to the realization that today's organizations are not women friendly in their culture. A survey of women managers found that 60% of them felt that a

male dominated corporate culture in organizations was a barrier to women executives (Konrad, 1990). In a similar survey of female managers, Wentling (1992) found that the women had a difficult time fitting into the company's culture, adjusting to the norms or understanding the informal power structure. In a study by Milwid (1984) he found that once women had obtained a job, they were blocked by the male dominated culture in obtaining job related information. Thus this research supports the idea that typical male dominant cultures are not responsive to women's problems and desires to move up the organization.

An alternative view on why women led departments might be more responsive to women in management than male led departments is that employees gain experience working with a woman leader. As discussed previously, the more experience one gains with a person, the less stereotypic opinions one will hold about a person and they will gain more positive attitudes about the person's abilities.

Based on this review, employees from a department led by females should have more positive attitudes towards women managers because of the type of culture that is encouraged within the department and the experience they gain with women leaders. A male led department would tend to be less responsive to women and would not have a positive attitude

towards women in management because women would not fit into the typical hierarchical culture.

A male led department would have a culture that did not promote the philosophy of employment equity. This organization would be attempting to reproduce itself, and women sharing power and jobs being shared fairly with women would not be a part of their culture. Incorporating equity as part of its underlying value system would be at odds with the culture that is normally encouraged by a male leader. Thus a male led department that had a traditional masculine culture would have negative attitudes towards employment equity for women. The reverse assumption could be made about female led departments. In this case, it is expected that since this type of leadership style encourages equality and sharing of power, that it would sanction and press for employment equity among the employees. Thus employees from women led department would have more positive attitudes towards employment equity than employees from male led departments.

2.5 Summary

Negative attitudes towards women and a glass ceiling limiting their advancement persists. Stereotypic and discriminatory attitudes seem to be considered one main cause for women's

slow progress. A means for overcoming them is by employment equity programs that target behavioral discrimination. It is believed that if behaviours are altered then dissonance will occur with employees old stereotypic attitudes and then new nondiscriminatory attitudes will hopefully follow.

Research presented suggested that there may be other situational variables that are related to attitudes. In total five variables were discussed that could explain attitudes employees hold towards women in management and towards employment equity for women. These included: number of years women have been in management, the percentage of women in management presently, the number of employment equity programs, the gender of the leadership of the department, and the gender group the employee belongs to. More knowledge on how these variables are related to attitudes will help reduce discriminatory behaviour that keeps women out of the upper echelons of management.

CHAPTER 3 MODEL AND HYPOTHESES

Drawing on the research cited in the previous section, a model was proposed in which five independent variables were used to explain two prime dependent factors (see figure 1). The five independent variables are: the proportion of women presently in management, the length of time since women in management have reached critical mass, the number of employment equity programs, the gender of the leadership of the department, and gender group. These variables were expected to be directly associated with the dependent variables. Gender is different from the other four variables because it not only has a direct effect on the dependent variables, but it also moderates the effect of the independent variables on the dependent variables. The prime dependent variables can be broken down into four interrelated dependent variables. The dependent variables that measure attitudes towards women in management are: equality of treatment, the effects of women's family responsibility on their work role, and women's ability to manage. The fourth dependent variable is attitudes towards employment equity.

Although the model has arrows suggesting the direction of the effects of the variables, this research did not test for the causality of the relationships. For example, the model suggests that there is a positive relationship between the

Figure 1 Proposed Model of Correlates affecting the Attitudes towards Women in Management and Employment Equity for Women

percent of women in management and attitudes of employees towards women in management. Yet, this study only determined whether there is a relationship between the variables and not which variable causes the other ones.

In order to determine if the relationships represented by this model are valid, two research questions needed to be asked. The first research question is what is the degree of relationship between the independent variables and each of the dependent variables. According to the model, five independent variables should contribute to the variance of each of the four dependent variables. This research question and the corresponding hypotheses were tested to see whether the situational variables were important for each dependent variable.

The second research question is what is the significance of gender group differences. As suggested by the model, gender moderates the effect of the other independent variables on the variance of the dependent variables. This question allowed the researcher to examine if this aspect of the model was true. There are four hypotheses that are related to this research question that will be discussed below.

3.1 Research Question 1

The following hypotheses are related to the research question of what is the degree of relationship between the independent variables and the dependent variables.

Hypotheses Set 1 - Percentage of Women in Management in a Department

The first set of hypotheses deals with the variable related to the number of women managers individuals work with. The majority of women still work in the lower paying, traditional positions with little or no chance for promotion, such as clerical and administrative work. Employees who work with women in these support positions will have their stereotypes about women's abilities reinforced by these experiences. There are however, an increasing number of women swelling the ranks of non-traditional jobs, such as management. When employees work with these women, they are being exposed to non-conventional women who break old stereotypes of what women can accomplish. This experience helps employees learn that women are capable of being successful managers. Thus, it is not being exposed to more women in an organization, but to more women managers that is important in order to change attitudes of employees.

Assuming that employees gain positive experience with managerial women, as their experience increases, their previous sex stereotyping and negative attitudes will lessen. Employees that are exposed to larger numbers of women in management will have gained a lot of working experience with managerial women and will thus have more positive attitudes than employees that have experience with fewer women in management. Referring to Figure 1, the proportion of women in management in a department should have a positive relationship with the dependent variables. Employees that work with a higher percentage of women in management presently will have more positive attitudes towards the equality of treatment of women.

H1A - Employees who work with a larger percentage of women in management should have more positive attitudes towards equality of treatment than employees who work with fewer women managers.

Employees who have more experience with many working managers who are women and are parents, will conclude that women can be mothers and working managers at the same time. Exposure to women who are both managers and mothers will have the result of improving employees' attitudes by changing their stereotypic ideas about women's family responsibilities. A department that has fewer women will have employees with more negative attitudes towards the women's family responsibility because they have had little exposure to positive models of successful managerial mothers.

H1B - Employees who work with a larger percentage of women in management should have more positive attitudes towards the effects of women's family responsibility on their work role than employees who work with fewer women managers.¹

A department that has more women managing successfully will have employees with better attitudes about women's ability to manage than a department that has fewer women managing. Exposure to women who are managing can only help improve one's attitude about women's ability to successfully manage. Workers in a department that has less managerial women will have more negative attitudes about women's abilities because they have little information on which to form opinions other than the stereotypes they already hold.

H1C - Employees who work with a larger percentage of women in management should have more positive attitudes towards women's ability to manage than employees that work with fewer women managers.

Experience with more managerial women will result in employees who perceive that employment equity is beneficial for women. These employees will not feel resentment towards employment equity because they see that employment equity is effective and fair in its treatment of employees. If employees work with a token number of women, they may feel employment equity

¹ The attitude entitled "the effects of women's family responsibilities on their work role" was changed to "the barriers from women's family responsibility". This new title seemed to better represent the questions involved in this scale. The new title will be used in subsequent analysis of this attitude.

is selective and biased in how people are treated because they may believe that a few women receive an unfair advantage.

H1D - Employees who work with a larger percentage of women in management should have more positive attitudes towards employment equity for women than employees who work with fewer women managers.

Hypotheses Set 2 - Length of Experience with Women Managers

The next set of hypotheses also deals with experience employees gain working with women managers. In this case, experience is acquired by the amount of time one spends with managerial women. The more time one spends with women managers, the more positive attitudes one should hold about managerial women. As in the above discussion it is not simply time spent with working women, but time spent working with a significant number of managerial women that is important in altering one's opinions about women in management.

In this research it was hypothesized that when women make up a substantial percentage of management, fellow employees will have less stereotypic attitudes towards them than when women make up a lesser percentage. Kanter (1977 a,b) suggests that as the percentage of women in the group increases they gain power and influence in the group. Power and influence are needed to change attitudes within the group. The point at which the percentage of women begins to alter the attitudes of

employees substantially is called critical mass. Employees that have more working experience with a higher percentage of managerial women will have a better understanding of how women work and what problems they face. They are exposed to women managers for longer periods and will see that women are as effective as men. These employees will appreciate the need for all employees to be treated fairly. Therefore, employees that have experience working with many women over time will have a better attitude towards equality of treatment for women.

H2A - Employees who work with a critical percentage of managerial women for a longer time should have more positive attitudes towards women in management than employees who have less experience with that percentage of women managers.

Employees who have more experience working with more managerial women who are parents, will believe that women can be managers and mothers successfully. The more time one spends with a critical number of women managers who are mothers, the more one will come to see that it is not just a token few women who can manage and be mothers but any woman who has the desire and ability. This exposure to working mothers should improve employees' stereotypic attitudes towards women's family responsibility in their work role. Employees from a department that has not had women at the critical percentage for the same amount of time will have less positive attitudes about women's role in the family.

H2B - Employees who work with a critical percentage of managerial women for a longer time should have more positive attitudes towards the effects of women's family responsibility on their work role, than employees who have less experience with that percentage of managerial women.

The more experience one has with managerial women the more accepting one will be of the concept of women managing competently. In this case, exposure is gained from the amount of time that employees spend working with managerial women.

If an employee has only worked with women managers for one year for example, they will have less information on which to base more realistic views. Contrast this to an employee who has worked with women managers for five years and has had time to observe many women perform. They have been able to adjust their opinion to be more positive about women managing. Therefore, the longer the time that employees have worked with a significant number of women managers, the more positive their attitudes will be.

H2C - Employees who work with a critical percentage of managerial women for a longer time should have more positive attitudes towards women's ability to manage than employees who have less experience with the same percentage of managerial women.

A department that has had women in management for only a couple of years may have employees that see their careers affected by employment equity and would not be happy to compete with women for management positions. Meanwhile, a department that has a critical number of women managers for five years will have employees who accept women in management

and would understand this to be a normal situation. These employees would realize that women do not steal their jobs and that employment equity is beneficial for all employees.

H2D - Employees who work with a critical percentage of managerial women for a longer time should have more positive attitudes towards employment equity programs for women than employees that have less experience with the same percentage of managerial women.

Hypotheses Set 3 - Number of Employment Equity Programs

Employees from departments with more employment equity programs should have more positive attitudes towards women in management than employees from departments with fewer initiatives. The reference to a 'program' refers to each individual employment equity initiative an organization implements. For example, one program could be a special training course offered to women only, another might be opening a career consulting centre and a third a training service for women.

An organization with only one program may have employees that see the changes as special privileges given to women only. These employees would not see the barriers that employment equity attempts to remove. For these employees, employment equity and the organization's goals are not clear. An

organization that structures employment equity so that it includes a set of programs that attack discrimination in all areas of the department at once, would institutionalize employment equity as part of the company's culture in a way that employees could understand. These same employees would then have a better attitude about the benefits of employment equity and how it facilitates women's move up the corporate ladder, than do employees who are exposed to a limited number of initiatives. Employees from departments with more employment equity programs would understand that women's lower status is not due to women's smaller career goals or lack of education, but rather systemic barriers. While employees in organizations with fewer employment equity programs may see women as promoted not based on merit but on the fact that they are women.

H3A - Employees exposed to more employment equity programs should have more positive attitudes towards equality of treatment of women than employees exposed to fewer employment equity programs.

Employees who work in organizations that have complete employment equity programs will have been exposed to the fact that for women to obtain positions in management, equal sharing of family duties is necessary. They will believe that women did not move up in management because they did not want to but rather because they did not have support looking after the family, as their husbands did. Employees from

organizations with an incomplete set of programs would not see that there is an unequal balance in family work or that it is a problem that needs corporate attention. These employees would not have positive attitudes about the effects of women's family responsibility on their work role.

H3B - Employees exposed to more employment equity programs should have more positive attitudes towards the effects of women's family responsibility on their work role than employees exposed to fewer employment equity programs.

Employees from an organization that has more equity programs should have a better view towards women's capability to manage. The more programs a department has, the more barriers that will be lowered. In lowering barriers, women are able to gain management positions, thus allowing employees to see that women are capable of managing as well as men when given the chance. As well, employees will come to see that barriers were systemic and not personal, in other words, it was not the women's fault that they were not able to obtain management positions. A department that has not removed employment barriers will have employees that see women as not competent or willing to work in management because they will believe that women are getting their positions based on the equity policy and not on merit. They therefore would not have positive attitudes to employment equity for women.

H3C - Employees exposed to more employment equity programs should have more positive attitudes towards women's ability to manage than employees exposed to fewer employment equity programs.

The more programs a department implements, the more equitable the environment of the department will be. Employees from this department will have a better understanding that women have not been able to move up the organization due not to their lack of ability or desire but rather invisible barriers. These employees will in turn have a better attitude towards employment equity because they will believe that it is beneficial in removing barriers for women. Employees from departments with fewer employment equity programs will not see that women deserve positions based on merit but that they obtained their job based on performance.

H3D - Employees exposed to more employment equity programs should have more positive attitudes towards employment equity programs for women than employees exposed to fewer employment equity programs.

Hypotheses Set 4 - Gender of Leadership of the Organization

The senior management team of an organization sets the tone or culture of the organization. Male and female leaders often have different styles that affect the culture of the organization. The traditional hierarchical style is most often used by male leaders. The type of environment that this

style supports would be one of exclusion, where different people are not accepted. On the other hand, a feminine or participative style is most often used by women. The female style of management would create a culture that is more open to diversity. Employees working in this type of feminine culture would have more positive attitudes towards the equality of treatment for both men and women, than people in an organization managed in a traditional masculine fashion.

H4A - If the senior management of a organization is female, the employees should have more positive attitudes towards the equality of treatment than if the senior management is male.

An organization led by women should be conscious and understanding of working mothers. The culture generated by a woman led organization would stress acceptance and accommodation of employees' needs, in other words, it would be more inclusive. Employees in this female led organization would have more positive attitudes towards women who work and have families, than would employees in organizations led by men.

H4B - If the senior management of an organization is female, employees should have more positive attitudes towards the effects of women's family responsibility on their work role than if the senior management is male.

A female led organization would value women as managers. Employees in this type of organization are exposed to female

leadership and thus would have a better attitude towards women managers because they know that women can be effective managers. A male led organization would not have the same attitude because they would not create a culture that appreciated women managers. Male led organizations may be more rigid in their requirements of who could be a manager. At the same time, the employees would not have a female leader as a model of women's possible abilities, so they would not perceive women to be qualified as managers.

H4C - If the senior management of an organization is female, the employees of the organization should have more positive attitudes towards women's ability to manage than if the senior management is male.

The literature suggests that a female led organization is more open to cooperation and disseminating information - it is more people oriented, than a male led organization. An organization led by a woman would be more sensitive to the hurdles that exist for minority groups to move up in an organization. They would be more interested in developing a workplace where everyone has a fair chance of succeeding. As discussed earlier, women have better attitudes towards employment equity than men. Therefore, an organization led by a woman should have employees with more positive attitudes towards employment equity than would a male led organization.

H4D - If the senior management of an organization is female, the employees of the organization should have more positive attitudes towards employment equity programs for women than if the senior management is male

Hypotheses Set 5 - Gender Group

The final set of hypotheses for this research question deal with the effect of gender. The majority of studies support the proposition that men and women have different attitudes towards women in management and employment equity. Men still have more negative perceptions of women in management than do women. This may possibly be due to the recent entrance of a greater number of women in management. Men are still trying to adjust their stereotypic attitudes to match the new reality of what women are doing in the workforce. Since men do not see men and women as equal, they do not have positive attitudes about treating managerial women the same way as managerial men.

H5A - Women should have more positive attitudes towards the equality of treatment of women than should men.

Men who do not believe women can be or should be in management might hold the view that women would instead make better mothers. Or they may feel that women should at least hold more of the family responsibility than men. They may see this as the natural roles that the sexes should maintain. Even men who believe women can manage may still think women's primary

job is to look after the family. Thus women's office job is of less importance and as such women should not be given demanding management jobs. The expectation is that men would see the effects of women's family responsibility on their work role as more negative than do women.

H5B - Women should have more positive attitudes towards the effects of women's family responsibility on their work role than should men.

Research over the years has found that men view women as being less able to manage effectively. For a variety of reasons men believe that women do not have what it takes to be good managers, and therefore they should not take up management positions. Although this view is becoming less prevalent, there is still a distinct difference in men's and women's attitudes towards women's abilities to manage. It is proposed that men will have more negative opinions towards women in management than will women. Women understandably would feel that women are quite capable of managing successfully.

H5C - Women should have more positive attitudes towards women's ability to manage than should men.

Men generally feel that employment equity creates inequity in the workplace, rather than creating a level playing field on which to compete. Men seem to feel that having employment equity within their organizations threatens their careers by

giving women an unfair advantage in moving up the ladder. Women have experienced sex discrimination on a wide scale, and they therefore may appreciate the benefits that employment equity offers not only them, but to all employees. Thus women should have a more positive attitude towards employment equity than will men.

H5D - Women should have more positive attitudes towards employment equity programs for women than should men.

3.2 Research Question 2

The following hypotheses are related to the second research question on whether there are significant gender group differences between men and women. The research presented previously demonstrated that men and women do have different attitudes. These gender differences may persist despite the influence of situational variables. Attitudes may be dependent on the interaction between gender and the independent variables, or in other words, the form of the relationship between the dependent and independent variables may be conditional upon gender. If no difference is found in the analysis, then one can conclude that there is no moderator effect. Based on the model, support for the following hypotheses is expected:

H6A - Gender of employee will moderate the relationship between the independent variables and attitudes towards equality of treatment.

H6B - Gender of employee will moderate the relationship between the independent variables and attitudes towards the effects of women's family responsibility to their work role.

H6C - Gender of employee will moderate the relationship between the independent variables and attitudes towards women's ability to manage.

H6D - Gender of employee will moderate the relationship between the independent variables and attitudes towards employment equity for women.

3.3 Summary

This section presented a model of relationships between the independent variables and the dependent variables. As a means of testing if this model is correct, two research questions were proposed. The first dealt with the direct relationship between the independent variables and each of the dependent variables, and the second dealt with gender group differences or moderator effects. A total of twenty-four related hypotheses were developed that will assist in testing each relationship of the model.

CHAPTER 4 METHODOLOGY

4.1 Overview

The purpose of this research was twofold: to examine the correlates of attitudes towards women in management in the Federal Public Service; and to examine the correlates of attitudes towards employment equity programs for women in the Federal Public Service. This research examined the hypotheses by analyzing data about attitudes gathered from a 1989 survey of Public Service employees carried out by the Task Force on the Barriers to Women in the Public Service. This section will describe how the data was gathered and refined and the statistics used to gather it.

4.2 The Task Force Study

Based on the apparent lack of advancement of women in the public service, a Task Force was assembled to determine what barriers existed for women. They were interested in what women had experienced while working in traditional and non-traditional jobs within the Federal public service. They wanted to examine what factors were blocking women from leaving low paying, dead end jobs. Another purpose was to

discover what employees felt about working with women, women as managers, fairness of the promotion and training systems, and barriers to advancing one's career.

The Task Force developed and administered a questionnaire to ascertain what employees' attitudes were towards these topics. A sample of 20000 employees across all departments of the Federal Public Service were asked to complete this survey (Appendix A) during the summer of 1989. The researchers obtained a response rate of 60%.

The findings from the Task Force survey showed that 67% of all women and 79% of women managers, agreed that a glass ceiling exists for women in the federal public service. Sixty-two percent of senior men did not believe that this barrier existed. In terms of attitudes towards employment equity programs, 54% of men and 66% of men in senior positions felt that these programs gave women an unfair advantage. Fifty-three percent of all women felt that employment equity had not put women in jobs above their abilities.

The findings from the survey supported the initial hypotheses which the Task Force had formed. They found that the majority of men and women supported the principle of equitable employment. However, men did not support the need for special programs for women to achieve employment equity. Women on the

other hand identified family responsibility, sex stereotyping and discrimination as barriers to their advancement.

It was the aim of this thesis to build on the research conducted by the Task Force. They examined the data at the macro level for the entire public service. The results were descriptive, relying on simple tabulations as the basis for their conclusions. Although this information is interesting and aids our understanding of attitudes, it does not explore determinants of the attitudes uncovered. This research used an explanatory approach to determine if situational differences between departments were related to the attitudes that employees from each department held. This was accomplished by examining specific independent variables and applying statistical tests of multiple regression and t-tests to determine if using these independent situational variables aided in explaining the variance in attitudes. Thus, the results obtained provide information on the variables that are related to public servants' attitudes towards women in management and employment equity for women.

4.3 Sources of Data

In conducting this research, several sources of data were used. Primary data was collected from a questionnaire designed to gather information on the independent variables related to

the types of employment equity programs and the leadership of each department in 1989. Secondary data was also gathered. One type was collected from the 1990 Beneath the Veneer: The Report of the Task Force on Barriers to Women in the Public Service conducted by the Federal Government's Task Force. Data from specific questions and departments was selected from the Task Force database. All measures of the dependent variables and the moderator variable (sex of respondent), came from this source. Another source of secondary data was the Public Service Commission Annual Reports. This archival source provided the data for the independent variables related to experience working with women. Finally, additional data on the make-up of the executive team of each department was collected from the Library of Parliament Report.

4.3.1 Using the Task Force Data

The Task Force questionnaire contained a total of 47 questions, many with subparts. The questions ranged from asking an employee why they felt they had missed a promotion within the previous three years, to whether they felt that raising a family was a woman's responsibility. This survey consisted of both Likert type questions as well as open ended questions. The items selected for inclusion in this study will be described below in the measurement section.

The unit of analysis used in this research was the department. Data was aggregated within departments in order to examine the effect of departmental programs on attitudes and to protect respondent confidentiality. A separate analysis was conducted of men's and women's responses from each department.

The population used in this research was all large departments within the Federal Public Service. A large department is defined as a department that had a minimum of 100 completed surveys. This criterion reduced the total number of departments to 36.

Small departments were omitted from the population for two reasons. The first reason is that Statistics Canada, which owns the Task Force survey data, was concerned about the confidentiality of individuals. They felt that small department results would be too easily recognizable as responses from certain individuals. The second reason is related to the possibility that small departments may have substantively different group behaviours than large departments (Daft, 1992). For example, small departments may develop different employment equity programs based upon different group dynamics related to their size. Since all departments would be given equal weight in the analysis, those small departments might skew the results. Therefore for these

two reasons, small departments were not included in the research.

The decision to limit the population to those departments that returned 100 surveys rather than some other cut off point was to ensure that a sufficient sample size was selected. Raising the criterion to 200 returned surveys would not have provided a sufficient number of cases to use multiple regression analysis. A cutoff point of 100 completed surveys was deemed adequate to overcome small department bias and to supply a large enough sample size.

The sampling technique that was used in this research was a census. This technique was selected because the population was small and the researcher's interest was in gathering information for as many of the departments as possible. As well, this technique provides more accuracy in the data than other sampling techniques (Tull & Hawkins, 1990). The impact of non sampling errors such as erroneous responses was minimized by using aggregate measures.

4.3.2 Archival Data

This research also used the Public Service Commission Annual Reports. The independent variables of: the percentage of women in the department in 1989, and the number of years women had

been in the department above the critical mass point were measured from this source. As with the previous database the response unit was the department, with separate analyses conducted for the responses of women and the responses of men within each of the 36 departments.

Another archival source of data came from The Parliament Compilations Report. This report was used to complete information that was missing from the primary data collection (see section 4.4.5 below).

4.3.3 Primary Data

Primary data was collected by a questionnaire designed for this research (Appendix B). The variables that were collected from this source were: the type of employment equity programs that the department had in place at the time of the Task Force survey, the gender of the Minister, and the percentage of female Deputy Ministers, Assistant Deputy Minister and Directors in 1989. The category of Assistant Deputy Ministers was originally included because they could wield substantial influence over the culture of the department. However, it became too difficult to determine their number per department, so that aspect of leadership was dropped.

The respondent for this survey was generally the present employment equity coordinator for each department. However sometimes the present coordinator had not been in the position long enough to answer questions related to 1989. Therefore the survey was passed to the previous employee who held that position or someone else in the department who could respond to the questionnaire.

The questionnaire was pretested to ensure that it was complete and understandable in such areas as: concise wording, easy and understandable format, and completeness (Davis & Cosenza, 1988). There were two steps involved in this pre-testing. In the first step the questionnaire was reviewed by a human resources specialist in External Affairs who had extensive experience in the field of employment equity. Only small changes were recommended from this review.

The second step was to test the questionnaire on three departmental employment equity coordinators. To accomplish this the coordinators were interviewed using the questions from the survey. Based on this pre-testing, only slight changes to remove repetitive questions, rewrite unclear questions and improve the format were deemed necessary. The data gathered from these three interviews was included in the data analysis.

To gather data for the remaining 33 departments the researcher asked the employment equity coordinator for retrospective information on what programs the department had in place in 1989. An issue that came up in the pre-testing was the problem of respondents' focusing on programs in 1989. The coordinators routinely commented on what their department was doing presently. To be assured the most accurate results and a high return of questionnaires, a telephone interview was planned. However in total only 4 interviews were conducted. Few coordinators were interested in giving up the time to do both the preliminary review of materials with which to answer the questions and then doing the interview. Thus the approach taken was that the respondent was asked if they would be willing to fill in the questionnaire. A cover letter (see Appendix C) and the questionnaire were faxed to the respondent. They were asked to complete the questionnaire and return it in two weeks. If a questionnaire was not returned, follow up calls were made to ascertain if the respondents had questions. On several occasions respondents called to ask a question or clarify something.

In order to verify the accuracy of the data given, all responses were compared to a document published by the government detailing an inventory of what each department was doing in response to the 1989 Task Force survey (Treasury Board of Canada Secretariat, 1991). For instance, if a

coordinator stated that there was special training for women in non-traditional jobs occurring in 1989, and yet it did not appear in the 1991 summary report, then it probably did not occur in 1989. Using the 1991 inventory for verification purposes, no inaccuracies were found.

4.4 Method of Measurement

Due to the diversity of methods used in this study, the method of measurement and the rationale behind it will be outlined for each variable separately. In total there are five independent variables and four dependent variables. The dependent variables will be discussed first.

4.4.1 Dependent Variables

The intent of this research was to measure employees' attitudes towards women in management and towards employment equity programs for women. These attitudes were measured from civil servants' responses to specific questions from the Task Force questionnaire. The twelve questions chosen to measure these attitudes were clustered into interrelated subgroups. Attitudes towards women in management fell into three interrelated clusters with a total of nine questions: equality of treatment, barriers from women's family responsibility, and women's ability to manage. Attitudes towards employment

equity programs for women formed a single cluster incorporating three questions. These clusters were the measures of the four dependent variables.

The men's and women's responses to each question were totalled separately for each department. Four responses were available for each question, anchored as follows: strongly agree, slightly agree, slightly disagree, and strongly disagree. One question was anchored differently using: very important, important, of little importance, and not at all important. These options were not numerically rated in the original questionnaire. It was necessary for this research to assign a rating to each response. Strongly agree was given a rating of four, strongly disagree a rating of one, with the other options falling in between. Scores were reversed where necessary to have all scales in the same direction.

Since the response options were not given numeric ratings on the original questionnaire, there was a concern that respondents may have selected their choices without making the assumption that the options were equidistant apart. The average employee would, however, have completed previous questionnaires that required them to select their preferences from ranked scales. Thus, the assignment of serial numeric values required for multivariate analysis should not violate

any assumptions that respondents implicitly attached to the response options.

Attitudes are complex because they are multifaceted. According to Henerson et al (1978) it is difficult to measure attitudes. Attitudes towards women in management are complex. Often attitudes are not discernible by one scale. Using different questions that measure different parts of an attitude will give more insight into the attitude. Therefore more than one question was initially chosen to measure each attitude.

In this research the prime interest was with attitudes towards women in management. One group of questions dealt directly with this construct. The other two sets of questions measured interrelated attitudes about women in management. As mentioned earlier, attitudes are complex and multifaceted. If one assumes that a person holds similar attitudes towards related subjects, then one could argue that attitudes towards different aspects of working women should be similar. Consider those attitudes towards women's family responsibility and attitudes towards their work role. One could argue that these two attitudes are closely intertwined based upon underlying beliefs that a person holds. For example, a person who thinks that a woman should have the responsibility of taking care of the children, would probably think that some

jobs are designed for men, while others for women. Thus, one would assume this person holds negative stereotypes of what women can do as managers. It is possible to see a trend in the attitudes, because they are so closely linked. Therefore, it is useful to use a set of scales that measure these attitudes because more information can be obtained about the stereotypes that employees hold from many scales versus one scale.

The third subset of attitudes relates to the equality of treatment. Again the argument is that this attitudinal subgroup reflects the stereotypes that employees hold about women. It is merely another dimension of the same principal attitude regarding women in management. If someone believes that there should be equality of treatment for everyone, then they would probably think that women would make good managers and they would also hold the opinion that both parents should share in the upbringing of the children. These attitudes although different, are closely linked because they represent the same underlying beliefs about women in management. It is therefore beneficial to measure these sub-attitudes of attitudes towards women in management, in order to learn as much as possible about employees' attitudes.

The Task Force survey was made up of various sections with questions that focused on different areas. The following lists

the questions from the Task Force survey that were initially selected for this research because they measured the attitudes that are of interest. Some questions were reversed score so that a rating of 4 would be given to the most positive responses. The section number beside each question below, represents its location in the Task Force survey.

Attitudes about Employment Equity for Women:

	<u>Section</u>	<u>Number</u>	<u>Question</u>
1.	35.18	10	Women have been placed in positions beyond their expertise and training because of employment equity. (Reverse Scored)
2.	22.07	1	How important do you think the following was in getting your current position ? Being a member of an employment equity target group (visible minority, women, aboriginal person or person with disability). ²
3.	35.9	5	Employment equity and affirmative action programs give women an unfair advantage when the public service is downsizing. (Reverse Scored)

² Response options were: very important, important, of little importance, and not at all important.

Attitudes towards Equality of Treatment:

	<u>Section</u>	<u>Number</u>	<u>Question</u>
1.	35.5	2	Men and women are treated in the same way in my department.
2.	35.6	3	Men and women are treated in the same way in the public service.
3.	35.13	9	Women have to be more qualified than men to be promoted. (Reverse Scored)
4.	35.19	11	Women should not expect to be placed in management positions that have usually been held by men. (Reverse Scored)

Attitudes towards the Effects of Women's Family Responsibility on their Work Role:

	<u>Section</u>	<u>Number</u>	<u>Question</u>
1.	35.10	6	When being considered for a job, it is a disadvantage to have family responsibilities. (Reversed Scored)
2.	35.11		Women who are pregnant should not apply for competitions in the public service. (Reverse Scored)
3.	35.12	8	Raising children should be a woman's responsibility. (Reverse Scored)

Attitudes towards Women's Ability to Manage:

	<u>Section</u>	<u>Number</u>	<u>Question</u>
1.	35.8	4	Men make better managers than women do. (Reverse Scored)
2.	35.21	12	Some jobs are more suited to skills that men have, while some jobs are more suited to women. (Reverse Scored)

Previous researchers (Asplund, 1988; Baron, 1989; Dubno et al, 1979) interested in measuring a group's attitudes towards women in management used similar questions to those used in this research. Therefore, there is some prior evidence that these questions measure the constructs in question.

In order to be confident about the reliability within each set of questions, Cronbach's Alpha was calculated. This measure assesses the internal consistency of scales, that is, it determines if the items measure the same construct. Cronbach's coefficient alpha is the most common technique used to assess scale reliability (Peter, 1979). Results of the reliability analysis are reported in the next chapter.

4.4.2 Independent Variable Percentage of Women in the Department at the Management Level.

Based on the literature review it was expected attitudes towards women in management would be better if there were more women in the department. In order to test this concept, the total percentage of women in upper management was measured for each department of the public service.

This variable was measured for each department of the public service for 1989 from the Federal Public Service Commission Annual Reports. There were a total of six occupational categories in the public service in 1989: management,

scientific and professional, administrative and foreign service, technical, administrative support, and operational. The method used to assess an individual's exposure to women in management was by the representation of women in the management category of each department.

The problem with using only the management category is that it contains only 4283 employees service wide. The federal government's classification system includes only senior managers and executives in the management category, thus overlooking a large number of individuals with some managerial responsibilities. To capture a broader range of influence, the category of scientific and professional employees was included. This category includes occupations such as lawyers, doctors, chemists, and town planners. This category was chosen because it includes more managers and was representative of more non-traditional positions than for example, the administrative category. The administrative category contains several traditional female positions such as translation, welfare worker and personnel administrator. A second reason for including the science/professional category is that these women would act as role models for other women and would also have more experience working with men than women in other occupational categories. The number of women in these two categories combined was used to measure the

variable of the percentage of women in management in a department.

4.4.3 Independent Variable Number of Years since Women reached Critical Mass.

Previous research indicates that experience working with women affects employees' attitudes towards working women. While one measure is the number of women in the department, a second important measure is the length of time that women have been in the department in significant numbers. The more time one spends working with women in management the more positive one's attitude towards women in management should be. Research suggests that this change in attitudes occurs when women reach a critical mass in the work group (Harlan & Weiss, 1982). In other words, when women constitute a significant percentage of the membership of a group, they have an effect on the attitudes that the members of the group hold about women. According to Weiss and Harlan (1982), critical mass helps to create an equal opportunity balance for minority members of the group.

To measure the construct of experience working with women managers, two issues were addressed. First, it was important to note that for this research, the women who were included in the critical mass were those who held significant roles in the

department. This restriction can be interpreted as meaning those women in leadership roles where they may have power to effect change and be seen by the staff as doing so. The second issue was that critical mass had to be quantified prior to the investigation to allow for testing.

Fraker (1984) hypothesized that women achieve critical mass when they represent 30% of the work group. She stated that attitudes of members of the group will be more positive towards women once they constitute 30% of the group than if the women made up less than 30% of the group. Kanter (1977 a,b) proposed that women were viewed as individuals, had power within the group, and reached a level of critical mass when they represented 35% of the group.

For the purpose of this research, critical mass was defined as women constituting 30% of management. However, using an exact percentage as the point where attitudes are expected to change is not totally accurate. One would find that attitudes do not automatically change when women reach 30% of a department because the process is more gradual than that. An exact percentage was selected in order to determine the number of years since critical mass. Looking at the annual average number of managerial women in a department based on the percentage of 30% will mean it is less likely that one is looking at temporary changes, but instead one is measuring

long term changes in the department. It is expected that one would find attitudes becoming more positive the longer women have been represented in management in significant numbers.

In order to test this concept, the Federal Public Commission reports were used to determine when the percentage of women in the executive and professional categories of each department reached 30%. The number of years elapsed between 1989 and the year in which women achieved critical mass was the measure of this variable of experience. If the critical mass in the department fluctuated over the years, the score recorded (number of years) was taken from 1989 till the year the percentage of women managers fell below 30% of the department for two or more consecutive years.

4.4.4 Independent Variable The Number of Employment Equity Programs that the Department had in 1989.

According to the literature, employees should have different attitudes based on the employment equity programs present in their department. A total of sixty-seven different possible programs were considered in this research, including initiatives such as: considering women for non-traditional jobs, conducting a workforce analysis, or offering special training programs. To test this concept, the number of programs present in each department in 1989 was measured to

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determine if more programs lead to more positive employee attitudes.

The information pertaining to the number of programs the department had was gathered from a questionnaire that was designed for this research. The questionnaire was designed to collect information on all possible employment equity programs that a department might offer. The questionnaire is based on the Treasury Board document entitled Responding to Beneath the Veneer, (1991). This is a summary of what each department initiated in terms of employment equity programs, after the Task Force survey in 1989. As well, a manual on implementing employment equity programs by Paschal (1992), and an article on recommendations for an equitable workplace (Merenivitch & Reigle, 1979), were used to compile as complete a list of programs as possible. Together, these sources were used to design a questionnaire that covered all relevant programs that a department might have used to enhance employment equity.

The questionnaire includes a total of 67 different programs that a department could have had. The major categories of programs included: planning employment equity initiatives, training, management accountability, staffing initiatives, communication, special programs, and special studies of the department. The questions had "Yes", "No", and "I don't know" response options.

The present employment equity coordinator of each department was asked to complete the questionnaire. Where responses were questionable, they were compared to the 1991 document Responding to the Beneath the Veneer to verify that programs mentioned for 1989 were not initiated in 1991. Based on the completed questionnaire a count of the number of programs that were in place in 1989 was taken and the percentage was used as the measure of employment equity initiatives for each department.

4.4.5 Independent Variable Gender of the leadership of the Department.

The concept of culture can be defined as a set of shared values that a group of people have. The culture of an organization has many different components and is influenced by many different things. As discussed earlier, different organizational cultures may be represented by differing employees' attitudes. In this research departmental culture could be represented by employees' attitudes towards women in management.

As outlined earlier, leadership of the group affects the culture of the group. Male and female leadership styles may affect employees' attitudes towards women in management and employment equity programs for women by creating different

cultures. The traditional male organizational culture could be characterized as one of exclusion which does not accept people and ideas that do not fit into the established mode (Apslund, 1988; Grant, 1988). Leaders with this type of style would model attitudes of elitism and exclusion. This culture would reject the philosophy of employment equity and would have negative attitudes towards women in management because it does not promote diversity in the organization. The traditional female culture would employ a strategy of inclusion. This culture would invite and encourage ideas and differences. Women using this style would model attitudes of acceptance for their employees. This style of leadership would create a culture open to the concept of diversity and employment equity for all people and would have positive attitudes towards women in management.

Culture is shaped in important ways by the leauers of a department, suggesting that gender of the leadership team may affect attitudes. The construct gender of the leadership was measured by looking at the sex of the Minister, Deputy Minister, and Directors in 1989. The data for this variable was gathered from the questionnaire that the employment equity coordinators filled out. Government documents from the Library of Parliament were also used to complete the data gathering.

4.4.6 Independent Variable - Gender Group.

Typically women have more positive attitudes towards women in management and employment equity programs for women. One would expect, therefore, that the women and men in each government department would have different attitudes. To analyze the effect of gender on attitudes, employee responses to each survey question were tabulated separately for women and men within each department.

The attitudes of men and women may also be differentially affected by experience working with women, employment equity programs and leadership style. Therefore, sex was also treated as a moderator variable for the second research question. Data was grouped according to sex in order to determine whether it affected the form of the relationship between the independent and the dependent variables (Cohen, 1982). Respondents' attitudes should be based on the joint function of the independent variables and the group membership variable (sex). In other words, a male and female from the same department with the same situational factors affecting them will possibly have different attitudes, because their gender interacts with the other independent variables.

Data for the other variables were aggregated separately for the women and men in each department. Gender acted as a means

of grouping the data for each dependent variable. Each question comprising the dependent variables had two data points for each department. One is the average answer for the male employees and the other is the average answer of the female employees of that department. By this method, one can ascertain if sex moderated the relationship between the dependent and independent variables.

4.5 Data Analysis

The first research question regarding the relationship between the independent and dependent variables was addressed using two different methods. First, to assess the degree of relationship between the four situational variables and the four dependent variables, correlations between each situational variable and each dependent variable were calculated. The correlations, which were calculated separately for women and men, indicated the extent of overlapping variance between these 16 pairs of variables. The second approach to exploring the relationship between attitudes and the independent variables was to look at the joint effects of the four situational variables on each of the four attitudes. Multiple regression indicated how much variance the independent situational variables jointly explained in each dependent variable. Again, these analyses were conducted separately for men and women. The resulting

four pairs of equations were then compared to address the second research question regarding the effects of gender group on these relationships. The explanatory power of the model may also vary according to gender. For example, the independent variables might explain 40% of the variance in attitudes towards the employment equity for women respondents, but only 22% of the variance in men's attitudes.

This technique also helped in interpreting how much of the variance in each dependent variable is explained by each of the independent variables. For example, one may find that for men, only one independent variable is a significant contributor to attitudes towards women's ability to manage, while for women three of the independent variables may be important. Thus, this technique facilitates analysis of the relationships between the independent and the dependent variables, recognizing that there may be group differences in these relationships.

In order to further investigate the second research question of whether there are significant group differences between men and women, a second statistical test was utilized. After the multiple regression was completed, a test of the moderating effect of gender was performed by comparing β weights of the two groups. This split group test (Arnold, 1982) indicates if different values of the moderator variable (men and women) are

associated with different values of the regression coefficients. In other words, this test determines whether gender moderates the relationship between the independent variables and attitudes (dependent variables) (Cohen, 1982). Given the following regression equations for attitudes towards women in management:

$$Y_1 = A_1 + B_{11}X + B_{12}X, \text{ etc for group 1 - Females}$$

$$Y_2 = A_2 + B_{21}X + B_{22}X, \text{ etc for group 2 - Males}$$

The difference of the two coefficients can be tested with the t-test suggested by Arnold (1982):

$$t = \frac{B_{21} - B_{11}}{\text{SE}_{B_{21} - B_{11}}}$$

The split group test is equivalent to using interaction terms in hierarchical multiple regression (Arnold, 1982). The purpose of using the split group test is to avoid the independence of data assumption that the hierarchical method requires. In this research this assumption cannot be made because a total of 72 data points, two for each of 36 departments, were used.

One potential concern with this analytical strategy is the possible correlation between women's and men's attitudes. Within each set of regression analyses, the dependent variables were, for example, women's attitudes towards employment equity and men's attitudes towards employment

equity. If these two dependent variables are correlated, the significance tests performed on the independent variables will not be independent. There is no straightforward adjustment to these tests that can be made to account for this correlation (Tabachnick & Fidell, 1983). Therefore, if women's and men's attitudes on each dependent variable were highly correlated, a more conservative significance level of $\alpha \leq .01$ was applied to the tests.

Another concern is the intercorrelation of the independent variables. The independent variables must be checked for multicollinearity. It is important that the independent variables not be highly inter-correlated. If the predictors are, it will reduce the ability of each additional independent variable to predict additional variance in the dependent variables. Multicollinearity makes it difficult to determine the importance of each independent variable in explaining the dependent variable (Stevens, 1986).

4.6 Summary

This section explained the methodology that was used to examine the hypotheses that were formed in the previous section. It also covered the types of data that were gathered, primary and secondary, and their sources. The

method of measurement of each of the variables was discussed. Finally, the type of data analysis and the rationale behind why it was selected, was presented.

CHAPTER 5 RESULTS

The following section will examine the findings from this research. The results are presented in three major parts. The first part is a description of the data and an evaluation of the measures. The second part presents the results related to one research question: what is the significance of gender group differences? A t-test and Arnold's split group test will be used to answer this question. The last section examines the data in order to answer the other research question: what is the relationship between the independent and dependent variables? Correlations and multiple regressions will be used to answer that question and the associated hypotheses.

5.1 Description of Data

In total, 30 out of 36 questionnaires on employment equity programs were recovered from the departments. Of the total number of respondents, 27 indicated how long they had been in that position. The average was 3.33 years as employment equity coordinators, with the minimum of 1 year and a maximum of 8 years.

Missing data was handled differently for each variable. There were no missing data for percent of women in management roles

in the department because it was obtained from archival data sources. There were no missing data for the dependent variables because they were based on aggregate data. However, 3 cases were dropped from the analyses. The female and the male responses for one department were both dropped. They had no variance in their scores for half of the questions and represented a small number of respondents. The female responses of a second department were also dropped. This department had only 5 women respondents and their answers were identical on every question. These cases were removed from the data file so they would not unduly influence the results.

The length of experience variable also had no missing data. However, only 14 or 39% of the departments reached critical mass (30%) for women in management positions. For those departments, the number of years that women had been present in over 30% of the management positions was recorded. The other departments were scored a "0" if they had not yet reached 30%. While scoring zero for all of these departments undoubtedly masks some of the variance in their experience with women, this variance is captured in the breadth of experience variable, percentage of women in management.

The employment equity coordinators were unable to say whether or not their departments had some of the programs specified. On average, 30% of the questions on specific programs were

either left blank or filled in as "I do not know". Unless the respondent indicated that their department definitely had a particular program, it was coded as a "no" response. It was felt that if the employment equity coordinators were unaware of programs or equity measures in place, then a good portion of the department staff would also be unaware of them. Thus, the benefit of the program would not be realized and the probability that attitudes would be affected would be small.

The final variable was the gender composition of the leadership group. Data was collected on 3 separate measures: whether the minister was a woman, percent of women deputy ministers and percent of women directors. The inclusion of the sex of the minister of the department was dropped from the analysis because only 2 departments out of 35 had female ministers in 1989. This variable had such little variance that no meaningful results would be obtained. The second measure was the deputy minister. The percentage of deputy ministers who were female was recorded for each department. Eleven cases had missing data. Next was the director of the department, which was measured the same way, as a percentage. Twenty-one departments had missing data for this measure. Due to the amount of missing data in deputy minister and directors, an average leadership variable was created. The two variables, deputy minister and director were combined and their average percentage was used. If only one of two

measures had a score then that value was used as the average leadership percentage. This measure was created as a means to see the effect of upper management influence on culture and thus on attitudes.

All data was carefully input into the data program associated with the SPSS statistical package. Data verification was accomplished by examining every fourth case. Only three inputting errors were found and rectified.

5.2 Evaluation of the Dependent Measures

The dependent measures were evaluated in two ways. First the reliability of the scale was assessed using Cronbach's Alpha. The second issue was whether or not women's and men's attitudes were correlated since a high correlation between the two would pose a problem for the regression analysis.

5.2.1 Measuring Reliability of the Scales

As seen in Table 1 the results for all of the proposed measures had low alpha scores, thus demonstrating that the scales were not homogeneous. This is not surprising since the original questions were not written with this research in

mind. It was necessary, therefore, to make revisions to each of the scales to create the internally consistent scales required for further research. The objective was to develop scales with a reliability of .70 or higher as recommended by Nunnally (1978).

Looking at attitudes towards employment equity for women (EEW), the proposed scale composed of items 1, 5, and 10, had an alpha of .7701 (Table 1). By subtracting item 1, alpha improved to .9006, indicating that the remaining two items are very homogenous in measuring the construct of attitudes towards employment equity for women. Question 1, which measures the impact of employment equity on the respondent's career, is not consistent with questions 5 and 10 which assess the impact on women in general. Thus, the removal of this item creates a stronger measure of this attitude.

A scale constructed of the three items intended to measure the barriers from women's family responsibilities resulted in an alpha of -.0582. Although all of the items were reverse scored to reflect minimal impact from family responsibilities, item 6 was negatively correlated with items 7 and 8. A reexamination of these items indicates that question 6 is about whether family responsibilities do represent a barrier in the workplace, while questions 7 and 8 ask whether or not women should be constrained by family responsibilities. To

create a more homogenous scale, item 6 was deleted. The resulting 2 item scale had an alpha of .6765.

Table 1 Cronbach's Alpha for the Dependent Variables

ATTITUDES	SCALE COMPOSITION	CRONBACH ALPHA SCORE
Employment Equity for Women (EEW)	Proposed Scale: 1,5,10	.7701
	Refined Scale: 5,10	.9006
Barriers from Women's Family Responsibility (BWR)	Proposed Scale: 6,7,8	-.0582
	Refined Scale: 7,8	.6765
Equality of Treatment (EOT)	Proposed Scale: 2,3,9,11	.3017
	Refined Scale: 2,3	.7963
Women's ability to Manage (WAM)	Proposed Scale: 4,12	.5899
	Refined Scale: 4,12,11	.6552
Work Barriers Women Face	New Scale: 6,9,13	.7430

An alpha score of .3017 was obtained from the four items that were intended to measure the attitudes towards equality of treatment (EOT). When question 11 was dropped, the alpha improved to .5426. A scale composed of only items 2 and 3 yields an alpha of .7963. A closer examination of the items suggests that question 11 may reflect sex typing of jobs rather than equality of treatment on the whole. Question 9 asks whether women need to be more qualified to be promoted.

Question 2 and 3 reflect equality of treatment within the respondent's department and public service as a whole. Since a scale composed of items 2 and 3 most closely reflects the construct and is most reliable, it was retained for subsequent analysis.

The proposed scale measuring the attitude towards women's ability to manage (WAM) was originally composed of items 4 and 12. They focus on women's skills and whether management is an appropriate occupation for women. Together, question 4 and 12 obtain an alpha of .5746. Question 11 ("Women should not expect to be placed in management positions that have usually been held by men", reverse scored) was added to this scale. This item is also a measure of the extent to which respondents view management as an occupation appropriate to women's skills. These three items together reflect the belief that women are capable of fulfilling management roles. The alpha of the revised scale (items 4,12,11) was .6552.

To make maximal use of the data available, the possibility of creating a new scale from the questions not included in the revised scales was examined. Three questions regarding barriers women face were found to be correlated with each other. Question 6 ("When being considered for a job, it is a disadvantage to have family responsibilities," reverse scored), question 9 ("Women have to be more qualified than men

to be promoted," reverse scored) and an additional question from the dataset ("Men have an advantage because they have more role models than women do," reverse scored) were all included in a new scale measuring work barriers for women. Positive scores on this scale would suggest that there are few barriers to women. This 3-item scale had an alpha of .7430 and was included in the subsequent analysis.

Although two of the reliability scores fall below the .70 cutoff recommended, they are close enough to warrant including the scales in the analysis. It is possible, however that some of the findings were attenuated by reliability problems.

5.2.2 Correlation of Male and Female Attitudes

One potential concern with the analytical strategy proposed for this research would be if female and male attitudes were highly correlated. If there was a high correlation it would affect the results of the split group test that examines the impact of gender on attitudes (Tabachnick and Fidell, 1983). Therefore the correlations between male and female attitudes were examined.

Table 2 shows the correlation for men and women's attitudes. Since none of the correlations are significant, no adjustments were made to the proposed analysis.

Table 2 Correlations of Female and Male Attitudes

	ATTITUDES				
	Barriers from Women's Family Responsibility	Equality of Treatment	Women's Ability to Manage	Employment Equity for Women	Work Barriers for Women
Correlation of Women's and Men's Attitudes	.0698 (p=.695)	.0573 (p=.747)	.3024 (p=.082)	.2857 (p=.293)	.1790 (p=.311)

5.3 Assessing the Independent Variables

The following section will examine the measures of the independent variables to ensure that each set is not correlated. If the independent variables were correlated the impact of multicollinearity on the subsequent analysis would need to be assessed.

As can be seen by Table 3 a significantly high correlation exists between the average leadership and the variables percent of female directors (.3949) and the percent of female deputy ministers variables (.9401). Since these 3 items measure the same variable (leadership), they will not be used at the same time in statistical manipulations.

Table 3 Test for Multicollinearity of Independent Variables

	% Female Director						
% Female Director	-----	% Female D.M.					
% Female Deputy Minister	.0127 (p=.960)	-----	Average Female D.M. and Director				
Average Female DM and Director	.3949 (p=.031)	.9401 (p=.000)	-----	% Employ. Equity Programs			
% Employment Equity Programs	.3316 (p=.073)	-.1940 (p=.218)	-.1851 (p=.180)	-----	% Women in Depart.		
% of Women in Depart.	.0103 (p=.957)	-.1234 (p=.403)	-.0398 (p=.763)	-.3515 (p=.007)	-----	# Years Women over 30%	
# of years Women at 30%	-.1979 (p=.294)	-.1440 (p=.329)	-.0810 (p=.539)	-.3207 (p=.014)	.8307 (p=.000)	-----	Combined Experience Z score
Combined Experience Z Score	-.1118 (p=.557)	-.1379 (p=.350)	-.0635 (p=.630)	-.3462 (p=.008)	.9570 (p=.000)	.9565 (p=.000)	-- --

A similar problem arises with the experience variables.

Conceptually the length of time one has experience with women managers is distinct from the absolute number of women managers employed. In practice however, they are highly correlated ($r=.83$, $p=.000$). To retain the incremental information contained in the length of experience variable, a new combined variable was created. The two experience variables (percent of women and number of years) were first converted to Z-scores and then summed. This solves the problem of multicollinearity.

The other significant correlation between independent variables is between the experience variables and employment

equity programs. These correlations range between .32 and .35. Since multicollinearity is not usually considered a problem if the correlation is below .8 no adjustments to the analysis were made.

This negative correlation suggests that when a department has a small number of women in management they have more employment equity programs. This makes sense since they would need more programs if they did not have many managerial women. The opposite would also be true, when a department has more women in management or women have been in the department for awhile, there are less employment equity programs. As employment equity is effective in increasing the number of women, the programs become less important. The number of programs vary based on the numbers of women and length of time women have been in a department. However, we do not know if the programs are being taken away when critical mass is reached or before. Is the full benefit of employment equity programs being reached or not?

5.4 Testing for Gender Group Differences

The following two sections will test to see if there are gender group differences between the women and the men. First a planned t-test will be done to see if there are group

differences. Second the results from a split group analysis will be presented to show whether gender moderates the relationship between the independent and dependent variables.

5.4.1 T-Test for Differences between Women and Men

In order to test the set of hypotheses H5A-H5D that state that women have more positive attitudes than men towards equality of treatment, women's ability to manage, the barriers from women's family responsibility, and employment equity programs for women, a t-test was run. The average means for both men and women were compared using a paired t-test.

Table 4 indicates that there is a significant difference in men's and women's attitudes towards employment equity for women. Women have significantly ($p=.000$) higher scores than men on the scale measuring attitudes towards employment equity for women. While men's scores are fairly neutral (mean = 4.7/8), women's attitudes towards employment equity are generally positive (mean = 6.1/8). Based on the results, the hypothesis,

Women should have more positive attitudes towards employment equity programs for women than should men.

is supported.

Table 4 T-Test of Women's and Men's Attitudes Towards
Employment Equity for Women

	Mean	Standard Deviation	T Value	Probability
Male	4.6985	.625	- 11.76	.000
Female	6.0972	.438		

An interesting finding from this analysis is the significantly larger variance in men's attitudes. This implies that the male sample was not homogeneous in their view towards employment equity programs for women. While some men held more positive views, an equal number felt that employment equity programs give women an unfair advantage.

The t-test results for the attitudes towards the barriers from women's family responsibilities are presented in Table 5. A significant t of -3.58 ($p=.001$) shows that the sample of women and men differed significantly in their attitudes. Women and men both disagreed with the statement that women who are pregnant should not apply for competitions and that raising children was a women's job. Women, however, expressed this disagreement significantly more strongly than men (a score of 8 would indicate very strong disagreement). Again, the hypothesis H5B was supported by the findings:

Women should have more positive attitudes towards the effects of women's family responsibility on their work role than should men.

Table 5 T-Test of Women's and Men's Attitudes Towards the Barriers from Women's Family Responsibilities

	Mean	Standard Deviation	T Value	Probability
Male	6.9068	.394	-3.58	.001
Female	7.2317	.381		

Table 6 shows that the female sample and male sample have a significant difference in opinion towards women's ability to manage. The male sample had a less positive attitude towards women's management capabilities than the women ($t = -3.35$, $p = .002$, where a score of 12 is the most positive attitude). Men were more likely than women to think that men make better managers and that women are not as suited to some positions. Thus hypothesis H5C was supported by the findings:

Women should have more positive attitudes towards women's ability to manage than should men.

Table 6 T-Test of Women's and Men's Attitudes Towards Women's Ability to Manage

	Mean	Standard Deviation	T Value	Probability
Male	9.3208	.823	-3.35	.002
Female	9.7766	.363		

The standard deviation for men on this measure was considerably larger than that for the women. Again, there was a wider range of attitudes within the male sample than the female sample.

Table 7 shows the results for the attitudes towards equality of treatment. The test scores show that although the men had a higher score than the women (5.052 versus 4.860), they were not significantly different. Both men and women agreed only slightly that there was equality of treatment in their workplace (maximum agreement would be a score of 8). Since the finding is not significant, hypothesis H5A:

Women should have more positive attitudes towards the equality of treatment than should men.

cannot be supported.

Table 7 T-Test of Women's and Men's Attitudes Towards Equality of Treatment

	Mean	Standard Deviation	T Value	Probability
Male	5.025	.511	1.54	.134
Female	4.860	.392		

The t-test results for attitudes towards the work barriers women face are represented in Table 8. A significant result ($p = .000$) demonstrates that men and women have significantly different attitudes. A higher score in this case represents an attitude of denial that work barriers exist for women. Men more strongly (9.366/12) disagree that barriers do exist, while women are more neutral (7.713/12) in their attitudes.

Table 8 T-Test of Women's and Men's Attitudes Work Barriers for Women

	Mean	Standard Deviation	T Value	Probability
Male	9.3667	.543	13.56	.000
Female	7.7136	.566		

5.4.2 Split Group Tests for the Moderator Effect

The split group test was used to determine whether there was any gender effect in moderating the relationship between the independent variables and each dependent attitude. The standardized regression coefficient and the standard error of β were used from standard multiple regression equations to compute this test statistic.

The first dependent variable that was examined was men and women's attitudes towards employment equity programs for women. Table 9 shows that for the independent variables of combined experience ($p < .05$), average female leadership ($p < .001$), and percent of employment equity programs ($p < .001$), gender moderated their relationship to the dependent attitude variables. For all three variables the women's β scores were higher. Therefore, these three variables had a greater impact on the women's attitudes towards employment equity than on the men's attitudes. The men had negative β scores for average

leadership and employment equity programs variables. In other words, as the female leadership and percent of employment equity programs increases men's attitudes towards employment equity become more negative. Turning back to the hypothesis that were stated, hypothesis H6D is supported for all three independent variables:

Gender should moderate the relationship between the independent and the dependent attitudes towards employment equity for women.

Table 9 Split Group Test for Attitudes towards Employment Equity for Women

Independent Variable	Women β Score	Men β Score	Test Score
Combined Experience	.34745	.10807	-3.33*
Female Leadership	.21382	-.2036	-69.09***
Percent Employment Equity Programs	.15672	-.13518	-37.07***

*** $p < .001$

** $p < .01$

* $p < .05$

Table 10 presents the results of the split group analysis for attitude towards the barriers from women's family responsibilities. The findings shows that average leadership and employment equity programs were significant at $p < .001$ and experience with managerial women was not significant. The β score was higher for women for the female leadership variable. Men had a higher β score for percent of employment equity programs than the women. It was therefore a more important variable for the male sample than the women's. The negative β

score for men for female leadership, suggests that the more women leaders in the organization the less likely men are to think that employment equity programs are beneficial. The hypothesis H6D is supported for two out of three variables:

Gender should moderate the relationship between the independent variables and the attitudes towards women's family responsibility to their work role.

Table 10 Split Group Test for Attitudes towards Barriers from Women's Family Responsibility

Independent Variable	Women β Score	Men β Score	Test Score
Combined Experience	.31990	.29985	-.392
Female Leadership	.15110	-.05661	-47.93***
Percent Employment Equity Programs	.10728	.28038	30.97***

*** $p < .001$

** $p < .01$

* $p < .05$

Table 11 has the results of the split group test for the attitudes towards women's ability to manage. All the variables were significant at $p = .05$. Gender moderates the relationship between the independent variables and attitudes. The variable of experience was more important to women than to men ($\beta = .32901 / \beta = .10051$). Female leadership and employment equity were more important to men's attitudes towards women's ability to manage. Overall, hypothesis H6D was supported:

Gender should moderate the relationship between the independent variables and the attitudes towards women's ability to manage.

Table 11 Split Group Test for Attitudes towards Women's
Ability to Manage

Independent Variable	Women β Score	Men β Score	Test Score
Combined Experience	.32901	.10051	-2.66'
Female Leadership	.02410	.03970	2.13'
Percent Employment Equity Programs	.02016	.04438	2.56'

*** $p < .001$

** $p < .01$

* $p < .05$

The results of the test for the moderator effect are presented in Table 12 for the attitudes of women and men towards equality of treatment. Both female leadership and employment equity programs had a significant result for the moderator effect ($p < .001$). Employment equity programs had a stronger effect on men's attitudes while female leadership had a more positive impact on women's attitudes towards equality of treatment. Hypothesis H6A was supported for two out of three variables:

Gender should moderate the relationship between the independent variables and attitudes towards equality of treatment.

Table 12 Split Group Test for Attitudes towards Equality of
Treatment.

Independent Variable	Women β Score	Men β Score	Test Score
Combined Experience	-.01440	.06357	1.19
Female Leadership	.10567	-.16134	-48.31***
Percent Employment Equity Programs	.14929	.18316	4.74***

*** $p < .001$

** $p < .01$

* $p < .05$

With regards to the new measure, work barriers facing women, there is a moderator effect ($p < .001$) for all independent variables. The variables experience and employment equity programs had a positive effect on men's attitudes. The more experience men have working with women and the more employment equity programs they are exposed to the less

Table 13 Split Group Test for Attitudes towards Work Barriers for Women

Independent Variable	Women β Score	Men β Score	Test Score
Combined Experience	-.03426	.22821	3.57***
Female Leadership	-.08010	-.01071	11.17***
Percent Employment Equity Programs	-.26240	.27009	66.29**

*** $p < .001$

** $p < .01$

* $p < .05$

likely they are to perceive there are work barriers against women. Female leadership had a stronger impact on women than on men ($\beta = -.08010$ versus $\beta = -.01071$). The more female leaders women worked with, the increased recognition women had of barriers women face at work.

5.5 Testing the Relationship between the Independent and Dependent Variables

As was discussed earlier, two different tests were used to test the research question regarding the relationship between the independent and dependent variables. The first technique

was to examine the correlations between situational variables and each dependent variable. The second technique was multiple regression analysis that looked at how the independent variables jointly explain the variance in attitudes. Due to the significant moderating effect of gender on 13 out of 15 relationships tested, the analyses were conducted separately for women and men. The bivariate results are presented first.

5.5.1 Testing the Bivariant Relationships between the Dependent and Independent Variables

Correlations were examined to determine the extent of overlapping variances between attitudes and the situational variables. As can be seen from Table 14 there is only one significant correlation for the male sample. Men's attitudes towards the impact of women's family responsibilities was positively correlated to the independent variable percent of women in management ($r = .3460$, $p = .04$). This suggests that men see women's family roles as less of a barrier when they experience working with more women in management. For the male sample, attitudes towards employment equity programs were negatively correlated (marginally) to the percent of deputy ministers ($r = -.3646$, $p = .08$). This suggests that men may have more negative attitudes towards employment equity when they have female deputy ministers in the department. It is possible that men might feel they have lost out on promotions

if they see more women leaders.

In the female sample there were three significant correlations, all related to the percent of women in management (Table 15). All three correlations were positive. Women felt that family responsibilities were less of a career barrier when they worked with more women managers ($r = .3724$, $p = .03$). Perhaps women seeing other women managing a family life and a career successfully acts as a role model of what women are capable of.

Table 14. Correlation of Male Attitudes towards the Independent Variable

Attitudes towards:	% Female DM	% Female Direct.	Average Female DM and Direct.	Employ. Equity Programs	% of Women in Mgt	# of Years over 30%	Combined Exper.
Equality of Treatment	-.2783 (p=.188)	.0266 (p=.925)	-.2500 (p=.183)	.2336 (p=.223)	-.0567 (p=.746)	.0829 (p=.339)	.0135 (p=.939)
Barriers from Women's Family Role	-.2543 (p=.231)	.3005 (p=.277)	-.1480 (p=.435)	.2768 (p=.146)	.3460 (p=.042)	.0600 (p=.732)	.2125 (p=.220)
Women's ability to Manage	.0286 (p=.894)	.2856 (p=.302)	.0335 (p=.861)	.0091 (p=.963)	.2606 (p=.131)	-.1008 (p=.564)	.0839 (p=.632)
Employ. Equity for Women	-.3646 (p=.080)	-.0424 (p=.881)	-.2384 (p=.205)	-.2029 (p=.291)	.2118 (p=.222)	.1007 (p=.565)	.1634 (p=.348)
Work Barriers for Women	-.1542 (p=.471)	.0435 (p=.873)	-.0862 (p=.650)	.2857 (p=.133)	.0587 (p=.738)	.2126 (p=.220)	.1416 (p=.417)

A positive correlation was also obtained for attitudes towards women's ability to manage and the percent of women in management ($r = .3700$, $p = .03$). When women see other women manage successfully they realize that women are capable of

being good managers. Due to the strong correlation between women's ability to manage and percent of women managers, the combined experience variable is also marginally correlated to women's ability to manage ($r = .3213$, $p = .06$).

Attitudes towards employment equity programs for women was also significantly correlated with the percent of women in management ($r = .2754$, $p = .05$). Perhaps women see the positive outcomes that employment equity is able to achieve by increasing the numbers of women in management, thereby increasing their support for these programs.

Table 15. Correlation of Female Attitudes towards the Independent Variable

Attitudes towards:	% Female DM	% Female Direct.	Average Female DM and Direct.	Employ. Equity Programs	% of Women in Mgt	# of Years over 30%	Combined Exper
Equality of treatment	.0730 ($p = .735$)	.0413 ($p = .884$)	.1088 ($p = .567$)	.1992 ($p = .300$)	-.0138 ($p = .938$)	-.0677 ($p = .704$)	-.0677 ($p = .7040$)
Barriers from Women's Family Role	.1856 ($p = .385$)	-.0471 ($p = .868$)	.1260 ($p = .507$)	-.0813 ($p = .925$)	.3724 ($p = .030$)	.1575 ($p = .374$)	.2773 ($p = .112$)
Women's ability to Manage	.1536 ($p = .474$)	-.1145 ($p = .685$)	-.0030 ($p = .987$)	-.1104 ($p = .568$)	.3700 ($p = .031$)	.2442 ($p = .164$)	.3213 ($p = .064$)
Employ. Equity for Women	.2366 ($p = .266$)	.2879 ($p = .298$)	.2015 ($p = .286$)	.0221 ($p = .909$)	.3529 ($p = .041$)	.1922 ($p = .274$)	.2857 ($p = .101$)
Work Barriers for Women	-.2902 ($p = .294$)	-.0679 ($p = .753$)	-.0528 ($p = .782$)	-.2900 ($p = .127$)	.0513 ($p = .773$)	.0509 ($p = .775$)	.0534 ($p = .764$)

Relating these results to the original hypotheses, we find mixed results. Hypotheses H1A - H1D suggest that working with a larger percent of women in management should create more positive attitudes. This was true for women's attitudes

towards employment equity, women's ability to manage and the barriers from women's family responsibilities. It was also true for men's attitudes towards the barriers from women's family responsibilities. The other 4 tests of the effect of large numbers of women in management were, however, not significant.

Hypotheses H2A - H2D specified that employees in organizations that have employed a critical mass of women for a longer period should have more positive attitudes. None of the correlations examined supported these hypotheses for either women or men. Unfortunately the small sample size and small number of departments which had reached critical mass mean that these tests are not powerful enough to detect modest effect sizes.

Hypotheses H3A - H3D claimed that the more employment equity programs a department had the more positive attitudes should be. No significant correlations supported these four hypotheses for either the female or male sample. Again, the sample size may have been too small to detect a smaller effect. Some significant effects for men might have been found with a larger sample.

Hypotheses H4A - H4D stated that if the senior management of an organization were female then employees would have more

positive attitudes than if it were male. The four hypotheses were not supported for the female sample. In the male sample there was a marginal negative correlation ($\alpha = -.3646$, $p = .08$) between female deputy ministers and attitudes towards employment equity programs. The other three hypotheses were not supported for the men.

5.4.2 Testing the Joint Effects of the Situational Factors.

The stepwise method of regression was used in this analysis. This method shows which independent variables are more useful in explaining each dependent attitude variable.

Due to the number of cases that had missing data for the independent variables, mean substitution was utilized. This method helped overcome the loss of data associated with listwise deletion of cases. Although this method reduces correlations lessening the significance of the equation, the increase in power from a more complete dataset more than compensates for the attenuation in this case.

The first dependent variable that was examined was women's attitudes towards employment equity programs (see Table 16). This equation was significant at .040 ($F = 4.55$). Only the percent of women in management variable entered the equation.

This independent variable explained 10% of the variance of women's attitudes towards employment equity programs.

The regression equation for attitudes towards employment equity for the male sample was not significant (Table 16). None of the variables contributed to the variance in men's attitudes.

Table 16 Step-wise Regression Equation for Women's and Men's Attitudes towards Employment Equity Programs for Women

SAMPLE	INDEPENDENT VARIABLE	BETA	T (Sig.T)	ADJUSTED R ²	F/SIGNIF.
WOMEN	% of Women in MGMT.	.3529	2.134 (P=.0406)	.0971	4.552 (p=.0406)
MEN	NO SIGNIFICANT VARIABLES				

The analysis for the female sample (Table 17) showed that the percent of women in the department is an important variable in explaining the variance in their attitudes towards the barriers from women's family responsibility. This single variable explained 11% of the variance in women's attitudes. Overall the equation was significant at .03. For women, more managerial women in the department positively affects their attitudes towards the family role they do, or might play.

Table 17 Step-wise Regression Equation for Women's and Men's Attitudes towards Barriers from Women's Family Role

SAMPLE	INDEPENDENT VARIABLE	BETA	T (Sig.T)	ADJUSTED R ²	F/SIGNIF.
WOMEN	% of Women in Depart.	.37245	2.270 (p=.0301)	.1118	5.1538 (p=.0301)
MEN	% Women in Department	.95997	3.574 (p=.0011)	.2433	6.465 (p=.0044)
	# Years in Department	-.73834	-2.748 (p=.0098)		

The results for attitudes about women's family responsibilities for the male sample are also shown in Table 17. The stepwise regression equation was significant at .004 ($F = 6.465$). The two experience variables combined to explain 24% of the variance of men's attitudes towards the barriers from women's family responsibilities. The multicollinearity of the two variables ($r = .83$) means, however, that the regression coefficients are not good indices of the effect size or direction (Pedhazur, 1982). The bivariate results suggest that while the percentage of women in management has a positive effect on men's attitudes towards women's family responsibilities ($r = .3460$, $p = .042$), the length of time women have been at critical mass does not have any independent effects on these attitudes ($r = .0600$, $p = .732$).

Table 18 presents the results for the regression for women's attitudes towards women's ability to manage. The F statistic

was significant at .03 ($F = 5.076$). The variable percent of women was the only variable in the equation explaining 11% of the variance of the dependent variable. Again experience with women managers seems to be positively related to women's attitudes towards women in management.

The regression for male attitudes towards women's ability to manage yielded no significant results. None of the variables explained any of the variance of the dependent variable.

Table 18 Step-wise Regression Equation for Women's and Men's Attitudes towards Women's Ability to Manage

SAMPLE	INDEPENDENT VARIABLE	BETA	T (Sig.T)	ADJUSTED R ²	F/SIGNIF.
WOMEN	% of Women in MGMT.	.37003	2.253 (P=.031)	.1099	5.0765 (p=.0312)
MEN	NO SIGNIFICANT VARIABLES				

There were no significant equations for either the male sample or the female sample to explain attitudes towards equality of treatment (Table 19). Based on this sample, none of the situational variables explain the variance in attitudes about equality of treatment.

Table 19 Step-Wise Regression Equation for Women's and Men's Attitudes towards Equality of Treatment

SAMPLE	INDEPENDENT VARIABLE	BETA	T (SIG T)	ADJUSTED R ²	F/SIGNIF.
WOMEN	NO SIGNIFICANT VARIABLES				
MEN	NO SIGNIFICANT VARIABLES				

Stepwise regression was also run for women and men using the new scale, attitudes towards work barriers for women (Table 20). There were no significant results for either the male sample or the female sample. None of the independent variables explained the variance in this attitude.

Table 20 Step-Wise Regression Equation for Women's and Men's Attitudes towards the Work Barriers Women Face

SAMPLE	INDEPENDENT VARIABLE	BETA	T (SIG T)	ADJUSTED R ²	F/SIGNIF.
WOMEN	NO SIGNIFICANT VARIABLES				
MEN	NO SIGNIFICANT VARIABLES				

5.6 Summary

The purpose of this analysis was to answer two research questions. The first research question was what is the impact of gender? The gender group effects were very strong. There is definitely a difference between men and women's attitudes. Women have more positive attitudes than men. Second, gender

significantly affected the relationship between most of the independent and dependent variables.

The second question was what is the degree of relationship between the independent and dependent variables? For both the male and female samples some situational variables were correlated to their attitudes and some joint effects were found. It was clear that the experience variable, percentage of managerial women in the department is the most important variable in explaining both women's and men's attitudes. It had a positive impact on attitudes. For men, the other experience variable, years women had been in the department in significant numbers, cannot be interpreted. No significant results were obtained for the number of employment equity programs variable or the female leadership for either men or women.

CHAPTER 6 DISCUSSION

The purpose of this chapter is to provide an interpretation of the results presented in Chapter 5. First, a review of the results in terms of the two research question will be presented. Then a new model will be developed from the insights gained from the results and its application to designing employment equity programs will be discussed. Finally the limitations of the research will be addressed and possible future research directions will be presented.

6.1 Does Gender Moderate the Relationship between Attitudes and Situational Factors ?

The one aim of this research was to answer the question of whether there were gender group differences. Based on the t-test results presented in chapter 5, three out of four hypotheses related to women having more positive attitudes than men, were supported. The female sample does have more positive attitudes than the male sample towards: employment equity programs for women ($t=-11.76$, $p=.000$), women's ability to manage ($t=-3.58$, $p=.001$), and the barriers from women's family responsibility ($t=-3.35$, $p=.002$).

The literature suggested that men have held stereotypic attitudes towards women in management and towards employment

equity for women over the years and that they still do (Brenner et al, 1989; Dubno, 1985). The results from this research support the view that men still have more stereotypic views about women in management. The literature also presented findings that women have different and more positive attitudes than do their male counterparts (Dubno, 1985; Colwill & Josephson, 1983). Again the findings strongly support that women have more positive attitudes on the measures of attitudes towards women managers and employment equity programs for women, than do the men.

Men and women's attitudes towards equality of treatment did not differ significantly. Both group's scores were close to the neutral point on this scale. There was, however, a significant gender difference on the new scale measuring barriers to women in the workplace. Women were significantly more likely to say that barriers existed. This is consistent with the other research that shows that women perceive barriers against them more than men do (Colwill & Josephson, 1983).

The second analysis of gender differences was the split group regression analysis. This analysis examined gender as a moderating effect on the relationship between the situational variables and attitudes. Based on the split group results all hypotheses were supported as true. Gender definitely

moderates the relationship between the attitudes measured in this research and the situational variables. In other words, there is a joint function between gender and the independent variables in determining the dependent attitude variables.

Not every independent variable/attitude pair relationship was moderated by gender. The combined experience variables did not affect women and men differently in the development of their attitudes towards women's role in the family and equality of treatment. It is possible that length of experience may be reducing the robustness of this variable and thus the split group cannot detect a moderator effect on these attitudes. Gender and experience did interact significantly, however, in explaining the other three attitudes. In the case of attitudes towards employment equity and women's ability to manage, experience working with women had a stronger positive effect on women's attitudes than on those of men. On the other hand, the combined experience variable had a bigger impact on men's attitudes towards work barriers. Men who work in departments with more women were less likely to believe there were barriers to women in the workplace.

Having more female leaders in the organization had a more positive impact for women than for men on attitudes towards employment equity, the barriers from women's family responsibilities, and equality of treatment. Female

leadership had a larger positive impact on men's attitudes about women's ability to manage than it did on women's views. Working in a department with more female leaders tended to enhance women's perceptions of the problems women face in the workplace more than it did than of men.

More extensive employment equity programs had a significantly more positive impact on women's attitudes towards employment equity than it did on men's attitudes. These programs had a more positive impact for men than women on attitudes towards women's ability to manage, equality of treatment and the impact of women's family responsibilities. Working in an organization with more employment equity initiatives enhanced women's perceptions of workplace barriers but meant that men were less likely to recognize the existence of barriers.

Overall, men's and women's attitudes do differ significantly. This result supports previous research in this field. Women have more positive attitudes towards women in management and employment equity programs for women. As well, gender does moderate the relationship between the situational variables and attitudes.

6.2 The Relationship between the Independent and Dependent Variables

One point of this research was to more fully understand what the relationship was between the independent situational variables and the dependent variables. Based on the literature it was anticipated that certain variables would be related to women's and men's attitudes. It was hypothesized that employees who had: a larger number of managerial women in the department, more employment equity programs in the department, more female leaders in the department, and more years that women had been in the department in significant numbers, would have more positive attitudes than other employees who worked with fewer of these variables.

Based on the results the most important variable that was correlated to women's attitudes was the experience variable, percent of women. The percentage of women managers was positively correlated to 3 out of 5 of the attitudes. Other research presented in chapter 2 suggests that the more experience employees have with women managers the more positive employees' attitudes will be towards women managers (Ezell et al 1981). Employees who see women work successfully in management positions have positive attitudes.

One reason why women's experience with managerial women is so important may be that they act as role models. Seeing that

women do indeed make competent managers or that managerial women can balance a family and still be successful at work may inspire other women. Research by Ely (1994) suggests that women who work in organizations with more women managers identify more with managerial women. They view them as positive role models with legitimate authority and as peers whom they want to associate with. As a consequence more woman-to-woman support is present in organizations with higher numbers of women managers.

As Kanter (1977) states, when a minority group increases their numbers within a work group their power increases and people see them less stereotypically. Women who had more experience working with managerial women saw that women could manage, and handle their many family duties. Traditional stereotypes of women as not being "management material" were shattered.

Percentage of women in management was also correlated to women's attitudes towards employment equity programs ($r = 2.134$, $p = .04$). In departments where there are more managerial women, the female sample may see that equity programs are successful at creating equity in the workforce, and thus have a more positive attitude towards them. Women may not see the need for or benefit from employment equity programs if they do not see women in management in substantial numbers. As a consequence they may have a less positive

attitude towards equity programs. Possibly, when women see no tangible benefites from employment equity programs they may not view these programs positively.

Turning to the results for the men, their attitudes were correlated to two different variables. The experience variable of percentage of managerial women was correlated to men's attitudes towards the barriers from women's family responsibilities. The more women in management that men worked with the less stereotypic their attitudes were. This confirms Kanter's (1977) findings that the more experience people gain with women the less stereotypic their attitudes will be.

The other interesting finding for men was the marginal negative correlation between men's attitudes towards employment equity programs for women and the percent of female deputy ministers. It is possible that men feel less secure with employment equity programs when they see more women attaining higher levels of management. Men may feel that they have lost out on promotions when more women are becoming the leaders of the organization. When there are fewer women leaders, the men had a more positive attitude towards employment equity programs for women. Men may not have felt threatened by the women and programs designed to lessen discriminatory practices. Men's status was not being

threatened by this new group. Another possible explanation is when men see more women in top levels of their organization they see no more need for employment equity programs.

The joint effects of the independent variables were also examined. The results from the multivariate analysis reflect the correlation analysis. For the female sample only the percentage of management women was important in explaining the variance in three attitudes, women's ability to manage, barriers from women's family responsibilities and employment equity programs.

For the male sample both measures of experience jointly explained the variance of men's attitudes towards the barriers from women's family responsibilities (percent of women $\beta = .95997$, $p = .001$; years of experience $\beta = -.73834$, $p = .009$). Due to the high correlation between these two variables, the multivariate result cannot be clearly interpreted. The bivariate results suggest, however, that the percentage of women has a positive impact on men's attitudes towards women's family responsibilities while the length of time women have been at critical mass has no independent effects.

Overall, the experience variable of percentage of women is the most important variable for both the women and men. The more experience men have the less stereotypic their attitudes will

be and the more accepting of women as managers. Women who work with more women managers may see them as role models that boost their own confidence in women's management capabilities.

6.3 Revisiting the Model

The model originally proposed suggested that the four independent variables were related to attitudes for both women and men. Based on the split group results it is clear that a single model cannot explain both men's and women's attitudes. Separate models are required.

The number of employment equity programs does not relate to the attitudes of either men or women. There is only the slightest suggestion that feminine leadership might relate to men's attitudes towards employment equity programs for women.

The attitudes towards equality of treatment seems to have to no explanatory independent variables for either men or women. Thus it is removed from the model. The new attitude, work barriers for women, has no explanatory independent variables. It will not be added into the model.

The experience variable, percentage of women, has an effect on women's attitudes towards: employment equity programs for

women, barriers from women's family responsibilities and women's ability to manage. For the men, the only attitude affected by experience with managerial women was men's attitudes towards barriers from women's family responsibilities.

Based on this research the model can be adjusted as seen in Figure 2. The number of attitudes and the number of independent variables are reduced. Separate models are now suggested for men and women to better capture gender differences.

Figure 2. Revised Model of Correlates affecting the Attitudes of Women and Men towards Women in Management and Employment Equity for Women

6.4 Applications for Designing Employment Equity Programs

The first issue that human resource specialists and employment equity coordinators must keep in mind is that women and men do have different attitudes towards women in management. Overall, women have more positive attitudes than men, though men are more neutral than specifically negative. Therefore the focus must be on maintaining women's positive views of managerial women and trying to help men develop more supportive views.

The most important contributor to improving attitudes seems to be increasing the number of managerial women that employees work with. This research does not suggest how that might best be done. However, the results strongly point to the need for both women and men to increase their experience with managerial women. For women this may provide positive role models to emulate. For men it may help to overcome stereotypic views of women. Given the dominant effects of experience on attitudes, increasing the number of women managers must be the first goal in employment planning. And while a cross sectional study cannot prove causality, the results suggest that if organizations can increase the number of women managers, attitude change will result.

6.5 Limitations

While using attitudinal questions from a previously completed survey provided access to data from numerous organizational units, it also posed some problems. It was not possible to create questions to tap the entire domain of attitudes towards women and employment equity for women. Instead, questions related to component parts of these attitudes had to suffice. And because the questions were not designed to be included in multi-item scales, internal consistency was not factored into the design. To create more homogeneous scales, the scales had to be refocused based on reliability results.

Another problem with the scales was that the questions used were not written in both negative and positive formats. In order to capture the nuances of an employee's attitude it is important to reword questions in both negative and positive directions. This ensures that the subject is being consistent and that all aspects of an attitude is measured. The questions used in this research did not have this so it was important to be more conservative with any conclusions made about positive and negative attitudes.

Another limitation of this research has been the small sample size. Data from only 36 departments were available for analysis. Data from two cases were eliminated due to small

numbers and limited variance. Missing data was also a problem. To keep the number of cases reasonably high for multiple regression analysis, mean substitution had to be utilized. This reduces the chances of finding significant results.

Generalizability is also an issue. Due to the restriction of using data for only large departments, extrapolation to smaller departments must be done very cautiously. In general, the generalizability of these results to other populations or organizations is difficult. This is a common problem in research and can only be overcome by further replication of the study using different populations.

6.6 Suggestions for Further Research

The most important suggestion from this research would be to replicate this survey in different organizations. It would also be interesting to see if there is a difference between the private and public sectors in their attitudes towards managerial women. A more targeted questionnaire should be designed for subsequent research.

Following the extension of employment equity legislation to smaller private organizations in Ontario, it would be

interesting to examine what new employment equity initiatives might have been developed. As well, it would be interesting to do longitudinal research to see if women's and men's attitudes change following the introduction of programs.

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APPENDIC A BARRIERS TO ADVANCEMENT IN THE PUBLIC SERVICE QUESTIONNAIRE

BARRIERS TO ADVANCEMENT IN THE PUBLIC SERVICE, MARCH 1982

RESPONSES TO QUESTIONNAIRE SURVEY

	TOTAL ALL DEPARTMENTS					
	BOTH SEXES		MEN		WOMEN	
	NUMBER	ROW %	NUMBER	ROW %	NUMBER	ROW %
TOTAL.....	203,091	100.0	115,049	56.9	87,442	43.1
Q20 = WHAT WAS THE DEPARTMENT AND CLASSIFICATION OF THE POSITION INTO WHICH YOU WERE HIRED?						
ATLANTIC CANADA OPPORTUNITIES AGENCY.....	46	100.0	11	25.1	34	74.9
ATOMIC ENERGY CONTROL BOARD.....	12	100.0	12	100.0	-	-
ATOMIC ENERGY OF CANADA LTD.....	41	100.0	4	9.7	37	91.3
AGRICULTURE CANADA.....	9,764	100.0	6,874	70.4	2,890	29.6
NATIONAL ARCHIVES OF CANADA.....	681	100.0	289	42.4	392	57.6
AGRICULTURAL STABILIZATION BOARD.....	1	100.0	-	-	1	100.0
NATIONAL TRANSPORTATION AGENCY.....	146	100.0	18	12.4	127	87.6
AUDITOR GENERAL.....	92	100.0	75	81.8	17	18.2
BANK OF CANADA.....	6	100.0	-	-	6	100.0
REVENUE CANADA - CUSTOMS AND EXCISE.....	8,782	100.0	4,237	48.7	4,445	51.3
CONSUMER AND CORPORATE AFFAIRS.....	1,858	100.0	1,004	54.0	854	46.0
CANADIAN COMMERCIAL CORPORATION.....	53	100.0	53	100.0	-	-
CANADIAN COUNCIL.....	2	100.0	-	-	2	100.0
CANADIAN GRAIN COMMISSION.....	24	100.0	-	-	24	100.0
CANADA LABOUR RELATIONS BOARD.....	17	100.0	-	-	17	100.0
CANADIAN CENTRE FOR MANAGEMENT DEVELOPMENT.....	42	100.0	42	100.0	-	-
COMMISSIONER OF OFFICIAL LANGUAGES.....	100	100.0	42	42.0	58	58.0
COMMUNICATIONS.....	2,387	100.0	1,317	55.2	1,070	44.8
CANADIAN PENSION COMMISSION.....	16	100.0	-	-	16	100.0
STATUS OF WOMEN OFFICE OF THE COORD.....	4	100.0	-	-	4	100.0
FISHERIES AND OCEAN CANADA.....	4,421	100.0	3,330	75.3	1,090	24.7
NATIONAL DEFENSE.....	72,381	100.0	20,633	28.5	51,748	71.5
ENVIRONMENT.....	8,295	100.0	4,325	52.1	3,970	47.9
PUBLIC WORKS.....	6,679	100.0	4,924	73.7	1,755	26.3
SUPPLY AND SERVICES.....	8,140	100.0	3,933	48.3	4,207	51.7
VETERANS AFFAIRS.....	3,534	100.0	1,490	42.4	2,044	57.6
ECONOMIC COUNCIL OF CANADA.....	153	100.0	143	93.5	10	6.5
EMPLOYMENT AND IMMIGRATION.....	25,085	100.0	8,382	33.4	16,703	66.6
ENERGY, MINES AND RESOURCES.....	4,447	100.0	2,356	53.0	2,091	47.0
NATIONAL ENERGY BOARD.....	80	100.0	36	45.0	44	55.0
EXTERNAL AFFAIRS.....	2,732	100.0	1,232	45.1	1,500	54.9
FINANCE.....	1,631	100.0	831	50.9	800	49.1
FEDERAL-PROVINCIAL RELATIONS OFFICE.....	20	100.0	7	35.0	13	65.0
GOVERNOR GENERAL.....	72	100.0	42	58.3	30	41.7
HOUSE OF COMMONS.....	16	100.0	16	100.0	-	-
CANADIAN HUMAN RIGHTS COMMISSION.....	114	100.0	36	31.6	78	68.4
INDIAN AFFAIRS AND NORTHERN DEVELOPMENT.....	3,377	100.0	3,433	101.9	1,318	39.0
CANADIAN INTERNATIONAL DEVELOPMENT AGENCY.....	207	100.0	43	20.7	164	79.3
INTERNATIONAL JOINT COMMISSION.....	5	100.0	5	100.0	-	-
INVESTMENT CANADA.....	16	100.0	-	-	16	100.0
INFORMATION AND PRIVACY COMMISSION OF CANADA.....	94	100.0	79	84.1	15	16.0
JUSTICE.....	1,263	100.0	596	47.2	667	52.8
LABOUR CANADA.....	814	100.0	424	52.1	390	47.9
ROYAL CANADIAN MINT.....	20	100.0	2	10.0	18	90.0
TRANSPORT CANADA.....	10,639	100.0	14,824	77.4	3,815	22.6
MINISTER OF STATE FOR FORESTRY.....	72	100.0	20	27.8	52	72.2
SCIENCES AND TECHNOLOGY MINISTRY OF STATE.....	45	100.0	30	66.7	15	33.3
NATIONAL CAPITAL COMMISSION.....	808	100.0	392	48.4	416	51.6
NATIONAL FILM BOARD.....	19	100.0	-	-	19	100.0
HEALTH AND WELFARE.....	8,088	100.0	3,184	39.4	4,904	60.6
NATIONAL LIBRARY.....	788	100.0	209	26.5	579	73.5
NATIONAL MUSEUM OF CANADA.....	322	100.0	136	42.3	186	57.7
NATIONAL PAROLE BOARD.....	85	100.0	27	31.8	58	68.2
NATIONAL RESEARCH COUNCIL OF CANADA.....	34	100.0	19	55.9	15	44.1
CONTROLLER GENERAL OF CANADA.....	38	100.0	11	28.9	27	71.1
PRIME MINISTER OFFICE OF.....	15	100.0	12	80.0	3	20.0
PRIVY COUNCIL OFFICE.....	239	100.0	117	49.0	122	51.0
CORRECTIONAL SERVICES.....	10,627	100.0	6,875	64.7	3,752	35.3
POST CANADA.....	864	100.0	637	73.8	227	26.2
PUBLIC SERVICE COMMISSION.....	2,822	100.0	1,414	50.1	1,408	49.9
ROYAL CANADIAN MOUNTED POLICE.....	3,211	100.0	641	20.0	2,570	79.9
PAIRIE FARM REHABILITATION ADMINISTRATION.....	324	100.0	216	66.7	108	33.3
DEPT. OF REGIONAL INDUSTRIAL EXPANSION.....	1,100	100.0	322	29.3	778	70.7
CANADIAN RADIO-TELEVISION COMMISSION.....	276	100.0	86	31.2	190	68.8
SCIENCE COUNCIL OF CANADA.....	30	100.0	23	76.7	7	23.3
SECRETARY OF STATE.....	2,486	100.0	867	34.9	1,619	65.1
STATISTICS CANADA.....	4,682	100.0	2,395	51.1	2,287	48.9
NATIONAL REVENUE - TAXATION.....	17,930	100.0	9,404	52.4	8,526	47.6
TREASURY BOARD.....	478	100.0	176	36.8	302	63.2
UNKNOWN (UNABLE TO CODE).....	3,120	100.0	1,442	46.2	1,678	53.8
WESTERN DIVERSIFICATION OFFICE.....	63	100.0	40	63.5	23	36.5
NOT STATED.....	1,239	100.0	594	47.9	645	52.1

APPENDIX 10 - APPROPRIATIONS IN THE FISCAL YEAR 1962
 SUMMARY OF APPROPRIATIONS BY FUND AND OBJECT CLASS

FUND	TOTAL		TOTAL		TOTAL	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
1. GENERAL FUND	10,000	100.0	10,000	100.0	10,000	100.0
2. SPECIAL FUND	10,000	100.0	10,000	100.0	10,000	100.0
3. DEBT FUND	10,000	100.0	10,000	100.0	10,000	100.0
4. CAPITAL FUND	10,000	100.0	10,000	100.0	10,000	100.0
5. RESERVE FUND	10,000	100.0	10,000	100.0	10,000	100.0
6. OTHER FUND	10,000	100.0	10,000	100.0	10,000	100.0
TOTAL	60,000	100.0	60,000	100.0	60,000	100.0

APPENDIX 10 - APPROPRIATIONS IN THE FISCAL YEAR 1962
 SUMMARY OF APPROPRIATIONS BY FUND AND OBJECT CLASS

FUND	TOTAL		TOTAL		TOTAL	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
1. GENERAL FUND	10,000	100.0	10,000	100.0	10,000	100.0
2. SPECIAL FUND	10,000	100.0	10,000	100.0	10,000	100.0
3. DEBT FUND	10,000	100.0	10,000	100.0	10,000	100.0
4. CAPITAL FUND	10,000	100.0	10,000	100.0	10,000	100.0
5. RESERVE FUND	10,000	100.0	10,000	100.0	10,000	100.0
6. OTHER FUND	10,000	100.0	10,000	100.0	10,000	100.0
TOTAL	60,000	100.0	60,000	100.0	60,000	100.0

TABLES TO ACCOMPANY THE PUBLIC SERVICE, DATES 1981
 RESPONSES TO QUESTIONNAIRE SURVEY-Continued

	TOTAL ALL DEPARTMENTS					
	1979 DATA			1981 DATA		
	NUMBER	AGE %	SEX %	NUMBER	AGE %	SEX %
AGE - 18-24 FACTOR THAT WOULD HELP IN HAMILTON CAREER ADVANCEMENT						
OTHER FACTORS WOULD BE THE MOST IMPORTANT.....	179	100.0	100.0	117	100.0	100.0
NOT WOULD THE PUBLIC SERVICE.....	939	100.0	100.0	942	100.0	100.0
CONCERN IN THE SOCIAL ENVIRONMENT.....	100	100.0	100.0	9	100.0	100.0
PERFORMANCE OF FAMILY RESPONSIBILITIES.....	31	100.0	100.0	7	100.0	100.0
GREATER ACCEPTANCE OF FAMILY RESPONSIBILITIES.....	21	100.0	100.0	2	100.0	100.0
WILLING TO ACCEPT RESPONSIBILITIES.....	21	100.0	100.0	2	100.0	100.0
OTHER FACTORS NOT WOULD THE MOST IMPORTANT.....	92	100.0	100.0	2	100.0	100.0
NOT STATED.....	100	100.0	100.0	100	100.0	100.0
TOTAL.....	100,000			100,000		

TABLES TO ACCOMPANY THE PUBLIC SERVICE, DATES 1981
 RESPONSES TO QUESTIONNAIRE SURVEY

	TOTAL ALL DEPARTMENTS					
	1979 DATA			1981 DATA		
	NUMBER	AGE %	SEX %	NUMBER	AGE %	SEX %
AGE - 18-24 FACTOR THAT WOULD HELP IN HAMILTON CAREER ADVANCEMENT						
OTHER FACTORS WOULD BE THE MOST IMPORTANT.....	179	100.0	100.0	117	100.0	100.0
NOT WOULD THE PUBLIC SERVICE.....	939	100.0	100.0	942	100.0	100.0
CONCERN IN THE SOCIAL ENVIRONMENT.....	100	100.0	100.0	9	100.0	100.0
PERFORMANCE OF FAMILY RESPONSIBILITIES.....	31	100.0	100.0	7	100.0	100.0
GREATER ACCEPTANCE OF FAMILY RESPONSIBILITIES.....	21	100.0	100.0	2	100.0	100.0
WILLING TO ACCEPT RESPONSIBILITIES.....	21	100.0	100.0	2	100.0	100.0
OTHER FACTORS NOT WOULD THE MOST IMPORTANT.....	92	100.0	100.0	2	100.0	100.0
NOT STATED.....	100	100.0	100.0	100	100.0	100.0
TOTAL.....	100,000			100,000		

QUESTIONNAIRE

Appendix B -
Employment Equity
Questionnaire

TO DETERMINE WHAT TYPE OF EMPLOYMENT EQUITY PROGRAM WAS IN PLACE BEFORE THE "BENEATH THE VENEER" SURVEY CONDUCTED.

A. *What is your position title ?*

How long have you been in this position?

B. *Prior to the period of the Beneath the Veneer Survey, what was your department doing with regards to Employment Equity?*

Was the department doing any of the following:

1. *To what degree did planning of the employment equity initiatives occur?*

Yes No Don't Know

—	—	—	- short term planning.
—	—	—	- long term planning 3-5 years, with a review at the end.
—	—	—	- use of informal and formal surveys of employees to gather their input.
—	—	—	- consult with groups that had vested interest in the process.
—	—	—	- examination of stock data.
—	—	—	- examination of flow data.
—	—	—	- conducting a work force analysis.
—	—	—	- conducting an availability analysis.
—	—	—	- conducting an utilization analysis.

2. Was there managerial accountability?

- Did it include such things as:

Yes No Don't Know

☐	☐	☐	- managers' performance review ratings attached to his/her effort to promote employment equity.
☐	☐	☐	- assessment of regional managers on human resources and employment equity results.
☐	☐	☐	- regular reports detailing progress in employment equity.
☐	☐	☐	- managers were responsible to ensure that department's recommendations.
☐	☐	☐	- senior committee were to be involved in process by assessing progress, reviewing plans, and making adjustments.

3. Were any of the following initiatives started for training and development programs?

Yes No Don't Know

☐	☐	☐	- special development programs for women.
☐	☐	☐	- establishing budgets to offer specialized courses.
☐	☐	☐	- one - on - one training for women / apprentice training
☐	☐	☐	- group discussions and training films geared towards women.
☐	☐	☐	- inclusion of module on employment equity in orientation and new management development.
☐	☐	☐	- sponsor women for career assignment program.
☐	☐	☐	- encourage women to pursue continuing education.
☐	☐	☐	- offer course modules that have practical career elements such as interview skills, stress management, resume writing etc.
☐	☐	☐	- support developmental assignments that lead to higher employment levels.

4. Were any of the following initiatives undertaken for staffing ?

Yes No Don't Know

☐	☐	☐	- ensured women represented in all aspects of selection process
☐	☐	☐	- discussed career opportunities and goals
☐	☐	☐	- made an effort to attract women/ use of external marketing strategy to accomplish this
☐	☐	☐	- considered women for non-traditional jobs
☐	☐	☐	- used a statistical model to forecast future human resource needs
☐	☐	☐	- used non-discriminatory (non subjective) staffing tools.
☐	☐	☐	- provided part time employment opportunities in supervisory positions
☐	☐	☐	- database developed of capable women for upper level jobs
☐	☐	☐	- posted all managerial job postings

5. Were any of the following in communicating to the staff about the employment equity program ?

Yes No Don't Know

☐	☐	☐	- staff informed of changes in practice and how they were to be affected.
☐	☐	☐	- conducted a sensitization of staff to the problems women face and various programs available for women
☐	☐	☐	- communication of rights of employees and employment equity policies
☐	☐	☐	- articles about employment equity in newsletters
☐	☐	☐	- information circulated on women's representation within department
☐	☐	☐	- meetings with staff, to inform them of the launch of new programs related to employment equity
☐	☐	☐	- reported progress of employment equity programs to staff.

6. Was there concern that staff wouldn't accept the new employment equity practices?

- If so how was it dealt with ?

Yes No Don't Know

☐	☐	☐	- involved staff in designing new policies
☐	☐	☐	- incorporate policies about sexism used in written documents
☐	☐	☐	- consulted with target group members for their insight of what they viewed as negative attitudes occurring from colleagues
☐	☐	☐	- surveyed employees to ascertain their own attitudes

7. Was mentoring of female employees developed?

Yes No Don't Know

☐	☐	☐	- job shadowing initiated
☐	☐	☐	- upper management encouraged to seek out a female employee to mentor
☐	☐	☐	- use / development of a women's network
☐	☐	☐	- formal mentoring programs that match up mentors and proteges

8. Did the department initiate any workshops, seminars or committees, with regards to women and employment equity ?

Yes No Don't Know

☐	☐	☐	- <i>brown bag informative sessions.</i>
☐	☐	☐	- <i>sessions on barriers for women and attitudinal awareness.</i>
☐	☐	☐	- <i>committees to advise deputy minister on women's issues</i>
☐	☐	☐	- <i>task force to develop equity plan for department</i>
☐	☐	☐	- <i>seminars looking at women's issues ie. the pink collar ghetto</i>
☐	☐	☐	- <i>lectures, films etc related to women's day</i>
☐	☐	☐	- <i>had an advisory committee to look at corporate culture</i>
☐	☐	☐	- <i>committees geared specifically toward secretaries concerns</i>
☐	☐	☐	- <i>established information centres where questions are answered</i>
☐	☐	☐	- <i>presented workshops on men's attitudes</i>

9. What kind of analyses/ surveys or reports were done?

Yes No Don't Know

☐	☐	☐	- <i>special research projects on issues affecting women</i>
☐	☐	☐	- <i>developed case studies dealing with employment equity for training purposes</i>
☐	☐	☐	- <i>a study of the department to discover specific barriers for women - systemic discrimination</i>
☐	☐	☐	- <i>analyze departure of women - exit interviews</i>
☐	☐	☐	- <i>study of the available career development for women</i>

10. What "special measures" (programs or changes designed to benefit women) were undertaken?

Yes No Don't Know

—	—	—	- on-site day care
—	—	—	- flexible work options
—	—	—	- reserve certain number of seats on courses for women
—	—	—	- support a number of women to go back to school or offer scholarships externally for technical schooling
—	—	—	- spousal employment assistance program/ helping spouse get a job when other spouse transferred
—	—	—	- use self identification of employees to assist in targeting groups
—	—	—	- use of target goals or quotas

D. Open ended questions

1. *How many deputy minister did you have in 1989 and how many were female?*

- *Was the minister male or female in 1989?*

2. *What do you feel are the most important issues for designing and implementing an employment equity program in the public service?*

Appendix C - Cover Letter**Employment Equity Coordinator****Date.****Dear ,**

I would like to thank you for taking the time and energy in filling in this questionnaire. If possible, could you please fill in the questionnaire and fax it back to me within a week.

As I mentioned on the phone, I am doing my Masters degree at Carleton University. In order to do my research I hope to obtain your cooperation in obtaining information about your present department's employment equity programs in 1989.

My goal is to ascertain what your department's employment equity program consisted of in terms of programs designed specifically for women in 1989. I picked 1989, because I would like to compare attitudes, measured in 1989 to employment practices that were in place at the time.

I need to only know whether your department was doing each type of employment equity program or not. If you are unsure or can not remember if the department had a certain program in 1989, please fill in the "Don't know" column.

If after reading this you have any questions, please feel free to call me for clarification. As a reminder, I am only looking at what employment equity programs the department had in 1989, and not what they have presently in the department

Thank you again for agreeing to completing this questionnaire.

Sincerely***Carolyn Giroux******Enclus. Phone: (W) 781 6764 (H) 731 4958 Fax: 788 2652***

END

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