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**CARLETON UNIVERSITY
SCHOOL OF BUSINESS**

**An examination of the Impact of the Management Development Program for
Women on its Participants**

THESIS

SUBMITTED BY:

**Linda Scourtoudis
B.I.B (Honours) 2000**

**In partial fulfillment of the requirements for the degree of
Masters in Business Administration**

September 20th, 2001

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**The undersigned recommend to
the faculty of graduate studies
acceptance of the thesis:**

**An examination of the Impact of the Management Development Program for
Women on its Participants**

**submitted by
Linda Scourtoudis B.I.B (Honours)
in partial fulfillment of the requirements for the degree of
Master of Business Administration**

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ABSTRACT

The primary focus of this research was to determine if the Management Development Program for Women offered at Carleton has been able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success. A model of the effects was evaluated using questionnaire data collected from MDPW alumnae. This study found the MDPW has played a large role in helping women raise their sense of self-worth and increase their belief in their ability to manage their own careers. These women have also taken a more active role in career planning activities and in cultivating networks. Having participated in the MDPW seems to have also enhanced the career and life satisfaction of respondents as well as reduce levels of emotional burnout. The positive outcomes for the women who participated in the MDPW implies that management training programs for women can be beneficial for women who wish to advance in their careers.

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CHAPTER 1 INTRODUCTION

The literature has shown that women are currently struggling to get into senior management positions (Burke and Davidson, 1994). Women's career paths appear to differ from their male counterparts (Gallos, 1989 and Powell, 1993). They receive less career encouragement, have more difficulties obtaining mentors and networks and receive fewer training opportunities than their male counterparts.

Management training programs for women have grown in popularity in recent years as a means to help women overcome these barriers. These programs differ slightly in their objectives and in their design. However, the case has been made for including both skills training and discussion of relevant gender issues into such programs. One specific program of this type is the Management Development Program for Women (MDPW) at Carleton in which participants are able to develop management skills in a supportive all-female environment. This program has been designed around the premise that an all-female classroom may benefit some women managers more than a mixed-sex classroom. Programs such as the MDPW aim to offer women managerial skills they may not have had the opportunity to receive in their organizations, and the knowledge and tools to overcome the barriers that are unique to them.

Despite the fact that a number of training programs for women managers exist, little research has been conducted to evaluate the success of these programs in terms of their

impact on short and long-term attitudinal and behavioural change (Rader, 1979; Desjardin and Lamy, 1987). Comprehensive evaluation processes are important because they allow program designers to assess the effectiveness of the training. Kirkpatrick's (1983) model is a widely used tool for conducting more extensive evaluations of training programs.

The MDPW, like most management training programs for women, has not been extensively evaluated to determine the effectiveness of the training provided. For the most part evaluation is focused on Kirkpatrick's (1983) reactionary level of evaluation seeking participants' satisfaction with the program. Choquette's (1999) study went beyond the reactionary level of evaluation and looked at how the Carleton MDPW helps to promote career development and growth for its participants. The results of Choquette's (1999) study indicate that significant attitudinal changes did take place among the participants and suggests that the program may impact behavioural changes and satisfaction levels. This study examined the variables from Choquette's (1999) study as well as other indicators of positive change, various career development strategies and career outcomes. This study aimed to evaluate the MDPW beyond Kirkpatrick's reactionary evaluation classification by using two separate questionnaires. One as a follow-up to Choquette's study and the second a retrospective study seeking respondents' perceptions as to whether or not they feel they have changed due to having participated in the MDPW.

The primary focus of this research was to determine whether the Management Development Program for Women offered at Carleton has been able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success. This research examined whether the MDPW has been able to promote positive career outcomes for women, if alumnae feel that the program has impacted their careers and if alumnae feel that the program has impacted their life satisfaction. One of the limitations of this study, is that the research relies on alumnae's perceptions of changes in their behaviours and attitudes rather than an examination of actual changes. Alumnae perceptions of change however are also important. For example, if alumnae feel that their sense of self-worth and career management self-efficacy have increased, they will feel more prepared to take on new challenges and shape their careers and their lives in a manner they desire despite the external barriers that they may face.

It is important to note that it might be difficult to attribute certain outcomes to having participated in the MDPW alone and that other life variables may have contributed to shaping these outcomes. This may be especially true for those who participated in the program over three years ago since it is can be difficult to assess the impact of a 10-month window out of a person's life. Many events shape who we are. Although the MDPW may help shape a person's attitudes and behaviours other factors may have played a role in the changes. For example, becoming a mother, successfully completing a challenging assignment at work and becoming physically fit could all impact a person's sense of self-worth.

Findings might encourage other women to participate in similar programs, or encourage managers to give women employees the opportunity to participate in similar programs. This study may also provide insight into what kind of training works and what does not. The trends that emerge from this study are important for intervention programs aimed at enhancing the career outcomes of managerial women.

CHAPTER 2 LITERATURE REVIEW

The primary focus of this research was to determine if the Management Development Program for Women offered at Carleton has been able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success. The absence of women in senior management suggests that women in management face unique barriers. Management training programs have been designed to help women overcome these barriers but so far there has been little evaluation of such programs. This chapter will provide an overview of research concerning women in management in order to help comprehend the issues that exist today. A brief review of issues with respect to career development will follow, as to highlight the specific barriers that women in management face which are addressed in management development programs for women such as the MDPW at Carleton.

This chapter will also examine management training programs for women, provide the rationale behind all women training programs such as the MDPW, describe evaluation models of management training programs and detail the current evaluation process of the MDPW highlighting the need for a more comprehensive evaluation. A study of the MDPW undertaken in 1998 reviewed some of the indicators of program success such as changes in self-concept, career self-management efficacy and career progress. These and other indicators of positive career changes are examined in the study.

2.1 An Overview of Research on Women in Management

During the last twenty years there has been an increase in the number of women who are pursuing managerial and professional careers (Davidson and Cooper, 1992, 1993; Statistics Canada, 2000). Burke and Davidson (1994) have asserted that many women prepare themselves for careers by obtaining university degrees and that women comprise almost half of the graduates of professional schools such as accounting, business and law. Research has shown that these graduates enter the workforce at levels comparable to their male counterparts with similar credentials and expectations (Burke and Davidson, 1994), but women's and men's corporate career paths begin to diverge soon after that point (Morrison et. al., 1987). Researchers in various countries report that women receive fewer opportunities than their male counterparts:

Researchers in 33 countries including the USA admit... that they haven't found a place where women have education, employment and health opportunities equal to those available to men. (ABC News, 25 May, 1993)

Although this statement is valid, one must acknowledge the progress being made in reducing barriers to equity. Although for women the progress may appear slow, it has resulted in more women in managerial positions (Statistics Canada, 2000). Women have made their greatest gains in attaining lower-level positions (Statistics Canada, 2000). Women still face great difficulty in attaining upper-level management positions. According to Statistics Canada (2000), in 1999, 35% of all those employed in managerial positions were women, an increase of 6% since 1987. However, women made up only 27% of senior managers (Statistics Canada, 2000). A recent study by the Conference Board of Canada also reflects the low percentage of women in senior positions. The study suggests that an average of 20% of senior management positions of large and medium sized firms in the Canadian private sector are held by women (Orser, 2000). This statistic does not include management positions in the largest Canadian firms where women remain a minority. Women also remain a minority in professional occupations in the natural sciences, engineering, and mathematics fields. In 1999, women made up only 20% of professionals in these occupations (Statistics Canada, 2000). These inequalities exist worldwide. According to an International Labor Organization report, men all over the world hold the highest management positions with greater inequalities occurring between men and women the closer they get to the top of organizational hierarchies (ILO, 1993).

Why do these inequalities still linger in the 21st century when more and more highly educated women are entering the workforce? Why do they exist when organizational leaders acknowledge that their ability to compete depends on their ability to hire and

retain the best employees they can find (Fagenson and Parker, 1994)? Why do they exist if organizations are also aware that many of their best employees may be those who belong to underrepresented groups such as women and visible minorities and they acknowledge the need to make better use of such groups (Schwartz, 1992)? It appears that although organizations may be aware of the advantages that hiring women or minorities offers, many still do not recruit, promote, value or support women workers to the same extent as men (Fagenson, 1993). It appears that they overlook a valuable resource in such a competitive global environment (Schwartz, 1992).

The following section will further explore career development for both men and women and highlight the key issues that are particularly relevant to women. The aim of exploring career development is to better understand the potential impact of management training, especially its impact for women.

2.2 Career Development

The literature on career development has shown that women's career paths differ from those of their male counterparts (Gallos, 1989; Powell, 1993). They face unique challenges and barriers in climbing the corporate ladder (Lyness and Thompson, 1997). Men receive more training opportunities than women do (Green 1990; Greenhalgh and Stewart, 1987). Women in the workplace face the use of gender stereotypes in hiring and promotion decisions and in performance evaluations (Powell, 1993). Often women

are given staff assignments rather than line assignments, are lacking mentors and are not given the opportunity to develop formal and informal networks (Lyness and Thompson, 1997; Stroth et., al, 1992; Powell, 1980). In men's career development, family life is often considered as external and of little relevance whereas for women it is often considered a barrier (Powell, 1993; Gallos, 1989). In general women's career development differs significantly from that of men.

There are two distinct differences in the career development of men and women. The first deals with differential access. Research suggests that women compared to men have less access to many of the career development opportunities required for advancement (Lyness and Thompson, 1997; Stroth et., al, 1992; Powell, 1980). For example, women receive fewer stretch assignments and fewer international assignments than men do. A second difference deals with differential impact. Some research suggests that some of the variables associated with career advancement have different impacts on women than on men (Gallos, 1989; Morrison et al., 1987). For example, some research suggests that the impact of training is greater for men than for women. Even though the concepts of differential access and impact can be more clearly separated for some variables (such as training and development) over others (such as home status), the theoretically argument can be made for all variables. Therefore, for each variable discussed in this section both differential access and differential impact will be explored.

Career advancement is a complicated concept to examine. Melamed (1995) has measured managerial advancement, a component of career advancement using three

scales: position in the managerial hierarchy, salary, and the number of subordinates. It is important to stress that for many individuals managerial advancement does not necessarily equate with career advancement. For many professionals, career advancement may have little to do with managing others and can be defined simply through more challenging tasks and responsibilities related to their work. Having said this, the MDPW is mainly designed for women seeking management development skills and for some of the participants managerial advancement may play a significant role in their definitions of career advancement. Research has suggested that many variables may have an impact on managerial career advancement. For women the relationship among variables appears even more complex.

Tharenou, Latimer and Conroy (1994) have studied the area of managerial advancement for both men and women. Their model proposes that first, organizational structure, in the form of gender-linked hierarchies, may influence an individual's work situation -- specifically career encouragement and training. Increased training is shown to enhance advancement. Second, home factors may have an effect on the amount of work experience an individual is able to obtain, which in turn affects advancement both directly, and indirectly through training. Tharenou, Latimer and Conroy's (1994) research suggests that self-confidence may impact managerial advancement indirectly because those with higher self-confidence gain greater career encouragement and training than do others. Additional variables that influence women's career development include: hard work, mentors, developing networks, interpersonal skills, demonstrating competency on the job, willingness to take risks, political savvy, career strategy and

career interruptions (Ely, 1995; Lyness and Thompson, 1997; Ohlott et.al 1994; Stroh, 1992 and Wentling, 1992). Ten key variables that may impact women's career development-- male hierarchy, career encouragement, mentoring, networking, training and development opportunities, home status, work experience, self-confidence, age and education -- are further discussed below in terms of both differential access and differential impact.

2.2.1 Male Hierarchies

The definition of a male managerial hierarchy is one composed exclusively or predominantly of men. It is considered to be critical in influencing men and women's managerial advancement (Tharenou, Latimer and Conroy, 1994).

Differential Access

There are fewer women in senior managerial positions than men (Statistics Canada, 2000). Men hold over 70% of such positions (Statistics Canada, 2000). During the last two decades there has been improvement in the representation of women in managerial positions but they are still a minority in the most senior positions (Statistics Canada, 2000).

Differential Impact

Research has suggested that male managerial hierarchies reduce women's career encouragement (South, Markham, Bonjean, & Corder, 1987), and women's training (Kanter, 1977). Kanter (1977) argued that such hierarchies place women as numerical

minorities and leave them more isolated than men which leads to less career encouragement for women and less access to training and development activities.

A more recent study by Ely (1995) suggests that Kanter's research is still applicable today. Ely (1995) found that in firms where few women hold high management positions, sex roles are more stereotypical and more problematic than in sex-integrated firms. Ely's respondents who worked for male dominated firms felt that the attributes they associated with men were the most important ones for achieving success, while they felt that those associated with women were less important or detrimental (Ely, 1995).

In summary, men continue to hold the majority of positions of power. This leaves women at a great disadvantage if they are not given career encouragement and access to the training needed for career advancement.

2.2.2 Training and Development Opportunities

Training plays an important role in managerial advancement for both men and women. Ragins and Sundstrom (1989) suggest that training can develop knowledge, skills, credentials, and credibility, which may aid in promotion.

Differential Access

Ragins and Sundstrom (1989) suggest that one path to power appears to be the development of special expertise through training. Women may find it more difficult to

reach positions of power when they attend fewer internal training courses and conferences or industry meetings than men do (Tharenou, Latimer and Conroy, 1994).

Lyness and Thompson (1997) and McCauley, Ruderman and Ohlott (1994) also note that women are given fewer developmental opportunities than men. They offer ample evidence to support this statement: Women have fewer subordinates than men in similar positions and they are given fewer opportunities to take on unfamiliar jobs and/or areas of business. Men are less likely to assign challenging tasks to female subordinates than their male subordinates and women are given jobs with lower visibility. Women are given fewer chances to make important contacts and therefore develop essential networks. Women are more likely to be moved into staff jobs rather than line jobs.

Despite the fact that women are given fewer developmental opportunities and less career encouragement, Wentling (1992) notes that women must demonstrate competency on the job at all times because they are under enormous pressure to do outstanding work continuously. This is due in part to the stereotypes that linger today about men's and women's roles and the perceived abilities of women managers. Women often find that due to stereotypes and discrimination they must work harder to prove themselves and often they are not taken seriously. Women often feel as if they are being constantly watched for mistakes they might make and screened more thoroughly than men are (Wentling, 1992). Women who see themselves as token women and role models for other women also put pressure on themselves (Kanter, 1977).

Tharenou, Latimer and Conroy (1994) note that organizations need to ensure that women are able to access training. Organizations should be aware of the barriers that limit women's access to training and aware of their tracking patterns that groom men more than women for powerful positions. In other words:

[They] need to "fast-track" women through training in the same way as they do men and should ensure that women are encouraged and feel sufficiently self-confident to undertake training (Tharenou, Latimer and Conroy 1994, p.927).

Differential Impact

Some research has indicated a difference of the impact of training on men and women. Tharenou, Latimer and Conroy (1994) found that the impact of training is greater for men than for women. In their study a positive relationship was found between training and developmental opportunities and managerial advancement. The correlation coefficient was lower for women ($r=.27$) than for men ($r=.58$).

In summary, research has suggested that training positively impacts managerial advancement for both men and women. Women receive less training opportunities than men do. In Tharenou, Latimer and Conroy's (1994) study, training and development had a more positive effect on men's managerial advancement than on women's. Tharenou, Latimer and Conroy (1994) note that this difference is consistent with Ragins and Sundstrom's (1989) explanation that organizations sometimes regulate access to certain types of training as part of a pattern of tracking that grooms men for powerful positions. This suggests that women need to receive more training because they currently are not receiving as many other developmental opportunities as men. Training may be an

essential source of expertise in managerial skills, which women may have little opportunity to develop through job assignments and work experience.

2.2.3 Career Encouragement

Career encouragement is important for managerial advancement for both men and women. The results of Tharenou, Latimer and Conroy's (1994) study suggest that career encouragement influences individuals to seek or accept opportunities for training.

Differential Access

Tharenou, Latimer and Conroy's (1994) study found that the women in their study received less career encouragement than the men did. Wentling found that lack of career encouragement (lack of guidance, lack of honest feedback, and the absence of assigning challenging tasks) hindered women's career development.

Tharenou, Latimer and Conroy's (1994) study found that gender appears to influence the career resources and power that enhance managerial advancement and they assert that this finding supports Kanter's (1977) general propositions. Kanter (1977) argued that because women often represent a numerical minority in organizations, they are more isolated than men are, receive less career encouragement and are prevented from undertaking training and development activities. Kanter also notes that when small numbers of women make up a job category, such as senior management they face obstacles such as being excluded from information networks and not being recognized for their achievements.

Differential Impact

Some literature suggests that career encouragement is more important for women. Tharenou, Latimer and Conroy (1994) found that career encouragement is more important for women's than men's managerial advancement. In their study they found a positive relationship between career encouragement and training and developmental opportunities. The correlation coefficient was higher for women ($r = .36$) than for men ($r = .12$).

In summary, career encouragement has a large impact on women's career development as it usually leads to more training and developmental opportunities for women which they receive less of compared to men. Career encouragement often involves mentor relationships and networks (Noe, 1988; Ibarra, 1993, Ragins and Cotton, 1991; Whitely et.al, 1991). These relationships are further discussed below.

2.2.4 Mentors

A mentor is usually a more senior member of an organization (Wentling, 1992). A mentor has gained the experience and status needed to support and promote the career of a less experienced individual (Wentling, 1992). In Wentling's study (1992) 90% of the women surveyed stated that their mentors significantly influenced their career development. Whitely, Dougherty, and Dreher (1991) found that mentoring was related to both promotion rate and total compensation for both men and women. Stewart and Gudykunst (1982) found that the perceived importance of a friend's assistance (in this

study a friend may or may not be considered a mentor) is negative for males' and positive for females' number of promotions.

Differential Access

The literature suggests that women have difficulty establishing such vital relationships (Cotton and Ragins, 1991; Dreher et.al, 1991; Noe, 1988). Women require other women to serve as mentors because cross-gender mentoring may be negatively looked upon by many organizations (Noe, 1988). Clawson and Kram (1984) suggest that various problems can arise from cross-gender mentoring such as sexual attraction, and gossip. For these reasons women may feel uncomfortable with initiating relationships with male superiors.

Men hold most of the critical positions that give them access to valuable information concerning job openings, and pending projects. Often men share information through the "old boy's network". Due to the low numbers of women in senior management, there is a smaller pool of women who can take on the mentoring role for less experienced women. Therefore, women often lack mentoring relationships because women mentors are few.

Differential Impact

Research on the differential impact of mentoring for men and women is not conclusive. Some researchers such as Morrison et al. (1987) suggest that mentoring may be more important for women's than men's career advancement due to the unique barriers and obstacles they face. In their research they found that 55% of successful men versus 100% of successful women had mentors. Establishing a relationship with a mentor is extremely

important as the mentor provides career guidance and psychological support to employees (Noe, 1988). More research is needed in this area to determine if mentoring is more important for women.

In summary, mentoring has been suggested to increase career advancement for both men and women, and anecdotal research suggests that it may be even more important for women. The fact remains that on average women have fewer mentoring relationships than men do which ultimately puts them at a disadvantage in the workplace (Noe, 1988).

2.2.5 Networks

Developing relationships with peers and developing interpersonal networks within or outside of the organization serves as additional support and career information for the employee (Ibarra, 1993). Networks provide resources that are critical for job effectiveness and career advancement for both men and women (Ibarra, 1993). These networks also provide emotional and social support (Ibarra, 1993).

Differential Access

Women often have limited access to or are excluded from informal networks (Kanter, 1977; Morrison & Van Glinow, 1990). The exclusion from informal networks may negatively impact women's career advancement as they may miss out on important information on training opportunities and job openings as well as career encouragement in the form of emotional and social support.

Differential Impact

Brass's (1985) results suggest a possible source of differential impact. He found that women in his study networked as much as men but because we tend to network with the people we work with and because work tends to be sex-segregated, women tend to be in less powerful networks. Thus, in his study both supervisors and non-supervisors perceived women as less influential than men; in addition, women received disproportionately fewer promotions than men.

In summary, research has shown networking to be positively associated with career advancement. It has also been shown that women often have fewer informal and influential networks (networks composed of men in senior positions) than men do. Brass's research suggests that women's exclusion from these types of networks may have a negative effect on women's career advancement.

2.2.6 Work Experience

Work experience is positively correlated with managerial advancement (Tharenou, Latimer, and Conroy, 1994). Researchers have associated work experience (years in organization and continuity) with managerial advancement (Cox & Harquail, 1991; Gattiker & Larwood, 1990; Jaskolka et al., 1985).

Differential Access

In Tharenou, Latimer and Conroy's (1994) study men had more work experience than women of the same age. This may be due to a variety of reasons. For example due to

family responsibilities many women chose to work part-time and or take leaves of absence to raise families (Statistics Canada, 2000)

Differential Impact

Research on the differential impact of work experience is not conclusive. Tharenou, Latimer and Conroy (1994) found that work experience had a more positive effect on men's training ($r = .58$) than on women's ($r = .25$) and on men's managerial advancement ($r = .58$) than on women's managerial advancement ($r = .27$), which is consistent with other research conducted by Marini (1989). Tharenou, Latimer and Conroy (1994) suggest that the difference in impact may occur because, as men gain work experience, senior managers may think of them as a more valuable investment that offers greater productivity returns than women offer and may therefore, provide them with more training.

Other research proposes that work experience has more impact on men's salary (Marini, 1989) and men's promotion (Stewart & Gudykunst, 1982). In Stewart & Gudykunst's (1982) study, length of tenure accounted for almost twice the variance in number of promotions for males than females. One explanation for these findings provided by Marini (1989) is that men spend relatively more time acquiring the more valuable types of experience, such as formal on-the-job training as compared to women.

In summary, work experience is an important variable in men's and women's career development. Women often have less work experience than do their male counterparts.

Tharenou, Latimer and Conroy's (1994) research would suggest that women need to obtain more work experience if they wish to be considered seriously for training opportunities and therefore advance in their careers.

2.2.7 Home Status

Home status can be defined as "the presence of a spouse and dependents" (Tharenou, Latimer and Conroy, 1994). Tharenou, Latimer and Conroy (1994) found that having a spouse and children is related to problems with dependent responsibilities and greater domestic duties. The amount of time spent on home responsibilities may negatively impact a person's career advancement (Tharenou, Latimer and Conroy, 1994; Ragins and Sundstrom, 1989). This is due to the fact that home responsibilities may reduce a person's work experience.

Differential Access

The literature indicates that women still take on a majority of home responsibilities, in terms of childcare, household chores and elderly care. For example in 1998, women employed full time with a spouse and at least one child under the age of 19 at home spent 4.9 hours per day on unpaid work activities. This was an hour and a half more per day than their male counterparts (Statistics Canada, 2000). Traditionally men have had fewer home responsibilities than women.

Differential Impact

Tharenou, Latimer and Conroy (1994) found that the effect of home status on advancement, through its impact on work experience, is gender-linked. Being a spouse and parent reduces a woman's work experience and in turn her training and development. Ragins and Sundstrom (1989) state that a spouse and children interrupt women's work experience and thus reduce promotion prospects.

Although this has traditionally been the case, Wentling (1992) has noted that many women have never interrupted their careers for more than two months and those who take maternity leave are absent two years or less. Twenty-one percent of Canadian women who gave birth in 1993 or in 1994 returned to work by the end of the first month after childbirth and within a year 86% had returned to work (Statistics Canada, 2000). Today, most women intend to continue their careers. They are trying to find ways to balance work and family life so that they are not required to sacrifice their careers. Work interruptions are becoming shorter and less common for women (Gallos, 1989). Having said this more married women with children are time stressed than married men with children (Statistics Canada, 2000).

Stroh, Brett and Reilly (1992) found that the women in their study had equivalent education, experience and family power as the men surveyed but still earned less than their male counterparts. There were significant disparities in men's and women's salary, progression and geographic mobility. The only factor they could find to explain these

disparities were leaves of absence but the average length of leaves for women in this study was 1 year.

In summary, home status may negatively affect a woman's career advancement. It has been shown that home status has traditionally impacted women more than men. Even though a lot has changed women still carry the brunt of home responsibilities and their levels of stress have also increased as they may be struggling to juggle work and home. A women's home status may negatively impact her career development if she is not able to successfully balance work and family responsibilities. On the other hand, home status is often viewed as a positive attribute for men. For example men who are married and have children are assumed to be more reliable than single men (Melamed, 1996). Tharenou, Latimer and Conroy (1994) found that a family increased men's work experience, which in turn leads to training and development and subsequently managerial advancement.

2.2.8 Self-Confidence

Research has suggested that self-confidence -- an individual's anticipation of successful mastery of challenges or overcoming of obstacles (Rosenberg, 1979) -- is an important attribute for leadership and management and that it enhances managerial advancement. Its impact occurs because those with higher self-confidence gain greater career encouragement and training than do others (Tharenou, Latimer and Conroy, 1994).

One possible means of increasing self-confidence is through education. Rosenberg's (1979) self-confidence study revealed that for both men and women self-confidence is positively associated with education levels. Education is thought to increase a person's self-confidence (Rosenberg, 1979).

Differential Access

Research suggests that there are sex differences with respect to self-confidence and self-concept in childhood as well as in adulthood (Rosenberg, 1979). Maccoby and Jacklin's (1974) research found that girls appear to have lower self-confidence than boys. Rosenberg (1979) also suggests that male and female self-concepts differ in a number of ways. For career women, lower levels of self-confidence may be due in part to having less exposure to training and development programs and management courses.

Upon reviewing profiles of successful female executives (a small percentage of women employees), Ragins and Sundstrom (1989) found that women who have reached powerful positions have high self-confidence. Also self-confidence is likely to help women to seek encouragement and training (Tharenou, Latimer and Conroy, 1994).

Differential Impact

Self-confidence appears to play an important role in both men and women's managerial advancement. Research does not suggest a differential impact for men and women. It may be more important for women to concentrate on increasing their self-confidence because traditionally, they tend to suffer from a lack of self-confidence.

In summary, self-confidence is positively associated with managerial advancement. Many women have lower levels of self-confidence than their male counterparts. Women may be able to increase their levels of self-confidence through education and training programs. With an increase in self-confidence, women may set higher career aspirations, take the necessary steps to achieve their goals and more importantly it may help them to deal with the many barriers they face with courage and perseverance.

2.2.9 Age

Age has been positively associated with managers' hierarchical levels and salary (Gattiker & Larwood, 1988, 1989, 1990; Jaskolka et al., 1985).

Differential Impact

Tharenou, Latimer and Conroy (1994) found that women's age positively correlated with managerial advancement ($r = .36$). A relationship between men's age and managerial advancement was not found. More research is needed in this area as to determine if age is more important for women.

In summary, age has been positively associated with managerial advancement. A woman's age may impact her career development. The older a woman is, the more experience she is likely to have and this may increase her advancement opportunities.

2.2.10 Education

Education has been positively associated with managers' hierarchical levels and salary (Gattiker & Larwood, 1988, 1989, 1990; Jaskolka et al., 1985).

Differential Access

Today, younger women are starting to obtain more university degrees including those in the management field. Older generations of women have less formal education. Overall, women are still less likely to have a university degree than men (Statistics Canada, 2000).

Differential Impact

Education appears to have an equal impact on men and women's managerial advancement. Tharenou, Latimer and Conroy (1994) reported a positive relationship between levels of education and managerial advancement for both men and women with correlation coefficients of .32 and .33 respectively.

In summary, education has been positively associated with managerial advancement. A woman's level of education may impact her career development. In order to have better prospects for advancement, women should ensure they have obtained adequate education.

2.2.11 Summary of Women's Career Development

The literature clearly indicates that there is differential access to career development opportunities for men and women. Women often receive less of these opportunities making managerial advancement even more challenging. Some research also suggests a

differential impact for some variables such as management hierarchies, mentors, and home status.

Specifically, the previous section on career development highlights how male hierarchies and home responsibilities may negatively impact women's managerial advancement. Women have to balance professional and personal lives, which are both important to them (Gallos, 1989). Home responsibilities can lead to interruptions in women's careers, and lead to fewer training opportunities (Tharenou et al., 1994). However the latest research shows that women's time away from the workforce is decreasing but that work-family conflict is increasing (Gallos, 1989; Duxbury, 1996; Statistics Canada 2000).

This section also illustrates that women receive fewer training and development opportunities and career encouragement than men and that women have fewer opportunities to form mentoring relationships. This is problematic since training and development opportunities, career encouragement and mentoring relationships have been shown to positively impact managerial advancement. Training and development opportunities may lead to an increase in self-confidence, which also plays a role in managerial advancement. Mentors and networks often support individuals to seek out training and development opportunities that match their career aspirations (Wentling, 1992.) The absence of mentors and networks may leave women in the dark as to the inner working of an organization. Women are at a disadvantage because they receive less of the key career building opportunities linked to managerial advancement.

An examination of the literature on career development and more specifically training is important because it has shown the importance of management training for both sexes and the need for women to receive more of it if they hope to advance to senior managerial positions. In a study conducted by the Conference Board of Canada and Catalyst (1997), chief executives (predominately men) felt that women lack general management skills and experiences as top reasons for absence of women in senior management. This leads one to conclude that if women are not given adequate training, varied assignments and other developmental opportunities they will be overlooked for senior management positions.

Management training programs for women have been designed to help women overcome the many barriers, which are unique to them. The following section will examine women only management programs which have been designed with the aim of giving women access to the skills and knowledge they require in order to move into the management positions they desire.

2.3 Management Training for Women

Women are slowly increasing their presence in the management field. Correspondingly, there are various methods that can help women become more effective managers. One method is to have them participate in management training programs for women. Some

critics would question whether these programs actually benefits women's careers (Lam, 1990).

The following section examines the objectives and content of management training programs, the nature of the participants, the training methods, and the choice of trainers for women only management training programs.

2.3.1 Objectives

Clear objectives of training programs are a must. If a program does not have clear objectives this may have negative consequences on factors such as the program's content and the use of adequate training methods. Clear objectives are also important at the assessment stage when one determines whether the goals of the program were met (Lam, 1990). Lam's (1990) review of training programs in different countries revealed that in developed countries, programs had a wide variety of objectives such as improving technical know-how and increasing one's personal awareness. The objective of a program in the UK (the UMIST Development Programme for Potential Women Managers) demonstrates the broadest set of objectives:

Increase the number of women in middle and senior management positions by providing training, which would assist competent women and men to work effectively together to their mutual benefit (Smith et. al., 1984).

2.3.2 Content

The content of a program will depend on the objectives (Lam, 1990; Cullen 1987; Merwin, 1981). Cullen (1987) draws the distinction between "women in management training" and "management training for women". "Management training for women"

refers to skills training in order to increase the effectiveness of women managers.

“Women in management training” refers to addressing gender issues.

The debate as to whether or not women need special training has been going on for years (Cullen, 1987). Some would argue that since training is meant to offer managerial skills to its participants these skills are the same for both men and women. Many women feel that programs designed for women only are patronizing and perpetuate myths about women (Ames and Heide, 1985).

Those in favor of training programs for women feel that women in management training is necessary because women face unique barriers compared to their male counterparts (Lavoie, 1990; Lam, 1990; Fonda, 1986). Lam (1990) also notes that traditional management training programs may have male biases because the majority of these programs have been designed by men. Research suggests that women face several barriers. Rader (1979) has classified these types of barriers into 4 groups: structural barriers, interpersonal barriers, stereotyped attitudes about the roles of men and women and internal barriers. An example of an internal barrier would be that a women may act in a passive manner because they have been socialized that this is the correct way for a women to act (Rader, 1979).

Lavoie (1990) suggests that courses specifically developed for women have several advantages:

They provide female models for women, a meeting place where women can share their problems and triumphs, a situation where they can learn from each other and a place where they do not hesitate to admit their ignorance or test some idea (Lavoie, 1990, p.381-382).

Desjardins and Lamy (1987) identified a number of Management Programs for women located in Canada and abroad. The content of many programs deal with common managerial topics such as communication and leadership styles and or focus on how to raise women's level of assertiveness, self-confidence and consciousness of the barriers that affect them (Lam,1990). For example a program provided by The Indian Institute of Management in Bangalore, India focuses on self-awareness as a major aspect of its training (Lam, 1990) whereas the training programs in the Philippines focus on career planning, managerial skills and issues specific to women such as work life balance and sex discrimination (Lam, 1990). Programs in the UK such as the "Development Programme for Potential Women Managers", offered by the University of Manchester Institute of Science and Technology (UMIST) also appears to be based on a philosophy of balance (Smith et., al, 1984). Paul (1985) argued that a combination of training in self-confidence, self-assertion, personal effectiveness and practical advanced management skills is required in order to have an effective program for women.

Both philosophies of training identified by Cullen (1987) -- "women in management training" and "management training for women" -- are being used. One can argue that an ideal training program for women in management should include both types of training as identified by Cullen (1987); that is they should include training on gender

issues and tactics to overcome the barriers women face as well as practical managerial skills (Lam, 1990).

2.3.3 Participants

Throughout the literature there appears to be a debate as to whether management development programs should have women participants only, or have a mix of men and women (Lam, 1990). Brenner et., al's (1989) research suggests that some men may still believe that women are not suited for managerial work which may negatively impact women's career advancement opportunities. Bargh (1986) has argued that women will continue to find it difficult to move into managerial positions unless the awareness of men in organizations is raised. On the one hand, the argument is that awareness training with men should be part of training programs for women. On the other hand it is felt that men's stereotypes will only get in the way of women's learning and undermine their self-confidence if men are present in training programs. Some argue that a mixed model is effective. In a four- part model proposed by Paul (1985) the first two stages would involve single-sex groups while in the last two, mixed-sex groups would participate. There are two main arguments for including men in the training. First, men may have hidden and unconscious assumptions, which training may be able to bring to the surface and may help them address. This may help them change their views and behaviours. Secondly, men still hold the power in organizations and they can make organization-wide institutional changes that are necessary to improve opportunities for women (Lam, 1990). By bringing assumptions and stereotypes to the surface men may be more cautious of their actions and may be more likely to work toward equal opportunities for both sexes.

Clearly men and women require training that addresses issues dealing with gender differences and stereotypes. Those in favor of single-sex education would suggest this be done separately, that work needs to be carried out in single-gender groups, so each sex can deal with issues such as oppression, sexism and gender-conditioning (Farrell, Boydell and Pedler, 1986).

Management development programs for women such as Carleton's MDPW are premised on the notion that women benefit from an all-female training environment. The following section outlines the argument for all-women training.

The argument for women only classes.

An all-women training environment offers women an opportunity to participate in a collaborative environment that emphasizes the sharing of personal experiences (Desjardins, 1989). Research by Tannen suggests that men and women have different conversational styles, which often leads to misunderstanding. Women tend to lean on connection and intimacy, while men lean on status and independence (Tannen, 1995). Other research suggests that in the classroom men attempt to demonstrate their status and independence outwardly often at the expense of women's contributions (West and Zimmerman, 1983). It has been suggested that men talk and interact more in a mix-sex environment compared to women (West and Zimmerman, 1983) and "men deny equal status to women as conversational partners" (West and Zimmerman 1983, p.107). Research by West and Zimmerman (1983) also suggests that women speak less in mixed-

sex environments and are interrupted more frequently. Often, men are given credit for women's ideas because women are less likely to vocalize their accomplishments (Tannen, 1995). Due to this competitive environment a woman's style of conversation and her preferred learning style may make it seem as though she were less competent and self-assured than her male peers; but this is not the case (Tannen, 1995).

In single-sex institutions it has been suggested that the environment is much more supportive than in mixed-sexed environments (Fonda, 1986). Women who participate in single-sex education "are not quickly dismissive of others' ideas and help each other out" (Fonda, 1986, p.3). This allows everyone to contribute and feel comfortable with the learning environment (Fonda, 1986). Fonda (1986) suggests that women working as a group are more willing to talk about their feelings, use their personal experiences and address tasks seriously. In such an environment women can feel free to discuss problems such as conflicts between home and work priorities, sexual harassment and self-confidence issues which generally would not arise in mixed-sex groups (Farell, Boydell and Pedler, 1986).

Although male and female conversational styles and preferred learning environment may differ, evidence does not support the notion that females are less competent than their male counterparts. Research has shown that all-women learning environments have a positive effect on the participants and result in learning successes. Tidball (1989) found that women-only colleges produce almost three times as many women achievers as do comparable mixed-sex institutions. The literature suggests that mixed-sex environments

may not allow women to practice leadership skills or to address their concerns about a male-dominated workplace (Dyke, 1992). For women who aspire to have fulfilling managerial careers a lot can be gained from training and education from an all-female environment.

2.3.4 Training Methods

In general there is a wide variety of training methods used in management development programs for women (Duhaime, 1987). In Duhaime's review of training programs she found that in developed countries, the majority of teaching methods are "active" in that participants are asked to participate in group discussions, to do exercises and to prepare career or business plans (Duhaime, 1987). According to Duhaime's (1987) review, the training methods varied somewhat depending on the training objectives. For instance, if one of the objectives of the program is to develop interpersonal skills, often trainers would use role plays, group exercises and discussions.

Methods used by the UMIST training program included group or syndicate discussions, use of role models through films and speakers, project work, business games, overview of management knowledge through lectures, presentations, films, group exercises and role plays. Psychological tests, consultation on test results, self- assessment based on the participants' strengths and weaknesses and preparation of a personal career plan were also used (Smith et.,al, 1984).

2.3.5 Choice of trainers

As in all training programs, the trainer must have knowledge of the subject matter, and be able to communicate the material effectively to the trainees (Elias, 1987). It is not sufficient to be an expert in a subject area nor is it sufficient to be an excellent communicator. A trainer must have a wealth of knowledge and feel comfortable delivering the material to his or her students for the students to benefit from the training (Lam, 1990). The Asian Institute of Management (AIM) uses case studies as its primary teaching method, thus trainers must be competent in dealing with cases, facilitating discussions and drawing relevant conclusions (Lam, 1987). Ideally the trainer should be able to play the role of an expert, a facilitator, an academic and a practitioner. Depending on the objectives of the program then perhaps the trainer should also be a specialist in women's issues (Lam 1990).

Another important aspect is the gender of the trainer. Should trainers be male or female? Some feel strongly that trainers in management training programs for women should be female (Paul, 1985). The reason for this is that women may serve as good role models for trainees as they have succeeded in their own careers. Being female themselves, trainers may better understand the unique barriers and issues women face and therefore are able to help trainees address such obstacles (Lam, 1990). Others feel that both genders must be involved. For example the UMIST program has a policy in that its ratio of trainees and trainers should be 60% female and 40% male (Smith et al., 1984). The rationale behind this split is that men and women can learn from each other and that it is important to get both gender's perspectives on women's issues. Men can also benefit

from this training as they may uncover biases and assumptions they might have towards women (Lam, 1987). An all women training environment may miss out on some of the expertise that men trainers have to offer.

2.3.6 Summary of Management Training Programs for Women

This section has reviewed various management training programs for women with respect to their objectives, content, participants, training methods and the choice of trainers. These programs differ slightly in their objectives and in their design. However, the case has been made for including both skills training and discussion of relevant gender issues into such programs. The argument for an all-women classroom has also been presented as well as the possible benefits and drawbacks.

Management training programs for women have been designed to help women overcome the many barriers, which are unique to them. Many programs offer an all-female learning environment such as the Management Development Program offered at Carleton. The following section will detail the program including its objectives.

2.4 Overview of the Management Development Program For Women Offered at Carleton

The Management Development Program for Women is designed to help women managers overcome barriers they face in their workplace (Dyke, 1992). Participants are encouraged to develop management skills in a supportive all-female environment. This

environment permits open discussion of specific issues that women face in their careers (Dyke, 1992).

2.4.1 Objectives

The main objective of the Management Development Program for Women at Carleton is:

[...] to provide management education which combines theory with practice and reflects the real world of management. The program is designed to facilitate the transfer of learning from the classroom to the workplace. Workplace-based assignments require participants to integrate new theories and skills with data and experience drawn from the participant's own work setting." (Center for Research and Education on Women and Work, 2000 p. 3).

The Center of Research and Education on Women and Work (2000) has identified the following benefits of the program for the women participants and their employers in the program's brochure:

For women, the program:

- provides the basis for a better understanding of the management process and of the interrelationships between the major management functions in their organization,
- provides opportunities to further develop specific management skills,
- provides a foundation for career development and further self-growth,
- offers a network of interaction and communication with women who share similar career goals, and
- offers an opportunity to address some of the issues that women face as managers (CREWW, 2000 p.3).

For the employer the program:

- provides a structured and integrated program for preparing and developing women for management positions,
- increases organizational awareness of current management theories and practices,
- builds skills which allow organizations to manage change while maintaining control over costs,
- facilitates the transfer of knowledge from the classroom to the workplace,

- provides immediate payback on training investments through the use of workplace based assignments, and
- provides an opportunity for the renewal of employees (CREWW, 2000 p.3).

2.4.2 Content

The participants in the Management Development Program for Women take part in a series of 10 three-day sessions over a 10-month period from August to May. The courses are aimed at improving women's skills and knowledge in the following areas: business strategy, accounting, budgeting and finance, marketing, project management, communications, management information systems, management and organizational behaviour, human resource management and business writing (CREWW, 2000).

Although there is no specific course geared to gender issues, such discussions are spread throughout the program. Also, the program holds specific seminars and workshops that focus on issues that are important for women. Examples of issues include assertiveness training, gender differences in management styles and coping with sexual harassment (Dyke, 1992).

Most courses are taught in two parts at different times during the 10-month period. For example, a participant may take a business writing course in the month of September and a second course on this subject in the month of December. The aim is to give participants an opportunity to transfer classroom learning to the workplace:

Students are able to learn theory, practice techniques in the classroom and in the workplace, reflect on the learning, and then return to the classroom for more instruction in the subject and to report on progress they have made in using the techniques in their place of work (CREWW, 2000 p.5).

The program also has two special features. First, there is a residential requirement. “The purpose of the residential session is to provide opportunities (other than the classroom) for participants to share their experiences” (CREWW, 2000 p.5). Second, the program includes a management skills assessment. All participants must complete an extensive evaluation of their management skills. Each participant has their peers, supervisors and subordinates rate them on the major skills required of them as managers. The report is particularly useful as it identifies strengths and weaknesses of each participant. The report also includes a developmental plan for students to follow in addressing skill development (CREWW, 2000).

2.4.3 Participants

The program is intended for the working woman. The ideal candidate is someone who is highly motivated and desires a career in management. Participants must have three or more years of experience in, “first line or higher levels of management, a professional position, or a pre-management position which provides exposure to management issues” (CREWW, 2000 p.6). The selected participants will be at different stages in their management careers and have different educational backgrounds. The program encourages diversity. Each participant must obtain a sponsor. A sponsor can be her employer or somebody else who is familiar with her work. The sponsor is expected to support the candidate financially and /or in a mentoring relationship. The candidate may choose two separate sponsors for the two roles.

2.4.4 Training Methods

The program uses a variety of training methods. The intent is to offer a balance between theory and the practical application of management skills. An emphasis is placed on in-class exercises and activities, opportunities for personal development, small group discussion, role-playing and the use of case studies. Workplace based assignments are also assigned. These are major assignments in which students use data or experience from their workplace. The purpose of these assignments is to ensure that the content of the course is meeting the students' needs and to demonstrate that the classroom learning is of practical relevance to the work setting. Students and their sponsors are encouraged to alter assignments to fit their learning needs and the needs of their organizations. An average of 9 hours each week outside of the classroom is typically required of the participants in order to complete required readings and assignments. Participation in class discussions is also essential to successful completion of the program (CREWW, 2000).

2.4.5 Choice of trainers

The trainers are mostly full-time business faculty. Others lecturers may address special topics. Both the instructors and the Management Board of the program are made up of women. An Advisory Board provides a strong link with business, government and professional leaders. The board is also involved on advising on the development needs of women in management (CREWW, 2000).

This section provided an overview of the objectives, content, participants, trainers and training methods of the Management Development Program for Women (MDPW) offered at Carleton. The following section will discuss how management training programs have typically been evaluated.

2.5 Evaluation of Training Programs

Despite the fact that training programs for women managers exist, little research has been conducted to evaluate the success of such programs in terms of the programs' impact on short and long-term attitudinal and behavioural change (Rader, 1979; Desjardins and Lamy, 1987).

Lam (1990) contends that although evaluations of training programs are important, many program organizers do not engage in such evaluations. For those who do, the evaluations are often not done correctly. She has identified several reasons for the lack of proper evaluations of training programs. First, it is difficult to evaluate a program if the objectives of that program are not clear, which is often the case. Also, evaluations are time consuming, and organizers often devote most of their time and energy to the training they deliver and not to evaluating whether their program was effective or not. A main problem is the lack of standards and yardsticks to aid in evaluation. Above all, there are many variables, such as growth and personal development of participants which

may influence the conclusions drawn in the evaluation but may have little to do with the impact of the actual training program.

Despite these complications, evaluations are important and necessary. It is important to prove the effectiveness of management training for women to obtain the support of managers and organizations (Lam, 1990). Evaluations also provide critical information to organizers so that they can determine what is working and what needs to be improved upon. Evaluations should help organizers determine whether their program has met its objectives and if it hasn't what can be done to ensure that it will do so in the future (Lam, 1990).

Lam (1990) has identified some key research questions:

- “[1] Training programs need to be evaluated in terms of their effectiveness. What are some effectiveness measures? How can we systematically relate those to the different aspects of training programs to determine possible relationships?
- [2] How can we determine the cost effectiveness of management training programs for women?
- [3] How can we measure attitudinal and behavioural changes [that may be affected by training]?
- [4] How important is organizational context on management training? Which aspects tend to help or hinder management training for women? How can an organization's policies and activities influence training? Are factors such as job responsibilities, or expectations of performance equally important determinants of development in women as training?
- [5] What is the impact on women trainees when they return to an unchanged organizational context after they have undergone training?
- [6] Longitudinal studies (one, two, five years, with control groups) are needed to trace the effects of training on the women trainees and on the organization. Time is needed to measure the ultimate outcomes - to trace career paths, to determine extent of promotions, productivity improvements, and the impact on the bottom line (p.403).”

These research questions demonstrate a need for well thought out evaluation criteria for management training programs for women. Proper evaluations are necessary to improve the programs in order to meet the objectives that women have and to obtain organizational support.

Merwin (1981) has looked at effective training evaluation strategies and techniques. She has defined evaluation as “ the means to determine the worth or value of the training” (Merwin 1981, p.1). Organizations need to know whether the time, money and effort they are investing in training are worth it. Effective evaluation systems can answer the following questions: What is the benefit to the organization? What is the benefit to the worker? How good is the training? (Merwin, 1981). Could these same benefits be obtained in any other way? The answers to these questions can help shape the type, quality and frequency of the training.

Perhaps the most important part of an evaluation system is the follow-up. Trainers wish to find out whether or not the participants gained knowledge and skills from the training and whether they were able to implement these skills and new knowledge in the workplace (Merwin, 1981).

Throughout the literature there are many evaluation models. Evaluation methods can range from simple to complex (Phillips, 1991; Merwin, 1981). Most models are similar in their structure. Although they differ in words they focus on reaction or satisfaction at the first level, learning or achievement at the second level, behaviour or measurable job

performance at the third level, and business results or ultimate outcomes at the fourth level (Phillips, 1991).

The most well known framework for classifying areas of evaluation comes from a four level model developed by Kirkpatrick (1983). Each area focuses on specific data to be collected.

Reaction. This level answers the question: Were the participants pleased with the program? Participants are asked their opinion on the program's materials, instructors, facilities, methodology, content etc.

Learning. This level answers the question what did the participants learn in the program? It is concerned with measuring the learning of principles, facts, techniques, and skills. This level of evaluation is difficult to measure. One must ensure that the measures are objective and quantifiable. It is also necessary to have some kind of benchmark to be able to compare results. Measures include paper and pencil tests, learning curves, skill practice, and job simulations.

Behaviour. Behaviour answers the questions did the participants change their behaviour based on what was learned? This level deals with job performance. Superior achievement in the program does not guarantee improved behaviour on the job. Forms of evaluation include: before-and after comparisons, observations from the participants' superiors, subordinates and peers, statistical comparisons and long-range follow-ups.

Results. This level answers the question did the change in behaviour positively affect the organization? (Kirkpatrick, 1983). It addresses the impact of the program on

organizational improvement. Some results may include costs savings, work output improvement, and quality changes. (Kirkpatrick, 1983; Phillips, 1991).

This section has stressed the importance of a well developed evaluation process for management training programs. Most programs do not have extensive evaluation processes due to time constraints. Instead they focus on Kirkpatrick's first level of evaluation. The following section will outline the current evaluation process for the MDPW.

2.6 Current Evaluation Process For the Management Development Program For Women

Yearly evaluations are used to assess the program's strengths and weaknesses and make any changes that are felt necessary. Three types of data are collected every year:

1. comments from an in-class feedback session,
2. a questionnaire seeking reaction to the program overall,
3. a questionnaire seeking evaluations of the following for each class —“ the value of the class material, the effectiveness of the instructor's approach, and any open-ended comments the participant wished to make” (Dyke, 2000 p.1).

These evaluations fall into the first level of Kirkpatrick's evaluation system, the reaction level. They are quite extensive and allow the program coordinators to assess whether or not the objectives of the program are met for each year that the program is run, what

courses may need modification and if anything should be added or deleted from the program. An overall positive response from the participants is generally obtained.

For the most part the evaluation process for the MDPW focuses on participants' reaction to the program (except for grades allocated to completed work which falls under the learning stage). This type of evaluation does not look at certain indicators of program success such as changes in the alumnae's self-worth, career self-management, career satisfaction, life satisfaction and career progress. One finding of the 1999-00 program review is particularly relevant to the present study; most participants felt that their self-confidence had increased after participating in the program and for some of the participants an increase in self-confidence was highly valued. This is important because the present study aimed to determine if participants' self-worth, career management self-efficacy and use of career enhancing strategies has changed significantly after having participated in the MDPW and self-confidence may play a key role in these changes.

The following section details previous research on the MDPW, which looked at indicators beyond the reactionary level.

2.7 Previous Research on the Management Development Program For Women at Carleton

A research project by Stephanie Choquette was undertaken in 1998 that explored if the Management Development Program for Women (MDPW) offered at Carleton, may help promote career development and growth for its participants. A pre-test (before participation in the MDPW session) and a post-test (five and a half months into the

MDPW session) were administered to 25 participants of the 1998-99 session. The questionnaire was constructed using Messer and Harter's Adult Self-Perception Profile (1986) and other scales related to career management activities and career outcomes. These scales were used in order to help explore how the MDPW assists growth and career development for women (Choquette, 1999). The variables explored in the study were self-worth, career self-efficacy, satisfaction of job needs and values, career management activity, interest in developmental career opportunities and career outcomes (Choquette, 1999).

The variables were further broken down for measurement purposes. Self-concept explores a person's perception of him or her self (Hubner et al., 1976). The term incorporates beliefs of self-worth and one's perceived competence (Byrne, 1996). In Choquette's (1999) study, self-concept was broken down into three parts: job competence, intelligence and global self-worth.

The study also explored changes in respondents' self-efficacy -- "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p.391). Desired career development opportunities was broken down into 17 activities including developmental activities, flexible working hours and fewer work hours. Job needs and values of participants were measured in two ways: first, respondents indicated the extent that job values were important to them and secondly they indicated the degree to which these values were satisfied in their current position (Choquette, 1999).

The study also examined changes in respondents' use of career enhancing strategies and changes in respondents' confidence in how they perform career management behaviours. Changes in respondents' personal efforts toward career planning were also examined (Choquette, 1999). The satisfaction and outcome variables were broken down into four parts. Career satisfaction based on Greenhaus, Parasuraman and Wormeley's (1990) study. Life satisfaction, work life satisfaction, and physical/emotional exhaustion measures were developed by Choquette (1999). It is important to note that each of Choquette's measures consist of 1 item and therefore both validity and reliability are questionable.

The results of Choquette's (1999) study indicated a significant increase in levels of global self-worth for MDPW participants from pre-test to post-test. Other variables that approached significance included the ability to set goals for career progress, career planning behaviours and satisfaction with life in terms of feeling less burned out and emotionally drained. It is important to note that the sample used in Choquette's (1999) study was very small. Also the post-test was administered before the termination of the 1998-99 session. A longitudinal study with a larger sample may be able to identify more significant effects of the MDPW on the variables examined. It is important to keep in mind that pre-test sensitization, the Hawthorne effect and demand effects may play a role in shaping alumnae's responses in the follow-up questionnaire. Some added questions asking respondents to indicate how they perceived that they have changed due to the MDPW and how their organizations have benefited from this change may lead to more accurate results.

The previous section discussed Choquette's (1999) study which looked at some significant attitudinal and behavioural changes that the MDPW participants experienced from pre-test to post-test. This study examines these variables as well as various career development strategies and career outcomes.

2.8 Summary of the Literature

Despite government actions such as pay equity and affirmative action women are still at the lower levels of organizations (Ragins and Sundstrom, 1989; Fagenson and Parker, 1994; Orser 2000; Statistics Canada, 2000) and are often faced with an invisible glass ceiling (Morrison et., al. 1987). Barriers to senior management clearly exist but the reasons have yet to be made clear. The literature has shown that women receive fewer developmental opportunities than men do. As a result, more and more women-only management training programs have been implemented as a part of women development programs (Desjardins and Lamy, 1987). Some experts are in favor of women-only management training. They state that such training is necessary for the advancement of women into higher-level managerial positions Others argue that such single-sex training only perpetuates the problem (Cullen, 1987).

Most of these training programs have formal evaluation systems used to obtain participants' feedback but extensive research on such programs is lacking. Complete evaluations of such programs are extremely important in order to determine whether or not the training was effective. This study examines the impact on participants from one

program in particular, the Management Development Program for Women (MDPW); a certificate program offered by the Center for Research and Education on Women and Work (CREWW) at Carleton University (CREWW, 2000).

CHAPTER 3 MODEL AND HYPOTHESES

The purpose of this research was to examine whether the Management Development Program for Women offered at Carleton has been able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success. Positive change can occur within the individual such as an increase in self-worth or increased career management self-efficacy. Changes that can be acted upon include: career planning, career enhancing strategies, and a desire for continued education. This research examined whether the MDPW was able to promote positive career outcomes for women, if the program has impacted the careers of the participants and if the program has impacted their life satisfaction.

Data collection consisted of two questionnaires. The first survey served as a follow-up post-test for the twenty-five participants of Choquette's (1999) study. The second sought comparative judgments from the remaining two hundred and forty-five alumnae on how they feel they have changed since completion of the MDPW. The intent of this

chapter is to present the research model and the theoretical logic behind each of the variables included.

Drawing on previous research a model has been developed which includes nine dependent variables (please refer to Figure 1). It is proposed that the independent variable, participation in the Management Development Program for Women offered by Carleton will have nine effects on its participants. These effects include: an increase in self-worth, an increase in career management self-efficacy, an increase in career planning, an increase of the use of career enhancing strategies (including developing mentor relationships and obtaining networks), an increase in the desire to continue education, an increase in career satisfaction and life satisfaction, a decrease in emotional burnout and career advancement. Five variables, the number of years since taking the MDPW, age, education, work experience and home status may moderate the impact of the MDPW on these nine variables and therefore have been examined in the research. It is not expected that all moderating variables will impact all dependent variables but each relationship has been examined in order to ensure that the results are not distorted by spurious findings.

Clearly, this model could be more complex and designed to illustrate the possible inter-relationships among variables. For example, it could be argued that participating in the MDPW leads to an increase in participant's self-worth, which leads to an increase in career advancement and therefore an increase in career satisfaction and life satisfaction.

Although, some of these relationships may exist, they will not be explored in this research due to its exploratory nature.

In the following discussion, each variable will be defined and a rationale for including the variable into this study will be provided. Hypotheses that predict how participating in the MDPW may affect each variable will also be included.

Figure 1: Proposed Model of the effects of the MDPW on its participants

3.1 Research Hypotheses

3.1.1 Positive Changes in Self-Worth

Self-concept can be defined as a person's perception of him or herself. Self-concept incorporates beliefs of self-worth with one's perceived competence (Byrne, 1996). If an individual believes a certain task to be important, his/her perception of how well he/she can perform that task will affect his/her sense of self-worth or acceptance of his or her self.

Consistently since the inception of the MDPW in 1992 women have reported feelings of increased self-confidence (Dyke, 1992). This may partly be due to the development of knowledge, skills and credentials as suggested by Ragins and Sundstrom (1989) but also because participants are able to openly discuss barriers particular to women and are encouraged to refuse to let discriminatory or unfair practices undermine their sense of self-worth. A demand effect may also impact this variable; that is the awareness on the part of the alumnae that the MDPW is intended to increase self-confidence may affect the results.

Nevertheless, it appears that after completion of the program women are not only armed with important skills but also a sense of power and courage to confront the many issues unique to women in the work place. It is important to stress that in this research, especially in the retrospective study, perceptions of changes in self-worth are examined rather than actual changes. Alumnae perceptions of change however are also important.

For example, if alumnae feel that their sense of self-worth and career management self-efficacy have increased, they will feel more prepared to take on new challenges and shape their careers and their lives in a manner they desire despite the external barriers that they may face.

The women-only classroom may offer women an opportunity to perform to their potential and prepare them to challenge discriminatory practices in today's corporations. Choquette (1999) found that after having participated in the MDPW for approximately six months there was a significant increase in levels of global self-worth, from pre-test to post-test. As a result the following hypothesis was developed:

Hypothesis 1: Participation in the MDPW will lead to an increase in perceived self-worth, as reflected by an increased level of global self-worth.

3.1.2 Career Management Self-Efficacy

Self-efficacy is defined by Bandura as the belief in one's ability to perform a particular task (Bandura, 1977). In other words a person has high self-efficacy when he/she holds the conviction that he/she can successfully execute the required behaviour necessary to obtain the desired outcomes (Bandura, 1977). The strength of people's convictions regarding their own effectiveness has been shown to affect whether or not they cope effectively with given situations (Bandura, 1977). Self-efficacy has been found to predict performance across a number of organizational settings, including career management

(Schwoerer, 1990). “Research suggests that self-efficacy is positively associated with enhanced career outcomes through constructive coping and persistence” (Choquette, 1999, p.10.)

The MDPW focuses on teaching its participants about effective management practices, including practical career strategies and techniques. Participants are also given the opportunity to assess their strengths and weaknesses in order to determine areas for improvement. Choquette (1999) found that action planning, a facet of career management self-efficacy as defined by Schwoerer was marginally enhanced for MDPW participants. As a result the following hypothesis was developed:

Hypothesis 2: Participation in the MDPW will increase an individual’s career management self-efficacy.

3.1.3 Career Planning

Career planning refers to the process of identifying one’s career objectives, assessing one’s strengths and weaknesses in relation to these objectives and deciding on the best course of action to achieve these goals in light of these strengths and weaknesses (Orpen, 1994). Career planning (along with the use of career tactics) has been shown to be positively correlated with one’s career success and career satisfaction (Orpen, 1994).

One of the career strategies stressed by the MDPW includes career planning. Career planning is encouraged. The participants must complete an assignment in which they define their career goals and choose five strategies to reach their goals. They are also asked to implement at least three of these strategies for a period of one month so that they can evaluate the implementation of the strategies and the results of having used the strategies. In order to determine the best route in achieving the goals of the participants the MDPW encourages self-assessment so that improvements can be made in the area of interpersonal skills, managerial skills and personal development.

The MDPW participants in Choquette's (1999) study exhibited marginally higher levels of confidence surrounding their ability to set goals for career progress; this scale approached significance, ($p < .05$). Participants also engaged in an increased number of career planning behaviours from pre-test to post-test ($p < .05$). As a result, the following hypothesis was developed:

Hypothesis 3: Participation in the MDPW will lead to an increase in career planning.

3.1.4 Career Enhancing Strategies

Individuals engage in career enhancing strategies to demonstrate their "distinct competence," and to increase their prospects for promotion (Dyke, 1990). Some career enhancing strategies identified include demonstrating competency on the job, taking risks, making use of mentors, developing networks and making superiors aware of one's

accomplishments (Dyke, 1990; Lyness and Thompson, 1997; Ohlott et. al 1994; Stroh, 1992 and Wentling, 1992). Dyke (1990) has found that individuals who employ career enhancing strategies are perceived as better candidates for promotion, receive more favorable peer ratings and experience enhanced career outcomes.

Promotions or simply recognition of one's work do not occur miraculously. It is often necessary to possess a competitive advantage by having a distinct competency. Although competence and hard work are important ingredients to success they are meaningless unless those higher in the organizational chain take notice and value your contribution to the firm. In the MDPW women have the opportunity to interact with knowledgeable experts in the management field and share their own experiences in an all women network. This gives women the opportunity to better understand the management process and obtain valuable knowledge on how to implement career enhancing strategies in their own careers. One of the MDPW assignments requires participants to develop and implement career strategies for themselves. As a result the following hypothesis was developed:

Hypothesis 4: Participation in the MDPW will lead to the use of more career enhancing strategies on the part of its participants.

One aspect of career enhancing strategies is having and using mentor relationships. A mentor is usually a more senior member of an organization who has the experience and status needed to support and promote the career of a less experienced individual

(Wentling, 1992). The literature identifies the importance of mentoring relationships as they may have a positive impact in an employee's career development. Mentors affect most, but not all employees positively. Most, but not all studies find a positive significant relationship between mentoring and career advancement. Whitely, Dougherty, and Dreher (1991) found that mentoring was related to both promotion rate and total compensation. Establishing a relationship with a mentor is extremely important as the mentor provides career guidance and psychological support to employees (Noe, 1988). Wentling (1992) found that 90% of the women managers surveyed stated that their mentors had a significant positive influence on their career development. The literature also suggests that women have difficulty establishing such vital relationships (Cotton and Ragins, 1991; Dreher et.al, 1991; Noe, 1988 and Ibarra, 1993). Without such relationships it may be difficult for women to advance their careers. Morrison et al., (1987) found that all of the successful women in their study reported having "help from above." In other words they had received some type of mentoring. The MDPW unit on Career Strategies addresses how mentors can be used as a career enhancing strategy. As a result, the following hypothesis was developed:

Hypothesis 5: Participation in the MDPW will lead to an increased effort to obtain a mentor.

Networking is another important aspect of career enhancing strategies. Developing relationships with peers and developing interpersonal networks within and outside of the organization serves as additional support and career information for the employee (Ibarra,

1993). Women often have limited access to or are excluded from informal networks (Kanter, 1977; Morrison & Van Glinow, 1990). Networks may provide resources that are critical for job effectiveness and career advancement. These networks may also provide emotional and social support (Ibarra, 1993). The MDPW also stresses the importance of developing networks as a useful career enhancing strategy. The MDPW itself may also serve as a networking venue as the knowledge and support shared among members can also be seen as an important network. These relationships can extend outside of the classroom and continue to develop once the program is completed. As a result, the following hypothesis was developed:

Hypothesis 6: Participation in the MDPW will lead to an increased effort to cultivate networks.

3.1.5 Desire to Continue Education

Several participants in the MDPW have been interested in academic credit for the work completed in program. Also there appears to be an interest in refresher courses for the alumnae. This suggests that the participants value the knowledge and the experience they have gained and may be seeking further education and training opportunities. Participants may also be interested in rekindling the network they have formed. For many participants the MDPW may be the only source of developmental opportunities available to them as these opportunities may not be given to them in their work environments (Lyness and Thompson, 1997; McCauley, Ruderman and Ohlott, 1994).

Women may be interested in furthering their education and skill development because both education and training have been found to be positively related to managerial advancement (Kealey, 1999; Ragins and Sundstrom, 1989; Tharenou, Latimer and Conroy, 1994). Also acquiring new knowledge and skills can positively impact the self-worth and career management self-efficacy of the participants. As a result, the following hypothesis was developed:

Hypothesis 7: Participation in the MDPW will lead to an increase in the desire for further education and training opportunities.

3.1.6 Career Satisfaction & Life Satisfaction

The MDPW offers women important managerial knowledge, career enhancing tools and a forum to discuss relevant problems and issues unique to women. The experience of having participated in this program leaves women feeling more self-confident and prepared to face the challenges in their place of work (Dyke, 1992). Having these tools, participants may be able to achieve more of their goals and thus be more satisfied with their careers and with their lives. As a result the following hypotheses were developed:

Hypothesis 8: Participation in the MDPW will lead to an increase in career satisfaction.

Hypothesis 9: Participation in the MDPW will lead to an increase in life satisfaction.

The program also addresses issues such as balance between work and home life, as participants share tips and strategies for creating an appropriate balance between the two. Choquette (1999) found that participants felt less emotionally and physically exhausted after six months in the program. This suggests that participants are finding better coping mechanisms for dealing with both work and home life or are getting more social and family support.

By reducing feelings of burnout participants can devote more energy to work and to home life thus increasing their satisfaction. Unfortunately, Choquette (1999) used a single-item measure for burnout which may not be as reliable as a multi-item scale. According to Maslach and Jackson (1986), burnout is a three-dimensional syndrome characterized by emotional exhaustion, personal accomplishment and depersonalization. For the purpose of this research, only the first dimension will be examined. As a result the following hypothesis was developed:

Hypothesis 10: Participation in the MDPW will lead to a decrease in emotional burnout.

3.1.7 Career Advancement

The literature shows that training and development courses are important for managerial advancement. Training and development courses can develop knowledge, skills, credentials, and credibility, which in turn can help employees achieve a promotion (Ragins and Sundstrom, 1989). This may be especially true for women because training may be an essential source of expertise in managerial skills, which they may have little

opportunity to gain through job assignments and work experience (Tharenou, Latimer and Conroy, 1994).

Women are given fewer developmental opportunities than men and women attend fewer internal training courses and conferences or industry meetings (Lyness and Thompson, 1997; McCauley, Ruderman and Ohlott, 1994). Tharenou, Latimer and Conroy (1994) found that training leads to managerial advancement. By not receiving this training women may hinder their career advancement opportunities.

Ragins and Sundstrom (1989) suggest that one path to power appears to be the development of special expertise through training. Kealey's (1999) study examined gender differences in predictors of career success in the high tech sector. The results suggest that training is significantly positively related to women's earnings and managerial level. The women in Kealey's study who received more training reached higher levels of management than those who did not (Kealey, 1999).

The Management Development Program for women is one source of the training women may require for their career development. This program provides women with timely and crucial managerial skills needed in today's competitive business world. Perhaps more importantly it also provides participants with a supportive environment that encourages open and free discussion of pertinent issues such as discrimination towards women in the workplace, sexual harassment and the dual roles many women face. The program also has a focus that encourages women to actively develop their careers. This

includes a focus on career enhancing strategies including cultivation of mentors, the importance of networking, career management self-efficacy and career planning. Some respondents may not seek managerial advancement per se, can still advance their careers through other means, in terms of level of challenge and responsibility. As a result the following hypothesis was developed:

Hypothesis 11: Participating in the MDPW will lead to career advancement especially for those who sought career advancement as a goal of participating in the MDPW.

3.2 Control Variables

It is likely that the effects of the MDPW on the ten dependent variables will be moderated by five variables: the number of years since taking the MDPW, age, education, work experience and home status of the participants.

3.2.1 The Number of Years Since Taking the MDPW

Although the MDPW is likely to lead to a series of attitudinal and behavioural changes such as an increase in self-worth and life satisfaction and lead to career advancement it is anticipated that these associations may be moderated by the number of years since having taken the MDPW. Possible impacts may include: more direct impacts of the MDPW for those who have recently graduated compared to those who have graduated a number of years ago and differences in accuracy in reporting. Also, other developments such as personal growth, independent of having participated in the program, will likely be higher

the more time that has passed since completion of the program. As a result the following hypothesis was developed:

Hypothesis 12: The impact of the MDPW on the ten dependent variables may be moderated by the number of years since taking the program.

3.2.2 Age

Although the MDPW is likely to lead to a series of attitudinal and behavioural changes such as an increase in self-worth and life satisfaction and lead to career advancement it is anticipated that these associations may be moderated by the participants' age as age has been positively linked with managerial advancement (Gattiker & Larwood, 1988, 1989, 1990; Jaskolka et al., 1985). Age is associated with managerial advancement and work experience for men and women. A lower level of career advancement may be due to the fact that the participant is younger (compared to others in their organization) rather than suggest that the MDPW is not providing these women with the right tools to advance their careers. As a result the following hypothesis was developed:

Hypothesis 13: The impact of the MDPW on the ten dependent variables may be moderated by the participant's age.

3.2.3 Education

Although the MDPW is likely to lead to a series of attitudinal and behavioural changes such as an increase in self-worth and life satisfaction and lead to career advancement, it is

anticipated that these associations may be moderated by the participant's educational level. Education has been positively linked with managerial advancement (Gattiker & Larwood, 1988, 1989, 1990; Jaskolka et al., 1985). Education is proposed to increase managerial advancement because it provides knowledge, skills and credibility for performance in high-level positions. A lack of career advancement may be due to the fact that the participant is less educated (compared to others in the organization) rather than suggest that the MDPW is not providing these women with the right tools to advance their careers. As a result the following hypothesis was developed:

Hypothesis 14: The impact of the MDPW on the ten dependent variables may be moderated by the participant's level of education.

3.2.4 Work experience

Although the MDPW is likely to lead to a series of attitudinal and behavioural changes such as an increase in self-worth and life satisfaction and lead to career advancement, these relationships may be moderated by the amount of work experience the participants have. Researchers have consistently associated work experience, total years and continuity, with managerial advancement (Cox & Harquail, 1991; Gattiker & Larwood, 1990; Jaskolka et al., 1985; Tharenou, Latimer, and Conroy, 1994). Factors such as work interruptions and the age one started to work will affect the overall amount of work experience obtained. A lack of career advancement may be due to the fact that a participant has less work experience than others in her organization rather than suggest

that the MDPW is not providing these women with the right tools to advance their careers. As a result the following hypothesis was developed:

Hypothesis 15: The impact of the MDPW on the ten dependent variables may be moderated by the amount of work experience the participant has.

3.2.5 Home Status

Although the MDPW is likely to lead to a series of attitudinal and behavioural changes such as an increase in self-worth and life satisfaction and lead to career advancement, these relationships may be moderated by the home status of the participants. Tharenou, Latimer and Conroy (1994) found that the effect of home status on advancement through its impact on work experience is gender linked. Being a spouse and parent often reduces a woman's work experience and in turn her training and development. Ragins and Sundstrom (1989) argue that a spouse and children interrupt women's work experience and thus reduce promotion prospects. Home status encompasses factors such as marital status, the number of children, time spent on childcare activities, elder care responsibilities, the number of and length of career interruptions for family reasons and the amount of support received by spouse and family members. A lack of career advancement may be attributed to a participant's home status, rather than suggest the MDPW is not providing these women with the right tools to advance their careers, and achieve life satisfaction. As a result the following hypothesis was developed:

Hypothesis 16: The impact of the MDPW on the ten dependent variables may be moderated by the participant's home status.

3.3 Summary of the Research Model

In summary, Figure 1 illustrates the hypothesized effects of the MDPW on its participants. The MDPW may lead to an increase in self-worth, an increase in career management self-efficacy, an increase in career planning, an increase of the use of career enhancing strategies (including developing mentor relationships and networks), an increase in the desire to continue education, an increase in career satisfaction, an increase in life satisfaction, a decrease in emotional burnout and career advancement. It is also hypothesized that the impact of the program on the nine dependent variables may be moderated by five variables: the number of years since taking the program, age, education, work experience and home status.

CHAPTER 4: RESEARCH METHODOLOGY

The primary focus of this research was to determine if the Management Development Program for Women offered at Carleton has been able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success. This research examined whether the MDPW has been able to promote positive career outcomes for women, if the program has impacted the careers of the participants and if the program has impacted their career satisfaction and their life satisfaction.

Data collection consisted of two questionnaires. The first survey served as a follow-up post-test for the twenty-five MDPW participants in Choquette's (1999) study. The second sought comparative judgments from the remaining two hundred and forty-five alumnae reflecting on how they feel they have changed since the completion of the MDPW. A survey method was chosen as it facilitates comparative measurement of attitudes and behaviour amongst the large sample. Personal interviews of such a large sample would not have been feasible for this research.

Research investigating the impact of a treatment condition usually calls for a control group in order to make direct comparisons with the treatment group. Alternatively, a pre-test/post-test design, in which the sample acts as its own control group can be used. In this study, it was impossible to obtain a control group to accurately match the population

of MDPW participants. Instead a questionnaire has been used as a follow-up post-test for the twenty-five participants of Choquette's (1999) study of MDPW participants. Respondents were asked to indicate their mother's birth date as in Choquette's (1999) study. This facilitated matching of responses from the current study and those given in Choquette's 1999 study. This questionnaire is referred to as the longitudinal questionnaire. Also a second questionnaire was administered to the remaining two hundred and forty-five alumnae, which asked participants to make comparative judgments. This questionnaire is referred to as the retrospective survey.

Both surveys aimed to explore changes in self-worth, career management self-efficacy, career satisfaction, life satisfaction and levels of emotional among MDPW alumnae. Also the questionnaires assessed how alumnae behaviours have changed with respect to career enhancing strategies, career planning and continuing education since completion of the MDPW. Demographic questions and work related questions were included in both questionnaires to assess career advancement and examine the impact of moderating variables such as time since taking the MDPW, age, education, work experience and home status. Details of how the measures were adapted for each questionnaire will be discussed later in this chapter.

4.1 Limitation of the Research Design

As noted above one limitation to this study is the absence of a control group for both the follow-up longitudinal study and the retrospective survey. As a result, observed effects of the program could have alternative explanations such as the natural growth and development of the participants. Some participants in the pre-test phase expressed this concern. They felt that other developments in their lives since having completed the MDPW had also played a role in shaping their behaviours and attitudes today. History and maturation effects may have also impacted the results of both studies. The history effect suggests that the change or lack of change in the data collected may be attributed to something other than the treatment and that took place outside the confines of the experiment between data collection at time one and data collection at time two in the longitudinal study and between taking the program and data collection in the retrospective study (Schuyler et al., 1979). The maturation effect suggests that changes may have occurred due in large part to the aging process (Schuyler et al, 1979). Despite the above limitations, this research is worthwhile as the hypotheses that have been tested in the research reflect the assumption that other influences average out across the sample and that any observed changes are attributable in a significant measure to participation in the MDPW.

In general, a positive bias can be expected as most alumnae are very proud of their accomplishments and many have chosen to partake in the alumnae association in which alumnae reunite on various occasions throughout the year. This positive bias may be

regarded as a limitation to this study. It is important to stress that perceptions of alumnae are important. If respondents believe that they are more confident, believe they are more competent with respect to their work, these beliefs may alter the actions and the behaviours that respondents chose to take towards enhancing their work and family lives. Tom Morris (1994) argues that to be successful you need precursive faith (faith that precedes the evidence). He also advocates the action approach whereby if you act as if you have self-confidence you will become confident. Confidence is a positive attitude that may lead to positive behaviour.

Demand effects may have also risen in the research. These occur when the subject knows (or thinks they know) what the researcher wants to hear/find and they change their responses to match the hypothesis. It can be inferred that respondents were aware of the objectives that the MDPW set out, many of which are being tested in this research. In this study respondents may have been inclined to answer favorably to questions because of the awareness of the program's objectives.

What has been coined the Hawthorne effect may have impacted the results of this research. This phenomenon is characterized by an awareness on the part of the subjects of special treatment. This awareness becomes confounded with the independent variable under study (Houston et al., 1973). It has been shown that in educational experimentation, no matter what the hypothesis is, the experimental classes do better than the control classes (Houston et al., 1973). This phenomenon is associated with human

psychology. In this study respondents may be inclined to answer favorably to questions because of the fact that they are being studied.

The longitudinal study has several specific limitations. First, the sample size is only seventeen. The small sample size will have had an effect on power and Type I error. The longitudinal study may have also lent itself to “pre-test sensitization”. This phenomenon occurs when the pre-test sensitizes the subjects to what is important about the post-test and therefore they perform much better on the post-test (Schuyler et al., 1979). Since many of the measures used in this study are behavioural rather than cognitive, and the fact that there was a substantial amount of time between the pre-test and post-test (three years) the impact of pre-test sensitization should be minimized.

Although the retrospective survey has a much larger sample (one hundred and two), it also has some limitations. Questions about self-worth, general satisfaction, career enhancing strategies, career planning and career management self-efficacy have been modified from the original survey to seek comparative judgments from the participants. Recall may not be as accurate as the answers obtained from the longitudinal study. Career advancement, mentoring and networks are also measured comparatively in both surveys, which may limit accuracy. This type of research lends itself to gathering respondents’ perceptions of changes in behaviours and attitudes rather than actual changes. As noted previously however, perceptions are of great importance as they may shape respondents career enhancing behaviours.

4.2 Data Collection

The surveys were sent out to the homes of alumnae via mail. A return envelope and postage were provided for the respondents. In order to increase the response rate several measures were taken. First, a cover letter coming from the Director of the program and the principal researcher was sent with each questionnaire. The purpose of the cover letter was to present participants' with a brief outline of the nature of the study, express the usefulness of this study, promise participants anonymity and express appreciation for participants' contribution (please see Appendices F and G).

Due to missing mailing addresses, 250 questionnaires were mailed out to respondents' home residences instead of the proposed 270. Three weeks after the first mailing a follow-up post card was mailed out to remind alumnae of the importance of their participation. A lower response rate than expected prompted personal follow-up calls rather than a second massive mail out. It appeared that many of the addresses were not up to date. Where the researcher was able to contact graduates by phone, a second questionnaire was either mailed out or faxed to the respondent.

The signed consent forms and the answered surveys were to be returned in separate envelopes. The consent forms were used to check the mailing list to assess who had responded and who had not. The consent forms were not attached to the questionnaires as they were returned separately and questionnaires were not associated with any specific individual. A copy of the consent form is located in Appendix H.

4.3 Questionnaires

The longitudinal study consists of 25 participants of the 1998-1999 MDPW session and the retrospective study consists of the remaining 245 MDPW alumnae. In selecting measures for inclusion in the questionnaires, the researcher tried to limit the length of the questionnaires while also exploring fully the research objective. The result was a 14-page questionnaire for the longitudinal study and a 13-page questionnaire for the retrospective questionnaire. To address the effects of the program on its participants through longitudinal comparisons the same questions and scales as in Choquette's (1999) survey were used with minor modifications. In addition three new constructs have been measured. The questionnaires have been constructed based on the information gathered throughout the literature review (individual questions are labeled and are found in Appendix A for the questions unique to the longitudinal study and in Appendix B for questions unique to the retrospective study and Appendix C for other questions in the retrospective study found in both questionnaires. The actual questionnaires are found in Appendices D and E. The questions that were asked sought to answer whether the MDPW was able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success.

4.4 Measures from the Model

A summary of constructs and measures for the variables included in the model and the corresponding supporting studies are outlined in Table 4.1.

Table 4.1: Summary of Measures and Constructs

Construct	Measures	Supporting Study	Cronbach Alpha From Supporting Study
Self Worth:			
Global Self-Worth	6 Items	Messer & Harter 1986	.91
Job Competence	4 Items	Messer & Harter 1986	.68
Career Management Self-efficacy	24 Items	Schwoerer 1990	.91
Self-Assessment	3 Items	Schwoerer 1990	--
Environmental Assessment	5 Items	Schwoerer 1990	--
Action Planning	5 Items	Schwoerer 1990	--
Career Management Initiation	5 Items	Schwoerer 1990	--
Reacting Calmly to External Requirements	6 Items	Schwoerer 1990	--
Career Planning	5 Items	Orpen 1994	.70
Career Enhancing Strategies	23 Items	Duxbury, Dyke & Lam 1990	.83 in Choquette 1999
Desire to Continue Education	2 Items	--	--
Satisfaction:			
Career Satisfaction	5 Items	Greenhaus et al, 1990	.88
Life Satisfaction	1 Item (longitudinal only)	Choquette 1999	--
	5 Items (longitudinal & retrospective)	Diener, Emmons, Larser and Griffen, 1985	.87
Work life	1 Item (longitudinal only)	Choquette 1999	--
Burnout	1 Item (longitudinal only)	Choquette 1999	--
	5 items (longitudinal & retrospective)	Maslach and Jackson 1986	.71-.90
Career Advancement	10 Items	Following Melamed 1996	--

4.4.1 Self-Worth

To assess changes in self-worth the Adult Self-Perception Profile (ASPP) developed by Messer and Harter (1986) was used. The ASPP is a 50-item scale that includes 12 sub-

scales. This instrument measures self-perceptions related to 12 domains of everyday life that may be regarded as pertinent for most adults including overall sense of self-worth.

Choquette's (1999) study explored three ASPP facets: job competence, intelligence and global self-worth. In the longitudinal study ten out of the original fifty sentences of the ASPP were used to assess self-worth. Job competence, an Adult Self-Perception Profile facet and the global-self worth measure were used. The intelligence facet has been omitted although it was used in Choquette's (1999) study because of the inability to measure this facet retrospectively as it would be difficult for respondents to indicate whether or not they feel they have increased their intelligence since completion of the MDPW. Also this facet did not lead to statistically significant results in Choquette's (1999) study.

Job competence measures perception of competence in one's occupation. This sub-scale includes items such as feeling productive, competent, and proud of one's work (Messer & Harter, 1986). Global self-worth measures one's global perceptions of worth. This sub-scale includes items such as liking the way one is leading one's life, being pleased with oneself, and liking the kind of person one is (Messer & Harter, 1986).

The question format is a forced-choice in which respondents must decide which statement of a sentence best describes them, and to what degree, by indicating whether the statement is either "really true for me" or "sort of true for me". Respondents could check only one box per item. Items are scored according to Messer and Harter's (1986)

scoring key, in which high scores reflect feelings of positive perceived self-worth and lower scores reflect low feelings of perceived self-worth (For a complete list of items please refer to Appendix A).

In the retrospective survey, a 7- point Likert scale was used to determine whether or not respondents feel that by having participated in the MDPW they have increased their job competence and global self-worth. The response options range from 1, strongly disagree to 7, strongly agree. A sample item would be; “Compared to before the MDPW I feel more satisfied with how I do my work” (For a complete list of items please refer to Appendix B).

4.4.2 Career Management Self-Efficacy

In order to determine participants’ feelings of self-efficacy with respect to managing their own careers, Schwoerer’s (1990) career management self-efficacy (CMSE) scale was used. Respondents were asked to indicate their level of confidence, on a 7-point Likert scale of their ability to perform 24 career management behaviours (Schwoerer, 1990). For a complete list of items please refer to Appendix A. In the retrospective survey respondents were asked to make comparative judgments, on a 7-point Likert scale of their ability to perform 24 career management behaviours. An example would be; “Compared to before the MDPW, I am better able to accurately assess my strengths.” Respondents were asked to indicate whether they disagree completely, agree somewhat or agree completely (see Appendix B).

4.4.3 Career Planning

Orpen's (1994) five-item scale was used to measure individual career planning. In the longitudinal survey, respondents were asked to indicate the extent to which they agree or disagree with statements about career planning on a 7-point Likert scale. The higher the scores the more a respondent is active in his/her individual career planning. A sample item is "I have definite goals for my career over my lifetime," (Orpen,1994). In the retrospective survey a modified version of Orpen's (1994) five- item scale was used. Respondents were asked to indicate the extent to which the statements on career planning apply to them now as compared to before participating in the MDPW using a 7-point Likert scale. The higher the scores the more the participant has increased their career planning activity since having participated in the MDPW (for a complete list of items please refer to Appendices A and B).

4.4.4 Career Enhancing Strategies

The dependent variable, career enhancing strategies was measured by using a scale developed by Duxbury, Dyke & Lam (1999) for exploring career development in the federal public service. The scale includes items from Dyke's (1990) self-promotion scale, Gould and Penley's (1984) career strategies inventory (CSI), and Ragins, Townsend and Mattis's (1998) work on women's career strategies. The scale consists of 23 items related to career enhancing strategies in an organization. No modifications were necessary for the longitudinal survey. An example of an item asked the respondent to indicate on a 7-point Likert scale the extent to which they "effectively advocate ideas and programs" (for a complete list of items please refer to Appendix A). In the retrospective

survey respondents were asked to indicate whether they perform the 23 activities less often, the same as or more often as compared to before participating in the MDPW (for a complete list of items please refer to Appendix B).

Two additional questions explored respondents' mentoring experiences and networks. Respondents were asked to indicate the amount of mentoring they have received prior to the MDPW. Response options include: received almost no mentoring, received some mentoring or received a great deal of mentoring. Part (b) asked respondents if they feel they have received less, the same amount or more mentoring since completion of the program. The second question asked respondents if they had a work-related network before the MDPW and part (b) asked if their current network is smaller, the same or larger than before the MDPW. These two questions on mentors and networks are included in both the longitudinal and the retrospective surveys (these questions may be found in Appendix C).

4.4.5 Desire to Continue Education and Training

Two questions on respondents' interest in furthering their education and training were included in both the longitudinal and retrospective surveys. These questions were developed for this study. The first question asked participants to rate on a 7-item Likert scale the extent to which they are motivated to further their education compared to before participating in the MDPW. The second is a dichotomous question that asked participants to indicate whether or not they have enrolled in an educational program since completion of the MDPW. They were also asked to specify what type of program they have participated in. Education and training is defined to include university and college

programs as well as workplace-based programs that involve a serious commitment (a series of courses over time). These questions may be found in Appendix C.

4.4.6 Career Satisfaction

Following Choquette's (1999) study, career satisfaction was measured by a five-item scale developed by Greenhaus, Parasuraman and Wormley (1990) in which respondents indicated the extent to which they agree or disagree with statements concerning satisfaction with their own careers on a 7-point Likert scale. An example of an item is "I am satisfied with the progress I have made toward meeting my goals for advancement" (Greenhaus et al, 1990). Please refer to Appendices A and B.

4.4.7 General Satisfaction

General satisfaction could include a number of factors such as satisfaction with one's life, career, work life and home life. In her research, Choquette used life as whole, work life and burnout. For consistency sake, the same measures as in Choquette's (1999) were used to test what she called "general satisfaction" for the longitudinal study only. Choquette developed these measures. In the longitudinal study, life satisfaction was measured using a 7-point Likert scale in which respondents were asked to answer the following question "In general, how satisfied or dissatisfied are you with your life as a whole right now?" Work-life satisfaction was also measured using a 7-point Likert scale in which respondents were asked to answer the following question "In general, how satisfied or dissatisfied are you with your work life right now?" The final component of general satisfaction, burnout was measured by asking respondents the following question

using a 7-item Likert scale, “In general, to what extent are you feeling burned out (disillusioned, emotionally and/or physically exhausted)?” For a complete list of items please refer to Appendix A.

These questions do not appear in the retrospective survey, as their reliability and validity are questionable. Instead life satisfaction and emotional burnout will be measured separately.

4.4.8 Life Satisfaction

In the retrospective study, life satisfaction was measured using a five-item scale developed by Deiner, Emmons, Larser and Griffen (1985). Respondents were asked to indicate on a 7-point Likert scale if the 5 items regarding their lives are less true now compared to before the MDPW, the same as before the MDPW or more true now as compared to before the MDPW. An example of an item is “In most ways my life is close to my ideal.” Please refer to Appendix C.

4.4.9 Burnout

Selected items from the Maslach 22-item burnout inventory were used to measure emotional burnout in the retrospective study. In total 5 items were used in this analysis. Respondents were asked to indicate on a 7-point Likert scale whether they feel much less burnout now compared to before participating in the MDPW, the same as before the MDPW or much more. An example of an item measuring emotional burnout is “How often do you feel emotionally drained by your job?” Please refer to Appendix C.

4.4.10 Career Advancement

Drawing on Melamed's (1996) measurement practices, career history questions were used to determine participants' career advancement. Participants were asked to respond to a series of questions with respect to their careers prior to participating in the MDPW and their current careers. These questions were included in both the longitudinal and retrospective surveys. For descriptive purposes, respondents were asked their year of participation in the MDPW, position prior to participation and current position. These questions determined the change in the participants' actual positions since they have completed the MDPW. Coding was necessary so that responses could be grouped into a limited number of categories.

Job Level

Participants were also required to choose from six choices, the category that best describes the level of their job ranging from senior management to non-management for both their prior positions and current positions. For changes in job level, levels were numbered one through six. A higher number in the current job level versus the prior job level indicated a move to a higher job level and a lower number indicated a move to a lower job level.

Salary Progression

Respondents were also asked to indicate the annual gross salary plus bonuses and commissions of both positions rounded off to the nearest thousand. They were also given

the opportunity to select a range if they were not comfortable in providing the exact amount. Salary freezes over the past decade in the Public Service may have had an impact on the results concerning salary changes. Some of the respondents may have been affected by the freeze while others may not. As a consequence salary progression may not be as reliable an indicator of career advancement as it would otherwise be. To address this issue it is necessary to examine the data to determine whether or not participants were affected by the salary freeze by examining for example the dispersion in salary progression.

Salary changes were measured in one of two ways depending on whether the respondent has indicated an actual salary or has selected a range. In the first case the actual salary of the participant's current position was used and the amount made in the position prior to participating in the MDPW was subtracted and the difference was then be divided by the number of years since taking the program. This gave the amount that the salary has either increased or decreased by year since completing the MDPW. Secondly, if a participant indicated a range for their salaries, the same calculations were made but using the midpoints of the range selected for both current salary and previous salary. Again, it is important to note that salary freezes in the Public Service may have impacted these results.

Levels to Chief Executive

Respondents were asked to indicate the number of levels between themselves and the Chief Executive in both positions. In terms of the levels of authority between a

participant and her chief executive the number of levels were compared from her current position and her prior position. A lower number of levels was a positive indicator of career advancement whereas a higher number was a negative indicator.

Supervisory Responsibilities

Respondents were asked to indicate whether or not they supervised others in these positions. If they supervised others they were asked to indicate the number of direct reports and the number of indirect reports. An increase in the number of direct reports was considered a positive indicator of career advancement whereas a decrease in the number of direct reports was considered a negative indicator.

Changes in Responsibility and Challenge

Another aspect of career advancement is assessed by the change in level of responsibility in their position. Respondents were also asked to rate on a 7-point Likert scale whether they feel their responsibilities have changed since completion of the MDPW. Respondents were asked to indicate whether in their current positions they are receiving less responsibility, the same level of responsibility or more responsibility than in positions prior to participating in the MDPW. The amount of challenge that the participants' current position provides was also asked to assess career advancement. Participants were asked to indicate whether their position has changed with respect to the amount of challenge it provides now compared to before the MDPW. Participants were asked to indicate whether their current positions are less challenging, equally challenging or more challenging than their positions prior to the MDPW.

Promotions and Lateral Moves

A final aspect of career advancement deals with the number of promotions a participant has received since completion of the MDPW. These kinds of career moves are important because they can expand an employee's skill set and accelerate career progression. Promotions are one of the most tangible forms of career advancement. Promotions are both a reward for good performance and an important developmental opportunity (Cooper, Graham & Dyke, 1993). Promotion practices also symbolize what organizations' value. Respondents were asked to indicate the number of promotions and lateral moves they have received within the same functional area and to a different functional area. (The above questions may be found in Appendix C).

Tests for career advancement were performed separately for each measure. If different measures indicate different changes in career advancement, conclusions were drawn on the balance of evidence. For instance, changes in career advancement was considered positive if the majority of measures indicate a positive change.

4.5 Moderating Variables

4.5.1 The Number of Years Since Taking the MDPW

In the retrospective study, respondents range from having completed the MDPW as recent as one year ago up to eight years ago. This may lead to possible impacts. There may be more direct impacts of the MDPW for those who have recently graduated compared to those who graduated a number of years ago. Also, other developments such

as personal growth, independent to having participated in the program will likely be higher the more time that has passed since completion of the program. Lastly, there may be differences in the accuracy of reporting. Therefore it is necessary to determine if the number of years since completing the program has impacted the results. Correlation analysis has been undertaken to determine if the number of years since completion of the program has impacted the results for the ten independent variables. Respondents in the retrospective survey were asked what year they completed the MDPW (please see Appendix B).

4.5.2 Work Experience

These questions asked respondents to indicate the year in which they began full time work and how many employers they have worked for because research has shown that work experience is positively correlated to managerial advancement. Because work experience is a moderating variable, these questions might explain some of the changes or lack of changes in the participants' career advancement and other dependent variables. The number of years worked was the measure used, and the number of employees was included for descriptive purposes. These questions have been included in both the longitudinal and retrospective surveys (these questions may be found in both Appendices A and B).

Nine questions were included to provide information on the moderating variables, age, education, and home status. The demographic questions have been modified slightly

from Duxbury, Dyke and Lam's (1999) study of career development in the high tech sector and in the federal public service.

4.5.3 Age

The respondent was asked to indicate her age.

4.5.4 Home Status

The respondent was asked to select a category which best describes her marital status.

Respondents were also asked to indicate the number of children they have living at home, how many of these children are under 18 or older than 18, the time spent on childcare activities, and time spent caring for them and for elderly relatives. A final question asked the respondent to indicate the total amount of hours spent working per week including work taken home (both now and prior to having participated in the MDPW).

Research done in the area of work life balance has suggested that the time spent on childcare activities is the most effective measure of home status (Duxbury, 1998). Therefore time spent on childcare activities was the measure used. Other measures have been included for descriptive purposes. (These questions may be found in Appendices A and B).

4.5.5 Education

Respondents were asked to select a category which best describes their level of educational attainment. Education was coded and broken up into two groups, completed

post-secondary education and have not completed post-secondary education. Splitting this variables into two groups helped to determine whether the impact of the independent variable (participating in the MDPW) on the ten dependent variables differs according to participants' level of education. For example it was be possible to determine whether or not having completed post secondary education has an effect on the relationship between having participated in the MDPW and career satisfaction.

4.6 Other Measures not included in the Model

The following measures do not pertain to the model but have been included because they relate to Kirkpatrick's model and may reveal useful information to the organizers of the MDPW. Responses to these questions may provide insight to modifications that may enhance the program.

4.6.1 Value of Skills and Knowledge of the MDPW

This variable is not included in the model but provides program organizers with a sense of whether respondents feel that they are obtaining worthwhile knowledge and skills from the program. Six questions were asked in order to determine how valuable the knowledge and skills learned by taking the program are to the participants' current jobs. These questions have been modified from a sample survey, 'New Supervisors' Development Program Evaluation Questionnaire in Phillips (1991). The questions used 7-point Likert scales allowing the participant to decide whether the content and

assignments of the MDPW are very valuable, have some value or have no real value to their current job. The sixth question is dichotomous and asked respondents to indicate whether or not they have made reference in their work to the material in the program. These questions have been included in both the longitudinal and retrospective surveys. These questions may be found in Appendix C.

4.6.2 Work Environment

This variable is not included in the model but provides the program organizers with an idea if respondents' work environments were supportive in allowing them to implement what they learned in the MDPW. A series of questions were asked to assess the participants' work environment. These questions provide information as to whether the participants' work environment has allowed participants to implement effectively the skills they have acquired from the MDPW. These questions have been developed from 'New Supervisors' Development Program Follow-Up Evaluation Survey in Phillips (1991). Four multiple-choice questions were used to assess the work environment of the participants. The questions asked participants to indicate the extent that they have been able to practice what they have learned in their work place, their boss' interest in assisting them in implementing what they have learned and whether informal departmental practices have hindered their ability to implement what they learned. These questions have been included in both the longitudinal study and retrospective study (these questions may be found in Appendix C).

4.6.3 Sponsor Support

This variable is not included in the model but provides the program organizers with an idea of the level of commitment from the participants' sponsors. This support or lack of support may have an effect on participants' performance in the program and may have an effect on their work performance. One question developed for this study was used to determine the extent of support from one's sponsor during participation in the MDPW. The question is in multiple choice format asking participants to indicate the level of support: completely supportive, somewhat supportive or not very supportive. This question is identical in both the longitudinal and retrospective surveys (these questions may be found in Appendix C).

4.6.4 Effects of Training on Organizational results

This variable is not included in the model but provides the program organizers with an idea of how the in class training may have impacted the organizations in which respondents work for. Three questions were included in order to assess the effect of training on organizational results. These measures must be considered exploratory, as one person's contribution to the overall results of an organization may be difficult to assess. The first question is composed of 4 pairs of words and phrases that describe possible changes in respondent's perceptions of their approaches to work since completing the MDPW. Respondents were to mark the position along each 7-item scale that best describes their experiences in their work lives. Items include: less effective at work versus more effective at work, less efficient at work versus more efficient at work, a

less effective communicator at work versus a more effective communicator at work and more stressed at work versus more relaxed at work.

The remaining questions are open-ended. The first asked participants to indicate any changes in them, their work, or their relationships at work that were caused in some substantial part by them attending the MDPW. The respondents were asked to include anything that they are doing now which they weren't doing prior to the MDPW as well as anything they have stopped doing since attending the MDPW. The second open-ended question asked respondents to indicate any changes, which the organization has experienced as a result of their participation in the MDPW. This question also asked respondents to estimate a dollar amount they feel they are saving their organization due to new ideas and managerial skills learned in the MDPW (Phillips, 1991). These questions will be included in both the longitudinal and retrospective surveys (these questions may be found Appendix C).

4.6.5 Other Qualitative Data

Three open-ended questions adapted from Duxbury, Dyke and Lam's (1999) background information survey on career development in the high tech sector were included in both the longitudinal and retrospective surveys. These questions provided the participant the opportunity to identify what her organization has done to facilitate the fulfillment of her career goals and what it has done to prevent her from doing so. The participant could

also explain if there have been aspects of her personal life that may have prevented her from achieving her career goals. These questions may help to better explain some of the results. For example, a response may indicate a specific reason that a participant was unable to advance in her career or feel satisfied with her life that has nothing to do with whether or not the respondent has participated in the program. These questions may be found in Appendix C.

4.7 Pre-Testing and Resulting Modifications

In anticipation of the possible recall difficulties, a pre-test was administered to six alumnae: three from the 1992/1993 session, two from the 1994/1995 session and one from the 1996/1997 session. A pre-test was administered for respondents in the retrospective study only as questions ask respondents to make comparisons from today to prior to their participation in the MDPW whereas in the longitudinal study, for the most part respondents are basing their answers on current events. The researcher phoned each of the participants and recorded their comments. Surprisingly, respondents did not express recall difficulties for most of the questions. This held true even for questions asking respondent to recall things like their salary prior to participating in the MDPW. This suggests that participating in the MDPW played a significant role in respondents' lives and that they are able to use it as a reference point in time. Respondents did stress that it is difficult to attribute certain outcomes of their lives to participating in the MDPW alone and that other life variables may have contributed to shaping these outcomes.

Based on comments from the respondents the following changes were made to the questionnaire:

1. Instructions were placed on the cover of the questionnaire to clarify for those working in the Public Service that by “Organization” we mean their Department, by “Employer” we mean their Department and by “Chief Executive” we mean their Deputy Minister. Instructions also stressed that researchers are interested in the current career experiences and attitudes of alumnae and awareness that these may not be directly linked to having participated in the MDPW alone.

2. Alumnae were also given the opportunity to indicate if career advancement was one of their goals for participating in the MDPW through a dichotomous question. Also, if respondents indicate yes they were asked to indicate the extent that this goal has been met on a 7-point Likert scale, in which a score of one suggests that respondents did not meet their goal at all, four means they have met it somewhat and 7 reflects that respondents have completely met their goal.

3. An additional column Not Applicable (N/A) was added to the question pertaining to the number of career moves since completion of the MDPW. If respondents choose N/A they are also asked to explain why they gave this answer. The reason for adding this question is so that respondents have the opportunity to indicate if career advancement such as later moves and promotions was not of interest to them or unavailable for some reason.

4. A question was also added asking respondents to characterize their personal definition of success on a 4-point Likert scale, in which one represents a focus on financial rewards and influence and four represents a focus on personal satisfaction and respect. The answers to this question may help to explain positive and or negative results with respect to career advancement. Respondents may be more inclined to seek challenging jobs, more responsibility, job satisfaction, personal satisfaction, or balance between family and life rather than just financial rewards. In other words, respondents may define career advancement in much broader terms than managerial advancement alone.

5. Some respondents indicated confusion with the wording of the question pertaining to the value of the program content and respondents' positions. It was unclear as to whether the question was dealing with current positions or previous positions. Therefore the wording was changed. There are now two questions dealing with the value of the program content, one to assess its value to the respondents' position held while participating in the MDPW and the second to assess its value to the respondents' current positions.

6. The career management self-efficacy scale was reduced to 24 items. Item k, "request a promotion if I feel it is overdue" and item w, "ask my supervisor for an increase in pay" have been combined into one item "I am able to ask my supervisor for opportunities that I deserve" as to better suit those working in the Public Service.

7. An open ended question asking respondents to indicate whether they feel that there is anything missing in the MDPW that could be added in order to enhance the program was also included in the questionnaire as per the suggestion of pre-test participants.

8. A final addition to the survey was a section on interest in related activities. This includes five questions inquiring about respondents' interest in continuing education with CREWW and interest in alumnae events. This was added at the request of the program staff and alumnae association. The final questionnaire appears in Appendix E.

4.8 Data Analysis

The two major types of data analysis in this study included paired t-tests and comparisons of mean scores. Paired t-tests were used for data in the longitudinal study and were compared to pre-test data from Choquette's (1999) study to see if changes have taken place. In the retrospective study, mean scores have been used to assess whether changes have taken place since each measure has response options indicating change or no change. This was accomplished by using paired t-tests where participants' actual scores were compared to the null hypothesis of no change (i.e. a score of 4). Proposed data analysis for all variables in the research are outlined in Table 4.2. A more detailed explanation of the data analysis follows.

Table 4.2 Data Analysis

Construct	Measure		Data Analysis	
	Longitudinal Study	Retrospective Study	Longitudinal Study	Retrospective Study
MODEL VARIABLES				
Self Worth:	6 Items	6 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Global Self-Worth	4 Items	4 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Job Competence				
Career Management	25 Items	24 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Self-efficacy				
Self-Assessment	3 Items	3 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Environmental Asses.	5 Items	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Action Planning	5 Items	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Career Management Initiation	6 Items	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Reacting Calmly to External Requirements	6 Items	6 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Career Planning	5 Items	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Desire to Continue Education	2 Items	2 Items	N/A	Paired t-tests (Actual scores vs. 4)
Career Satisfaction	5 Items	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Life as a whole/Life Satisfaction	1 Item	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Emotional Exhaustion	1 Item	5 Items	Paired t-tests (T2 vs. T1)	Paired t-tests (Actual scores vs. 4)
Career Advancement	N/A	10 Items	N/A	Paired t-tests (Actual scores vs. 4)

MODERATING VARIABLES			
Number of Years Since Completion of the MDPW	N/A	1 Item	<p>A correlation analysis has been run for each of the moderating variables and the dependent variables. Where significant correlations are present, regressions have also been run to further explain the magnitude of these relationships.</p> <p>Where significant correlations are present further analysis of differences between groups, using mean score comparisons and t tests for continuous measures and Chi-Square testing for dichotomous measures have been conducted to determine the impacts on the overall results. Groups were determined by a median split for the following variables: the number of years since taking the MDPW, age, work experience and time spent on childcare activities (home status). For the variable education, the groups was split between those who have completed post-secondary education and those who have not.</p> <p>Results were reported only for the relationships that are significantly different from the overall results</p>
	3 Items	3 Items	
Work Experience	1 Item	1 Item	
Age (During MDPW and Current)	6 Items	6 Items	
Home Status	1 Item	1 Item	
Education			
ADDITIONAL VARIABLES			
Effects on Org. Results	N/A	6 Items	N/A Paired t-tests (Actual scores vs. 4)
Changes in approaches to work	N/A	4 Items	N/A Paired t-tests (Actual scores vs. 4)
Open-ended questions	N/A	2 Items	N/A Content Analysis
Work Environment	N/A	4 Items	N/A Mean Scores
Value of Skills and Knowledge	N/A	6 Items	N/A Mean Scores
Sponsor Support	N/A	1 Item	N/A Mean Scores
Open-ended Questions	N/A	3 Items	N/A Content Analysis

In the longitudinal study, in order to compare pre-test and post-test data, paired t-tests were used for the following variables: self-worth, career enhancing strategies, career management self-efficacy, career planning and satisfaction. It was necessary to use paired t-tests because the sample is not independent, identical measurements have been used on the same set of individuals as in Choquette's (1999) study. In essence, each respondent was paired with herself so that change or lack of change on the independent variables could be determined from time 1 to time 2. For each individual, the differences between the values from the 2001 questionnaire were compared to Choquette's (1999) data collected at the beginning of the 1989/1999 MDPW program. Differences found between the two measurements are assumed to be due in part to the treatment condition (participating in the MDPW). As detailed earlier, other factors may influence the results such as the history and maturation effects. Five potential moderating variables were examined: the number of years since taking the program, age, education, work experience and home status may also impact results.

For the comparative data collected on the same variables in the retrospective data, mean scores have been reported indicating whether on average, participants feel that there has been positive, negative or no change. The mean scores have also been tested against a mean of 4 (which represents no change), in order to determine if the changes are significant. For example, let's suppose that the mean score for global self-worth is 4.9. We need to ask ourselves if this is significantly different from a score of 4 (no change

in global self-worth). Paired t-tests will be used to determine whether the difference is statistically significant.

A content analysis was used to help group similar responses for the open-ended questions on the effect of training on organizational results and for the three remaining open-ended questions. Mean scores are reported for the additional variables work environment, sponsor support and two items on the effect of training on organizational results variable.

Analysis of Moderating Variables

In a typical situation where you compare a treatment group to a control group, analysis of variance would be used to determine the impact of the moderating variable on the relationship between the treatment variable and dependent variables. Variance among means for differently treated groups is of interest. The form of analysis used would depend on the number of predictors and whether they are discrete or continuous. For example if one was testing the relationship between the treatment and career advancement and wanted to determine the impact of respondents' age (continuous predictor), they would undertake an analysis of covariance comparing treatment and control group (see Figure 4.1). This would explain how much of the variance in career advancement was due to training and how much was due to age.

Figure 4.1: Typical Analysis of a Moderator Under Varying Treatment Conditions

Figure 4.2 illustrates how this research differs. Since all respondents have been exposed to the same program, there is no variance in the level of training that respondents have received. Main effects of the treatment have been assessed by comparing mean scores to the null hypothesis of no change. Moderating effects have been assessed by examining the relationship between the change scores and the moderating variable such as age. Correlations have been examined to determine which dependent variables are affected by the moderators and regression analyses have been used to assess the impact of the moderators on the dependent variables.

Figure 4.2: Analysis of Moderator Effects in the Current Research

For the continuous moderating variables, (the number of years since taking the MDPW, work experience, home status and age), correlation analyses has been used.

Where significant correlations were present further analysis of between group differences, using mean score comparisons and t tests for continuous measures and Chi-Square testing for dichotomous measures was conducted to determine how the correlation impacts overall conclusions. For ease of interpretation and to provide examples, groups were determined by a median split for the following variables: the number of years since taking the MDPW, age, work experience and time spent on childcare activities (home status). For the education variable which was broken down into two groups (those who have completed post-secondary education and those who have not), independent sample t-tests have been used to test the impact on education on the dependent variables.

4.9 Summary of Methodology

This section has outlined the methodology used to test the hypotheses formed in Chapter Three. A mail survey technique was used in order to determine whether the MDPW has been able to promote positive career outcomes for women, if the program has impacted the careers of the participants and if the program has impacted their career satisfaction and their life satisfaction. It is important to stress that due to the limitations of the research design, outcomes may reflect participants' perceptions of changed behaviours and attitudes and not necessarily actual changes. Nevertheless, these perceptions are of great importance because they may affect career enhancing behaviours.

Two separate questionnaires have been used. One questionnaire was mailed to the twenty-five MDPW participants in Choquette's (1999) study. The other questionnaire was mailed to the remaining two hundred and forty-five alumnae. Whenever possible, measures have been adapted from previous studies (see Table 4.1 for a summary of constructs and measures).

Data analysis consisted mainly of paired t-tests for the data in the longitudinal study that corresponded with data obtained in Choquette's (1999) study and paired-t-tests compared to the null hypotheses of no change for the data in the retrospective survey and for the variables in the longitudinal study that were not included in the 1999 questionnaire. A content analysis was also preformed for open-ended questions (see Table 4.2 for summary of data analysis).

CHAPTER 5 RESULTS

This chapter describes the results of both the longitudinal survey and the retrospective survey and the methods used to test the 16 hypotheses which were described in Chapter Three. The results of the survey are intended to determine whether participating in the MDPW has led to a positive increase in self-worth, career management self-efficacy, career planning, the use of career enhancing strategies, motivation to further education, career satisfaction, life satisfaction, career advancement and a decrease in emotional. The impact on the results of the number of years since participating in the MDPW, respondents' age, home status, work experience and education will also be examined.

This chapter is divided into four sections. The first section describes the data. Section two deals with longitudinal study and the section three deals with the retrospective study. Sections two and three are broken down to describe the demographics of the particular study, the reliability of the measures used, the results and the impact of the moderating variables. The last section of this chapter summarizes the hypothesis testing.

5.1 An Overview of the Data

Out of the 250 questionnaires sent out for both surveys, a total of 124 questionnaires were returned for a response rate of 49.6%. Twenty-two longitudinal questionnaires were

returned. Only twelve questionnaires had pseudonyms (mother's birth date) that accurately matched those from the questionnaires in 1998. Five more questionnaires were matched because the day of the mother's birth date was off by a day or two and other demographic information such as age, education, number of children living at home as well as managerial level prior to participating in the MDPW matched. A total of 17 respondents were included in the analysis of the longitudinal study.

One hundred and two retrospective questionnaires were returned. Analysis of retrospective change in self-worth, career management self-efficacy, career planning, career enhancing strategies and career satisfaction are based on this sample. A number of questions such as those related to mentoring, networking and desire to continue education were not included in the initial phase (T1) of the longitudinal study (i.e. Choquette's data), and were therefore measured in a retrospective way in the longitudinal survey. For analysis of the questions, responses from both the retrospective and longitudinal surveys were pooled. Thus the total sample was 124 for the measures of: career advancement, networking, mentoring, life satisfaction emotional burnout, changes in approaches to work, demographics, work experience, value of the program, related activities and all open-ended questions.

5.2 Longitudinal Study

Respondents to this questionnaire participated in the MDPW during the 1998/1999 session. Twenty-five respondents filled out a questionnaire at the beginning of the

session in August 1998 (T1), which included eight of the measures located in the current questionnaire. The post-test questionnaire (T2) was filled out during March and April of 2001, roughly three years since completing the program. As noted above, the useable sample for this analysis is 17.

5.2.1 Demographics

The average age of respondents was approximately 44. The age of respondents ranged from thirty-two to fifty-four. Employees in the sample had considerable work experience. Respondents had an average of 22 years of full-time work experience. Most respondents (over 90%) had some post-secondary education with 41% completing at least one university degree. Twelve percent of respondents had also completed a post-graduate degree. Many women had significant family responsibilities. Forty-eight percent of the respondents were married or living with a significant other. Most respondents had children living at home (54%). Please refer to Table 5.1.

Table 5.1: Demographics for the Longitudinal Study

Variable	Mean Score	Percentage of Respondents
Number of years of work experience	22	--
Age	44.24	--
Education		
High School	--	11.80%
Some College or University	--	17.60%
College Diploma	--	17.60%
University Degree	--	41.20%
Post-graduate degree	--	11.80%
Marital Status		
Never married	--	11.8%
Married or living with a significant other	--	70.6%
Separated, divorced or widowed	--	
Have children living at home	--	53.85%
Do not have children living at home	--	46.15%
Number of children living at home	1	--

5.2.2 Reliability of Measures

Table 5.2 indicates the reliabilities of the scales used to test the eight repeated measures. The standardized Cronbach alpha has been calculated for each measure for both time 1 and time 2 results. Cronbach's alpha measures the internal consistency of a scale, that is the degree to which instrument items are homogeneous and reflect the same underlying construct(s). According to Carmines and Zeller (1979), a satisfactory level of reliability is .80. As seen below, most scales appear to be fairly reliable with alphas above .80. The job competence facet of self-worth and the self-assessment facet of career management self-efficacy are lower in reliability. It is also important to note that the three measures

developed by Choquette (1999) are single item measures and therefore no reliability coefficient can be calculated.

Table 5.2: Reliability of Scales

Measure	# of Items (T1/T2)	Cronbach Alpha	
		Time 1	Time 2
Self-Worth			
Job competence	4	.7273	.6212
Global Self-Worth	6	.9126	.8092
Career Management Self-Efficacy		.9549	.9301
	25/24	.6614	.7769
Self-Assessment	3	.8526	.9493
Environmental Assessment	5	.9006	.8827
Action Planning	6	.8000	.8796
Career Management Initiation	4	.8409	.7901
Reacting Calmly to External	5		
Requirements			
Career Enhancing Strategies	23	.8719	.8949
Career Planning	5	.8187	.8050
Career Satisfaction	5	.8990	.9412
Life Satisfaction	1	N/A	N/A
Work Life Satisfaction	1	N/A	N/A
Burnout	1	N/A	N/A

5.2.3 Results for Dependent Variables Measured at T1 and T2

This section explains the results for the longitudinal study. Paired t-tests at the 95% significance level have been used to test the dependent variables. Mean scores are compared from time 1 (T1) recorded in 1998 to time two (T2) recorded in 2001.

5.2.3.1 Self-Worth

Two facets of self-worth, job competence (4 items) and global self-worth (6 items) were measured. It is important to note that this measure is scored between 1 (low sense of self-worth) and 4 (high sense of self-worth).

The mean of job competence at T1 was equal to 3.23 and at T2 the mean was 3.34. The paired t-test indicated that this difference was not statistically significant. This would suggest that respondents' feeling of job competence have not changed much since prior to having participated in the program. It is important to note that the job-competence facet is lower in reliability than other measures and this may reduce the chances of finding significant results (see Table 5.3).

The mean score of global self-worth at T1 was equal to 3.01 and at T2 it was equal to 3.47. The paired t-test indicated that this difference is statistically significant. This would suggest that respondents' feelings of global self-worth have risen significantly since prior to having participated in the program (see Table 5.3).

Table 5.3: Self-Worth Paired Sample Statistics

Variable	Mean T1	Mean T2	t Statistic	Significance
Job Competence	3.23	3.34	-1.01	.328
Global Self-Worth	3.08	3.47	-4.47	.000

5.2.3.2 Career Management Self-Efficacy

The mean for the career management self-efficacy scale at T1 was 4.94 and 5.59 at T2. The paired t-test indicated that this difference is statistically significant. This would suggest that respondents feel that their abilities to manage their careers have improved since participated in the program. The means for all five facets of career management self-efficacy have increased from T1 to T2 and two out of the five facets reflected a significant positive change. These include both action planning and career management initiation (see Table 5.4).

Table 5.4: Career Management Self-Efficacy Paired Sample Statistics

Variable	Mean T1	Mean T2	t Statistic	Significance
Career Management Self-Efficacy	4.94	5.59	-2.53	.022
Self-Assessment	5.25	5.82	-1.78	.094
Environment Assessment	4.88	5.52	-2.02	.060
Action Planning	4.55	5.33	-2.25	.039
Career Management Initiation	4.90	5.48	-2.60	.019
Reacting Calmly to External Requirements	5.35	5.75	-1.94	.071

5.2.3.3 Career Enhancing Strategies

Only one item of the career enhancing strategies inventory proved to have a significant difference in means from T1 to T2. The mean for item g, pursue opportunities to gain line experience at T1 was 3.23 and was 4.80 at T2. This result suggests that respondents may be more likely to engage in pursuing line experience today than prior to their

participation in the MDPW. This may, however be a spurious finding, since with a .05 significance level, we would expect 1 out of 20 tests to be significant just by chance. It is reported in the interest of completeness but overall, it does not appear that participants have significantly changed their level of engagement in career enhancing strategies (see Table 5.5).

Table 5.5: Career Enhancing Strategies Paired Sample Statistics

Variable	Mean T1	Mean T2	t Statistic	Significance
Consistently exceed performance expectations	5.53	5.38	-.38	.707
Exhibit a style that senior managers are comfortable with	5.38	5.44	-.24	.817
Work on high visibility projects	5.71	5.24	.97	.347
Cultivate a powerful mentor	3.59	4.38	1.21	.243
Network with influential colleagues	4.38	4.00	.67	.515
Cultivate an extensive network of contacts outside of the organization	3.81	3.69	.29	.779
Pursue opportunities to gain line experience	3.27	4.80	-2.14	.050
Round out your skills by working in a variety of areas	4.71	4.59	.19	.845
Move from one department to the other	2.56	2.88	-.77	.453
Show that you aspire to positions of increased responsibility	5.50	5.69	-.44	.669
Perform high quality work on the things your supervisors pay attention to	5.94	5.94	.00	1.00
Be a leader within your peer group	5.38	5.63	-1.00	.333
Effectively advocate your ideas and programs	5.01	5.82	-2.02	.061
Show initiative	6.12	6.12	.00	1.000
Communicate your career goals and plans to management	5.25	4.63	.98	.343
Recommend innovative products and services	4.38	5.31	-1.61	.127

Work at your job outside of normal working hours	5.24	5.29	-.16	.872
Find ways to make your contributions unique	4.82	5.41	-1.61	.126
Do things that go well beyond what is required by the job	5.41	5.24	.64	.529
Become a specialist in an area that is crucial to the organization's success	4.94	5.53	-1.34	.198
Let others know that you are prepared to re-locate if necessary	3.13	3.75	-.84	.412
Show that you are very confident	5.24	4.47	1.27	.223
Spend a considerable amount of time thinking about your job outside of normal working hours.	4.77	4.82	-.20	.842

5.2.3.4 Career Planning

The mean for the career planning scale at T1 was 4.06 and at T2 it was 5.38. This difference is statistically significant. This would suggest that respondents have increased their efforts toward career planning (see Table 5.6).

Table 5.6: Career Planning Paired Sample Statistics

Variable	Mean T1	Mean T2	t-Statistic	Significance
Career Planning	4.06	5.38	-2.94	.010

5.2.3.5 Career Satisfaction

No significant changes were noted on the career satisfaction scale as a whole from T1 to T2. Individual items also yielded no significant changes in means scores. This finding

suggests that the career satisfaction of respondents has not changed significantly over the last three years. Means at both points in time were above 5 out of seven indicating a high level of satisfaction with their careers.

5.2.3.6 Work Life Satisfaction

The paired t-test revealed no significant changes in means from T1 and T2. This suggests that respondents' satisfaction with their work lives has not changed over the last 3 years. Means at both points in time were above 5 out of 7 indicating a high level of satisfaction with their work lives. These results should be interpreted with caution since they are based on a single item rather than a multi-item scale. Unfortunately only a single measure of work life satisfaction was included in the original questionnaire, limiting the reliability for the comparative data.

5.2.3.7 Life Satisfaction

The paired t-test revealed no significant difference in means between T1 and T2. This suggests that respondents' satisfaction with their lives has not changed over the last 3 years. Mean scores increased from just below 5 to just above 5. This reflects a fairly consistent level of life satisfaction from T1 to T2. These results should be interpreted with caution since they are based on a single item rather than a multi-item scale. Unfortunately only a single item measure of life satisfaction was included in the original questionnaire, limiting the reliability of the results for the data.

5.2.3.8 Burnout

The mean score for burnout at T1 was 4.31 and it dropped to 3.63 at T2. This difference is not statistically significant. This suggests that the level of burnout did not change significantly from pre-test to post-test. These results should be interpreted with caution since they are based on a single item rather than a multi-item scale. Unfortunately only a single item measure of burnout was included in the original questionnaire, limiting validity and the reliability of the comparative results.

5.2.4 Impact of Moderating Variables

Five variables, the number of years since taking the MDPW, education, home status, age and work experience may moderate the impact of the MDPW on the dependent variables. Moderating effects have been assessed by examining the relationship between the changed scores and the moderating variable. Correlations have been examined to determine which dependent variables are affected by the moderators and regression analysis have been used to assess the impact of the moderators on the dependent variables.

5.2.4.1 Impact of the Number of Years since Taking the Program.

All of the respondents in the longitudinal study participated in the MDPW at the same time, during the 1998/1999 session. Therefore it was not possible to assess the impact of the number of years since completing the program since there was no variance in the

number of years since program completion. This relationship will be explored in the retrospective study.

5.2.4.2 Education

The sample was divided into those who had completed post-secondary education ($n = 12$) and those who have not completed post-secondary education ($n = 5$). Independent t-tests were conducted in order to determine if there were any differences between the two groups. No significant differences were found. These results should be interpreted with caution as the samples are small, therefore the chances of finding significant differences are reduced substantially. This relationship will be further explored in the retrospective study.

5.2.4.3 Time Spent on Childcare Activities (Home Status)

The amount of time that respondents spent caring for their children while participating in the MDPW was used to determine the impact of respondents' home status on the dependent variables. Significant negative correlations between the amount of time spent caring for children and burnout at T2 and between the amount of time spent caring for children and the T2 value for environmental assessment, a facet of career management self-efficacy were revealed. This means that respondents who spent more time caring for children while participating in the MDPW were less burned out at T2 and did less environmental assessment e.g. anticipating the perceptions of others; see Table 5.7.

Table 5.7: Impact of Home Status

Dependent Variable	Correlation with Time Spent on Childcare	n	Significance
Burnout T2	-6.24	12	.040
Env. Ass T2	-.823	12	.001

A further analysis was conducted in order to determine whether or not the correlations found for burnout and for environmental assessment at T2 impacted the overall results. The sample was divided into those who spent 8 hours per week or less on childcare activities while participating in the MDPW, and those who spent more than 8 hours per week. This split was based on the median in the retrospective data which had a larger number of respondents on which to base an appropriate division.

The analysis of the affected variables was repeated separately for the 2 groups, those who spent 8 hours or less per week on childcare activities and those who spent more than 8 hours per week on childcare activities. No significant changes in mean scores were found for either variable across the two groups. For example, for those who spent 8 or fewer hours per week on childcare, environmental assessment did not change significantly from T1 to T2 (T1 mean = 4.79, T2 mean = 5.30, $t = -1.31$, $p = .224$). The same was true for those who spent more than 8 hours per week on childcare activities. Similar results were obtained for burnout (see Table 5.8). The results are consistent with

the original results in that there is no significant change in levels of burnout or environmental assessment from T1 to T2. This implies that the time spent on childcare activities has no significant impact on the relationship between having participated in the MDPW and the 8 dependent variables.

These results should be interpreted with caution as the samples are small, therefore the chances of finding significant differences are reduced substantially. This relationship will be further explored in the retrospective study.

Table 5.8: Burnout and Environmental Assessment by Childcare Grouped

Variable	Mean T1	Mean T2	t Statistic	Significance
Burnout for those who spent 8 hours or less per week on childcare activities	4.56	4.44	.17	.870
Burnout for those who spent more than 8 hours per week on childcare activities	3.50	1.50	2.00	.295
Environmental Assessment for those who spent 8 hours or less per week on childcare activities	4.79	5.30	-1.31	.224
Environmental Assessment for those who spent more than 8 hours per week on childcare activities.	5.10	4.10	1.67	.344

5.2.4.4 Age (now and at the time of participation in the program)

A correlation analysis indicated no significant correlation between age and any of the variables examined. Both the current age of the participants and their age while

participating in the MDPW do not appear to have an impact on the results. These results should be interpreted with caution as the samples are small, therefore the chances of finding significant differences are reduced substantially. This relationship will be further explored in the retrospective study.

5.2.4.5 Work Experience

A correlation analysis indicated no significant correlation between work experience (the number of years worked) and any of the variables examined. These results should be interpreted with caution as the samples are small, therefore the chances of finding significant differences are reduced substantially. This relationship will be further explored in the retrospective study.

5.2.5 Summary of the Longitudinal Study

Table 5.9 summarizes the findings of the longitudinal study. The results indicate that significant increases in global self-worth, career management self-efficacy and career planning occurred for respondents from prior to their participation in the MDPW (T1) to today (T2).

Table 5.9: Summary of Findings of the Longitudinal Study

Variable	Finding
Self-Worth	
Job competence	X
Global Self-Worth	✓
Career Management Self-Efficacy (As a whole)	✓
Facets:	
Self-Assessment	X
Environmental Assessment	X
Action Planning	✓
Career Management Initiation	✓
Reacting Calmly to External Requirements	X
Career Enhancing Strategies	
Item(s):	
Pursuing Line Experience	✓
Career Planning	✓
Career Satisfaction	X
Life Satisfaction *	X
Work Life Satisfaction *	X
Burnout *	X

✓ = *Significant Change*

X = *No Significant Change*

* = *Single item scales.*

5.3 Retrospective Study

5.3.1 Data Treatment

As explained at the beginning of this chapter, the retrospective study consists of 102 complete surveys. Unlike the longitudinal questionnaire, the retrospective study relies on respondents to indicate how they feel now compared to before participating in the

MDPW. The questions on the eight variables that have been examined in the longitudinal study using paired t-tests are not included in this analysis as they are in a different format. A number of questions in the longitudinal questionnaire were, however in comparative format and results for these questions are based on the pooled sample of 124 respondents. The variables using the larger sample are career advancement, networking, mentoring, life satisfaction emotional burnout, changes in approaches to work, demographics, work experience, value of the program, related activities and all open-ended questions.

Mean scores are reported for all variables. Most measures are based on 7-point Likert scales in which 1 indicates that respondents feel they perform a behaviour or express an attitude much less often now as compared to before the MDPW, a ranking of 4 represents no change in respondents' behaviour or attitude and a ranking of 7 indicates that respondents perform a behavior or express an attitude much more often now as compared to before the MDPW. Although there are no pre-test results to compare to, to assess change, paired t-tests were used to compare sample mean scores to a mean score of 4, which represents no change in behaviour or attitude. If a mean score differs significantly from a value of four, this will indicate that respondents do feel that they have changed their behaviour or attitude as compared to before participating in the MDPW.

In addition to tests on the means, the percentages reporting positive change, no change and negative change will also be reported. Because most measures are based on 7-point Likert scales; responses have been grouped into three categories. A ranking between 1

and 3.5 indicates that respondents feel that they perform a behaviour or express an attitude less often now as compared to before participating in the MDPW, a ranking between 3.51 and 4.5 means that there has been little change in behaviour or attitude and 4.51 to 7 means that respondents feel that they perform a behaviour or express an attitude more often now as compared to before participating in the MDPW.

5.3.2 Demographics

Respondents range from having completed the program 1 to 8 years ago. The mean number of years since completing the program is just over 4. The average age of respondents was 46. The age distribution ranges from thirty-one to fifty-nine. Respondents in the sample had considerable work experience. Respondents had an average of about 24 years of full-time work experience. A majority of the sample (about 90%) had some exposure to college or university, with 36% completing at least one university degree. About 10% had also completed a post-graduate degree. Most respondents had significant family responsibilities. The majority of respondents (75%) were married or living with a significant other and 58% had at least one child living at home (see Table 5.10).

Table 5.10: Demographics for Retrospective Study

Variable	Mean Score	Percentage of Respondents
Number of Years Since Completing the MDPW	4.0427	--
Number of Years of Work Experience	24.4262	--
Age	46.03	--
Education		
High School	--	10.7%
Some College or University	--	31.1%
College Diploma	--	12.3%
University Degree	--	36.1%
Post-graduate degree	--	9.8%
Marital Status		
Never married	--	9.8%
Married or living with a significant other	--	74.6%
Separated, divorced or widowed	--	15.3%
Have children living at home	--	58.1%
Do not have children living at home	--	41.9%
Number of children living at home	.9915	--

5.3.3 Reliability of Measures

Table 5.11 indicates the reliabilities of the scales used to test the retrospective variables. The standardized Cronbach's alpha has been calculated for each variable and sub-scale. As mentioned above, Cronbach's alpha measures the internal consistency of a scale, that is, the degree to which instrument items are homogeneous and reflect the same underlying construct(s). As seen below, most scales appear to be fairly reliable with alphas of above .80. Career management initiation, a facet of career management self-efficacy, is below .80. The reliability of the life satisfaction scale also falls below .80.

The four measures of career advancement, the items concerning changes to approaches to work, motivation to further education, mentoring and networking items do not have alpha scores as they are single item measures and therefore no reliability coefficient can be calculated.

Table 5.11: Reliability of Scales

Variable	Number of Items	Cronbach's Alpha
Self Worth:	10	.9374
Job competence	4	.9218
Global Self-Worth	6	.9218
Career Management Self-Efficacy	24	.9635
Self-Assessment	3	.9124
Environmental Assessment	5	.8864
Action Planning	6	.8396
Career Management Initiation	4	.7628
Reacting Calmly to External Requirements	5	.8829
Career Enhancing Strategies	23	.9199
Career Planning	5	.8670
Career Satisfaction	5	.9249
Life Satisfaction	5	.7890
Emotional Burnout	5	.9327
Motivation To Further Education	1	--
Level of Job Responsibility	1	--
Level of Job Challenge	1	--
Extent to which Career Advancement has been met	1	--
Definition of Career Success	1	--
Effectiveness at Work	1	--
Efficiency at Work	1	--
Effective Communicator at Work	1	--
Level of Stress felt at Work	1	--
Changes in mentoring received	1	--
Changes in size of network	1	--

5.3.4 Results for Dependent Variables

This section explains the results for the retrospective study. As noted above mean scores have been compared to a mean score of 4 (no change) at a 5% significance level. Results have also been reported into 3 categories, positive change, no change and negative change in behaviour or attitude.

5.3.4.1 Self-Worth

Two facets of self-worth were measured, job competence and global self-worth. Job competence, consisting of 4 items, yielded a mean of 5.57. This score is significantly different from a mean of 4 (no change in feelings of job competence; $t = 16.17$, $p \leq .05$). Eighty-five percent of respondents feel that they have more job competence, 11% feel that they have about the same level of job competence and 4.0% feel that they have less job competence now as compared to before participating in the MDPW (see Table 5.12).

Global self-worth, consisting of 6 items, yielded a mean score of 5.72. This score is significantly different from a mean of 4 (no change in feelings of global self-worth; $t = 19.46$, $p \leq .05$). Eighty-five of respondents feel that they have more global self-worth now and 15% feel that they have about the same amount of global self-worth now as compared to before participating in the MDPW. This suggests that the majority of respondents do feel that they have more global self-worth now compared to prior to having participated in the MDPW (see Table 5.12).

Table 5.12: Self-Worth

Measure	Higher (% of respondents)	Same (% of respondents)	Lower (% of respondents)
Job Competence	85.1%	10.9%	4.0%
Global Self-Worth	85.3%	14.7%	0.0%

5.3.4.2 Mentoring

Respondents were asked to indicate how much mentoring they feel they received prior to participating in the MDPW. About forty-six percent of respondents stated that they received a small amount of mentoring, 29% said they received some mentoring and 26% stated they received a great deal of mentoring. On the whole, respondents indicated that they received little or some mentoring with a mean score of 3.46.

When asked to compare the amount of mentoring they receive now compared to before participating in the MDPW, the mean score is 3.97. This number is not significantly differently from a mean of 4 (the same amount of mentoring as before the MDPW; $t = -.223$, n.s.). This suggests that the respondents' level of mentoring has not changed significantly since they participated in the MDPW. These results should be interpreted with caution due to the fact that this measure consists of single item and may not be as reliable as a multi-item scale.

5.3.4.3 Networking

Respondents were asked to indicate if they had a work-related network prior to participating in the MDPW. Thirty six percent of respondents stated that they had a small work-related network, 36% stated somewhat and 28% felt they had a large network. The mean score for this response was 3.86, suggesting that respondents had modest networks.

When asked to indicate whether their network has changed, since completing the MDPW, respondents averaged a score of 4.90. This score is significantly different from a mean of 4 (network has stayed the same; $t = 7.51, p \leq .05$). Sixty three percent of respondents felt that their network had gotten larger since having participated in the MDPW (see Table 5.13). These results should be interpreted with caution due to the fact that the measure consists of a single item and may not be as reliable as a multi-item scale.

Table 5.13: Networking

Variable	More (% of respondents)	The Same (% of respondents)	Less (% of respondents)
Networking	63.1%	24.6%	12.3%

5.3.4.4 Career Enhancing Strategies

Respondents were asked to indicate the extent to which they engage in career enhancing strategies now as compared to before participating in the MDPW on a 24-item inventory. The mean for each item was tested separately and results showed that all but 1 item “let others know that you are prepared to re-locate if necessary” reflected a significant

change. The items that respondents feel they are doing more often today compared to prior to their participation in the MDPW include:

- Consistently exceed performance expectations,
- Exhibit a style that senior managers are comfortable with,
- Work on high visibility projects,
- Cultivate a powerful mentor,
- Network with influential colleagues,
- Cultivate an extensive network of contacts outside of the organization,
- Pursue opportunities to gain line experience,
- Round out your skills by working in a variety of areas,
- Move from one department to the other,
- Show that you aspire to positions of increased responsibility,
- Perform high quality work on the things your supervisors pay attention to,
- Be a leader within your peer group,
- Effectively advocate your ideas and programs,
- Show initiative,
- Communicate your career goals and plans to management,
- Recommend innovative products and services,
- Work at your job outside of normal working hours,
- Find ways to make your contributions unique,
- Do things that go well beyond what is required by the job,
- Become a specialist in an area that is crucial to the organization's success,
- Show that you are very confident, and
- Spend a considerable amount of time thinking about your job outside of normal working hours.

This suggests that overall respondents feel that they are using more career enhancing strategies now as compared to before the MDPW (see Table 5.14).

Table 5.14: Career Enhancing Strategies

Variable	More (% of respondents)	The Same (% of respondents)	Less (% of respondents)
Consistently exceed performance expectations	50.5%	48.5%	1.0%
Exhibit a style that senior managers are comfortable with	75.8%	22.1%	2.1%
Work on high visibility projects	69.1%	24.7%	6.2%
Cultivate a powerful mentor	50.5%	42.9%	6.6%
Network with influential colleagues	57.9%	35.8%	6.3%
Cultivate an extensive network of contacts outside of the organization	50.0%	42.6%	7.4%
Pursue opportunities to gain line experience	61.7%	31.9%	6.4%
Round out your skills by working in a variety of areas	57.7%	39.2%	3.1%
Move from one department to the other	37.2%	52.1%	10.7%
Show that you aspire to positions of increased responsibility	70.5%	23.2%	6.3%
Perform high quality work on the things your supervisors pay attention to	69.1%	30.9%	0.0%
Be a leader within your peer group	77.3%	19.6%	3.1%
Effectively advocate your ideas and programs	80.2%	16.7%	3.1%
Show initiative	71.1%	26.8%	2.1%
Communicate your career goals and plans to management	65.6%	29.0%	5.4%
Recommend innovative products and services	72.0%	26.0%	2.0%
Work at your job outside of normal working hours	57.3%	32.3%	10.4%
Find ways to make your contributions unique	58.3%	40.6%	1.1%
Do things that go well beyond what is required by the job	62.9%	36.1%	1.0%

Become a specialist in an area that is crucial to the organization's success	61.5%	36.3%	2.2%
Let others know that you are prepared to re-locate if necessary	21.5%	64.5%	14.0%
Show that you are very confident	77.6%	19.4%	3.0%
Spend a considerable amount of time thinking about your job outside of normal working hours.	48.5%	37.1%	14.4%

5.3.4.5 Career Planning

Respondents were asked to indicate their level of career planning activity on a 5-item scale. The 5-item scale yielded a mean of 5.07. This mean score is significantly differently from a mean of 4 (participants' level of career planning has not changed since participating in the MDPW; $t = 11.91, p \leq .05$).

Seventy-five percent of respondents feel that they participate more in career planning activities now than before the program. About 22% feel that their career planning activities have not changed and 2% feel that their career planning activities have decreased compared to before having participated in the MDPW (see Table 5.15).

Table 5.15: Career Planning

Variable	More (% of respondents)	The Same (% of respondents)	Less (% of respondents)
Career Planning	75.5%	22.4%	2.0%

These results suggest that on the whole respondents participate in career planning activities more often now than before the program.

5.3.4.6 Career Management Self-Efficacy

Respondents were asked to indicate their level of career management self-efficacy now as compared to before the MDPW. The mean of the career management self-efficacy scale as a whole is 5.23. Each of the five facets yielded mean scores of above 5 (see Table 5.16). All of these scores were tested against a mean score of 4 (no change). Each of these differences in mean scores proves to be statistically significant.

Table 5.16: Tests for Career Management Self-Efficacy

Variable	Mean	t Statistic	Significance
Career Management Self-Efficacy	5.23	15.24	.000
Self-Assessment	5.43	16.69	.000
Environmental Assessment	5.01	13.22	.000
Action Planning	5.21	10.45	.000
Career Management Initiation	5.29	9.80	.000
Reacting Calmly to External Requirements	5.21	14.21	.000

About 72% of respondents feel that their career management self-efficacy has increased since having participated in the program, while 25% do not see a change and 3% feel it has decreased (see Table 5.17).

Also 85% of respondents feel that they use self-assessment strategies such as accurately assessing their strengths and weaknesses more often now as compared to before having participated in the program. Seventy-one percent of respondents feel that they use environmental assessment strategies such as accurately assessing their boss's opinion of them more often now than prior to having participated in the program. Seventy-one percent feel that they engage in action planning such as setting short-term and long-term goals for career progress more often now than before the program. Seventy-seven percent of respondents feel that they engage in career management initiation such as being able to ask for assignments they like more often now. Lastly about 81% react calmly to externally imposed requirements such as being able to remain optimistic even in the face of setbacks more so today than prior to having participated in the MDPW. Please refer to Table 5.17 for more complete description of changes in career management self-efficacy. These results suggest that respondents feel that their career management self-efficacy has increased, overall and in all five areas as compared to before having participated in the program.

Table 5.17: Changes in Career Management Self-Efficacy

Measures	Engage in more often (% of respondents)	Engage in about the same as before MDPW (% of respondents)	Engage in less often (% of respondents)
Career Management Self-Efficacy	72.2%	24.7%	3.1%
Self-Assessment	85.1%	12.9%	2.0%
Environmental Assessment	70.7%	27.3%	2.0%

Action Planning	71.0%	27.0%	2.0%
Career Management Initiation	76.8%	20.2%	3.0%
Reacting Calmly to Externally Imposed Requirements	81.0%	15.0%	4.0%

5.3.4.7 Career Satisfaction

Respondents were asked to indicate their level of satisfaction with their careers as compared to before the MDPW on a five-item scale. The mean score for the scale is 5.09. This score is significantly different from a mean score of 4 (representing no change in career satisfaction; $t = 9.940$, $p \leq .05$). Sixty-nine percent of respondents feel that they are more satisfied with their careers now compared to prior to having participated in the MDPW. Twenty-two percent feel that they were equally satisfied and 9% are less satisfied with their careers now as compared to before the program (see Table 5.18).

Table 5.18: Career Satisfaction

Variable	More Satisfied now (% of respondents)	Equally Satisfied (% of respondents)	More Satisfied Now (% of respondents)
Career Satisfaction	69.0%	22.0%	9.0%

5.3.4.8 Life Satisfaction

Respondents were asked to indicate how they feel about their lives right now as compared to before participating in the MDPW. Examples of this 5-item scale include “I am satisfied with my life” and “So far I have gotten the important things I want in life”. The mean for this 5-item measure is 4.88. This mean score is statistically different from

a mean of 4 (equally satisfied; $t = 7.470$, $p \leq .05$). About six percent of respondents are less satisfied with their lives now, 36% are equally satisfied and 58% of respondents stated that they are more satisfied with their lives right now as compared to before participating in the MDPW (see Table 5.19). It is important to note that the life satisfaction scale is lower in reliability as compared to other measures.

Table 5.19: Life Satisfaction

Variable	More Satisfied (% of respondents)	Equally Satisfied (% of respondents)	Less Satisfied (% of respondents)
Life Satisfaction	58.2%	36.1%	5.7%

5.3.4.9 Emotional Burnout

Respondents were asked to rate their level of emotional burnout now compared to before participating in the MDPW. The mean score of the 5 items comprising emotional burnout is 3.64. This is significantly different than a mean of 4 (the same amount of emotional burnout; $t = -3.04$, $p \leq .05$). Forty-one percent of respondents feel they experience less emotional burnout, 34.5% feel they experience the same amount of emotional burnout and 24.4% feel they are more emotionally burnt out now (see Table 5.20). These results suggest that the majority of respondents do feel less emotionally burnt out now as compared to before the MDPW.

Table 5.20: Emotional Burnout

Variable	More Now (% of respondents)	Equal Amount now (% of respondents)	Less Now (% of respondents)
Emotional Burnout	24.4%	34.5%	41.2%

5.3.4.10 Changes in Approaches to Work

Respondents were asked to indicate whether they feel they have changed their approaches to work since completing the MDPW, in terms of effectiveness, efficiency, communication and levels of stress. These results should be interpreted with caution due to the fact that the measures consist of single item scales and may not be as reliable as multi-item scales.

Effectiveness

The mean score on this single item was 5.41. This is significantly different from 4 (equally effective; $t = 15.3$, $p \leq .05$). Eighty-two percent of respondents felt that they have become more effective at work now as compared to before having participated in the program, 16% felt that they are about equally effective and 3% felt less effective now (see Table 5.21).

Table 5.21: Changes in Effectiveness at Work

Variable	More effective now (% of respondents)	Equally effective now (% of respondents)	Less effective now (% of respondents)
Effectiveness at Work	82.0%	15.6%	2.5%

Efficiency

The mean score of this single item was 5.30. This is significantly different from a mean score of 4 (equally efficient; $t = 14.591$, $p \leq .05$). About 78% of respondents felt that they are more efficient at work now compared to before having participated in the MDPW, 20% felt that are equally efficient and 3% felt that they are less efficient at work now (see Table 5.22).

Table 5.22: Changes in Efficiency at work

Variable	More efficient now (% of respondents)	Equally efficient now (%of respondents)	Less efficient now (% of respondents)
Efficiency at Work	77.9%	19.7%	2.5%

Communication

The mean score of this single item was 5.72. This score is significantly different from a mean score of 4 (equally effective communicator; $t = 21.35$, $p \leq .05$). Ninety-one percent of respondents felt that they are now more effective communicators at work, 8% felt that they are equally effective communicators and less than 1% felt they are less effective communicators now as compared to before the MDPW (see Table 5.23).

Table 5.23: Changes in Effectiveness of Communication at Work

Variable	More effective now (% of respondents)	Equally effective now (%of respondents)	Less effective now (% of respondents)
Effective Communication at Work	91.9%	8.2%	.80%

Feelings of Stress at work

The mean score on this single item was 4.78. This score is significantly different from a mean score of 4 (equally stressed; $t = 21.11$, $p \leq .05$). Fifty-eight percent of respondents felt that they are more relaxed at work now compared to before participating in the MDPW, 30% felt that they are equally stressed at work now and 12% felt that they are more stressed at work now (see Table 5.24). This suggests that the majority of respondents feel that they are more relaxed at work today compared to before participating in the MDPW.

Table 5.24: Changes in Level of Stress at Work

Variable	More stressed now (% of respondents)	Equally stressed now (% of respondents)	More relaxed now (% of respondents)
Stress at Work	11.5%	30.3%	58.2%

5.3.4.11 Desire to further Education

Desire to further education was measured by asking respondents to rate their motivation to further their education as well as by determining whether or not respondents have enrolled in an educational program since having completed the MDPW.

Motivation to Further Education

Respondents were asked if their motivation to further their education has changed since having participated in the MDPW. The mean score on this single item was 4.60. This score is significantly different from 4 (equally motivated to further education; $t = 4.61$, p

$\leq .05$). About 40% of respondents stated they are more motivated to further their education now, 47% feel they are equally motivated and 13% feel less motivated to further their education. This suggests that many respondents are more motivated to further their education (see Table 5.25). These results should be interpreted with caution due to the fact that this measure consists of a single item and may not be as reliable as a multi-item scale.

Table 5.25: Motivation for further education

Variable	More motivated now (% of respondents)	Equally motivated (% of respondents)	Less motivated now (% of respondents)
Motivation to further education	40.3%	46.8%	12.9%

Have you enrolled in an educational program?

Thirty-four percent of respondents have enrolled in an educational program since completion of the MDPW, while 66% have not. Of those who have enrolled in an educational program, 18% have enrolled in a University/College degree or diploma program, 38% have enrolled in a certificate or a specialized program and 44% have enrolled in some other type of educational program such as language and computer literacy courses. These results corroborate the finding that a significant number of respondents are more motivated to further their education and in fact, one-third have already taken steps to meet this goal.

5.3.4.12 Career Advancement

This section is divided into two parts. The first section examines whether or not career advancement was one of respondents' goals for participating in the program and assesses their definition of career success. The second section deals with determining career advancement of respondents since participation in the MDPW.

Career advancement was measured by the number of promotions, lateral moves and total career moves respondents have received since taking the MDPW, the level of responsibility and challenge in their current jobs as compared to before the MDPW, their annual salary increase since completing the program, the number of levels of authority between respondents and their Chief Executives in their current positions as compared to the positions they held prior to the MDPW and the number of direct and indirect reports in their current positions as compared to the positions they held prior to the MDPW.

These results should be interpreted with caution due to the fact that many of the variables are assessed using single item measures and may not be as reliable as multi-item scales were used.

5.3.4.12.1 Career Advancement as a Goal and Definitions of Career Success.

Career Advancement as a Goal

Respondents were asked to indicate whether or not career advancement was one of their goals for participating in the MDPW. If it was, they were also asked to indicate to what extent this goal had been met. About 72% of respondents stated that career advancement

was one of their goals for participating in the program. For most (59%) this goal had been met to a large extent; the mean score of 4.58 was significantly different from a score of 4 (goal has been met somewhat; $t = 2.95$, $p \leq .05$). Another way of assessing whether respondents have met their goals for advancement is to examine career moves. The mean number of career moves for those who stated career advancement as a goal was 2.3387 and the mean number of career moves for those who did not seek career advancement was 2.333. Those seeking advancement expressed slightly more career moves than those who not seeking advancement and most respondents seeking advancement felt that their goals for advancement were largely met.

Definition of Career Success

When respondents were asked to characterize their personal definition of success 84% focus more on personal satisfaction and respect and 16% indicated that they focus on financial rewards and influence (see Table 5.26). It is interesting to note that in Duxbury, Dyke and Lam's (1999) study of high-tech workers, in which the same question was asked, 74% of the women sampled defined career success as personal satisfaction and 26% defined career success in terms of rewards and influence.

In Duxbury, Dyke and Lam's (1999) study of the Federal Public Service, 49% of the women sampled defined career success, as being in some way related to satisfaction (happy with the work I do, happy in my job) and 20% defined it in terms of recognition (i.e., extrinsic rewards-money, "fame."). Other definitions were: esteem-related (38%),

progress related (31%), learning related (26%) and contribution/influence related (26%). Multiple responses were recorded for this question.

MDPW alumnae in this study seek more than financial rewards from their careers; in fact, they focus more on personal satisfaction (10% more so than those in the high-tech study and considerably more than in the Public Service study). The number of respondents in this study who defined success as personal satisfaction and respect may be higher than in the Public Service study, partly because they were forced to make a choice on a 4-point scale whereas respondents in the other study answered the open-ended question “how would you define career success.” Nonetheless when compared to the women in the high tech study in which the identical question was asked respondents in this study comparatively focus more on personal satisfaction than rewards and influence.

These results suggest that managerial advancement may not be at the heart of respondents’ definitions of career advancement or that respondents seek advancement for different reasons (i.e. money vs. challenge). Respondents may focus on other facets of their careers, such as the level of challenge, level of responsibility, achieving a balance between work and non-work lives, job satisfaction (i.e. doing a job that is enjoyable) and the personal satisfaction of doing a job well done. In addition to measures of managerial advancement, results related to levels of challenge and responsibility are reported below. Respondents perceptions of their personal effectiveness at work are also reported in sections 5.3.4.10 and 5.3.5.1 and career satisfaction is reported in section 5.3.4.7.

Table 5.26: Career Success

Measure	Financial Rewards and Influence (% of respondents)	Personal Satisfaction and Respect (%of respondents)
Definition of career success	16.1%	83.9%

5.3.4.12.2 Career Advancement Measures

The following assessments of career advancement have been calculated using a sub-sample of all respondents except those who have retired or became self-employed since completing the MDPW. The rationale for excluding those who have retired or have become self-employed since completing the MDPW is that for these individuals progressing up the corporate hierarchy is no longer a feasible goal. The resulting sub sample is one hundred and fourteen.

If the base sample excludes these respondents (n =10)¹ from the analysis, the results do not vary significantly from overall results except for respondents' total career moves since completing the MDPW and changes in the number of direct and total number of reports since completing the MDPW. Therefore results will be reported for the sub sample and where results are significantly different from what would be obtained from the full sample, differences will be reported.

Promotions, Lateral Moves and Total Career Moves

Table 5.27 illustrates the mean of number of promotions, lateral moves and total career moves that respondents have received since completing the program as well as the percentage of respondents who received at least one of the specified career moves since completion of the MDPW. These findings are important as promotions are one of the most tangible forms of career progression (Duxbury, Dyke and Lam, 1999) and lateral moves can expand an employee's skill set and accelerate career progression (Cooper, Graham and Dyke, 1993). Thus it is important to assess whether participating in the MDPW can help participants achieve such career moves in order to advance their career development.

Results showed that promotions had been experienced by approximately 83% of the sample. Lateral moves within the same functional area (department) had been made by approximately 29% of the respondents, and lateral moves to a different functional area (department) had been made by 26% of the respondents. Total career moves includes all promotions, lateral moves and acting assignments, which respondents have received. The mean score for total career moves is 2.3 with 96% of all respondents experiencing at least one career move. As noted above, the difference between those who sought career advancement as a goal and those who did was significant. Ninety-eight percent of those who stated career advancement as one of their goals for participating in the MDPW made at least one career move compared to 64% of those not seeking career advancement.

¹ Please refer to Appendix L which highlights frequency distributions. The number of respondents is lower for these measures as there was missing data for the question "please describe your current position" which

It is also interesting to note that more respondents in this study (83%) have received at least one promotion since completion of the MDPW (an average of 4 years ago) compared to 59% of the women in Duxbury, Dyke and Lam's (1999) Federal Public Service study who had received at least one promotion over the past 5 years. It is also interesting to note that 71% of the women sampled in the high tech study (Duxbury, Dyke and Lam, 1999) indicated they had received a promotion over the past five years. Total lateral moves were comparable for both the current study and the high tech study with approximately 54% of respondents in this study receiving at least one lateral move since completing the MDPW and 60% of the high tech sample receiving at least one lateral move over previous five years (Duxbury, Dyke and Lam, 1999). These comparisons suggests that the MDPW has helped women make more career moves as they have received considerably more promotions than the women in the Federal Public Service Study and the high tech study in 20% less time (respondents in this study have indicated career moves made over an average of 4 years while career moves were measured over 5 years in the other two studies).

Table 5.27: Career Moves

Career Moves *	All Respondents		Respondents With a Goal of Career Advancement	
	Average Number of Moves	Percent Reporting at Least One Move	Average Number of Moves	Percent Reporting at Least One Move
Promotions Within the Same Functional Area	.8947	61.8%	.9836	65.6%
Promotions to a Different Area	.5132	40.8%	.5082	42.6%
Total Promotions	1.4087	82.9%	1.4918	86.9%
Lateral Moves Within the Same Functional Area	.5526	28.9%	.5082	27.9%
Lateral Moves to a Different Functional Area	.4079	26.3%	.3607	27.9%
Total Lateral Moves	.9605	53.9%	.8689	54.1%
Total Career Moves (All promotion, Lateral Moves and Acting Assignments.)	2.3333	96.2%	2.3387	98.4%

**Sample excludes retired and self-employed respondents*

Level of Responsibility

When asked if they feel that the level of responsibility in their jobs has changed compared to before participating in the MDPW, 79% of respondents stated that they have more responsibility now. Twelve percent of respondents felt that they have about the same amount of responsibility and 9% felt that they have less responsibility now compared to prior to having participated in the MDPW. Please refer to Table 5.28.

The mean score for this measure is 5.75. This mean score is significantly different than 4 (no change in level of responsibility since having completed the program; $t = 10.81$, $p = .000$).

Table 5.28: Changes in Level of Responsibility at Work

Measure	More Responsibility Now (%of respondents)	Same amount of Responsibility Now (% of respondents)	Less Responsibility Now (% of respondents)
Level of Responsibility	78.8%	11.8%	9.4%

Level of Challenge

When asked to indicate the level of challenge in their current jobs compared to prior to participating in the MDPW, 79% of respondents felt that their jobs are more challenging now. Thirteen percent stated that their current positions are about equally challenging as prior to the MDPW and 9% felt that their current positions are less challenging. Please refer to Table 5.29.

The mean score for this measure is 5.57. This mean is significantly different from a mean of 4 (no change in level of responsibility since having completed the program; $t = 9.91$, $p = .000$).

Table 5.29: Level of Challenge

Measure	More Challenging Now (% of respondents)	Equally Challenging Now (% of respondents)	Less Challenging Now (% of respondents)
Level of challenge	77.6%	12.9%	9.4%

Changes in Job Level

Ninety-four percent of respondents have changed positions since participating in the MDPW and 39% of respondents have moved to a different organization. Today, 11% of respondents hold senior management positions as compared to the 1.2% of respondents prior to participation in the MDPW. Twenty-two percent of respondents held middle management positions prior to participation in the MDPW compared to 50% today. Lastly, approximately 42% of respondents stated that they were in first level manager/supervisor positions prior to having participated in the MDPW compared to 16% today. These changes in job level are statistically significant ($X^2 = 62.61$, $p=.000$). Please see Table 5.30.

Table 5.30: Changes in Job level

Job Level	Current Position	Position Held Prior to MDPW
Senior Management/Executive	10.8%	2.6%
Middle Management	47.7%	26.3%
First Level Manager/Supervisor	18.4%	40.4%
Professional or Technical	10.5%	13.2%
Position		
Other Non-Management	11.3%	17.5%
Position		

Average Salary Increase Per Year Since Completing the MDPW

The average salary of respondents prior to participating in the MDPW was \$52,411.76 compared to the current average salary of \$70,891.57. Respondents' average salary per year since completion of the MDPW has increased by approximately 10.18% per year since completing the MDPW. This measure may, however, be distorted as pay freezes in the Public Service throughout the last decade may have affected some but not all respondents. About 61% of MDPW alumnae worked in the Public Service. Given the high number of Public Service workers and the pay freeze, the relatively high rate of salary increase (compared to inflation and average union wage settlements over this period), suggests that respondents may have made significant progression with respect to salary.

Levels of Authority

Respondents had a mean of 3.49 levels between themselves and their Chief Executives in the positions they held prior to the MDPW. In their current positions the mean number of levels has been reduced to 2.88. This change in means is significantly different, $t = -3.793$, $p = .000$). This suggests that respondents have moved up the corporate hierarchy since completion of the MDPW. Another plausible explanation is that respondents have moved to smaller organizations (it is important to note that 39% of respondents have moved to different organizations since completion of the MDPW).

Number of Direct and Indirect Reports

Sixty percent of respondents supervised the work of others in the positions they held prior to participating in the MDPW. The mean number of direct reports that respondents had was 3.75 and the mean number of indirect reports that respondents had was 2.68 for a total average of 6.43 reports. Seventy-one percent of respondents currently supervise the work of others. The mean number of direct reports that respondents have in their current positions is 3.84 and the mean number of indirect reports is 6.01 for a total average of 9.85. This reflects an increase in the number of total reports from prior to participating in the MDPW and today (see Table 5.31). This change in total reports is not statistically different, suggesting that the number of reports has not changed much since completion of the MDPW.

Table 5.31: Supervision of Others

Measure	Retirees and Self-Employed Excluded
Did you supervise others in your prior position?	60%
Do you supervise others now?	71%
Number of Direct Reports Then	3.75
Number of Direct Reports Now	3.84
Number of Indirect Reports Then	2.68
Number of Indirect Reports Now	6.01
Total Number of Reports Then	6.43
Total Number of Reports Now	9.85

5.3.4.12.3 Summary of Career Advancement

The majority of respondents stated that career advancement was one of their goals for participating in the MDPW. The majority also stated that this goal has been met to a large extent. Having said this, the majority of respondents characterize career success in terms of personal satisfaction and respect versus financial rewards and influence. This indicates that respondents' idea of career advancement may vary. For example one person may want a promotion for the money but another may want it for the challenge. Respondents may value other things such as recognition, the level of job challenge and responsibility given, job satisfaction, personal satisfaction. Nevertheless it is interesting to note that despite defining success in terms of personal satisfaction, most respondents did advance in management.

About 83% of respondents had made at least one career move since completing the MDPW. Both job responsibility and job challenge had increased for most respondents. Respondents' job levels have also increased. The average salary increase per year since completion of the MDPW was 10.12%. Although this measure may not be the most appropriate due to pay freezes within the Public Service during the last decade, it does indicate that respondents' salaries had increased substantially.

Respondents are currently in jobs with fewer levels of authority between themselves and the Chief Executive. More respondents supervise others today, the total number reports has increased from 6.43 to 9.85 (although this has increased it is not statistically

significant). On the whole, it appears that respondent's have made substantial progress in advancing their careers since participating in the MDPW.

As mentioned earlier it is important to note that factors other than having participated in the MDPW alone may have attributed to these changes. Various life events may have contributed to participants' personal growth and development and therefore may also partially explain the results.

5.3.5 Qualitative Data

The questions found in this section were open ended. Respondents were not restricted in their responses as they were able to list as many things as they thought applied to them. For each question, responses were typed out in a word processing program. Similarities among answers were sought. The content analysis allowed for categories of answers to emerge. All responses were placed into the identified categories and total numbers of mentions for each category have been reported.

5.3.5.1 Changes in work

Respondents were asked to describe any changes in them, their work, or their relationships at work that were caused in some substantial part by attending the MDPW. Two major changes are apparent from the answers to this question. The first is that many

respondents (47%) felt that their confidence levels at work have increased largely due to their participation in the MDPW. Although this finding is based primarily on respondents' perceptions it is extremely important. Self-confidence may play a significant part in shaping one's sense of self-worth, it may also impact one's sense of career management self-efficacy and it can play a role in influencing many other factors such as one's decision to pursue career enhancing strategies.

Many respondents (44%) also feel that they have become better communicators due to participation in the program including becoming more effective at public speaking. Managing others more effectively, noticeable improvements in general business skills and better networking skills were some other changes mentioned by respondents (see Table 5.32). Overall, these results show that many respondents felt that they have experienced changes in themselves, their work or their relationships at work as a result of their participation in the MDPW.

Table 5.32: Changes in Work

Changes in respondents, their work or their relationships at work	Percent
Increased Confidence	47.0%
Better Communication	44.0%
Managing Others More effectively	13.0%
General Business Skills Improved	11.0%
More Effective at Networking	9.0%
Nothing	6.0%
Not Applicable	5.0%

**Multiple Responses Recorded*

5.3.5.2 Changes that Organization(s) Have Experienced

Respondents were asked to describe any changes which the organization(s) they have worked for have experienced as a result of their participation in the MDPW.

Approximately 22% of respondents stated that there had not been any changes which the organization(s) they have worked for have experienced as a result of their participation in the MDPW and about another 19% stated that this question was not applicable to them. Eighteen percent of respondents felt that their organizations benefited from an increase in their personal effectiveness since having completed the program. Sixteen percent of respondents mentioned that they have improved processes, started new products, won major contracts and or have redesigned departments which have positively benefited the organizations they have worked for. Fifteen percent of respondents stated that they have improved work relationships and have created better working environments for their subordinates. Other changes mentioned included: respondents are more effective leaders and communicators and are making better use of teams (see Table 5.33). Overall, these results show that many respondents feel that they have positively impacted their organizations in one way or another as a result of their participation in the MDPW.

Table 5.33: Changes that Organization(s) Have Experienced

Changes which the organization(s) have experienced as a result of participation in the MDPW.	Percent
Nothing	22.0%
Not Applicable	19.0%
Increased Personal Effectiveness (more confidence and more productive)	18.0%
Improved Processes, Started New Products, Won Major Contracts, Redesigned the Organization	16.0%
Improved Work Relationship With Subordinates/Create a Better Work Environment for Employees	15.0%
More Effective Leadership/Better Communication	9.0%
Better Teamwork	8.0%

**Multiple Responses Recorded*

Respondents were also asked to estimate in dollars the amount of money which they have saved their organization(s) or have earned their organization(s) as a result of the changes noted above. It is important to note that only twenty-three people answered this question out of the 72 who answered the open-ended question. Responses range from zero dollars to six and a half million dollars. The average dollar amount estimated by respondents was \$527,826.08. Although this question is difficult to answer, at least 23 (approximately 32%) could state an amount of money they have saved/earned their organization(s) due to the changes they have implemented as a result of having participated in the MDPW. Please refer to Appendix L for frequency distribution.

5.3.6 Impact of Moderating Variables

In order to assess the impact of the moderating variables on the relationship between having participated in the MDPW and the nine dependent variables, correlation analysis was completed for each of the moderating variables and the dependent variables. Where significant correlations are present, regressions have also been run to further explain the magnitude of these relationships.

Where significant correlations are present further analysis of differences between groups, using mean score comparisons and (t tests for continuous measures and Chi-Square testing for dichotomous measures) have been conducted to aid in with the interpretation of the results. Groups were determined by a median split for the following variables: the number of years since taking the MDPW, age, work experience and time spent on childcare activities (home status). For the variable education, the groups were split between those who have completed post-secondary education and those who have not. The rationale for the split is that research indicates that those who have completed post-secondary education increase their chances for career advancement significantly versus those who have not (Gattiker & Larwood, 1988, 1989, 1990; Jaskolka et al., 1985). Results are reported only for the variables where significant relationships were found.

5.3.6.1 Impact of the number of years since completion of the MDPW

It is important to examine the impact of the number of years since having taken the program because respondents range from having participated in the program a year ago to up to eight years ago. Recall for those having taken the program several years ago is likely to be less accurate than for respondents who took the program one year ago. Also, other developments such as personal growth that may not be directly related to having participated in the program will likely be higher the more time that has passed since completion of the program.

Correlation analysis indicates that the number of years since taking the program positively correlates with the total promotions, lateral moves, and total career moves that respondents have received. It also correlates negatively with salary increase per year. Lastly, the number of years since taking the MDPW correlates positively with emotional burnout and levels of stress felt at work. Table 5.34 contains the correlation coefficients and the unstandardized regression coefficients for the variables that are related to number of years since program completion. To examine the impact of these relationships the data was split into two groups based on the median split: those who participated in the MDPW 1 to 4 years ago and those who have participated in the program between 5 to 8 years ago.

Table 5.34: Variables Significantly Related to the Number of Years Since Program Completion

Variable Impacted	N	Correlation	Sign.	Unstandardized B
Total Promotions	96	.298	.003	.143
Total Lateral Moves	96	.445	.000	.232
Total Career Moves	100	.556	.000	.364
Salary Increase	108	-.245	.010	-569.237/-1.1%
Emotional Burnout	112	.196	.038	.114
Changes in approach to work: Levels of Stress	115	.183	.050	102

The regressions suggest that respondents will gain .143 promotions, .232 total lateral moves and .364 total career moves for each additional year since taking the program.

Comparisons among the groups revealed that those who participated in the program 1 to 4 years ago had a significantly lower number of total lateral moves, with a mean of .4828 compared to the mean of 1.37 for those who participated in the program 5 to 8 years ago ($t = -8.69$, $p = .000$). Accordingly, since lateral moves make up part of total career moves, those who participated in the program between 1 to 4 years ago also had a significant lower number of career moves, with a mean of 1.39 compared to the mean of 2.79 for those who have participated in the program between 5 to 8 years ago ($t = -11.041$, $p = .000$).

With each additional year since taking the program, respondents' average salary increase will decrease by 1.1% and eventually salary will level off. Those who have participated in the program within the last 4 years have a considerable higher average salary increase per year, with a mean of 10.9% compared to the mean of overall mean of 5.6% for those who participated in the program 5 to 8 years ago. This difference in salary increase is significant ($t = 3.31$, $p = .002$). This suggests that even though respondents' salaries have increased overall, participating in the MDPW may have more impact on average salaries of more recent graduates. The impact appears to decline the more years that pass since graduation. Participating in the MDPW may give respondents a boost to their careers with respect to earning salary increases shortly after graduation. Immediate results may have a positive effect on lifetime earning.

The regression coefficient also shows that as more time passes since taking the program respondents' feelings of emotional burnout and feelings of stress at work increase. Findings suggest that for those who participated in the program 1 to 4 years ago, the mean for emotional burnout is 3.51, which is significantly lower than a mean of 4 (no change; $t = -3.07$, $p = .003$). These results are consistent with the overall findings. However, for those who have participated in the program between 5 to 8 years ago, the mean for emotional burnout was 3.84 which is not significantly different from a mean of 4 (no change in emotional burnout; $t = -.782$, $p = .438$). Results for changes in approaches to work in terms of levels of stress felt were consistent with overall results in that for both groups, feelings of stress at work decreased significantly since their participation in the program. For those who have participated in the program 1 to 4 years ago, the mean for changes in stress levels was 5.07 which is significantly higher than a

mean of 4 (no change) and for those who participated between 5 to 8 years ago the mean for changes in stress levels was 4.39 which is also significantly higher than a mean of 4 (no change). Those who participated in the program between 1 and 4 years ago have become less stressed at work (mean of 5.07) to a greater degree than those who participated between 5 and 8 years ago (mean = 4.39; $t = 5.02$, $p = .000$).

It makes intuitive sense that the number of years since completing the program would correlate with career advancement measures. The more years that have passed the more likely it is that respondents will have had an opportunity to advance their careers. According to these results one can infer that the more time that has passed since having participated in the MDPW, the more opportunity respondents may have had to make career moves also increases with time since graduation.

5.3.6.2 Impact of Education

There were significant differences in means between those who have completed a post secondary degree and those who have not, for several variables: self-worth, career management self-efficacy, career enhancing strategies, career planning, career satisfaction, life satisfaction, desire to further education and many career advancement measures. To assess the impact of these differences, the means of each dependent variable for each of the two sub-groups (those who have completed post secondary education and those who have not) have been tested separately against a mean of four indicating no change (see Table 5.35).

Table 5.35: Education Sub-Group Comparisons*

Measures	Have Completed Post Secondary Education			Have Not Completed Post Secondary Education		
	Mean	t stat	Sig.	Mean	t stat	Sig.
Self-Worth						
Job competence	5.35	9.86	.000	5.82	13.77	.000
Global Self-Worth	5.48	12.53	.000	6.01	16.23	.000
Career Management Self-Efficacy						
Environmental	4.91	9.02	.000	5.16	9.65	.000
Assessment						
Reacting Calmly to	5.01	9.23	.000	5.42	11.15	.000
External Requirements.						
Career Enhancing	4.81	7.98	.000	5.17	11.30	.000
Strategies						
Networking	4.78	5.34	.000	5.00	4.91	.024
Career Planning	4.91	8.10	.000	5.20	8.49	.000
Career Satisfaction	4.73	5.55	.000	5.49	8.84	.000
Life Satisfaction	4.68	3.72	.000	5.11	9.12	.000
Career Advancement						
Level of job challenge	5.28	7.34	.000	5.78	8.09	.000
Salary Increase **	6.34%	--	--	11.06%	--	--

**Includes only variables that differ significantly by education group. Reported tests assess whether sub-group means differ significantly from mean of 4 which indicates no change.*

*** Cannot compare to mean of 4 because measure is not based on a 7-point Likert Scale*

Those who had completed a post-secondary degree had scores that were significantly different on several dependent variables from those who did not have a degree. In most cases however, both groups indicated significant positive change following the MDPW and the between-group differences indicated a difference in magnitude rather than

direction. For most of the dependent variables, those who had not completed post-secondary education reported more significant positive changes although those with a post-secondary education also reported significant positive changes.

The general pattern of more positive outcomes for those without prior post-secondary education was also true for several of the career advancement measures. Those without post-secondary education reported significantly more positive changes in job challenge than did those with degrees. They also experienced higher annual salary increases. The finding that participation in the MDPW provides a greater boost to the careers of those who did not have prior post-secondary education implies that the MDPW can help women without university degrees to experience career achievements.

5.3.6.3 Impact of Age at time of the program

The impact on the dependent variables is the same for both current age of respondents and their age at the time they took the MDPW. Rather than duplicate the analysis, the age of respondents at the time of the program was chosen for further analysis. The rationale for this choice is that by investigating the age at the time respondents participated in the MDPW, it may be possible to determine the ideal participation age. Age at the time of the program is also more substantive theoretically because some research suggests that opportunities to advance are affected by age (Rozenbaum,1984)

Age was found to correlate negatively with most career advancement measures. Table 5.36 lists the variables impacted.

Table 5.36: Age at time respondents participated in the MDPW

Variables Impacted	Correlation	Sig.	Unstandardized B
Promotions to different functional area.	-.282	.004	-.0288
Lateral Moves to a different functional area	-.210	.036	-.0288
Career Advancement as a Goal *	-.219	.017	-3.369
Job Level in Prior Position	-2.39	.008	-.0381
Supervised Others *	.215	.018	3.137
Indirect Reports in Prior Position	.190	.040	.635
In the Same Position Now *	.249	.007	4.197
With the Same Organization *	.230	.016	3.300
Defines Success as Personal Satisfaction and Respect	.181	.049	.02101
Salary Increase	-.334	.000	-260.564/-0.48%

* *These variables are dichotomous, thus the maximum possible correlation is .8 (Nunally, 1978).*

In general, the MDPW positively benefits career advancement but the regression analysis shows that this relationship declines with age. In other words the program may have a larger benefit if a participant is younger when taking the program. It should be noted that the regression coefficients are quite small. Therefore, although the relationship decreases, it may not represent a substantial change in the impact of the program.

In order to further examine the impact of age on the results, the sample was divided into those who were 43 years old or younger and those who were older than 43 based on the median. Mean comparisons using t-tests for the continuous variables and Chi square analysis for the dichotomous measures (career advancement as a goal, supervision of others then, same or different position now, same or different organization) have been undertaken to determine whether the group differences affect the conclusions drawn (see Tables 5.37).

Table 5.37: Age Sub-Group Comparisons *

Measures	Under 44 Mean/Percent	44 and Over Mean/Percent	t-Stat or X²	Significance
Career Advancement Defines Career Success Personal Satisfaction & Respect	80%	87.6%	-2.47	.017
Promotions to a Different Functional Area	.6400	.1800	4.06	.000
Job Level in Prior Position	3.43	2.85	4.23	.000
Indirect Reports in Prior Position	2.26	8.03	-4.059	.000
Salary Increase	11.27%	5.8%	3.70	.001
Career Advancement As a Goal **	81.5%	64.6%	30.40	.000
Supervised Others **	57.1%	75.4%	4.51	.034
In the Same Position Now **	12.75	28.8%	8.34	.004

* Includes only variables that differ significantly by age group. T tests used for continuous variables.

** Dichotomous variables. Chi-Square testing used

As can be seen in Table 5.37, those under 44 at the time of taking the MDPW had scores that were significantly different on several career advancement measures. For

most measures, those 44 and younger reported more significant positive changes. It is interesting to note that those 44 and under had fewer indirect reports and had lower job levels in their prior positions.

The results show those under 44 define career success as personal satisfaction and respect (80%) less so than those 44 and over (87.6%). Those under 44 at the time of the program were likely to state that career advancement was one of their goals for participating the MDPW (81.5% compared to 64.6% of those 44 and over; $\chi^2 = 30.40$, $p = .000$). Promotions to a different functional area were significantly higher for those under 44 at the time of the program (mean = .64) compared to those 44 and over at the time of the program who had a mean of .18 promotions; $t = 4.06$, $p = .000$). Also the average salary increase per year was significantly higher for those under 44 at the time of the program (mean = 11.27%, $t = 2.084$, $p = .042$) and significantly lower for those 44 and over at the time of the program (mean = 5.8%, $t = -1.990$, $p = .05$).

A possible explanation for those under 44 at the time of the program receiving more promotions and increasing their salary more per year than those 44 and over might be that the MDPW has a greater impact on younger participants. This may be due in part that respondents 45 and older may face career plateaus (Rosenbaum, 1984).

5.3.6.4 Impact of Work Experience

Correlation analysis indicates that work experience is negatively correlated with promotions to a different functional area, total career moves, level of authority in prior position as well as current position, whether respondents' position is the same and if it is within the same organization. Work experience positively correlates with career advancement as a goal and definition of career success as personal satisfaction and respect (see Table 5.38).

Table 5.38: Work Experience

Variable Impacted	Correlation	Sig.	Understandarized B
Promotions to Different Functional Area.	-.22	.03	-.0187
Total Career Moves	-1.93	.05	-.0381
Career Advancement as a Goal *	-.22	.02	-4.053
Level of Authority (Prior)	-.19	.05	-.0383
Levels of Authority (Current)	-.24	.02	-.0437
In the Same Position Now *	.22	.02	4.436
With the Same Organization*	.23	.02	3.87
Defines Career Success as Personal Satisfaction and Respect	.18	.05	.01751

Earlier results showed that on average the MDPW positively benefits career advancement of respondents. The regression analysis shows that this relationship is negatively related to the amount of work experience that respondents have. In other words the program may have a larger benefit if a participant has less work experience (also likely to be younger women). It should be noted that the regression coefficients are quite small. Therefore, although the relationship decreases, it may not represent a significant change of the impacts of the program.

In order to determine whether different amounts of work experience has an impact on the results, the data has been divided into two groups; those who have 24 years or less of full-time work experience and those who have more than 24 years of work experience. This division of groups was based on the median. Mean comparisons using t-tests for the continuous variables and Chi square analysis for the dichotomous measures (career advancement as a goal, are you in the same position now and is your position with the same organization) have been undertaken to determine whether the group differences affect the conclusions that are drawn (see Table 5.39).

Table 5.39: Work Experience Sub-Group Comparisons *

Measures	24 Years or Less of Work Experience Mean/Percent	Over 24 Years of Work Experience Mean/Percent	t Stat or X²	Significance
Career Adv. Total Career Moves	2.18	1.73	2.28	.027
Level of Authority (Prior)	3.68	2.90	3.91	.000
Level of Authority (Current)	3.05	2.33	3.65	.001
Career Adv. as a Goal **	78.9%	66.7%	25.21	.000
In the Same Position Now**	14.8%	28.3%	9.13	.003

* Includes only variables that differ significantly by amount of work experience. T tests used for continuous measures.

** Dichotomous variable . Chi-Square testing used

Results indicate for those who have 24 years or less of full-time work experience have made significantly more career moves and are less likely to be in the same position now compared to those who have more than 24 years of work experience. They also have stated career advancement as goal for participating in the MDPW (78.9%) more so than those with more than 24 years of work experience.

The number of levels between respondents and their chief executives in their positions prior to MDPW proved to be higher for respondents with 24 years of work experience or less. Changes in level of authority did not differ significantly between the two groups. Respondents who have 24 years or less of work experience have reduced the number of levels by $-.607$ compared to those with more than 24 years of work experience who have reduced the number of levels by $-.625$ levels ($t = -.109$, $p = .913$).

These results suggest that the MDPW may serve as a substitute for greater work experience for career advancement for those who have 24 or fewer years of work experience.

5.3.6.5 Impact of Time Spent on Childcare (Home Status)

The amount of time that respondents spent on childcare activities was the measure used to assess the impact of home status on the dependent variables. Table 5.40 indicates that time spent on childcare activities while participating in the MDPW positively correlated with motivation to further education and changes in approaches to work in terms of communication. Although the regression coefficients are quite small, the interpretation of this data suggests that more time spent on childcare activities will lead to more motivation to further education and to increased effectiveness of communication at work.

Table 5.40: Time Spent on Childcare Activities (home status)

Variable Impacted	Pearson	Significance	Unstandardized B
Motivation to further education	.33	.001	.03708
Effective communicator at work	.20	.047	.01428

In order to further examine this relationship, respondents were divided into two groups, those who spent 8 hours or less per week on childcare activities while participating in the MDPW, and those who spent more than 8 hours a week. These groups were formed based on the median.

Both groups significantly increased their levels of effective communication at work as in the overall results. Both groups indicated significant positive change following the MDPW and the between-group differences indicated a difference in magnitude rather than direction. Those who spent more than 8 hours per week on childcare are even more effective communicators at work (mean = 5.80) compared to those who spent 8 hours or less at work mean= 5.56; $t= 2.36$, $p=.021$.

The only variable where group differences influence the conclusion to be drawn was motivation to engage in further education. Those who spent 8 hours or less per week on childcare activities were not significantly more motivated to further their education (mean = 4.24, compared to a mean= 5.29 for those spending more than 8 hours per week $t= -6.71$, $p= .000$). This finding may be due to the fact that a majority of women who spent 8 hours or less per week on childcare (61.4%) have already completed post

secondary education, and a majority of these women (57%) hold middle level or senior managerial positions.

5.3.6.6 Summary of the Impact of the moderating Variables

The amount of education, work experience that respondents have, their age at the time of the program, the amount of time spent on childcare activities and the amount of time since completion of the MDPW impacted respondents' career advancement.

The number of years since respondents have taken the program has a positive relationship with the number of lateral moves and total career moves of respondents. In other words the longer it has been since respondents took the program the more total lateral moves and total career moves they have made. This may reflect the fact that it take time for new opportunities to arise.

Respondents who were under 44 at the time of the MDPW have received more promotions to a different functional area and have increased their salary more per year than those who were 44 and over. This suggests that the program has more benefit for younger participants. The results coincide with research on career plateaus. For instance, Rosenbaum (1984) found that prospects for promotion for college-educated managers decline sharply after the age of 45.

Those who participated in the program over the past 4 years increased their salary more per year than those who took the program between 5 and 8 years ago. This relationship

may be partially explained by the fact that salaries have been frozen in the Public Service and that the wage freeze was lifted in recent years. This implies that fewer graduates who took the program 1 to 4 years ago graduated during the wage freeze. It is also possible that the impact of the MDPW on salary is greatest shortly after graduation and that this impact may begin to decline over time.

Those with less work experience have made more career moves since completion of the MDPW and overall those who have not completed post secondary education have higher increases in salary per year and more challenging jobs. This may imply that having participated in the MDPW gave these respondents a boost to their careers despite lacking a key asset associated with career advancement, namely completed post-secondary education. In these cases the MDPW may have served as a substitute for post-secondary education and or for greater work experience.

One difference from the original findings was found. Those who spent 8 hours or less per week on childcare activities while participating in the MDPW did not indicate a significant change in their motivation to further their education. This may be due to the fact that these women are already well educated and have made great strides in achieving their career goals.

5.3.7 Program Assessment Variables

5.3.7.1 Work Environment

Respondents' work environments have been moderately positive towards them and the training they received during the MDPW. For the most part respondents were able to practice what they learned in the MDPW at their place of work, respondents' bosses, their organizations and their departmental practices were neutral or positive toward the training they received in the MDPW and for the most part sponsors were perceived as being completely supportive or moderately supportive. Please refer to Appendix I for a more detailed analysis of this variable.

5.3.7.2 Value of the Program

Overall, respondents felt that the knowledge and experience gained in the MDPW was valuable to the positions they held while participating in the MDPW and that it is also valuable to their current positions. Both the assignments and the in-class work are seen by respondents of having value to the work they have done subsequent to the MDPW. (Please refer to Appendix J for more details).

5.3.7.3 Other Factors Affecting Respondents' Ability to Achieve Career Goals

Appendix K details the positive and negative things in respondents personal lives which may have impacted their abilities to achieve their career goals. It also examines things

that respondents' organizations have done to facilitate and or hinder their abilities to achieve their career goals.

5.3.8 Summary of Findings of the Retrospective study

Table 5.41 summarizes the key findings of the retrospective survey. Respondents feel that compared to before participating in the MDPW, their sense of global self-worth and career-management self-efficacy have increased. They also feel that they engage in more career enhancing strategies and career planning activities now. Respondents are somewhat more motivated to further their education and are more satisfied with their careers and with their lives. Respondents have also expressed that they feel less emotionally and physically burnt out now as compared to before participating in the MDPW. Lastly, it appears that the majority of respondents have advanced their careers significantly since their participation in the MDPW.

Table 5.41: Summary of Findings of the Retrospective Study

Variable	Experienced Positive Changes
Self-Worth	
Job competence	✓
Global Self-Worth	✓
Career Management Self-Efficacy	✓
Self-Assessment	✓
Environmental Assessment	✓
Action Planning	✓
Career Management Initiation	✓
Reacting Calmly to Externally Imposed Requirements	✓
Career Enhancing Strategies	✓
Mentoring	X
Networking	✓
Career Planning	✓
Career Satisfaction	✓
Life Satisfaction	✓
Reduced Emotional Burnout	✓
Desire to further education	~
Career Advancement	✓

✓ = *Significant Change*

X = *No Significant Change*

~ = *Approaching Significance or with some facets significant*

5.4 Summary of Hypothesis Testing

Table 5.42 presents the hypotheses that were presented in Chapter 3 and the support provided by the findings of the longitudinal, and the retrospective studies. The following chapter will discuss the results of the hypothesis testing in more detail along with some important implications.

Table 5.42: Summary of Hypothesis Testing

Hypotheses		Results	
		Longi- tudinal	Retro- spective
H1	Participation in the MDPW will lead to an increase in perceived self-worth, as reflected by an increased level of global self-esteem.	✓	✓
H2	Participation in the MDPW will increase an individual's career management self-efficacy.	✓	✓
H3	Participation in the MDPW will lead to an increase in career planning.	✓	✓
H4	Participation in the MDPW will lead to the use of more career enhancing strategies on the part of its participants.	X	✓
H5	Participation in the MDPW will lead to an increased effort to obtain a mentor.	N/A	X
H6	Participation in the MDPW will lead to an increased effort to cultivate networks.	N/A	✓
H7	Participation in the MDPW will lead to an increase in the desire to further education and training opportunities.	N/A	~
H8	Participation in the MDPW will lead to an increase in career satisfaction.	X*	✓
H9	Participation in the MDPW will lead to an increase in life satisfaction.	X*	✓
H10	Participation in the MDPW will lead to a decrease in emotional exhaustion.	X*	✓
H11	Participation in the MDPW will lead to career advancement especially for those who sought out career advancement as a goal of participating in the MDPW.	N/A	✓
H12	The impact of the MDPW on the ten dependent variables may be moderated by the number of years since taking the program.	X	~
H13	The impact of the MDPW on the ten dependent variables may be moderated by the participant's age.	X	~
H14	The impact of the MDPW on the ten dependent variables may be moderated by the participant's level of education.	X	~
H15	The impact of the MDPW on the ten dependent variables may be moderated by the amount of work experience the participant's has.	~	~
H16	The impact of the MDPW on the ten dependent variables may be moderated by the participant's home status.	~	~

✓ = Hypothesis Supported

X = Hypothesis Not Supported

~ = Hypothesis Partially Supported

N/A = Indicates that the Hypothesis Was Not Tested in that Study

* = Single-Item or Problematic Measure

CHAPTER 6 DISCUSSION

This chapter discusses the main findings of both the longitudinal and retrospective studies and provides some explanations for the acceptance and rejection of the 11 hypotheses related to the relationship of the independent variable (having participated in the MDPW) and the 9 dependent variables. It also discusses the impact of the moderating variables where applicable. For each hypothesis, implications of the findings will be explored. The chapter will conclude with a look at the limitations of this research and the benefits of undertaking this research and possible future applications.

6.1 Impact of participating in the MDPW on the 10 dependent variables

The following section summarizes the hypotheses based on the 9 dependent variables identified in the proposed model. Each hypothesis is presented in a table followed by a discussion of the results.

Hypothesis	Results
<p>H1: Participation in the MDPW will lead to an increase in perceived self-worth, as reflected by an increased level of global self-worth.</p>	<p>LONGITUDINAL: A paired t-test indicated that respondents' feelings of global self-worth had increased from T1 (prior to MDPW) to T2 (now) but that job competence did not increase from T1 (prior to MDPW) to T2 (now).</p> <p>RETROSPECTIVE: Mean scores for both job competence and global self-worth indicated that respondents feel that their sense of self-worth and job competence have increased compared to before participating in the MDPW. In the open-ended questions, self-confidence was reported as the number one change in respondents due to having participated in the MDPW. Respondents also indicated positive changes in their approaches to work in terms of being more effective, efficient, better communicators and more relaxed at work.</p>

The hypothesis of increased self-worth was strongly supported. The results suggest that the women who have participated in the MDPW have experienced an increase in their perceptions of self-worth. Respondents indicated that they feel more productive, competent and proud of their work and have an increased sense of self-worth now as compared to before having participated in the MDPW. This may be due in part to the development of knowledge, skills and credentials obtained by participating in the MDPW as suggested by Ragins and Sundstrom (1989). It may also reflect the positive learning environment of the MDPW, which is supportive of the specific needs of women and addresses the many barriers unique to them.

After having participated in the program many women feel more self-confident and this feeling of confidence appears to positively impact their sense of self-worth. This may be due to the fact that there is a close relationship between self-confidence and self-worth (Rosenberg, 1979). Self-confidence refers to the anticipation of successfully mastering challenges or overcoming obstacles. If the challenge or obstacle is important to the individual, the anticipation of mastery will affect his/her feeling of self-worth (or acceptance of his or her self; Rosenberg, 1979).

Lastly, respondents have indicated positive changes in their approaches to work in terms of being more effective, efficient, better communicators and more relaxed at work. These results may partly explain why respondents feel more competent in their jobs. These effects were also noted in the open-ended questions; respondents felt that they use better communication skills, manage others more effectively and had improved their general business skills. If respondents believe that they are more effective and efficient in their work lives, can better communicate with both superiors and subordinates and are less stressed at work this will likely positively affect both their sense of job competence (sense of their ability to do the work they do) and their overall sense of self-worth.

Other results indicate that respondents felt that their organizations benefited from an increase in their personal effectiveness since having completed the program. Respondents also noted that their initiatives such as improving processes, starting new products, winning major contracts and redesigning departments, positively benefited the organizations they have worked for.

In a recent study by Krejci (1997), nurses' perceptions of leadership competencies (defined as both understanding and ability) had increased after participating in a leadership training and development program. Perceptions of increased leadership competencies were found when measured immediately after the nurses completed the program and at a 3-month follow-up. This suggests that the perceptions of managerial skills may be felt immediately after participation in a development program and may also be felt for longer periods of time afterwards.

Because women tend to have lower levels of self-confidence (Maccoby and Jacklin, 1974; Rosenberg, 1979) in part due to the lack of training and developmental opportunities offered to them, management and leadership programs such as the MDPW may play a significant role in helping women raise their levels of confidence, and perceptions of their work abilities which may positively impact their feelings of self-worth. This sense of self-worth may play an important role in the pursuit of a fulfilling career.

Hypothesis	Results
H2: Participation in the MDPW will increase an individual's career management self-efficacy.	LONGITUDINAL: The paired t-test indicated that respondents' overall levels of career management self-efficacy had increased from T1 (prior to MDPW) to T2 (now). The Action Planning and Career Management Initiation facets were also significant.

	<p>RETROSPECTIVE: Mean scores indicated that respondents feel that their career management self-efficacy had increased significantly compared to before having participated in the MDPW (overall and for each of the 5 facets).</p> <p>In the open-ended questions, Self-confidence was reported as the number one change in respondents due to having participated in the MDPW. Respondents also indicated positive changes in their approaches to work in terms of being more effective, efficient, better communicators and more relaxed at work.</p>
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The hypothesis of increased career management self-efficacy (CMSE) was strongly supported. Career management refers to the strategies and activities that individuals adopt to facilitate their career progress. Much of the responsibility for career management lies with the individual (Hall, 1986). Individuals stand to lose a lot if they take a passive stance. Increasing one's career management self-efficacy is important because higher levels of CMSE are positively associated with career management activity and career outcomes. Schwoerer (1990) found that typically women are less active career managers than men. Therefore, a lack of career management may negatively impact women's careers. The results of this study indicate that respondents have increased their beliefs that they are able to achieve their career goals through the following actions: self-assessment, environmental assessment, action planning, career management initiation and reacting calmly to externally imposed requirements.

This increase in career management self-efficacy is also consistent with reports of increased self-confidence (the anticipation of successfully mastering challenges or overcoming obstacles). With an increase in self-confidence women can proactively manage their career aspirations. For example an increase in self-confidence may help women remain optimistic even in the face of setbacks when otherwise they might feel defeated and give up.

Respondents also indicated positive changes in their approaches to work in terms of being more effective, more efficient, better communicators and more relaxed at work. These reports may partly explain the increase in respondents' career management self-efficacy. Feeling better about how they approach their work can also stimulate positive attitudes about managing their careers and increase respondents' confidence to take the necessary action for career progress.

These results may be due in part to the fact that the MDPW focuses on teaching its participants about effective management practices, including practical career strategies and techniques. Participants are also given the opportunity to assess their strengths and weaknesses in order to determine areas for improvement.

The finding that career management self-efficacy has increased for respondents since taking the MDPW is important because, as noted above, typically women are less active career managers (Schwoerer, 1990), and they may suffer negative consequences from not

engaging in career management. Therefore the increase in CMSE may positively affect respondents' abilities to meet their career goals.

Hypothesis	Results
H3: Participation in the MDPW will lead to an increase in career planning	LONGITUDINAL: The paired t-test indicated positive changes in career planning as a whole from T1 to T2. RETROSPECTIVE: Mean scores reflected that respondents feel that they have experienced an increase in career planning as compared to before having participated in the MDPW.

The hypothesis of increased career planning was strongly supported. Respondents feel that they have experienced an increase in career planning as compared to before participating in the MDPW. Respondents feel that they are more likely now to identify their career objectives, assess their strengths and weaknesses in relation to these objectives and decide on the best course of action to achieve their goals in light of their strengths and weaknesses.

This result may be due in part to the assignments related to career planning and self-assessment that each participant of the program is required to complete. This exposure to the importance of career planning and understanding one's strengths and weaknesses may have helped respondents think about career planning as a necessary strategic tool they

must utilize to accomplish their career goals. The observed increase in career planning may positively affect the careers of the respondents.

Hypothesis	Results
H4: Participation in the MDPW will lead to the use of more career enhancing strategies on the part of its participants.	LONGITUDINAL: Paired t-tests indicated that 1 item of the career enhancing strategy inventory was significant: "Pursue opportunities to gain line experience." RETROSPECTIVE: Means scores indicate that respondents feel that their use of career enhancing strategies has increased for all items except for "let others know you are willing to relocate if necessary."

The results of this research are not conclusive about changes in respondents' use of career enhancing strategies and in fact the longitudinal and retrospective study appear to have contradictory conclusions with the longitudinal study suggesting almost no change in career enhancing strategies and the retrospective suggesting that the use of almost all strategies had increased. While normally one would rely more heavily on the results of longitudinal research in assessing changes over time, there are two possible concerns with this data. First, it could be argued that respondents in the longitudinal study were overly positive with their ratings of career enhancing strategies at T1 because they did not want to admit that they were not proactive in managing their careers. This may reflect a

social bias to appear proactive and may also have also been influenced by the fact that they were about to embark on a management development program where they would be expected to actively manage their careers. The second concern with the longitudinal data is that the sample size was quite small (average $n = 17$) which limits the ability to detect significant changes. In addition to the one significant finding “pursue opportunities to gain line experience” there were some findings which approached significance supporting the contention that the small sample size may be responsible for the lack of results. One additional item “effectively advocate your ideas and programs” was marginally significant ($p = .1$). Two others-- “recommend innovative products and services” and “find ways to make your contribution unique”-- also neared marginal significance ($p = .127$ and $p = .126$ respectively). Item g – pursue opportunities to gain line experience is also supported as significant positive change was also found in the retrospective study. There is also some support from the qualitative data to indicate that respondents “effectively advocate their ideas and programs (item m) and it is probable that superiors note respondents’ “demonstrate increased confidence” (item v) as respondents have indicated an increase in confidence as the most prominent outcome of participating in the MDPW.

There is also some corroboration for increased use of some career strategies in other questions included in the retrospective study. For instance, respondents did report that their networks are much larger now as compared to before participating in the MDPW (see discussion below) and this would suggest a positive change for two other items –

“network with influential colleagues” and “cultivate an extensive network of contacts outside of the organization.”

If program graduates do increase their use of career enhancing strategies this has great implications. Research has shown that employing career enhancing strategies may help individuals be perceived as better candidates for promotion, they may receive more favorable peer ratings and may experience enhanced career outcomes (Dyke, 1990). Organization politics can be viewed as a competitive game in which a woman’s style of conversation and her preferred learning style may make it seem as though she were less competent and self-assured than her male peers (Tannen, 1995). Often, women may be less likely to vocalize their accomplishments (Tannen, 1995) and tend to be more reluctant to “sell” themselves (Dyke, 1993), as they may perceive it as showing off. By applying the tools they have learned in the MDPW in taking proactive measures to demonstrate their talents and accomplishments, these women can greatly enhance their chances of achieving their career goals.

Hypothesis	Results
H5: Participation in the MDPW will lead to an increased effort to obtain a mentor.	LONGITUDINAL: Not Tested RETROSPECTIVE: Mean scores for the amount of mentoring prior to participation indicates that respondents received little or some mentoring. Means scores indicated that respondents’ level of mentoring had not changed significantly since completion

	of the MDPW. Respondents did indicate an increased effort to “cultivate a powerful mentor” (item d of the career enhancing strategies inventory)
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The hypothesis of increased effort to obtain a mentor had some limited supported. The results for the item d- “cultivate a powerful mentor” of the career enhancing strategies scale suggests that women are making the effort to establish mentoring relationships. This is not a very strong finding as there is evidence to the contrary in the other results. The majority of respondents reported receiving either a small amount or some mentoring prior to participating in the MDPW. Respondents also indicated that their levels of mentoring had not changed significantly since having participated in the MDPW.

Potential explanations for the lack of change in mentoring received may be due to a possible lack of formal mentoring programs in the organizations in which respondents work. Also, the literature has shown that it can be difficult for women to form these relationships due to problems associated with cross-gender mentoring (Clawson and Kram, 1984). Female respondents may feel uncomfortable initiating relationships with male superiors and therefore choose not to form such relationships. If women seek other women as mentors because of problems with cross –gender mentoring, they may have difficulty obtaining a mentor because women are underrepresented in senior management positions (Statistics Canada, 2000).

Hypothesis	Results
<p>H6: Participation in the MDPW will lead to an increased effort to cultivate networks.</p>	<p>LONGITUDINAL: Not Tested Findings for 2 items with respect to networking on the career enhancing strategies scale did not indicate a positive change.</p> <p>RETROSPECTIVE: Mean scores indicate that participants feel that their networks have gotten larger since completion of the program. Mean scores for the 2 items with respect to networking on the career enhancing strategies scale also indicated positive changes: 1. "Network with influential colleagues" 2. "Cultivate an extensive network of contacts outside the organization." These findings were not corroborated in the longitudinal study.</p>

The hypothesis of increased networking was supported. As predicted, it appears that respondents have made efforts to enlarge their networks since completion of the MDPW and have been successful.

This may be due in part to the fact that the MDPW stresses the importance of networking as an important career enhancing strategy. Also, the MDPW class itself may have served as a networking venue as the knowledge and support shared among members may be viewed as important and relevant to career development. The relationships formed during the program may have been extended outside of the classroom and may have continued to develop once the program was completed. A fairly large and active alumnae

association also suggests that this network has become important to those who have participated in the program.

This is an important finding, because earlier research suggests that typically women are excluded from networks and therefore have fewer opportunities to gain support and valuable information. Participating in the MDPW seems to provide women with the tools to enlarge their networks and therefore may help them receive the career related benefits of networking.

Hypothesis	Results
<p>H7: Participation in the MDPW will lead to an increase in the desire for further education and training opportunities.</p>	<p>LONGITUDINAL: Not Tested</p> <p>RETROSPECTIVE: Mean scores suggest that respondents are slightly more motivated to further their education. About 40% said they are more motivated, and about 47% are equally motivated to further their education. Thirty-four percent of respondents have enrolled in an educational program since participating in the MDPW.</p> <p>Those who spent 8 hours or less per week on childcare activities while participating in the MDPW did not indicate a significant change in their motivation to further their education.</p>

It was predicted that respondents would increase their motivation to further their education after completing the MDPW. This hypothesis was partially supported. On the

average participants were somewhat more motivated to further their education. Also about one third of respondents have enrolled in a program since completing the MDPW, of which about 60% were either University or College programs or specialized certificate programs. Also, 78% of respondents expressed an interest in follow-up workshops and programs from CREWW.

Some respondents may feel that the MDPW is equal to other management oriented educational programs at the graduate level and may not see the need to “duplicate” their efforts. When asked whether respondents felt that there was anything missing in the MDPW that could be added in order to enhance the program a number of respondents (about 12%) stated that the program should be accredited.

It should be noted that respondents who spent 8 hours or less per week on childcare activities while participating in the MDPW did not indicate a significant change in their motivation to further their education. This may be due to the fact that these women are already well educated and have made great strides in achieving their career goals.

Hypothesis	Results
H8: Participation in the MDPW will lead to an increase in career satisfaction.	LONGITUDINAL: A paired t-test indicated no significant changes in career satisfaction from T1 to T2. RETROSPECTIVE: Mean scores suggest that respondents feel more satisfied with their careers now as

	<p>compared to before participating in the MDPW.</p> <p>72% of respondents stated career advancement as one of their goals for participating in the MDPW. It was also found that this goal was met to a large extent.</p>
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Hypothesis 8 predicted that, by gaining the appropriate career enhancing tools through the MDPW, respondents would become more satisfied with their careers. The results indicate that in the retrospective study this appears to be the case but that in the longitudinal study significant changes in career satisfaction were not found.

There are several possible explanations for the mixed results. It should be noted that results from the longitudinal study would be less likely to be influenced by demand effects than the retrospective study. However, there are several concerns with the longitudinal study. First, the sample in the longitudinal study is very small, which allows for only the most substantial changes to be noticed. Also, the respondents in the longitudinal study had less than three years to achieve their career goals whereas in the retrospective study some respondents had as long as eight years to accomplish their goals. Therefore it makes sense that they would be more satisfied with their career progress. Another finding related to career satisfaction is that the majority of respondents felt that career advancement was one of their goals for participating in the MDPW, and that this goal has been met to a large extent. Thus it appears that many MDPW graduates are satisfied with their career progress.

Hypothesis	Results
H9: Participation in the MDPW will lead to an increase in life satisfaction.	<p>LONGITUDINAL: A paired t-test indicated no significant changes in life satisfaction. (1-item)</p> <p>RETROSPECTIVE: Mean scores reflect a positive change in life satisfaction since completion of the MDPW (5-item scale)</p>

Because the MDPW aims to increase respondents' career awareness, their perception of their abilities to achieve career goals, their self-confidence and their sense of self-worth it was predicted these effects would lead respondents to be more satisfied with their lives.

The hypothesis of increased life satisfaction was moderately supported. The differences in results between the two studies may be due in part to the inherent unreliability of the single item in the longitudinal study and the fact that the small sample size permits the researcher to capture only the most sizable differences from T1 and T2.

A single item cannot accurately capture the complexity of the life satisfaction measure. The judgment of how satisfied people are with their present state of affairs is based on a comparison with a standard which each individual sets for him or herself; it is not externally imposed. Thus the 5-item satisfaction with life scale (SWLS) used in the retrospective study allows us to measure life satisfaction as a cognitive-judgmental process (Diener et., al, 1985), thus facilitating a richer assessment of life satisfaction.

More weight should be placed on the findings from the retrospective study since it employed a well validated multi-item measure while the longitudinal study was limited to a single-item measure. Accordingly, it appears that the majority of respondents do feel more satisfied with their lives now as compared to before participating in the MDPW. The number of years since completing the program and the other moderating variables did not influence this relationship. This suggests that participating in the MDPW has played a significant role in this change in life satisfaction.

Completing the MDPW may give women a sense of accomplishment and, give them the tools to pursue their career goals which may have contributed to their feeling that the five items surrounding life satisfaction are much more true for them now as compared to before having participated in the MDPW.

Hypothesis	Results
H10: Participation in the MDPW will lead to a decrease in emotional burnout.	LONGITUDINAL: A paired t-test indicated that changes in burnout were not significant from T1 and T2. (Single-item). RETROSPECTIVE: Mean scores indicated a significant decrease in emotional burnout compared to before participating in the MDPW but respondents who participated in the MDPW 5-8 years ago did not significantly reduce their levels of emotional burnout at work.

Because the program addresses issues such as balance between work and home life and participants have the opportunity to share tips and strategies for creating an appropriate balance between hypothesis 10 predicted that participating in the MDPW would lead to a decrease in emotional burnout. Contradictory results between the two studies may be due to the fact that the scale used in the longitudinal study was a single item developed by Choquette. This single-item measure may not accurately represent emotional burnout. In addition, the small sample size permits the researcher to capture only the most sizable differences from T1 to T2. Accordingly, conclusions based on the longitudinal study must be treated with caution.

The decrease in emotional burnout noted in the retrospective study suggests that participants are finding coping mechanisms for dealing with both work and home life or are getting more social and family support. In fact, in the open-ended questions, respondents reported family and friends' support as the number one thing in their personal lives making it easier to meet their career goals. Having said this, respondents also indicated family responsibilities and difficulties as the number one thing in their personal lives making it more difficult to achieve their career goals.

It should also be noted that for those who participated in the MDPW between 5 and 8 years ago, their levels of emotional burnout was not significantly reduced. This may be partly explained by the fact that these respondents have taken on new or greater challenges as their careers have advanced.

Overall it was found that respondents' level of emotional burnout has decreased. This may be due in part to the lessons learned in the MDPW and new support systems

developed such as the larger networks. This finding is important because by reducing feelings of emotional burnout, participants can devote more energy to work and home life thus may increase their satisfaction and productivity in both facets of their lives.

Hypothesis	Results
H11: Participating in the MDPW will lead to increased career advancement especially for those who sought career advancement as a goal of participating in the MDPW.	RETROSPECTIVE: On the whole respondents have advanced their careers since completion of the MDPW The number of years since completing the program, the level of education attained, age, and work experience impact this relationship.

Because the literature shows that training and development courses are important for managerial advancement it was hypothesized that participating in the MDPW would lead to career advancement. Training and development courses can develop knowledge, skills, credentials, and credibility, which in turn can help employees achieve a promotion (Ragins and Sundstrom, 1989). This may be especially true for women because training may be an essential source of expertise in managerial skills, which they may have little opportunity to gain through job assignments and work experience (Tharenou, Latimer and Conroy, 1994).

A majority of respondents indicated that career advancement was a goal for them in participating in the MDPW. Additionally respondents stated that this goal has been met to a large extent. The results also indicate that the respondents have experienced positive

changes in all areas of career advancement measured in this study (job level, salary progression, levels to chief executive, supervisory responsibilities, job responsibility, job challenge, promotions and lateral moves).

These results are modified by several factors. The number of years since completion of the program has a positive relationship with the number of lateral moves and total career moves of respondents. Recent graduates have increased their salaries more per year than graduates of 5 years or more. Although salary freezes may partially explain this finding, this result also suggests that the MDPW launches graduates into new career paths which gain momentum. The Management Development Program for Women may be one source of the type of training women may require for their career development, and serve to jumpstart women's careers. This may be due to the fact that the program provides women with timely and crucial managerial skills needed in today's competitive business world. Perhaps more importantly it also provides participants with a supportive environment that encourages open and free discussion of pertinent issues such as discrimination towards women in the workplace, sexual harassment and the dual roles many women face. The program also has a focus that encourages women to actively develop their careers. This includes a focus on career enhancing strategies including the cultivation of mentors, the importance of networking, career management self-efficacy and career planning.

Other findings suggest that younger respondents have increased their salary more per year than older respondents and have received more promotions to a different functional area. Those with less work experience made more career moves since completion of the MDPW. These respondents are likely to be younger and therefore less likely to have hit the age 45 “plateau” (Rozenbaum, 1984). This may imply that the MDPW has contributed more to the career advancement for those who are younger and have less work experience.

Overall those who have not completed post secondary education experienced more positive career outcomes. For example they have higher increases in salary per year, and reported significantly more positive changes in job challenge than did those with degrees. A likely explanation for these findings is that the MDPW serves to fill the gap for those without other post-secondary education. The lack of post-secondary education may have been holding these respondents back from progressing in their careers and the MDPW may have been regarded as a substitute for other post-secondary education.

Overall respondents were able to advance their careers since completing the MDPW. Some respondents who did not seek managerial advancement per se were still able to advance their careers in terms of level of the level of challenge and responsibility provided in their jobs.

6.2 Summary of Impacts

This research suggests that, for the women who have participated in the MDPW since 1992, the program has had a significant positive impact in their lives. The program has played a large role in helping women raise their sense of self-worth and increase their belief in their ability to manage their own careers. These women have also taken a more active role in career planning activities and in cultivating networks. Having participated in the MDPW seems to have also shaped the career and life satisfaction of respondents as well as reduced levels of emotional burnout. Due to the fact that model variables are highly intercorrelated, further research using complex modeling may shed additional light on these findings.

It is important to note that it might be difficult to attribute certain changes of respondents' lives to participating in the MDPW alone and that other life variables may have contributed to shaping these outcomes. This may be especially true for those who participated in the program over three years ago since it is can be difficult to assess the impact of a 10-month window out of a person's life. Many events shape who we are. Although the MDPW may help shape a person's attitudes and behaviours other factors may have played a role in the changes. For example, becoming a mother, successfully completing a challenging assignment at work and becoming physically fit could all impact a person's sense of self-worth.

6.3 Evaluation of the Program

Evaluating educational programs is not an easy task. There is a lack of common standards and yardsticks to aid in evaluation and more importantly many variables may influence the outcome of the training but in reality may not have anything to do with the training. Despite these complications evaluations are important and necessary. It is important to prove the effectiveness of management training for women to obtain the support of managers and organizations and to help structure the training needed.

This research has looked at the four stages of Kirpatrick's (1983) model: reaction, learning, behavior and results. In other words, how did the respondents react to the program, what did the participants learn, how has their behavior changed and what results were produced in their organizations based in some substantial part on having participated in the MDPW.

Overall, respondents felt that the MDPW had value to both the positions they held while participating in the MDPW and to their current positions. The assignments and the in-class work are seen by respondents as having value to the work they have done subsequent to the MDPW. It was evident that respondents have learned more than basic managerial skills, they have also learned about career management and how to take an active role in shaping one's career. This is reflected in the behavioural changes noted in career management self-efficacy, career planning and the cultivation of networks. Respondents' organizations have also benefited from respondents' increased personal

effectiveness, the introduction of new products and processes, improved working relationships with supervisors and the creation of better working environments for subordinates.

6.4 Implications

This research examined whether the Management Development Program for Women offered at Carleton has been able to promote positive change for managerial women with respect to certain variables that are associated with enhanced career success. Results suggest that overall the MDPW has been successful in meeting its goals.

Previous research has shown that women do not receive as much management training nor as many developmental opportunities as men do (Tharenou, Latimer and Conroy, 1994; Lyness and Thompson, 1997: and McCauley, Ruderman and Ohlott, 1994). Previous research also indicates that management training and development opportunities have been positively linked to managerial advancement (Tharenou, Latimer and Conroy, 1994). Results from this research suggest that women who have participated in the MDPW have made positive changes with respect to many of the variables associated with career success. For example respondents have increased their use of career planning and have increased their career management self-efficacy. Respondents have also notably advanced their careers due in a significant part to participating in the program. Perhaps the most significant impact of the MDPW has been respondents increased sense of self-worth. This is a very important finding since women generally have lower levels of self-

confidence (Maccoby and Jacklin's, 1974 and Rosenberg, 1979) and therefore may suffer from lower levels of self-worth. This may reflect the fact that historically women were not deemed suited for the corporate or the scientific worlds and therefore not socialized to believe in their capabilities in these fields (Powell, 1993). Even when women are self-confident they are often less likely to "sell" themselves due to perceptions that it is considered showing off (Tannen, 1995) which is not viewed as appropriate for women to do (Dyke, 1993). Although a lot has changed many stereotypes of men and women's roles still linger today. This is reflected in part in the low numbers of women in senior management and in the mathematical and engineering fields (Statistics Canada, 2000). The results of this research suggest that the MDPW is helping women believe in themselves by giving them the necessary tools to overcome some of the external barriers they face.

The positive outcomes for the women who participated in the MDPW imply that management training programs for women can be beneficial for women who wish to advance in their careers. Organizations also benefit from the increased effectiveness women gain by participating in programs such as the MDPW. Society as a whole may also benefit, as women who participate in management training are more confident, productive and may serve as role models for young women.

Clearly, more programs like the MDPW are needed to help women achieve their career aspirations. Educators therefore should advocate the development of more management

programs for women, help promote such programs and continue to improve on them. It is also in the best interests of organizations to do more to support women's training.

6.5 Limitations

Most research is subject to limitations and the research reported in this paper is no exception. In an ideal world research would have begun eight years ago, an accurate control group would have been formed and a pre-test /post-test design would have been used for participants for each year of the program. This was not feasible and the researcher had to make do with the current situation. A longitudinal study of a small number of graduates of one class was undertaken as well as a retrospective study with the remainder of the graduates that asked respondents to make comparative judgments. Therefore several limitations have presented themselves.

One limitation of this study is the absence of a control group for both the follow-up longitudinal study and the retrospective survey. As a result, observed effects of the program could have alternative explanations such as the natural growth and development of the participants. Respondents who participated in the program 8 years ago may have been exposed to numerous experiences and situations that have impacted their lives that may not have anything to do with having participated in the MDPW. History and maturation effects may have also impacted the results of both studies. The history effect suggests that the change or lack of change in the data collected may be attributed to something other than the treatment that took place outside the confines of the experiment

between data collection at time one and data collection at time two in the longitudinal study and between taking the program and data collection in the retrospective study (Schuyler et al., 1979). The maturation effect suggests that changes may have occurred due in large part to the aging process (Schuyler et al., 1979). Despite the above limitations, this research is worthwhile as the hypotheses that have been tested reflect the assumption that other influences will have averaged out across the sample and that any observed changes are attributable in a significant measure to participation in the MDPW.

As detailed in chapter 4, responses may have been affected by social desirability bias, in that respondents answered questions favorably because they thought it was socially valued to do. Demand effects and the Hawthorne effect may have also impacted results of this research. Demand effects occur when the subject knows (or thinks they know) what the researcher wants to hear/find and they change their responses to match the hypothesis. It can be inferred that respondents were aware of the objectives that the MDPW set out, many of which have been tested in this research. In this study respondents may be inclined to answer favorably to questions because of the awareness of the program's objectives. What has been coined the Hawthorne effect may impact the results of this research. This phenomenon is characterized by an awareness on the part of the subjects of special treatment. Because of the research this awareness becomes confounded with the independent variable under study (Houston et al., 1973). It has been shown that in educational experimentation, no matter what the hypothesis is, experimental classes do better than the control classes (Houston et al., 1973). This

phenomenon is associated with human psychology. In this study respondents may be inclined to answer favorably to questions because of the fact that they were being studied.

The longitudinal study has several specific limitations. First, the sample size is only 17. The small sample size will have an affect on power and Type 1 error. The longitudinal study may also lend itself to “pre-test sensitization”. This phenomenon occurs when the pre-test sensitizes the subjects to what is important about the post-test and therefore they perform much better on the post-test (Schuyler et al., 1979). Since many of the measures used in this study are behavioural however, rather than cognitive, the impact of pre-test sensitization should be minimized.

Although the retrospective survey has a much larger sample (one hundred and two), it also has some limitations. Questions about self-worth, general satisfaction, career enhancing strategies, career planning and career management self-efficacy have been modified from the original instruments to seek comparative judgments from the participants. Recall may not be as accurate as the answers obtained from the longitudinal study. Career advancement, mentoring and networks are also measured comparatively in both surveys, which may limit accuracy. This type of research lends itself to gathering respondents’ perceptions of changes in behaviours and attitudes rather than actual changes. As noted previously, however, perceptions are of great importance as they may shape respondents career enhancing behaviours.

Another limitation lies in the unreliability of the single-item scales in the longitudinal study. Even though the retrospective study used more reliable scales, conclusions were difficult to draw due to the different scales used in the two studies. Lastly, more accurate results for some measures may have been obtained if self-reporting was combined with additional reports by respondents' supervisors on the changes or lack of changes they noticed.

6.6 Benefits

The trends that have emerged from this study are important for intervention programs aimed at enhancing the career outcomes of managerial women. Participating in the MDPW made positive contributions to not only the careers but also the lives of these women. Women who participated in the MDPW experienced significant changes in their levels of self-confidence and self-worth and have taken on a more proactive role in managing their careers.

This study has highlighted the fact that this type of training is beneficial for women to have. These findings should encourage other women to participate in similar programs, and encourage managers to give women employees the opportunity to participate in similar programs.

This attempt at evaluating a specific management development program is a step toward developing more adequate and complete evaluations of such programs. It is hoped that

other researchers would take this research as a beginning and build on it by addressing its methodological flaws. It is also hoped that the directors of training programs will move beyond reactionary level evaluations in order to determine if their programs are in fact meeting the needs of women seeking to enhance their careers and if they are not, that they use the research to identify necessary adjustments. By providing a well-rounded managerial training that addresses specific issues and concerns unique to women, programs such as the MPDW may contribute significantly in the struggle to equalize the power distribution between the sexes within the corporate world.

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Appendix A

Measures for Longitudinal Study Only

Self-Worth

9. These are statements which allow people to describe themselves. There are no right or wrong answers since people differ markedly. Please read across both parts of the sentence. First decide which one of the two parts of each statement best describes you; then go to that side of the statement and check whether that is just "sort of true" for you or "really true" for you. Please check only **ONE** of the four boxes for each statement.

	Really True for Me	Sort of True for Me		BUT		Sort of True for Me	Really True for Me
Job Competence							
a)	☐	☐	Some adults are not satisfied with the way they do their work	BUT	Other adults are satisfied with the way they do their work.	☐	☐
b)	☐	☐	Some adults are not very productive in their work	BUT	Other adults are very productive in their work	☐	☐
c)	☐	☐	Some adults are proud of their work	BUT	Other adults are not very proud of what they do	☐	☐
d)	☐	☐	Some adults feel they are very good at their work	BUT	Other adults worry about whether they can do their work	☐	☐
Self –Worth							
e)	☐	☐	Some adults are dissatisfied with themselves	BUT	Other adults are satisfied with themselves	☐	☐
f)	☐	☐	Some adults sometimes question whether they are a worthwhile person	BUT	Other adults feel that they are a worthwhile person	☐	☐
g)	☐	☐	Some adults like the kind of person they are	BUT	Other adults would like to be someone else	☐	☐
h)	☐	☐	Some adults are very happy being the way they are	BUT	Other adults would like to be different	☐	☐
i)	☐	☐	Some adults like the way they are leading their lives	BUT	Other adults don't like the way they are leading their lives	☐	☐
j)	☐	☐	Some adults are disappointed with themselves	BUT	Other adults are quite pleased with themselves	☐	☐

Career Management Self-Efficacy

15. Please indicate how confident you are that you are able to perform the following behaviors:

	NOT AT ALL CONFIDENT		SOMEWHAT CONFIDENT			HIGHLY CONFIDENT	
CONFIDENT Self-Assessment							
a) I am able to accurately assess my strengths.	1	2	3	4	5	6	7
b) I am able to identify areas where I can improve.	1	2	3	4	5	6	7
g) I am able to accurately assess my weaknesses.	1	2	3	4	5	6	7
Environmental Assessment							
c) I am able to accurately assess my boss's opinion of me.	1	2	3	4	5	6	7
d) I am able to tell how well I am performing.	1	2	3	4	5	6	7
e) I am able to anticipate my performance evaluation ratings.	1	2	3	4	5	6	7
m) I am able to accurately assess my co-workers' opinions of me.	1	2	3	4	5	6	7
t) I am able to anticipate the feedback I receive.	1	2	3	4	5	6	7
Action Planning							
f) I am able to set short-term goals for career progress.	1	2	3	4	5	6	7
h) I am able to set long-term goals for career progress.	1	2	3	4	5	6	7
j) I am able to identify steps that will help me achieve my goals.	1	2	3	4	5	6	7
l) I am able to develop a timetable for achieving my goals.	1	2	3	4	5	6	7
o) I am able to re-evaluate goals and adjust my plans as time passes.	1	2	3	4	5	6	7
Career Management Initiation							
k) I am able to ask my supervisors for opportunities I feel that I deserve	1	2	3	4	5	6	7
n) I am able to monitor the progress I make towards my goals.	1	2	3	4	5	6	7
p) I am able to ask for feedback if I am not sure how I am doing.	1	2	3	4	5	6	7
w) I am able to challenge a performance appraisal with which I disagree.	1	2	3	4	5	6	7
x) I am able to ask for an assignment that I'd like.	1	2	3	4	5	6	7

Reacting Calmly to Externally Imposed Requirements

i) I am able to react to changes in the organization calmly.	1	2	3	4	5	6	7
q) I am able to remain optimistic even in the face of setbacks.	1	2	3	4	5	6	7
r) I am able to take advantage of career opportunities.	1	2	2	4	5	6	
s) I am able to learn new skills easily.	1	2	3	4	5	6	7
u) I am able to accept new responsibility with little stress.	1	2	3	4	5	6	7
v) I am able to adapt to changes in my job.	1	2	3	4	5	6	7

Career Planning

14. To what extent do you agree or disagree with the following statements about career planning?

	STRONGLY				DISAGREE		NEUTRAL	
STRONGLY AGREE								
a) I have definite goals for my career.	1	2	3	4	5	6	7	
b) When I think of changing my job, I always consider whether the new job leads to another one I want.	1	2	3	4	5	6	7	
c) I give a lot of thought to plans and schemes for achieving my career goals.	1	2	3	4	5	6	7	
d) I know what my strengths and weaknesses are in relation to my career goals.	1	2	3	4	5	6	7	
e) Achieving my career goals is important to me.	1	2	3	4	5	6	7	

Career Enhancing Strategies

11. Following is a list of career behaviors that have been linked to career advancement in some organizations. Please indicate the extent to which you **currently**:

Very	To A Very					To A	
	Little Extent			Somewhat		Great Extent	
a) Consistently exceed performance expectations.	1	2	3	4	5	6	7
b) Exhibit a style that senior managers are comfortable with.	1	2	3	4	5	6	7
c) Work on high visibility projects.	1	2	3	4	5	6	7
d) Cultivate a powerful mentor.	1	2	3	4	5	6	7
e) Network with influential colleagues.	1	2	3	4	5	6	7
f) Cultivate an extensive network of contacts outside the department.	1	2	3	4	5	6	7
g) Pursue opportunities to gain line experience (work that relates to the major business of the organization)	1	2	3	4	5	6	7
h) Round out your skills by working in a variety of areas.	1	2	3	4	5	6	7
i) Move from one department to an other.	1	2	3	4	5	6	7
j) Show that you aspire to positions of increased responsibility.	1	2	3	4	5	6	7
k) Perform high quality work on the things your supervisors pay attention to.	1	2	3	4	5	6	7
l) Be a leader within your peer group.	1	2	3	4	5	6	7
m) Effectively advocate your ideas and programs.	1	2	3	4	5	6	7
n) Show initiative.	1	2	3	4	5	6	7
o) Communicate your career goals and plans to management.	1	2	3	4	5	6	7
p) Recommend innovative products and services.	1	2	3	4	5	6	7
q) Work at your job outside of normal working hours.	1	2	3	4	5	6	7
r) Find ways to make your contributions unique.	1	2	3	4	5	6	7
s) Do things that go well beyond what is required by the job.	1	2	3	4	5	6	7
t) Become a specialist in an area that is crucial to the organization's success.	1	2	3	4	5	6	7

u) Let others know you are prepared to re-locate if necessary.	1	2	3	4	5	6	7
v) Show that you are very confident	1	2	3	4	5	6	7
w) Spend a considerable amount of time thinking about your job outside of normal work hours.	1	2	3	4	5	6	7

Life Satisfaction

17. In general, how satisfied or dissatisfied are you with your **life as a whole** right now?

Completely Dissatisfied			Neutral			Completely Satisfied
1	2	3	4	5	6	7

Work Life Satisfaction

18. In general, how satisfied or dissatisfied are you with your **work life** right now?

Completely Dissatisfied			Neutral			Completely Satisfied
1	2	3	4	5	6	7

Career Satisfaction

16. Following is a list of statements regarding career satisfaction. Please indicate how satisfied you are with the following:

	Very Dissatisfied			Somewhat Satisfied			Very Satisfied
a)The success I have achieved in my career.	1	2	3	4	5	6	7
b) The progress I have made toward meeting my overall career goals.	1	2	3	4	5	6	7
c) The progress I have made toward meeting my goals for income.	1	2	3	4	5	6	7
d) The progress I have made toward meeting my goals for advancement.	1	2	3	4	5	6	7
e) The progress I have made toward meeting my goals for the development of new skills.	1	2	3	4	5	6	7

Burnout

20. In general, to what extent are you feeling “burned out” (disillusioned, emotionally and/or physically exhausted)?

Not at all Burned out				Neutral			Completely Burned out
1	2	3	4	5	6	7	

Moderating Variables

Age

42. What is your current age? _____ YEARS

Education

43. Please circle the letter which best describes the highest level of education you completed prior to the MDPW

- A High School
- B Some college/university
- C College diploma _____ (YEAR COMPLETED)
- D University degree _____ (YEAR COMPLETED)
- E Post-graduate degree _____ (YEAR COMPLETED)

Home Status

44. What was your marital status **while participating** in the MDPW? Please circle the letter which best describes you

at the time you were participating in the MDPW?

- A Never married
- B Married or living with a significant other
- C Separated, divorced or widowed

45. **While you were participating** in the MDPW, how many children did you have living at home in each of the following age groups? _____ Under 18 years old _____ Over 18 years old

46. How much time did you spend each week in childcare or activities with your children **while participating** in the MDPW? _____ HOURS

47. **While you were participating** in the MDPW, how much time did you spend each week in caring for elderly relatives? _____ HOURS

48. On average, how many hours did you work in the position you held **while participating in the MDPW?**

(Please include any work done at home as well _____ HOURS

49. On average, how many hours do you **currently** work in total each week? (Please include any work done at home as well). _____ HOURS

Work Experience

1. In what year did you begin full-time work? 19____ YEAR

2. How many different employers (including federal government departments) have you worked for in your career?

_____ EMPLOYERS

3. How long have you worked:

a. In your current organization? _____ YEARS

b. In your current position? _____ YEARS

Appendix B

Measures for the Retrospective Study Only

Self-Worth

10. Listed below are pairs of sentences, which allow people to describe themselves. Mark the position along each scale that best reflects how you feel now compared to before having participated in the MDPW.

Compared to before the MDPW,

Job Competence

I feel less satisfied with how I do my work.	1	2	3	4	5	6	7	I feel more satisfied with how I do my work.
I feel less competent with respect to my job.	1	2	3	4	5	6	7	I feel more competent with respect to my job.
I feel that I am less productive in my work.	1	2	3	4	5	6	7	I feel that I am more productive in my work.

Self-Worth

I have less pride in the work I do.	1	2	3	4	5	6	7	I have more pride in the work I do.
I feel less satisfied with myself as a person.	1	2	3	4	5	6	7	I feel more satisfied with myself as a person.
I am less happy with who I am.	1	2	3	4	5	6	7	I am happier with who I am.
I feel less satisfied with how I am living my life.	1	2	3	4	5	6	7	I feel more satisfied with how I am living my life.
I feel that I am a less worthwhile person.	1	2	3	4	5	6	7	I feel that I am a more worthwhile person.
I dislike the kind of person I am.	1	2	3	4	5	6	7	I like the kind of person I am.
I am less pleased with myself.	1	2	3	4	5	6	7	I am more pleased with myself

Career Management Self-Efficacy

16. Please indicate the extent that you agree or disagree with the following statements:

	More	Much Less		The Same			Much	
	Before	Than Before		As Before			Than	
Compared to before the MDPW...		The MDPW		The MDPW			The	
MDPW								
Self-Assessment								
a) I am able to accurately assess my strengths.		1	2	3	4	5	6	7
b) I am able to identify areas where I can improve.		1	2	3	4	5	6	7
g) I am able to accurately assess my weaknesses.		1	2	3	4	5	6	7
Environmental Assessment								
c) I am able to accurately assess my boss’s opinion of me.		1	2	3	4	5	6	7
d) I am able to tell how well I am performing.		1	2	3	4	5	6	7
e) I am able to anticipate my performance evaluation ratings.		1	2	3	4	5	6	7
m) I am able to accurately assess my co-workers’ opinions of me.		1	2	3	4	5	6	7
t) I am able to anticipate the feedback I receive.		1	2	3	4	5	6	7
Action Planning								
f) I am able to set short-term goals for career progress.		1	2	3	4	5	6	7
h) I am able to set long-term goals for career progress.		1	2	3	4	5	6	7
j) I am able to identify steps that will help me achieve my goals.		1	2	3	4	5	6	7
l) I am able to develop a timetable for achieving my goals.		1	2	3	4	5	6	7
o) I am able to re-evaluate goals and adjust my plans as time passes.		1	2	3	4	5	6	7
Career Management Initiation								
k) I am able to ask my supervisors for opportunities I feel that I deserve		1	2	3	4	5	6	7
n) I am able to monitor the progress I make towards my goals.		1	2	3	4	5	6	7
p) I am able to ask for feedback if I am								

not sure how I am doing.	1	2	3	4	5	6	7
w) I am able to challenge a performance appraisal with which I disagree.	1	2	3	4	5	6	7
x) I am able to ask for an assignment that I'd like.	1	2	3	4	5	6	7

Reacting Calmly to Externally Imposed Requirements

i) I am able to react to changes in the organization calmly.	1	2	3	4	5	6	7
q) I am able to remain optimistic even in the face of setbacks.	1	2	3	4	5	6	7
r) I am able to take advantage of career opportunities.	1	2	2	4	5	6	7
s) I am able to learn new skills easily.	1	2	3	4	5	6	7
u) I am able to accept new responsibility with little stress.	1	2	3	4	5	6	7
v) I am able to adapt to changes in my job.	1	2	3	4	5	6	7

Career Planning

15. After having completed the MDPW to what extent do you agree with the following statements on career planning?

Before MDPW	More		Much Less		The Same		Much	
	Than Before				As Before		Than	
	The MDPW				The MDPW		The	
a) I have definite goals for my career.	1	2	3	4	5	6	7	
b) When I think of changing my job, I always consider whether the new job leads to another one I want.	1	2	3	4	5	6	7	
c) I give a lot of thought to plans and schemes for achieving my career goals.	1	2	3	4	5	6	7	
d) I know what my strengths and weaknesses are in relation to my career goals.	1	2	3	4	5	6	7	
e) Achieving my career goals is important to me.	1	2	3	4	5	6	7	

Career Enhancing Strategies

12. Following is a list of career behaviors that have been linked to career advancement in some organizations. Please indicate the extent to which you engage in the following behaviors now **compared to before your participation in the MDPW**.

Often before MDPW	Much Less Often		The Same		Much More	
	Than before the MDPW		as before the MDPW		than the	
a) Consistently exceed performance expectations.	1	2	3	4	5	6 7
b) Exhibit a style that senior managers are comfortable with.	1	2	3	4	5	6 7
c) Work on high visibility projects.	1	2	3	4	5	6 7
d) Cultivate a powerful mentor.	1	2	3	4	5	6 7
e) Network with influential colleagues.	1	2	3	4	5	6 7
f) Cultivate an extensive network of contacts outside the department.	1	2	3	4	5	6 7
g) Pursue opportunities to gain line experience (work that relates to the major business of the organization)	1	2	3	4	5	6 7
h) Round out your skills by working in a variety of areas.	1	2	3	4	5	6 7
i) Move from one department to an other.	1	2	3	4	5	6 7
j) Show that you aspire to positions of increased responsibility.	1	2	3	4	5	6 7
k) Perform high quality work on the things your supervisors pay attention to.	1	2	3	4	5	6 7
l) Be a leader within your peer group.	1	2	3	4	5	6 7
m) Effectively advocate your ideas and programs.	1	2	3	4	5	6 7
n) Show initiative.	1	2	3	4	5	6 7
o) Communicate your career goals and plans to management.	1	2	3	4	5	6 7
p) Recommend innovative products and services.	1	2	3	4	5	6 7
q) Work at your job outside of normal working hours.	1	2	3	4	5	6 7
r) Find ways to make your contributions unique.	1	2	3	4	5	6 7

s) Do things that go well beyond what is required by the job.	1	2	3	4	5	6	7
t) Become a specialist in an area that is crucial to the organization's success.	1	2	3	4	5	6	7
u) Let others know you are prepared to re-locate if necessary.	1	2	3	4	5	6	7
v) Show that you are very confident	1	2	3	4	5	6	7
w) Spend a considerable amount of time thinking about your job outside of normal work hours.	1	2	3	4	5	6	7

Career Satisfaction

17. Following is a list of statements regarding career satisfaction. Compared to before the MDPW, are you less satisfied, equally satisfied or more satisfied with the following:							
More	Much Less		Equally		Much		
	Satisfied		Satisfied		Satisfied		
a) The success I have achieved in my career.	1	2	3	4	5	6	7
b) The progress I have made toward meeting my overall career goals.	1	2	3	4	5	6	7
c) The progress I have made toward meeting my goals for income.	1	2	3	4	5	6	7
d) The progress I have made toward meeting my goals for advancement.	1	2	3	4	5	6	7
e) The progress I have made toward meeting my goals for the development of new skills.	1	2	3	4	5	6	7

Moderating Variables

Time since taking the program

1. In what year did you complete the Management Development Program for Women? _____

Age

40. What is your current age? _____ YEARS

Education

41. Please circle the letter which best describes the highest level of education you completed prior to the MDPW

- A High School
- B Some college/university
- C College diploma _____(YEAR COMPLETED)
- D University degree _____(YEAR COMPLETED)
- E Post-graduate degree _____(YEAR COMPLETED)

Home Status

42. What was your marital status **while participating** in the MDPW? Please circle the letter which best describes you at the time

you were participating in the MDPW?

- A Never married
- B Married or living with a significant other
- C Separated, divorced or widowed

43. While you were participating in the MDPW, how many children did you have living at home in each of the following age groups? _____ Under 18 years old _____ Over 18 years old

44. How much time did you spend each week in childcare or activities with your children **while participating** in the MDPW?

_____ HOURS

45. While you were participating in the MDPW, how much time did you spend each week in caring for elderly relatives? _____ HOURS

46. On average, how many hours did you work in the position you held **while participating in the MDPW?**
(Please include any work done at home as well) _____ HOURS

47. On average, how many hours do you **currently** work in total each week? (Please include any work done at home as well). _____ HOURS

Work Experience

2. In what year did you begin full-time work? 19____ YEAR

3. How many different employers (including federal government departments) have you worked for in your career?

_____ EMPLOYERS

4. How long have you worked:

a. In your current organization? _____ YEARS

b. In your current position? _____ YEARS

Appendix C

Questions for the Retrospective Study found in both the Longitudinal and the Retrospective Questionnaires

Mentoring

There is a lot of talk these days about mentoring. A mentor is a senior employee who has provided support and guidance to you in managing your career.

a) Prior to participating in the MDPW how much mentoring did you feel you received?

Almost no Mentoring		Some Mentoring			A great deal Of Mentoring	
1	2	3	4	5	6	7

b) Compared to before the MDPW how much mentoring do you receive now?

Much Less Mentoring		Same Amount Of Mentoring			Much More Mentoring	
1	2	3	4	5	6	7

Networking

Networks also affect career experiences. A network is a group of people you feel you can call upon for career or work related advice and for emotional support.

a) Prior to participating in the MDPW did you have a work-related network?

Not at all		Somewhat			A Large Network	
1	2	3	4	5	6	7

b) Compared to before the MDPW how has your network changed? My network is:

Smaller		The Same			Larger	
1	2	3	4	5	6	7

Desire to Continue Education

Has your motivation to further your education changed since your participation in the MDPW? (Education here means any university/college program or workplace-based program that involves a commitment over several sessions or a series of courses over time)

Less Motivated		Equally Motivated		More Motivated		
1	2	3	4	5	6	7

Have you enrolled in an educational program (any university/college program or workplace-based program that involves a commitment over several sessions or a series of courses over time) since completion of the MDPW?

☐ Yes ☐ No If yes, please describe _____

Life Satisfaction

18. Please indicate how you feel about your life right now as compared to before participating in the MDPW:

More before MDPW	Much Less			The Same			Much	
	True than before			as before			True than	
	the MDPW			the MDPW			the	
a) In most ways my life is close to my ideal	1	2	3	4	5	6	7	
b) The conditions of my life are excellent				1	2	3	4	
5	6	7						
c) I am satisfied with my life	1	2	3	4	5	6	7	
d) So far I have gotten the important things I want in life.	1	2	3	4	5	6	7	
e) If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7	

Burnout

19. Compared to before the MDPW, how often to you feel the following:

	Much Less Often than before the MDPW		The Same as before the MDPW			Much More Often than before the MDPW	
a) Feel "burned out" from your job?	1	2	3	4	5	6	7
b) Feel "frustrated" by your job?	1	2	3	4	5	6	7
c) Feel difficulties are piling up so high that you can not overcome them?	1	2	3	4	5	6	7
d) Feel fatigued when you get up in the morning and have to face another day?	1	2	3	4	5	6	7
e) Feel "used up" at the end of the workday?	1	2	3	4	5	6	7
f) Feel emotionally drained by your job?	1	2	3	4	5	6	7

Career Advancement

Promotions and Lateral Moves

Please indicate how many career moves you have made since completion of the MDPW, or if appropriate circle Not Applicable (N/A)

a. Promotions within the same functional area	_____	or	N/A
b. Promotions to a different functional area (or department)	_____	or	N/A
c. Lateral moves within the same functional area	_____	or	N/A
d. Lateral moves to a different functional area (or department)	_____	or	N/A

If you circled Not Applicable, please explain

Job Responsibility

Compared to prior to your participation in the MDPW, do you feel your level of responsibility has changed? I currently have:

Less Responsibility	The Same Level of Responsibility			More Responsibility		
------------------------	-------------------------------------	--	--	------------------------	--	--

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Job Challenge

Compared to prior to your participation in the MDPW do you feel that your position has changed?

My current position is:

Less Challenging	Equally Challenging			More Challenging		
---------------------	------------------------	--	--	---------------------	--	--

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Career Advancement as a goal

Was career advancement one of your goals for participating in the MDPW?

☐ Yes ☐ No

If yes, please indicate the extent to which this goal has been met.

Not at all	Somewhat			Completely		
------------	----------	--	--	------------	--	--

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Career Success Defined

“Career success” means different things to different people. Would you characterize your personal definition of success as focusing on:

Financial Rewards
and Influence

Personal Satisfaction
and Respect

1	2	3	4
---	---	---	---

9. Please describe the job you had prior to participation in the MDPW and your current job.

<p>What was your position prior to MDPW?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Please answer the following questions based on your position prior to your participation in the MDPW.</p> <p>What was your job level?</p> <p>A Senior Management/Executive ☐</p> <p>B. Middle Management ☐</p> <p>C. First Level Manager/Supervisor ☐</p> <p>D. Professional or Technical Position ☐</p> <p>E. Other Non-Management Position ☐</p>	<p>Are you:</p> <p>In the same position as prior to the MDPW ☐</p> <p>A new position ☐</p> <p>Please describe: _____</p> <p>_____</p> <p>Is this position with:</p> <p>The same organization ☐</p> <p>A different organization ☐</p> <p>Even if you are in the same position, please complete the following to indicate any changes</p> <p>Please answer the following questions based on your Current Position</p> <p>What is your current job level?</p> <p>A Senior Management/Executive ☐</p> <p>B. Middle Management ☐</p> <p>C. First Level Manager/Supervisor ☐</p> <p>D. Professional or Technical Position ☐</p> <p>E. Other Non-Management Position ☐</p>
---	--

<p>Indicate the approximate annual gross salary (including bonuses and commissions) of your position prior to participating in the MDPW</p> <p>Gross Annual Salary \$ _____,000</p> <p>OR</p> <p>A. under \$20,000 ☐</p> <p>B. \$20,000-\$39,999 ☐</p> <p>C. \$40,000-\$59,999 ☐</p> <p>D. \$60,000-\$79,999 ☐</p> <p>E. \$80,000-\$99,999 ☐</p> <p>F. \$100,000 or more ☐</p> <p>How many levels of authority were there between you and the Chief Executive?</p> <p>_____ (# OF LEVELS)</p> <p>Did you supervise the work of others in that position? Yes ☐ No ☐</p>	<p>Indicate the approximate annual gross salary (including bonuses and commissions) of your current position.</p> <p>Gross Annual Salary \$ _____,000</p> <p>OR</p> <p>A. under \$20,000 ☐</p> <p>B. \$20,000-\$39,999 ☐</p> <p>C. \$40,000-\$59,999 ☐</p> <p>D. \$60,000-\$79,999 ☐</p> <p>E. \$80,000-\$99,999 ☐</p> <p>F. \$100,000 or more ☐</p> <p>How many levels of authority are there Between you and the Chief Executive?</p> <p>_____ (# OF LEVELS)</p> <p>Do you supervise the work of others in your current position? Yes ☐ No ☐</p>
--	--

If YES → I had ____ DIRECT REPORTS (number of employees who reported directly to you) And I had ____ INDIRECT REPORTS (number of employees who reported to managers who reported to you).	If YES → I have ____ DIRECT REPORTS (number of employees who report directly to you) And I have ____ INDIRECT REPORTS (number of employees reporting to managers who report to you).
--	---

Other measures

Effects on organizational results

Changes in Approaches to work

Listed below are pairs of words and phrases that could describe your perceptions of how you have changed your approach to work since completing the MDPW. Mark the position along each scale that best describes your experiences in your work life.

Since completing the MDPW I am...

Less Effective at Work	1	2	3	4	5	6	7	More Effective at Work
Less Efficient at Work	1	2	3	4	5	6	7	More Efficient at Work
A Less Effective Communicator at Work	1	2	3	4	5	6	7	A More Effective Communicator at Work
More Stressed at Work	1	2	3	4	5	6	7	More Relaxed at Work

Can you describe any changes in you, your work, or your relationships at work that were caused in some substantial part by your attending the MDPW? Include anything that you are doing now which you weren't doing prior to the MDPW as well as anything you have stopped doing since attending the MDPW.

Some graduates have mentioned changes that their organization has experienced as a result of their participation in the MDPW. Examples might include reduced absenteeism and turnover, reduced employee complaints, better teamwork, increase in personal effectiveness, launch of a new product etc.

a) Can you describe any changes which the organization(s) you have worked for have experienced as a result of your participation in the MDPW? Please include both current as well as previous organizations you have worked for since completing the MDPW.

b) If possible, please estimate (in dollars) the amount of money which you have saved the company or have earned the organization(s) as a result of the changes above:

\$ _____

Work Environment

While participating in the MDPW, to what extent were you able to practice what you learned?

- I was not able to practice anything I learned. ☐
- I was not able to practice much of what I learned. ☐
- I was able to practice most of what I learned. ☐
- I was able to practice all of what I learned. ☐

While participating in the MDPW, how did your boss react to the training you received?

My boss:

- Ignored the effects of the training I received. ☐
- Was neutral regarding the training I received. ☐
- Was moderately interested in the training I received. ☐
- Assisted me in trying to practice what I learned during the program. ☐

While participating in the MDPW, how did your organization react to the training you received?

- My department did not allow me to practice the skills that I learned. ☐
- My department was neutral to the skills I learned. ☐
- My department allowed me to practice some of what I learned. ☐
- I had support from Senior management down to my boss to allow me to use what I learned. ☐

While participating in the MDPW, how have departmental practices affected your ability to use the skills you have learned?

- Department practices and precedents kept me from using what I learned. ☐
- Department practices and precedents were Neutral in allowing me to use what I learned. ☐

While participating in the MDPW, I feel that my sponsor(s) was(were):

- Completely supportive (during the program) ☐
- Somewhat supportive (during the program) ☐
- Not very supportive (during the program) ☐

Do you feel that there is anything missing in the MDPW that could be added in order to enhance the program?

Value of the Program

How valuable was the program content to the position you held while participating in the MDPW?

No real value			Of some value			Very valuable
1	2	3	4	5	6	7

How valuable is the program content to your current position?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

How valuable were the assignments to the work you have done since completing the MDPW?

No real value			Of some value			Very valuable
1	2	3	4	5	6	7

How would you rate the relevance of in-class work in the MDPW to the work you have done since completing the MDPW?

Not relevant			Suitable			Very relevant
1	2	3	4	5	6	7

How much did the program duplicate what you had learned somewhere else?

Very Little			Some			Very Much
1	2	3	4	5	6	7
		Duplication			Duplication	

Have you used the reference and reading material provided during the MDPW subsequently?

Not at all			Somewhat			A Great Deal
1	2	3	4	5	6	7

Qualitative Data

Since participating in the MDPW, what, if any, types of things is the organization doing to increase the chances you will achieve your career goals?

Since participating in the MDPW, what, if any, types of things is the organization doing which is making it harder for you to achieve your career goals?

Can you identify anything in your personal life (either positive or negative) that is having an impact on your ability to meet your career goals?

→ Positive?

→ Negative?

Interest in Related Activities

A number of MDPW alumnae have expressed an interest in courses or workshops that would build upon the work they completed in the MDPW. Would you be interested in continuing education from CREWW

Yes ☐

No ☐

If you are interested in additional courses, please indicate what type of courses you would be interested in by checking all that apply from the following list.

½-day workshops ☐

1-day workshops ☐

2-day workshops ☐

A more extended program

(similar to the MDPW but shorter) ☐

If you are interested in additional workshops or courses from CREWW, please indicate the topics you are interested in:

The MDPW Alumnae Association would like to know how many alumnae events would you be willing to attend during a calendar year? _____

What kind of events would you be interested in?

Appendix D
Longitudinal Questionnaire

STUDY ON
MDPW ALUMNAE

Please be assured that your responses are **anonymous** and will be held in confidence by the researchers. In Section D (Personal Information) we will ask you for your pseudonym which is composed of the day, month and year of your mother's birth date. The pseudonym will ensure your complete anonymity, yet will enable us to compare your present responses with those from the beginning of the 1998/1999 MDPW session to see how (or if) your views have changed. Only summary results from the survey will be presented in the final report. Thank you for taking the time to fill out this questionnaire. Your response is greatly appreciated.

Please keep in mind that the study aims to capture a picture in time. **While answering questions please indicate your current career experiences and attitudes. The researchers are aware that many events in your life other than the MDPW may have shaped these experiences and attitudes and they may not be directly linked to having participated in the MDPW.** We simply want to learn about the current situation of MDPW alumnae.

If you work for the Public Service, please note that throughout the survey that:

by "Organization" we mean your Department

by "Employer" we mean your Department

by "Chief Executive" we mean your Deputy Minister

If you have any questions or concerns, please feel free to contact the researchers listed below.

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SECTION A: WORK BACKGROUND

This section deals with information about your work history including information about your current position, the position you held prior to participating in the MDPW and other work experience you have had. Please fill in the requested information or circle the most appropriate response for each question.

1. In what year did you begin full-time work? 19____ YEAR
2. How many different employers (including federal government departments) have you worked for in your career?
_____ EMPLOYERS
3. How long have you worked:
 - a. In your current organization? _____ YEARS
 - b. In your current position? _____ YEARS
4. Please indicate how many career moves you have made since completion of the MDPW, or if appropriate circle Not Applicable (N/A).
 - a. Promotions within the same functional area _____ or N/A
 - b. Promotions to a different functional area (or department) _____ or N/A
 - c. Lateral moves within the same functional area _____ or N/A
 - d. Lateral moves to a different functional area (or department) _____ or N/A

If you circled Not Applicable, please explain

5. Compared to prior to your participation in the MDPW, do you feel your level of responsibility has changed? I currently have:

Less Responsibility		The Same Level of Responsibility			More Responsibility	
1	2	3	4	5	6	7

6. Compared to prior to your participation in the MDPW do you feel that your position has changed? My current position is:

Less Challenging		Equally Challenging			More Challenging	
1	2	3	4	5	6	7

7. Was career advancement one of your goals for participating in the MDPW?

☐ Yes ☐ No

If yes, please indicate the extent to which this goal has been met.

Not at all		Somewhat		Completely		
1	2	3	4	5	6	7

8. Please describe the job you had prior to participation in the MDPW and your current job

<p>What was your position prior to MDPW?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Please answer the following questions based on your position <u>prior</u> to your participation in the MDPW.</p> <p>What was your job level?</p> <p>A Senior Management/Executive ☐</p> <p>B. Middle Management ☐</p> <p>C. First Level Manager/Supervisor ☐</p> <p>D. Professional or Technical Position ☐</p> <p>E. Other Non-Management Position ☐</p>	<p>Are you:</p> <p>In the same position as prior to the MDPW ☐</p> <p>A new position ☐</p> <p>Please describe:</p> <p>_____</p> <p>_____</p> <p>Is this position with:</p> <p>The same organization ☐</p> <p>A different organization ☐</p> <p>Even if you are in the same position, please complete the following to indicate any changes</p> <p>Please answer the following questions based on your <u>Current Position</u></p> <p>What is your current job level?</p> <p>A Senior Management/Executive ☐</p> <p>B. Middle Management ☐</p> <p>C. First Level Manager/Supervisor ☐</p> <p>D. Professional or Technical Position ☐</p> <p>E. Other Non-Management Position ☐</p>
--	--

Indicate the approximate annual gross **salary** (including bonuses and commissions) of your position **prior** to participating in the MDPW

Gross Annual Salary \$_____,000

OR

- A. under \$20,000 ☐
B. \$20,000-\$39,999 ☐
C. \$40,000-\$59,999 ☐
D. \$60,000-\$79,999 ☐
E. \$80,000-\$99,999 ☐
F. \$100,000 or more ☐

How many levels of authority were there between you and the Chief Executive?
_____ (# OF LEVELS)

Did you supervise the work of others in that position? Yes ☐ No ☐

If YES → I had _____ DIRECT REPORTS
(number of employees who reported directly to you)

And I had _____ INDIRECT REPORTS
(number of employees who reported to managers who reported to you).

Indicate the approximate annual gross **salary** (including bonuses and commissions) of your **current** position.

Gross Annual Salary \$_____,000

OR

- A. under \$20,000 ☐
B. \$20,000-\$39,999 ☐
C. \$40,000-\$59,999 ☐
D. \$60,000-\$79,999 ☐
E. \$80,000-\$99,999 ☐
F. \$100,000 or more ☐

How many levels of authority are there Between you and the Chief Executive?
_____ (# OF LEVELS)

Do you supervise the work of others in your current position? Yes ☐ No ☐

If YES → I have _____ DIRECT REPORTS
(number of employees who report directly to you)

And I have _____ INDIRECT REPORTS
(number of employees reporting to managers who report to you).

SECTION B: CAREER RELATED EXPERIENCES AND ATTITUDES

This section deals with information with respect to your feelings about your work and your career experiences. Please check the appropriate box or circle the most appropriate response for each question.

9. These are statements which allow people to describe themselves. There are no right or wrong answers since people differ markedly. Please read across both parts of the sentence. First decide which one of the two parts of each statement best describes you; then go to that side of the statement and check whether that is just "sort of true" for you or "really true" for you. Please check only **ONE** of the four boxes for each statement.

	Really True for Me	Sort of True for Me				Sort of True for Me	Really True for Me
a)	☐	☐	Some adults are not satisfied with the way they do their work	BUT	Other adults are satisfied with they way they do their work.	☐	☐
b)	☐	☐	Some adults are not very productive in their work	BUT	Other adults are very productive in their work	☐	☐
c)	☐	☐	Some adults are proud of their work	BUT	Other adults are not very proud of what they do	☐	☐
d)	☐	☐	Some adults feel they are very good at their work	BUT	Other adults worry about whether they can do their work	☐	☐
e)	☐	☐	Some adults are dissatisfied with themselves	BUT	Other adults are satisfied with themselves	☐	☐
f)	☐	☐	Some adults sometimes question whether they are a worthwhile person	BUT	Other adults feel that they are a worthwhile person	☐	☐
g)	☐	☐	Some adults like the kind of person they are	BUT	Other adults would like to be someone else	☐	☐
h)	☐	☐	Some adults are very happy being the way they are	BUT	Other adults would like to be different	☐	☐
i)	☐	☐	Some adults like the way they are leading their lives	BUT	Other adults don't like the way they are leading their lives	☐	☐
j)	☐	☐	Some adults are disappointed with themselves	BUT	Other adults are quite pleased with themselves	☐	☐

10. "Career success" means different things to different people. Would you characterize your personal definition of success as focusing on:

Financial Rewards and Influence

Personal Satisfaction and Respect

1

2

3

4

11. Following is a list of career behaviors that have been linked to career advancement in some organizations. Please indicate the extent to which you **currently**:

	To A Very Little Extent			Somewhat		To Very Great Extent	
a) Consistently exceed performance expectations.	1	2	3	4	5	6	7
b) Exhibit a style that senior managers are comfortable with.	1	2	3	4	5	6	7
c) Work on high visibility projects.	1	2	3	4	5	6	7
d) Cultivate a powerful mentor.	1	2	3	4	5	6	7
e) Network with influential colleagues.	1	2	3	4	5	6	7
f) Cultivate an extensive network of contacts outside the department.	1	2	3	4	5	6	7
g) Pursue opportunities to gain line experience (work that relates to the major business of the organization)	1	2	3	4	5	6	7
h) Round out your skills by working in a variety of areas.	1	2	3	4	5	6	7
i) Move from one department to an other.	1	2	3	4	5	6	7
j) Show that you aspire to positions of increased responsibility.	1	2	3	4	5	6	7
k) Perform high quality work on the things your supervisors pay attention to.	1	2	3	4	5	6	7
l) Be a leader within your peer group.	1	2	3	4	5	6	7
m) Effectively advocate your ideas and programs.	1	2	3	4	5	6	7
n) Show initiative.	1	2	3	4	5	6	7
o) Communicate your career goals and plans to management.	1	2	3	4	5	6	7
p) Recommend innovative products and services.	1	2	3	4	5	6	7
q) Work at your job outside of normal working hours.	1	2	3	4	5	6	7
r) Find ways to make your contributions unique.	1	2	3	4	5	6	7
s) Do things that go well beyond what is required by the job.	1	2	3	4	5	6	7
t) Become a specialist in an area that is crucial to the organization's success.	1	2	3	4	5	6	7
u) Let others know you are prepared to re-locate if necessary.	1	2	3	4	5	6	7
v) Show that you are very confident	1	2	3	4	5	6	7
w) Spend a considerable amount of time thinking about your job outside of normal work hours.	1	2	3	4	5	6	7

12. There is a lot of talk these days about mentoring. A mentor is a senior employee who has provided support and guidance to you in managing your career.

a) Prior to participating in the MDPW how much mentoring did you feel you received?

Almost no Mentoring		Some Mentoring			A great deal Of Mentoring	
1	2	3	4	5	6	7

b) Compared to before the MDPW how much mentoring do you receive now?

Much Less Mentoring		Same Amount Of Mentoring			Much More Mentoring	
1	2	3	4	5	6	7

13. Networks also affect career experiences. A network is a group of people you feel you can call upon for career or work related advice and for emotional support.

a) Prior to participating in the MDPW did you have a work-related network?

Not at all		Somewhat			A Large Network	
1	2	3	4	5	6	7

b) Compared to before the MDPW how has your network changed? My network is:

Smaller		The Same			Larger	
1	2	3	4	5	6	7

14. To what extent do you agree or disagree with the following statements about career planning?

	STRONGLY DISAGREE		NEUTRAL		STRONGLY AGREE		
a) I have definite goals for my career.	1	2	3	4	5	6	7
b) When I think of changing my job, I always consider whether the new job leads to another one I want.	1	2	3	4	5	6	7
c) I give a lot of thought to plans and schemes for achieving my career goals.	1	2	3	4	5	6	7
d) I know what my strengths and weaknesses are in relation to my career goals.	1	2	3	4	5	6	7
e) Achieving my career goals is important to me.	1	2	3	4	5	6	7

15. Please indicate how confident you are that you are able to perform the following behaviors:

	NOT AT ALL CONFIDENT		SOMEWHAT CONFIDENT			HIGHLY CONFIDENT	
a) I am able to accurately assess my strengths.	1	2	3	4	5	6	7
b) I am able to identify areas where I can improve.	1	2	3	4	5	6	7
c) I am able to accurately assess my boss's opinion of me.	1	2	3	4	5	6	7
d) I am able to tell how well I am performing.	1	2	3	4	5	6	7
e) I am able to anticipate my performance evaluation ratings.	1	2	3	4	5	6	7
f) I am able to set short-term goals for career progress.	1	2	3	4	5	6	7
g) I am able to accurately assess my weaknesses.	1	2	3	4	5	6	7
h) I am able to set long-term goals for career progress.	1	2	3	4	5	6	7
i) I am able to react to changes in the organization calmly.	1	2	3	4	5	6	7
j) I am able to identify steps that will help me achieve my goals.	1	2	3	4	5	6	7
k) I am able to ask my supervisors for opportunities I feel that I deserve	1	2	3	4	5	6	7
l) I am able to develop a timetable for							

achieving my goals.	1	2	3	4	5	6	7
m) I am able to accurately assess my co-workers' opinions of me.	1	2	3	4	5	6	7
n) I am able to monitor the progress I make towards my goals.	1	2	3	4	5	6	7
o) I am able to re-evaluate goals and adjust my plans as time passes.	1	2	3	4	5	6	7
p) I am able to ask for feedback if I am not sure how I am doing.	1	2	3	4	5	6	7
q) I am able to remain optimistic even in the face of setbacks.	1	2	3	4	5	6	7
r) I am able to take advantage of career opportunities.	1	2	2	4	5	6	7
s) I am able to learn new skills easily.	1	2	3	4	5	6	7
t) I am able to anticipate the feedback I receive.	1	2	3	4	5	6	7
u) I am able to accept new responsibility with little stress.	1	2	3	4	5	6	7
v) I am able to adapt to changes in my job.	1	2	3	4	5	6	7
w) I am able to challenge a performance appraisal with which I disagree.	1	2	3	4	5	6	7
x) I am able to ask for an assignment that I'd like.	1	2	3	4	5	6	7

16. Following is a list of statements regarding career satisfaction. Please indicate how satisfied you are with the following:

	Very Dissatisfied		Somewhat Satisfied			Very Satisfied	
a)The success I have achieved in my career.	1	2	3	4	5	6	7
b) The progress I have made toward meeting my overall career goals.	1	2	3	4	5	6	7
c) The progress I have made toward meeting my goals for income.	1	2	3	4	5	6	7
d) The progress I have made toward meeting my goals for advancement.	1	2	3	4	5	6	7
e) The progress I have made toward meeting my goals for the development of new skills.	1	2	3	4	5	6	7

Please indicate how satisfied you are with the following three aspects of your life right now.

17. In general, how satisfied or dissatisfied are you with your **life as a whole** right now?

Completely Dissatisfied		Neutral			Completely Satisfied	
1	2	3	4	5	6	7

18. In general, how satisfied or dissatisfied are you with your **work life** right now?

Completely Dissatisfied		Neutral			Completely Satisfied	
1	2	3	4	5	6	7

19. Please indicate how you feel about your life right now **as compared to before participating in the MDPW**:

	Much Less True than before the MDPW		The Same as before the MDPW		Much More True than before the MDPW		
a) In most ways my life is close to my ideal	1	2	3	4	5	6	7
b) The conditions of my life are excellent	1	2	3	4	5	6	7
c) I am satisfied with my life	1	2	3	4	5	6	7
d) So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
e) If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7

20. In general, to what extent are you feeling “**burned out**” (disillusioned, emotionally and/or physically exhausted)?

Not at all Burned out		Neutral			Completely Burned out	
1	2	3	4	5	6	7

21. Compared to before the MDPW, how often to you feel the following:

	Much Less Often than before the MDPW		The Same as before the MDPW		Much More Often than before the MDPW		
a) Feel "burned out" from your job?	1	2	3	4	5	6	7
b) Feel "frustrated" by your job?	1	2	3	4	5	6	7
c) Feel difficulties are piling up so high that you can not overcome them?	1	2	3	4	5	6	7
d) Feel fatigued when you get up in the morning and have to face another day?	1	2	3	4	5	6	7
e) Feel "used up" at the end of the workday?	1	2	3	4	5	6	7
f) Feel emotionally drained by your job?	1	2	3	4	5	6	7

22. Since participating in the MDPW, what, if any, types of things is the organization doing to increase the chances you will achieve your career goals?

23. Since participating in the MDPW, what, if any, types of things is the organization doing which is making it harder for you to achieve your career goals?

24. Can you identify anything in your personal life (either positive or negative) that is having an impact on your ability to meet your career goals?

→ Positive?

→ Negative?

25. Do you feel that there is anything missing in the MDPW that could be added in order to enhance the program?

SECTION C: PERCEIVED VALUE OF THE MDPW

The following section includes questions on the value of the knowledge and skills learned by participating in the program, opportunities to use this knowledge in the workplace and the effects of participation in the MDPW on organizational results. Please circle the most appropriate response.

26. How valuable was the program content to the position you held while participating in the MDPW?

No real value		Of some value			Very valuable	
1	2	3	4	5	6	7

27. How valuable is the program content to your current position?

No real value		Of some value			Very valuable	
1	2	3	4	5	6	7

28. How valuable were the assignments to the work you have done since completing the MDPW?

No real value		Of some value			Very valuable	
1	2	3	4	5	6	7

29. How would you rate the relevance of in-class work in the MDPW to the work you have done since completing the MDPW?

Not relevant		Suitable			Very relevant	
1	2	3	4	5	6	7

30. How much did the program duplicate what you had learned somewhere else?

Very Little Duplication		Some Duplication			Very Much Duplication	
1	2	3	4	5	6	7

31. Have you used the reference and reading material provided during the MDPW subsequently?

Not at all		Somewhat			A Great Deal	
1	2	3	4	5	6	7

32. Has your motivation to further your education changed since your participation in the MDPW? (Education here means any university/college program or workplace-based program that involves a commitment over several sessions or a series of courses over time)

Less Motivated		Equally Motivated			More Motivated	
1	2	3	4	5	6	7

33. Have you enrolled in an educational program (any university/college program or workplace-based program that involves a commitment over several sessions or a series of courses over time) since completion of the MDPW?
- ☐ Yes ☐ No If yes, please describe _____

Formal development programs can fail or succeed because of conditions that may or may not be controllable. Please indicate which of the conditions below reflect your on-the-job opportunities to use what you learned during the program.

34. While participating in the MDPW, to what extent were you able to practice what you learned?

I was not able to practice anything I learned. ☐

I was not able to practice much of what I learned. ☐

I was able to practice most of what I learned. ☐

I was able to practice all of what I learned. ☐

35. While participating in the MDPW, how did your boss react to the training you received?

My boss:

Ignored the effects of the training I received. ☐

Was neutral regarding the training I received. ☐

Was moderately interested in the training I received. ☐

Assisted me in trying to practice what I learned during the program. ☐

36. While participating in the MDPW, how did your organization react to the training you received?

My department did not allow me to practice the skills that I learned. ☐

My department was neutral to the skills I learned. ☐

My department allowed me to practice some of what I learned. ☐

I had support from Senior management down to my boss to allow me to use what I learned. ☐

37. While participating in the MDPW, how have departmental practices affected your ability to use the skills you have learned?

Department practices and precedents kept me from using what I learned. ☐

Department practices and precedents were neutral in allowing me to use what I learned. ☐

38. While participating in the MDPW, I feel that my sponsor(s) was(were):

- Completely supportive (during the program) ☐
Somewhat supportive (during the program) ☐
Not very supportive (during the program) ☐

39. Listed below are pairs of words and phrases that could describe your perceptions of how you have changed your approach to work since completing the MDPW. Mark the position along each scale that best describes your experiences in your work life.

Since completing the MDPW I am...

Less Effective at Work at Work	1	2	3	4	5	6	7	More Effective
Less Efficient at Work at Work	1	2	3	4	5	6	7	More Efficient
A Less Effective Communicator at Work Work	1	2	3	4	5	6	7	A More Effective Communicator at
More Stressed at Work Work	1	2	3	4	5	6	7	More Relaxed at

40. Can you describe any changes in you, your work, or your relationships at work that were caused in some substantial part by your attending the MDPW? Include anything that you are doing now which you weren't doing prior to the MDPW as well as anything you have stopped doing since attending the MDPW.

41. Some graduates have mentioned changes that their organization has experienced as a result of their participation in the MDPW. Examples might include reduced absenteeism and turnover, reduced employee complaints, better teamwork, increase in personal effectiveness, launch of a new product etc.

a) Can you describe any changes which the organization(s) you have worked for have experienced as a result of your participation in the MDPW? Please include both current as well as previous organizations you worked for since completing the MDPW.

b) If possible please estimate (in dollars) the amount of money which you have saved the organization(s) or have earned the organization(s) as a result of the changes above:

\$ _____

SECTION D: PERSONAL INFORMATION

In order to help us describe the people who responded to this survey, please fill in the following information. To enable us to compare your responses from the 1998/99 MDPW session please provide the date of your mother's birth as a pseudonym. This will give us a unique identifier for your responses while maintaining your anonymity.

Pseudonym (mother's birth date):

(dd/mm/yy)

42. What is your current age? _____ YEARS

44. What was your marital status **while participating** in the MDPW? Please circle the letter which best describes you at the time you were participating in the MDPW.

- A Never married
- B Married or living with a significant other
- C Separated, divorced or widowed

45. **While you were participating** in the MDPW, how many children did you have living at home in each of the following age groups?

_____ Under 18 years old _____ Over 18 years old

46. How much time did you spend each week in childcare or activities with your children **while participating** in the MDPW? _____ HOURS

47. **While you were participating** in the MDPW, how much time did you spend each week in caring for elderly relatives.

_____ HOURS

48. On average, how many hours did you work in the position you held **while participating in the MDPW?**

(Please include any work done at home as well.)

_____ HOURS

49. On average, how many hours do you **currently** work in total each week? (Please include any work done at home as well).

_____ HOURS

SECTION E: INTEREST IN RELATED ACTIVITIES

This section deals with questions related to your interest in other activities that could be offered by the Centre for Research and Education on Women and Work (CREWW) or the MDPW Alumnae Association. Please check the appropriate box or fill in the requested information.

50. A number of MDPW alumnae have expressed an interest in courses or workshops that would build upon the work they completed in the MDPW. Would you be interested in continuing education from CREWW?

Yes ☐

No ☐

51. If you are interested in additional courses, please indicate what type of courses you would be interested in by checking all that apply from the following list.

½-day workshops ☐

1-day workshops ☐

2-day workshops ☐

A more extended program
(similar to the MDPW but shorter) ☐

52. If you are interested in additional workshops or courses from CREWW, please indicate the topics you are interested in:

53. The MDPW Alumnae Association would like to know how many alumnae events would you be willing to attend during a calendar year? _____

54. What kind of events would you be interested in?

THANK YOU FOR YOUR TIME. PLEASE BE ASSURED THAT ALL YOUR ANSWERS WILL BE
HELD IN CONFIDENCE.

Appendix E
Retrospective Questionnaire

STUDY ON
MDPW ALUMNAE

Please be assured that your responses are **anonymous** and will be held in confidence by the researchers. Only summary results from the survey will be presented in the final report. Thank you for taking the time to fill out this questionnaire. Your response is greatly appreciated.

Please keep in mind that the study aims to capture a picture in time. **While answering questions please indicate your current career experiences and attitudes. The researchers are aware that many events in your life other than the MDPW may have shaped these experiences and attitudes and they may not be directly linked to having participated in the MDPW.** We simply want to learn about the current situation of MDPW alumnae.

If you work for the Public Service, please note that throughout the survey that:

by “Organization” we mean your Department

by “Employer” we mean your Department

by “Chief Executive” we mean your Deputy Minister

If you have any questions or concerns, please feel free to contact the researchers listed below.

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SECTION A: WORK BACKGROUND

This section deals with information about your work history including information about your current position, the position you held prior to participating in the MDPW and other work experience you have had. Please fill in the requested information or circle the most appropriate response for each question.

1. In what year did you complete the Management Development Program for Women? _____
2. In what year did you begin full-time work? 19____ YEAR
3. How many different employers (including federal government departments) have you worked for in your career?
_____ EMPLOYERS
4. How long have you worked:
 - a. In your current organization? _____ YEARS
 - b. In your current position? _____ YEARS
5. Please indicate how many career moves you have made since completion of the MDPW, or if appropriate circle Not Applicable (N/A).

a. Promotions within the same functional area	_____ or	N/A
b. Promotions to a different functional area (or department)	_____ or	N/A
c. Lateral moves within the same functional area	_____ or	N/A
d. Lateral moves to a different functional area (or department)	_____ or	N/A

If you circled Not Applicable, please explain

6. Compared to prior to your participation in the MDPW, do you feel your level of responsibility has changed? I currently have:

Less Responsibility	The Same Level of Responsibility			More Responsibility
1 2	3	4	5	6 7
7. Compared to prior to your participation in the MDPW do you feel that your position has changed? My current position is:

Less Challenging	Equally Challenging		More Challenging
1 2	3	4 5 6 7	
8. Was career advancement one of your goals for participating in the MDPW?

☐ Yes ☐ No

If yes, please indicate the extent to which this goal has been met.

Not at all		Somewhat		Completely		
1	2	3	4	5	6	7

9. Please describe the job you had prior to participation in the MDPW and your current job.

<p>What was your position prior to MDPW?</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Please answer the following questions based on your position prior to your participation in the MDPW.</p> <p>What was your job level?</p> <p>A Senior Management/Executive ☐</p> <p>B. Middle Management ☐</p> <p>C. First Level Manager/Supervisor ☐</p> <p>D. Professional or Technical Position ☐</p> <p>E. Other Non-Management Position ☐</p>	<p>Are you:</p> <p>In the same position as prior to the MDPW ☐</p> <p>A new position ☐</p> <p>Please describe:</p> <p>_____</p> <p>_____</p> <p>Is this position with:</p> <p>The same organization ☐</p> <p>A different organization ☐</p> <p>Even if you are in the same position, please complete the following to indicate any changes</p> <p>Please answer the following questions based on your Current Position</p> <p>What is your current job level?</p> <p>A Senior Management/Executive ☐</p> <p>B. Middle Management ☐</p> <p>C. First Level Manager/Supervisor ☐</p> <p>D. Professional or Technical Position ☐</p> <p>E. Other Non-Management Position ☐</p>
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Indicate the approximate annual gross salary (including bonuses and commissions) of your position prior to participating in the MDPW

Gross Annual Salary \$_____,000

OR

- A. under \$20,000 ☐
B. \$20,000-\$39,999 ☐
C. \$40,000-\$59,999 ☐
D. \$60,000-\$79,999 ☐
E. \$80,000-\$99,999 ☐
F. \$100,000 or more ☐

How many levels of authority were there between you and the Chief Executive?
_____ (# OF LEVELS)

Did you supervise the work of others in that position? Yes ☐ No ☐

If YES → I had _____ DIRECT REPORTS
(number of employees who reported directly to you)

And I had _____ INDIRECT REPORTS
(number of employees who reported to managers who reported to you).

Indicate the approximate annual gross salary (including bonuses and commissions) of your current position.

Gross Annual Salary \$_____,000

OR

- A. under \$20,000 ☐
B. \$20,000-\$39,999 ☐
C. \$40,000-\$59,999 ☐
D. \$60,000-\$79,999 ☐
E. \$80,000-\$99,999 ☐
F. \$100,000 or more ☐

How many levels of authority are there Between you and the Chief Executive?
_____ (# OF LEVELS)

Do you supervise the work of others in your current position? Yes ☐ No ☐

If YES → I have _____ DIRECT REPORTS
(number of employees who report directly to you)

And I have _____ INDIRECT REPORTS
(number of employees reporting to managers who report to you).

SECTION B: CAREER RELATED EXPERIENCES AND ATTITUDES

This section deals with information with respect to your feelings about your work and your career experiences. Please check the appropriate box or **circle** the most appropriate response for each question. (Keep in mind that these questions are meant to capture a picture in time and are not meant to suggest your participation in the MDPW is the only variable affecting your current career related experiences and attitudes).

10. Listed below are pairs of sentences, which allow people to describe themselves. Mark the position along each scale that best reflects how you feel now compared to before having participated in the MDPW.

Compared to before the MDPW,

I feel less satisfied with how I do my work.	1	2	3	4	5	6	7	I feel more satisfied with how I do my work.
I feel less competent with respect to my job.	1	2	3	4	5	6	7	I feel more competent with respect to my job.
I feel that I am less productive in my work.	1	2	3	4	5	6	7	I feel that I am more productive in my work.
I have less pride in the work I do.	1	2	3	4	5	6	7	I have more pride in the work I do.
I feel less satisfied with myself as a person.	1	2	3	4	5	6	7	I feel more satisfied with myself as a person.
I am less happy with who I am.	1	2	3	4	5	6	7	I am happier with who I am.
I feel less satisfied with how I am living my life.	1	2	3	4	5	6	7	I feel more satisfied with how I am living my life.
I feel that I am a less worthwhile person.	1	2	3	4	5	6	7	I feel that I am a worthwhile person.
I dislike the kind of person I am.	1	2	3	4	5	6	7	I like the kind of person I am.
I am less pleased with myself.	1	2	3	4	5	6	7	I am more pleased with myself

11. "Career success" means different things to different people. Would you characterize your personal definition of success as focusing on:

Financial Rewards
and Influence

Personal Satisfaction
and Respect

1

2

3

4

12. Following is a list of career behaviors that have been linked to career advancement in some organizations. Please indicate the extent to which you engage in the following behaviors now **compared to before your participation in the MDPW**

	Much Less Often Than before the MDPW		The Same as before the MDPW			Much More Often than before the MDPW	
a) Consistently exceed performance expectations.	1	2	3	4	5	6	7
b) Exhibit a style that senior managers are comfortable with.	1	2	3	4	5	6	7
c) Work on high visibility projects.	1	2	3	4	5	6	7
d) Cultivate a powerful mentor.	1	2	3	4	5	6	7
e) Network with influential colleagues.	1	2	3	4	5	6	7
f) Cultivate an extensive network of contacts outside the organization.	1	2	3	4	5	6	7
g) Pursue opportunities to gain line experience (work that relates to the major business of the organization).	1	2	3	4	5	6	7
h) Round out your skills by working in a variety of areas.	1	2	3	4	5	6	7
i) Move from one department to an other.	1	2	3	4	5	6	7
j) Show that you aspire to positions of increased responsibility.	1	2	3	4	5	6	7
k) Perform high quality work on the things your supervisors pay attention to.	1	2	3	4	5	6	7
l) Be a leader within your peer group.	1	2	3	4	5	6	7
m) Effectively advocate your ideas and programs.	1	2	3	4	5	6	7
n) Show initiative.	1	2	3	4	5	6	7
o) Communicate your career goals and plans to management.	1	2	3	4	5	6	7
p) Recommend innovative products and services.	1	2	3	4	5	6	7
q) Work at your job outside of normal working hours.	1	2	3	4	5	6	7
r) Find ways to make your contributions unique.	1	2	3	4	5	6	7
s) Do things that go well beyond what is required							

by the job.	1	2	3	4	5	6	7
t) Become a specialist in an area that is crucial to the organization's success.	1	2	3	4	5	6	7
u) Let others know you are prepared to re-locate if necessary.	1	2	3	4	5	6	7
v) Show that you are very confident	1	2	3	4	5	6	7
w) Spend a considerable amount of time thinking about your job outside of normal work hours.	1	2	3	4	5	6	7

13. There is a lot of talk these days about mentoring. A mentor is a senior employee who has provided support and guidance to you in managing your career.

a) Prior to participating in the MDPW how much mentoring did you feel you received?

Almost no Mentoring		Some Mentoring			A great deal Of Mentoring	
1	2	3	4	5	6	7

b) Compared to before the MDPW how much mentoring do you receive now?

Much Less Mentoring		Same Amount Of Mentoring			Much More Mentoring	
1	2	3	4	5	6	7

14. Networks also affect career experiences. A network is a group of people you feel you can call upon for career or work related advice and for emotional support.

a) Prior to participating in the MDPW did you have a work-related network?

Not at all			Somewhat		A Large Network	
1	2	3	4	5	6	7

b) Compared to before the MDPW how has your network changed? My network is:

Smaller			The Same		Larger	
1	2	3	4	5	6	7

15. After having completed the MDPW to what extent do you agree with the following statements on career planning?

	Much Less Than Before The MDPW		The Same As Before The MDPW			Much More Than Before The MDPW	
Compared to before the MDPW...							
a) I have definite goals for my career.	1	2	3	4	5	6	7
b) When I think of changing my job, I always consider whether the new job leads to another one I want.	1	2	3	4	5	6	7
c) I give a lot of thought to plans and schemes for achieving my career goals.	1	2	3	4	5	6	7
d) I know what my strengths and weaknesses are in relation to my career goals.	1	2	3	4	5	6	7
e) Achieving my career goals is important to me.	1	2	3	4	5	6	7

16. Please indicate the extent that you agree or disagree with the following statements:

	Much Less Than Before The MDPW		The Same As Before The MDPW			Much More Than Before The MDPW	
Compared to before the MDPW...							
a) I am able to accurately assess my strengths.	1	2	3	4	5	6	7
b) I am able to identify areas where I can improve.	1	2	3	4	5	6	7
c) I am able to accurately assess my boss's opinion of me.	1	2	3	4	5	6	7
d) I am able to tell how well I am performing.	1	2	3	4	5	6	7
e) I am able to anticipate my performance evaluation ratings.	1	2	3	4	5	6	7
f) I am able to set short-term goals for career progress.	1	2	3	4	5	6	7
g) I am able to accurately assess my weaknesses.	1	2	3	4	5	6	7
h) I am able to set long-term goals for career progress.	1	2	3	4	5	6	7
i) I am able to react to changes in the organization calmly.	1	2	3	4	5	6	7
j) I am able to identify steps that will help me achieve my goals.	1	2	3	4	5	6	7
k) I am able to ask my supervisors for opportunities I feel that I deserve	1	2	3	4	5	6	7
l) I am able to develop a timetable for achieving my goals.	1	2	3	4	5	6	7
m) I am able to accurately assess my							

co-workers' opinions of me.	1	2	3	4	5	6	7
n) I am able to monitor the progress I make towards my goals.	1	2	3	4	5	6	7
o) I am able to re-evaluate goals and adjust my plans as time passes.	1	2	3	4	5	6	
p) I am able to ask for feedback if I am not sure how I am doing.	1	2	3	4	5	6	7
q) I am able to remain optimistic even in the face of setbacks.	1	2	3	4	5	6	7
r) I am able to take advantage of career opportunities.	1	2	2	4	5	6	7
s) I am able to learn new skills easily.	1	2	3	4	5	6	7
t) I am able to anticipate the feedback I receive.	1	2	3	4	5	6	7
u) I am able to accept new responsibility with little stress.	1	2	3	4	5	6	7
v) I am able to adapt to changes in my job.	1	2	3	4	5	6	7
w) I am able to challenge a performance appraisal with which I disagree.	1	2	3	4	5	6	7
x) I am able to ask for an assignment that I'd like.	1	2	3	4	5	6	7

17. Following is a list of statements regarding career satisfaction. Compared to before the MDPW, are you less satisfied, equally satisfied or more satisfied with the following:

	Much Less Satisfied		Equally Satisfied			Much More Satisfied	
a)The success I have achieved in my career.	1	2	3	4	5	6	7
b) The progress I have made toward meeting my overall career goals.	1	2	3	4	5	6	7
c) The progress I have made toward meeting my goals for income.	1	2	3	4	5	6	7
d) The progress I have made toward meeting my goals for advancement.	1	2	3	4	5	6	7
e) The progress I have made toward meeting my goals for the development of new skills.	1	2	3	4	5	6	7

18. Please indicate how you feel about your life right now as compared to before participating in the MDPW:

	Much Less True than before the MDPW		The Same as before the MDPW		Much More True than before the MDPW	
a) In most ways my life is close to my ideal	1	2	3	4	5	6 7
b) The conditions of my life are excellent	1	2	3	4	5	6 7
c) I am satisfied with my life	1	2	3	4	5	6 7
d) So far I have gotten the important things I want in life.	1	2	3	4	5	6 7
e) If I could live my life over, I would change almost nothing.	1	2	3	4	5	6 7

19. Compared to before the MDPW, how often to you feel the following:

	Much Less Often than before the MDPW		The Same as before the MDPW		Much More Often than before the MDPW	
a) Feel "burned out" from your job?	1	2	3	4	5	6 7
b) Feel "frustrated" by your job?	1	2	3	4	5	6 7
c) Feel difficulties are piling up so high that you can not overcome them?	1	2	3	4	5	6 7
d) Feel fatigued when you get up in the morning and have to face another day?	1	2	3	4	5	6 7
e) Feel "used up" at the end of the workday?	1	2	3	4	5	6 7
f) Feel emotionally drained by your job?	1	2	3	4	5	6 7

20. Since participating in the MDPW, what, if any, types of things is the organization doing to increase the chances you will achieve your career goals?

21. Since participating in the MDPW, what, if any, types of things is the organization doing which is making it harder for you to achieve your career goals?

22. Can you identify anything in your personal life (either positive or negative) that is having an impact on your ability to meet your career goals?

→ Positive?

→ Negative?

SECTION C: PERCEIVED VALUE OF THE MDPW

The following section includes questions on the value of the knowledge and skills learned by participating in the program, opportunities to use this knowledge in the workplace and the effects of participation in the MDPW on organizational results. Please circle the most appropriate response.

23. How valuable was the program content to the position you held while participating in the MDPW?

No real value		Of some value			Very valuable	
1	2	3	4	5	6	7

24. How valuable is the program content to your current position?

No real value		Of some value			Very valuable	
1	2	3	4	5	6	7

25. How valuable were the assignments to the work you have done since completing the MDPW?

No real value		Of some value			Very valuable	
1	2	3	4	5	6	7

26. How would you rate the relevance of in-class work in the MDPW to the work you have done since completing the MDPW?

Not relevant		Suitable			Very relevant	
1	2	3	4	5	6	7

27. How much did the program duplicate what you had learned somewhere else?

Very Little Duplication		Some Duplication			Very Much Duplication	
1	2	3	4	5	6	7

28. Have you used the reference and reading material provided during the MDPW subsequently?

Not at all		Somewhat			A Great Deal	
1	2	3	4	5	6	7

29. Has your motivation to further your education changed since your participation in the MDPW? (Education here means any university/college program or workplace-based program that involves a commitment over several sessions or a series of courses over time)

Less Motivated			Equally Motivated			More Motivated
1	2	3	4	5	6	7

30. Have you enrolled in an educational program (any university/college program or workplace-based program that involves a commitment over several sessions or a series of courses over time) since completion of the MDPW?

☐ Yes ☐ No If yes, please describe

Formal development programs can fail or succeed because of conditions that may or may not be controllable. Please indicate which of the conditions below reflect your on-the-job opportunities to use what you learned during the program.

31. While participating in the MDPW, to what extent were you able to practice what you learned?

I was not able to practice anything I learned. ☐
 I was not able to practice much of what I learned. ☐
 I was able to practice most of what I learned. ☐
 I was able to practice all of what I learned. ☐

32. While participating in the MDPW, how did your boss react to the training you received?

My boss:
 Ignored the effects of the training I received. ☐
 Was neutral regarding the training I received. ☐
 Was moderately interested in the training I received. ☐
 Assisted me in trying to practice what I learned during the program. ☐

33. While participating in the MDPW, how did your organization react to the training you received?

My department did not allow me to practice the skills that I learned. ☐
 My department was neutral to the skills I learned. ☐
 My department allowed me to practice some of what I learned. ☐
 I had support from Senior management down to my boss to allow me to use what I learned. ☐

34. **While participating** in the MDPW, how have departmental practices affected your ability to use the skills you have learned?

Department practices and precedents
kept me from using what I learned. ☐

Department practices and precedents were
Neutral in allowing me to use what I learned. ☐

35. **While participating** in the MDPW, I feel that my sponsor(s) was(were):

Completely supportive (during the program) ☐

Somewhat supportive (during the program) ☐

Not very supportive (during the program) ☐

36. Do you feel that there is anything missing in the MDPW that could be added in order to enhance the program?

37. Listed below are pairs of words and phrases that could describe your perceptions of how you have changed your approach to work since completing the MDPW. Mark the position along each scale that best describes your experiences in your work life.

Since completing the MDPW I am...

Less Effective at Work	1	2	3	4	5	6	7	More Effective at Work
Less Efficient at Work	1	2	3	4	5	6	7	More Efficient at Work
A Less Effective Communicator at Work	1	2	3	4	5	6	7	A More Effective Communicator at Work
More Stressed at Work	1	2	3	4	5	6	7	More Relaxed at Work

38. Can you describe any changes in you, your work, or your relationships at work that were caused in some substantial part by your attending the MDPW? Include anything that you are doing now which you weren't doing prior to the MDPW as well as anything you have stopped doing since attending the MDPW.

39. Some graduates have mentioned changes that their organization has experienced as a result of their participation in the MDPW. Examples might include reduced absenteeism and turnover, reduced employee complaints better teamwork, increase in personal effectiveness, launch of a new product etc.

a) Can you describe any changes which the organization(s) you have worked for have experienced as a result of your participation in the MDPW? Please include both current as well as previous organizations you have worked for since completing the MDPW.

- b) If possible, please estimate (in dollars) the amount of money which you have saved the company or have earned the organization(s) as a result of the changes above:

\$ _____

SECTION D: PERSONAL INFORMATION

In order to help us describe the people who responded to this survey, please fill in the following information.

40. What is your current age? _____ YEARS

41. Please circle the letter which best describes the highest level of education you have completed prior to the MDPW

- A High School
- B Some college/university
- C College diploma _____ (YEAR COMPLETED)
- D University degree _____ (YEAR COMPLETED)
- E Post-graduate degree _____ (YEAR COMPLETED)

42. What was your marital status **while participating** in the MDPW? Please circle the letter which best describes you at the time you were participating in the MDPW.

- A Never married
- B Married or living with a significant other
- C Separated, divorced or widowed

43. **While you were participating** in the MDPW, how many children did you have living at home in the following age groups?

_____ Under 18 years old _____ Over 18 years old

44. How much time did you spend each week in childcare or activities with your children **while participating** in the MDPW?

_____ HOURS

45. **While you were participating** in the MDPW, how much time did you spend each week in caring for elderly relatives _____ HOURS

46. On average, how many hours did you work in the position you held **while participating in the MDPW?**

(Please include any work done at home as well.)

_____ HOURS

47. On average, how many hours do you **currently** work in total each week? (Please include any work done at home as well). _____ HOU

SECTION E: INTEREST IN RELATED ACTIVITIES

This section includes questions related to your interest in other activities that could be offered by the Centre for Research and Education on Women and Work (CREWW) or the MDPW Alumnae Association. Please check the appropriate box or fill in the requested information.

48. A number of MDPW alumnae have expressed an interest in courses or workshops that would build upon the work they completed in the MDPW. Would you be interested in continuing education from CREWW?

Yes ☐ No ☐

49. If you are interested in additional courses, please indicate what type of courses you would be interested in by checking all that apply from the following list.

½-day workshops ☐
1-day workshops ☐
2-day workshops ☐
A more extended program
(similar to the MDPW but shorter) ☐

50. If you are interested in additional workshops or courses from CREWW, please indicate the topics you are interested in:

51. The MDPW Alumnae Association would like to know how many alumnae events would you be willing to attend during a calendar year? _____

52. What kind of events would you be interested in?

THANK YOU FOR YOUR TIME. PLEASE BE ASSURED THAT ALL YOUR ANSWERS
WILL BE HELD IN CONFIDENCE.

Appendix F
Cover Letter for the Longitudinal Study

Dear Graduate,

As graduates of the Management Development Program for Women (MDPW), your participation in this study is very important to us. Graduates from the program often state that the program has had a significant impact on them. The enclosed questionnaire is designed to help us learn about the current situation of MDPW alumnae. This questionnaire is a follow-up to the study which your class participated in when they began the program. Some ideas that the enclosed questionnaire attempts to explore are self-concept, career development and life satisfaction. The survey calls for brief answers, most questions involve checking a box or assigning a rating from 1-7. The questionnaire will take approximately thirty minutes to complete.

We are contacting you in the hopes that you can spare a few minutes of your time to help us with this research. Linda Scourtoudis is undertaking the study as her M.M.S. thesis in the area of women in management and Lorraine Dyke is participating as Director of CREWW and as Linda's thesis advisor.

Your responses to this questionnaire will be completely anonymous. In **Section D (Personal Information)** we will ask you for a pseudonym which is composed of the day, month and year of you mother's birth date. The pseudonym will ensure your complete anonymity, yet will enable us to compare your present responses with those from the beginning of the 1998/1999 MDPW session to see how (or if) your views have changed. The signed consent form on the back of this letter will be used to check the mailing list to determine who has responded and who has not. The consent forms will not be attached to the questionnaires and questionnaires will not be associated with any specific individual. To ensure your complete anonymity, the consent form and questionnaire are to be returned in separate envelopes as provided.

If you would like us to mail you a copy of the results of the study, you may fill out the section "Request for Results" on the consent form and return it with your survey. Alternatively, you may e-mail your complete address to lscourtoudis@hotmail.com, or leave a message at 746-1189. If you have any questions and or comments you may contact Linda Scourtoudis or Professor Lorraine Dyke at the phone numbers provided below.

Thank you in advance for your time and your help. Your participation in this study is very much appreciated.

Sincerely,

Linda Scourtoudis, B.I.B
M.M.S Candidate,
School of Business
Carleton University
(613) 746-1189

Dr. Lorraine Dyke
Director, Centre for Research and Education on Women
and Work & Associate Professor, School of Business
Carleton University
(613) 520-2600 ext 2389.

Appendix G
Cover letter for the Retrospective study

Dear Graduate,

As graduates of the Management Development Program for Women (MDPW), your participation in this study is very important to us. Graduates from the program often state that the program has had a significant impact on them. The enclosed questionnaire is designed to help us learn about the current situation of MDPW alumnae. Some ideas that the enclosed questionnaire attempts to explore are self-concept, career development and life satisfaction. The survey calls for brief answers, most questions involve checking a box or assigning a rating from 1-7. The questionnaire will take approximately thirty minutes to complete.

We are contacting you in the hopes that you can spare a few minutes of your time to help us with this research. Linda Scourtoudis is undertaking the study as her M.M.S. thesis in the area of women in management and Lorraine Dyke is participating as Director of CREWW and as Linda's thesis advisor.

Your responses to this questionnaire will be completely anonymous. The signed consent form on the back of this letter will be used to check the mailing list to determine who has responded and who has not. The consent forms will not be attached to the questionnaires and questionnaires will not be associated with any specific individual. To ensure your complete anonymity, the consent form and questionnaire are to be returned in separate envelopes as provided.

If you would like us to mail you a copy of the results of the study, you may fill out the section "Request for Results" on the consent form and return it with your survey. Alternatively, you may e-mail your complete address to lscourtoudis@hotmail.com, or leave a message at 746-1189. If you have any questions and or comments you may contact Linda Scourtoudis or Professor Lorraine Dyke at the phone numbers provided below.

Thank you in advance for your time and your help. Your participation in this study is very much appreciated.

Sincerely,

Linda Scourtoudis, B.I.B
M.M.S Candidate,
School of Business
Carleton University
(613) 746-1189

Dr. Lorraine Dyke
Director, Centre for Research and Education on Women
and Work & Associate Professor, School of Business
Carleton University
(613) 520-2600 ext 2389.

Appendix H

Consent form for both studies

The purpose of an informed consent form is to ensure that you understand the purpose of the study and the nature of your involvement. The goal is to provide sufficient information such that you have the opportunity to determine whether you wish to participate in the study.

Research Personnel: Two people are involved in this research. The principal researcher is Linda Scourtoudis and Dr. Lorraine Dyke is her thesis advisor. We may be contacted at any time at (613) 746-1189 or (613) 520-2600 ext. 2389 respectively.

Purpose: The purpose of this study is to examine the impact of the MDPW on its graduates. This research is being conducted in partial fulfillment of the requirements for the Masters degree in Management Studies.

Task Requirements: There is one questionnaire that you will be asked to complete.

Duration: The questionnaire will take roughly 30 minutes to complete.

Potential Risk/Discomfort: There are no potential risks or discomfort in this study.

Anonymity/Confidentiality: The data collected in this study is confidential. The signed consent form will be kept separate from the completed questionnaire which is completed anonymously. The coded data will be made available only to the researchers associated with this project.

Right to Withdraw: You have the right to choose not to participate in this study without any penalties to you. If you choose to participate it should be noted that once researchers have received your survey it will not be possible to withdraw from the study as questionnaires will be anonymous and impossible to match with individual respondents.

I have read the above description of the study and understand the conditions of my participation. My signature indicates that I agree to participate in the research.

Participant's Name _____

Participant's Signature _____

Participant's Email address (for updating alumnae list only) _____

Researcher's Name _____

Researcher's Signature _____

Date _____

Would you like a copy of the results? ☐ Yes ☐ No

If you would like a copy of results please indicate the address you would like us to send them to.
Please send to the email address above ☐ or :

Appendix I Work Environment

Work Environment

For the most part respondents were able to practice what they had learned in the MDPW at their place of work. Respondents' bosses, organizations and their departmental practices were neutral or positive toward the training respondents received in the MDPW (See tables I.1 through I.5). For the most part, sponsors were perceived as being completely supportive or moderately supportive (See table I.5).

Table I.1: Extent to which respondents practiced what was learned

Respondents were asked the following question:

"While participating in the MDPW, to what extent were you able to practice what you learned?"

Response Options	Percent
I was not able to practice anything that I learned	2.4%
I was not able to practice much of what I learned	33.9%
I was able to practice most of what I learned	53.2%
I was able to practice all of what I learned	10.5%

Table I.2: Reaction of Bosses to Training

Respondents were asked the following question:

"While in the MDPW, how did your boss react to the training you received?"

Response Options	Percent
My boss ignored the effects of the training I received	19.7%
Was neutral regarding the training I received	18.9%
Was moderately interested in the training I received	34.4%
Assisted me in trying to practice what I learned.	27.0%

Table I.3: Organization(s)' reaction to training

Respondents were asked the following questions:

“While in the MDPW, how did your organization react to the training you received?”

Response Options	Percent
My department did not allow me to practice the skills that I learned	4.1%
My department was neutral to the skills I learned	46.3%
My department allowed me to practice some of what I learned	26.8%
I had support from sr. mgmt. down to my boss to allow me to use what I learned.	22.8%

Table I.4: Interference of departmental practices

Respondents were asked the following question:

“While in the MDPW, how have departmental practices affected your ability to use the skills you have learned?”

Response Options	Percent
Departmental Practices:	
kept me from using what I learned	10.9%
were neutral in allowing me to use what I learned	89.1%

Table I.5: Level of sponsor support

Respondents were asked the following question:

“While in the MDPW, I feel that my sponsor(s) was (were):”

Response Options	Percent
Completely supportive	43.9%
Somewhat Supportive	34.1%
Not very supportive	21.1%

Appendix J

Value of the Program

Value of the Program

In general respondents felt that the MDPW was valuable to the positions they held while in the program and that the learning from this program is valuable to their current position. They also felt that the assignments and in-class work have been relevant to the work they have done since completing the MDPW. Respondents felt that the program has duplicated somewhat what they have learned elsewhere.

Table J.1: Value of the Program

Respondents were asked five questions on the value of the program. Mean scores are out of 7.

Question	Mean Score
How valuable was the program to the position you held while in the MDPW?	5.1613
How valuable is the program to your current position?	5.4215
How valuable were the assignments to the work you have done since completing the MDPW?	5.0246
How would you rate the relevance of in-class work to the work you have done since completing the MDPW?	4.9016
How much did the program duplicate what you learned somewhere else?	3.5565

Respondents were asked the following question:

“Have you used the reference and reading material provided during the MDPW subsequently?”

Table J.2: Use of Reference Material Grouped

Response Options	Percent
Have not used reference material	34.7%
Have used the reference material somewhat	26.6%
Have used the reference material a great deal.	38.7%

Appendix K
Other things in personal life and within organizations which may have affected respondents' ability to meet career goals.

Things in Personal Life

Respondents were asked the following question:

"Can you identify anything in your personal life (either positive or negative that is having an impact on your life?"

Respondents reported that family and friends' support as well as an increase in confidence, a positive attitude and better communication most frequently as things positively affecting their ability to meet career goals. Having fewer family responsibilities and being happy, satisfied, healthy and spiritual were also mentioned as key positive factors in their personal lives.

Table K.1: Positive things in personal life which impact ability to meet career goals

Positive things in personal life that have affected ability to meet career goals.	Percent*
Family Support/Support of Friends	26%
Increased Confidence/Positive Attitude/Better Communication Skills	25%
Fewer Family Responsibilities	15%
Not Applicable/Nothing	22%
Happy/Satisfied/Healthy/Spiritual	10%
Enrolled in an educational program/taken foreign assignment	7%
Financial Flexibility	6%
Better Coping Skills i.e. Exercise	3%

**Total Exceeds 100% as Multiple Responses are Possible*

Thirty-four percent of respondents who answered this question reported that family responsibilities or family difficulties such as going through a divorce, had a negative impact on their abilities to meet their career goals. Twenty-seven percent of respondents felt that there was nothing in their personal lives that negatively impacted their ability to meet their career goals. About 9% of respondents felt that this question is not applicable for them. Other responses included respondents' personality such as a tendency to procrastinate, respondents' age, health problems and the fact that some respondents still lack confidence (although many stated this has improved since taking the program)

Table K.2: Negative things in personal life which impact ability to meet career goals

Negative things in personal life, which impact ability to meet career goals	Percent
Family Responsibilities/Family Difficulties	34%
Not Applicable/Nothing	36%
Personality	7%
Current Age/Nearing Retirement	7%
Health Problems	5%
Still Lack Confidence	5%

**Total Exceeds 100% as Multiple Responses are Possible*

Things that organizations are doing

Respondents were asked the following question:

"Since participating in the MDPW, what if any types of things is the organization doing to increase the chances you will achieve your career goals?"

Thirty-three percent of respondents mentioned that their organizations have helped them through informal activities such as listening more actively to suggestions and recommendations, providing feedback, more informal mentoring, raises, and offers to sponsor more education. Twenty-five percent of respondents felt that their organizations are not doing anything to help them. About 19% said that their organizations have given them new responsibilities. An example would be receiving more challenging positions and special assignments. About 17% of employees mentioned that they have been giving more training opportunities. Formal initiatives such as career development programs and formal mentoring program were also mentioned although less frequently.

Table K.3: Things that organizations are doing to increase respondents' chances to increase career goals.

Negative things in personal life, which impact ability to meet career goals	Percent
Informal Activities	34%
Not Applicable/Nothing	40%
New Responsibilities	19%
Training	17%
Formal Initiatives	9%

Respondents were also asked the following question:

"Since participating in the MDPW, what if any types of things is the organization doing which is making it harder for you to achieve your career goals?"

About one quarter of respondents felt that their organizations are not doing anything to make it more difficult to achieve their career goals. Another 24% of respondents did not feel that this question was applicable to them. Uncertainty/organizational change and limited opportunities within respondents' organizations were mentioned as the top factors. Other things mentioned include politics, an increase of requirements such as university degrees and bilinguism, bureaucratic organizations and an increase in workload.

Table K.4: Things that organizations are doing which make it harder for respondents to achieve their career goals.

Negative things in personal life, which impact ability to meet career goals.	Percent
Not Applicable/Nothing	50%
Uncertainty/Organizational Change	19.6%
No where to go/limited opportunities	16%
Politics	7%
Increased Qualifications Required	5%
Bureaucracy	5%
Increased Workload	4%

**Total Exceeds 100% as Multiple Responses are Possib*