CAREER ADVANCEMENT FOR WOMEN: WHAT IS THE PRESCRIBED PATH FOR SUCCESS?

SENIOR SERVICE COLLEGE FELLOWSHIP
STRATEGY RESEARCH PROJECT

RESEARCH REPORT 10-005

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ABSTRACT

Are women prepared for senior management positions? A culturally diverse workforce is becoming a reality in the United States. As the workforce is rapidly becoming more diverse than in the past, increased female participation raises an issue that leadership must address. Unless businesses and organizations properly train women for significant jobs, they may have a difficult time competing.

The Developmental Test Command (DTC), the customer's (Army, DoD, industry, etc.) preferred tester of choice, is currently mentoring, training, and developing their female employees to compete for senior management positions. As part of DTC's strategic human capital planning, DTC leadership is providing highly potential female candidates for career advancement programs such as the Aberdeen Proving Ground (APG) Cohort, Harvard University Program for Senior Executive Fellows, Defense Acquisition University (DAU) Senior Service College Fellowship (SSCF), and other developmental assignment opportunities. DTC understands the importance of the diverse workforce and realizes the potential long-term pay-off for developing the next generation of DTC female leaders to continue the legacy of the DTC mission and vision.

This planned research will review the career advancement paths of the DTC female employees at the senior analyst/management levels (General Service [GS]-13 [pay band 2], GS-14/GS-15 [pay band 3], Senior Executive Service [SES]) by examining the perceived barriers and facilitators of advancement, developmental experiences, and career histories. Examining the career paths will identify the key or keys to achieving success.

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CHAPTER 1
INTRODUCTION

Nationally, women comprise about 45 percent of the workforce, according to the Bureau of Labor Statistics, but hold less than 5 percent of the top jobs in the nation's 1,000 largest companies. According to a 1993 study by the National Associate of Female Executives, women hold about 40 percent of all executive management and administrative positions in the United States. These positions, however, are mostly confined to the lower and middle ranks (Coleman, 1998). Major demographic trends are occurring in the global labor force that will have direct implications for organizations. Among them is the large movement of women entering the workforce (Schmidt & Duenas, 2002).

The Civil Rights Act of 1991 and the establishment of the Federal Glass Ceiling Commission called for actions to improve the status of women in the workforce. The charter of the Federal Glass Ceiling Commission was to identify the causes of gender discrimination and to make recommendations to eliminate it (Baker, B.; Graham, S.; Williams, S., 2003). According to the report, *A Question of Equity: Women in the Glass Ceiling in the Federal Government. A Special Study. A Report to the President,* the federal government was not protected. Prior to the establishment of the commission in1992, only 6.2 percent of federally employed women were at or above the middle management level (GS-13 and above). However, men were more than four times more apt to reach those upper levels; nearly 28 percent of federally employed males were in a GS-13 and above category. Although, women comprise nearly half of the federal collar workforce, their distribution by grade level and occupation, remain disproportionate.

Background (Overview) of this Study

The Developmental Test Command (DTC), the customer's (Army, DoD, industry, etc.) preferred tester of choice, is currently mentoring, training, and developing their female employees to compete for senior management positions. As part of DTC's strategic human capital planning, DTC leadership is nominating and having success with the selection of highly potential female candidates for career advancement programs such as the Aberdeen Proving Ground (APG) Cohort, Harvard University Program for Senior Executive Fellows, Defense Acquisition University (DAU) Senior Service College Fellowship (SSCF), and other developmental assignment opportunities. DTC understands the importance of the diverse workforce and realizes the potential long-term pay-off for developing the next generation of DTC female leaders. Thirty-one GS-15s from across Aberdeen Proving Ground, including the 67 tenant organizations that operate on post, began a yearlong journey. An innovative new leadership development program called "Leadership Cohort" kicked off in 2009 and has put the concept of "action learning" into practice. The program revolves around the idea that the best way to understand leadership concepts is to put them into practice. Cohort students will work on installation-wide projects over the course of the next year that will give them opportunities to practice leadership skills and concepts.

The Office of Personnel Management designed the training program and has enlisted an academic crew of professional coaches from universities and institutions across the country to coach and support the students through the yearlong endeavor. The local members of the Senior Executive Service have agreed to help guide the students throughout the year, so there is a very strong support system built into the program. The Cohort students will help senior leaders solve the issues that they face today. Moreover, critical jobs in Harford County will need to be filled when all of the dust settles from the Base Realignment and Closure (BRAC). The leadership cohort by design is to attract high-potential individuals from a wide variety of organizations across

the installation. Furthermore, from those issues will come opportunities for leaders to grow—looking beyond their traditional roles within their organizations to working across each of the 67 tenant organizations that make up Aberdeen Proving Ground (APG) to tackle larger issues.

Each of the Cohort students will have an individual and group project during the year that is part of their normal work. The program requires the student cohorts to reach out to one another outside the scheduled sessions to coordinate their efforts at solving larger challenges. The student cohorts will have eight scheduled meetings during the year. During the scheduled meetings, the students will review the progress of the assigned projects. In addition to immersing themselves in installation-wide projects and sharpening his or her leadership skills, the student cohorts now have people guiding them with their future career endeavors.

The Harvard University Program for Senior Executive Fellows (SEF) builds executive skills in political and public management, negotiation, human resource management, policy-making, organizational strategy, communication, ethics, and leadership. The program provides a unique opportunity to gain perspectives on public policy and management through interaction cross agency and executive-legislative branch boundaries. The program is four weeks and designed for individuals at the GS-14/GS-15 levels. Senior Executive Service candidates are strongly encouraged to attend this program.

The Senior Service College Fellowship (SSCF) program at the Defense Acquisition University (DAU) has three sites: Huntsville, Alabama; Detroit, Michigan; and Aberdeen Proving Ground, Maryland. The SSCF vision is a nationally recognized program to develop strong effective civilian senior leaders for the DoD acquisition community.

The SSCF mission is to:

- Meet a current need for civilian leadership training;

- Develop and maintain a strong mentorship program;

- Expand state of the art leadership and acquisition skills through professional development;

- Develop network leadership; and

- Leverage collective experiences.

This fellowship is designed to help develop civilian senior leaders in the Army Acquisition Corps to assume roles as product and project managers, program executive officers, and other key acquisition positions. DAU has partnered with several other organizations such as the U.S. Army Research, Development, and Engineering Command; Webster University; the Army War College; APEX Performance, Inc.; and the Center for Creative Leadership to provide the opportunities needed for the fellows' professional growth. All SSCF activities have been carefully planned to enhance acquisition leadership skills.

The fellows are given a tremendous opportunity to further enhance his or her professional skills. The SSCF program takes 10 months to complete, it is academically challenging, provides the opportunity to think and reflect upon his or her leadership style, and role in making the Army acquisition enterprise more desirable.

Developmental assignments are temporary internal and/or external job assignment opportunities that are designed to expose high potential individuals in areas outside or an extension of their current subject matter expertise. Additionally, it is an opportunity to expand their insight into other missions within an organization.

Purpose of this Study

The purpose of this research study is to review the career advancement paths of the DTC female employees at the senior analyst/management levels (GS-13 or pay band 2, GS-14/GS-15 or pay band 3) as well as to examine the perceived internal and external barriers to

advancement. By examining the career paths, the researcher will be able to identify the key or keys to achieving success.

Brief Overview of the Methodology Used to Collect Data

This research study will use both qualitative and quantitative methods. Data will be analyzed using different sources of information and methods for collecting data. These methods included surveys and in-depth interviews. A quantitative survey will be used to gather demographic and narrative information based on the research questions.

Research Questions

1. What career advancement path is best for obtaining a senior management position?

2. What challenges do women perceive they encounter enroute to a senior management position?

3. What opportunities do women perceive to be available to them enroute to a senior management position?

Research Hypotheses

The hypothesis for this research is that organizations have not provided opportunities (e.g., mentoring, networking, training, etc.) for women to move from lower or middle management positions into senior management positions.

Limitations and Assumptions

Every effort was made to select a variety of women with differing educational backgrounds as well as women who are in different stages of their governmental careers. The target population was female government employees at the GS-13 through GS-15 or NSPS Pay Band 2 or 3, and Senior Executive Service members performing work at the U.S. Developmental Test Command (DTC) located at the Aberdeen Proving Ground in the state of

Maryland and two select females at the same target grade level located within the Baltimore-Washington Metropolitan Area.

Although studying DTC female senior analyst/managers from one organization enabled the researcher to examine career advancement paths, to include the perceived internal and external barriers, this approach may have hampered the generalizability of the findings. Moreover, the response rate (48.8 percent) limited the power of the analyses. Because it is possible that organizational decision makers gave developmental assignments to the best managers or the best managers sought the most challenging assignments, the researcher also cannot conclude that various types of assignments or experiences caused senior managers/analysts to succeed. It is possible that these experiences were indicators rather than predictors of success.

Definitions of Key Words and Terms

- **Glass Ceiling** is the invisible artificial barriers created by attitudinal and organizational prejudices that bar women from top executive jobs (Wirth, 1998).

- **Current Population Survey** is a monthly survey of about 50,000 households conducted by the Bureau of the Census for the Bureau of Labor Statistics (www. Census.gov).

- **Career Patterns** is the sequence of career position held prior to securing the present position (Coleman, 1998).

- **Career Tracking** involves identifying women with high potential and helping them gain visibility and experience through challenging and high-profile assignments (Wirth, 1998).

- **Equal Opportunity** or **Equal Opportunity Commission** is responsible for enforcing federal laws that make it illegal to discriminate against a job applicant.

- **Internal Barriers** are those that can be overcome by individual change (Coleman, 1998).

- **External Barriers** require social and institutional change (Coleman, 1998).

- **Mentoring** involves anyone who provides guidance, support, knowledge, and opportunities for whatever period the mentor and protégé deem this help to be necessary (Washburn, 2007).

- **Networking** is communication that promotes access to information about career development (Knorr, 2005).

- **Training and Development** are programs that enhance employee overall achievement and performance through acquisition of skills, credentials, and knowledge (Knorr, 2005).

- **Organizational Culture** is norms, beliefs, attitudes, and assumptions that influence organizational practices, tacit norms, and values (Knorr, 2005).

- **Government and Organizational Policies** are legal framework of policies created to achieve gender equity in the workplace (Knorr, 2005).

- **Supportive Work Environment** is the existence of work-family programs and family-friendly policies that help women manage balance work-life demands (Knorr, 2005).

- **Support from Top Management** is the commitment to implement initiatives to advance women (Knorr, 2005).

- **Organizational Support System** is the assessment structure for tracking achievement that measures how well women are advancing (Knorr, 2005).

- **Systematic Barriers** refer to situations, policies, and/or practices that unfairly exclude members of the designated groups from taking part in the workplace (sexism, lack of access to education or training, lack of accommodation of family responsibilities, impact of child-rearing responsibilities on the tenure and promotion process).

CHAPTER 2
LITERATURE REVIEW

Chapter 1 introduced the need to develop and prepare high-potential women for senior management positions. Wirth (1998) noted, as a consequence of the swelling ranks of women in lower and middle management, an increasing number of women are in line to be selected for high-level positions in private companies, government, and politics in the coming decade. The purpose of this research is to review the career advancement paths of the DTC female employees at the senior analyst/management levels (GS-13 or pay band 2, GS-14/GS-15 or pay band 3) as well as to examine the perceived internal and external barriers to advancement. By examining the career paths, the researcher will be able to identify the key or keys to achieving success.

This chapter addresses the following topics that emerged during the research for women on their way to obtaining senior management positions: (a) Background, (b) Career Advancement, Support Systems, and Potential Obstacles or Challenges, (c) Challenges (Barriers), and (d) Opportunities (Networking, Mentoring, Policies, and Training and Development).

Background

The "Glass Ceiling" concept was introduced in 1986 as a result of a three-year study supported by the Center for Creative Leadership. The study looked at 76 female executives and their male associates at America's top companies and concluded that the glass ceiling functioned as a significant barrier to women's advancement. The study offered the following advice to women who sought success: put in extra time and effort, advertise abilities, cultivate allies, and actively seek opportunities (Inman, 1998).

According to a 1991 report, the U.D. Department of Labor revealed that the number of women and people of color in the labor market progressively diminished as the jobs become higher in position and/or classification. The report further concluded, that people of color account for 22.3 percent of all jobs at large companies, yet they make up only 9.9 percent of officials and managers (The Glass Ceiling: Are Women and Minorities Blocked from the Executive Suite? October 29, 1993). A recent study done by the Equal Employment Opportunity Commission (1993) revealed that women comprise 45.7 percent of the employees in large companies (100 or more employees), yet only 27.4 percent of managerial positions are held by women.

Although approximately half of the workforce is female, women tend to occupy low- or middle-level positions in organizations. Women occupy 85 percent of all clerical positions but only 13 percent of the federal government's Senior Executive Service positions. Nearly two-thirds of the net labor force growth between 1987 and 2000 is attributed to women entering the workforce. This growth is an indication that there is a growing need to develop and prepare women for the executive levels. (The Entrepreneur Network on-line Journal, "Gender and the federal senior executive service: where is the glass ceiling," Public Personnel Management—Winter, 1997)

Career Advancement, Support Systems, and Potential Obstacles or Challenges

Traditionally leadership images have been based on white, professional male personal characteristics and values such as being rational, having the impulse to fight, and ambition. Mani (1997) contended women who did not conform to these images were not considered for leadership positions, so only a small number of females reached executive ranks. She further noted it is important that this support system be able to capture and measure the progress of how well women are advancing through the ladder within the organization. Additionally,

progress includes such areas as pay, promotion opportunities, and inclusion in decision-making, respect, and credibility. The system would measure the performance and promotion of women, identify assumptions, and assess her individual needs, her career aspirations, and potential discrimination factors. Culpan and Wright (2002) reported according to women manager expatriates that an organizational support system does contribute to job satisfaction.

Challenges

Coleman (1998) contended women still have to overcome subtle or invisible barriers on their way to reaching top positions, whether in business, government, or education. These barriers are termed the "Glass Ceiling" and may be internal or external. Shakeshaft (1987) defined internal barriers are those that can be overcome by individual change and external barriers require social and institutional change.

Research conducted by Wirth (1998) states that the most important period for career development occurs between the ages of 30 and 40. Coleman (1998) commented, women during this period must decide if they will juggle the roles of career/spouse/parent and must give thought to how. She further commented it is important to be aware of the variables that inhibit and assist women in their career development. The following variables, which often act as barriers, need attention when examining the career development of women: sex-role stereotyping; parental influences; combining career, marriage, and family; and dual-career couple's dilemma (Borman, Guido-DiBrito, 1986).

Systematic Barriers

Wirth (1998) found one of the main obstacles perceived by women is that of sex stereotyping regarding their ability and willingness to accept positions of responsibility, especially if long hours, travel, and relocation are involved. Markham, Macken, Bonjean, and Corder (2001) concluded with the increasing aspirations among women and greater prevalence

of dual career marriages, sex differences in geographic mobility for occupational advancement is a barrier. They further agree that migration is an important factor in career advancement and evidence from a case study reveals that women employees move less often and are less willing to do so in their careers.

Another concern has surfaced regarding the perceived under-representation and lower pay of women in professional and managerial positions given the projected increase of women in the workforce. The Equal Pay Act of 1963 was enacted as an amendment to the Fair Labor Standards Act. According to the Reference for Business, "The Equal Pay Act forbids employers from paying employees different wages or salaries based on sex." Despite the Equal Pay Act of 1963, Knorr (2005) claimed, "Women face unequal pay for the same type of work that men do or have fewer job promotion opportunities (Knorr, 2005). Baker, Wendt, and Slonaker (2002), further reported that a major aspect of gender discrimination is pay.

External Barriers

The powerful force of a corporate culture runs through every organization. Corporate culture is defined as the attitudes, experiences, beliefs, and values that operate within an organization. Within an organization, social groups are guided by the existence of established norms, beliefs, and assumptions that make it difficult for those individuals who are different in ethnicity, race, or gender from the traditional incumbents that currently hold leadership positions (Hackney, Hogard, 1999). The corporate culture undercurrents define people's behavior and how a company gets things done, in either positive or negative ways.

Organization Barriers

An organizational culture is based on norms, beliefs, attitudes, and assumptions. It influences organizational practices, tacit norms, and values; and it is a factor that is central to promoting a supportive work environment. An increasing number of women in management

positions are more likely to occur when that organization maintains a culture that promotes gender equity. What that culture looks like is still up for debate (A question of equity: women and the glass ceiling in the federal government, 1992).

The creation of a supportive environment for women and the implementation of work-family programs are major factors that contribute to the retention and development of women within an organization (A question of equity: women and the glass ceiling in the federal government, 1992). Organizations have an obligation to provide mechanisms to help employees balance the demands of work and the responsibilities of home so employees, particularly women, are not forced to choose one over the other (Rogier, Padgett, 2004).

Employees who have family responsibilities and include childcare initiatives are concerned with a flexible or alternative work schedules and parental leaves. One response to these concerns is the implementation of the family-friendly policies (FFP) such as the Family Medical Leave Act that was created to balance work-life demands. "Childcare initiatives are keys to the retention of working women with children (ILO, 2004)." Flexible or alternative work schedules are being exercised to assist employees with the management of their work and life demands as well as to assist with the progression to upper-level positions (A question of equity: women and the glass ceiling in the federal government, 1992).

On the contrary, research also suggests that FFPs benefits are inconsistent. The FFP outcomes and effectiveness are in question with respect to serving women employees, as the context in which these policies take place has not changed. First, inequality exists for women, as they are the major childcare provider, thereby affecting their roles at work. Second, flexible or alternative work schedules have impacted women's careers in management with negative results such as reduced income, envy of colleagues, loss of more interesting assignments, lack

of promotions, less access to resources, and being viewed as less committed and less competent. Third, parental leave does not guarantee organizational implementation or all needs are covered and vary greatly among organizations (A question of equity: women and the glass ceiling in the federal government, 1992).

Internal Barriers

Rader (1979) noted internal barriers to advancement are difficult to change and include obstacles women have placed against themselves because of their own socialization. She further explained critical factors needed for women to succeed are the demands of work-life balance and the existence of gender inequalities. Knorr (2005) suggested that women and men development programs are different because of the interruptions women experience more in their careers, such as being the primary providers of child and elder care.

According to Wirth (1998), the pressure is much greater for women than for men to make the difficult choices between career and family as a result of the social attitudes and cultural biases that exist. Still, women appear affected by work-family conflicts to a greater extent than men (Covin, Brush, 1991). Executive women who have achieved career successes found that it is not without compromise and sacrifice on their personal lives. Balancing personal and work lives remain a worrisome issue. However, the only difference between high-profile executive women and women working at the middle or lower management levels is that the executive jobs are more demanding and require working longer hours (Wirth, 1998)

Opportunities

Knorr (2005) suggested in order for women to continue making greater strides and succeed with obtaining a senior management position, they must identify and participate in the opportunities that exist in their workplace. Opportunities include networking, mentoring, understanding the organizational and government policies, and training and development. The

researcher further commented it is important for women to pursue these opportunities in order to position themselves to compete for a senior management position. Moreover, these opportunities will enhance their leadership toolkits and assist them with the challenge of maintaining a personal and professional balance. Burke (2002) contended that organizations should document their efforts to develop women managers and professionals and be more knowledgeable about factors that positively influence the advancement of women in organizations. More research in the areas of opportunities is needed, as past research has mostly focused on barriers.

Networking

Crucial to women's development among women managers were their visibility of access to experiences such as sponsorship and networking. Women rely on networking with each other to advance to the executive level. Networking shares a common goal and focus on career and skills development and attempts to improve communications among women members and management. Women are provided with more information and options with networking than they would have without it. Networking also gives women the opportunity to seek out and enhance connections with prospective sponsors (A question of equity: women and the glass ceiling in the federal government, 1992).

Johnson (1991) reported a correlation has been drawn that the higher the position, the more glaring the gender gap. A strategy for overcoming the glaring gender gap is networking. Men have successfully utilized networking for centuries. Casbolt and DeWine (1981) stated, "Women have traditionally engaged in successful networking within their communities, churches, and volunteer organizations, so it is not something new." However, networking for aspiring women in a male organizational power arena is a new discovery, and gaining access

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can be a challenge. Johnson (1991) further reported lack of time and lack of information about how to participate in networking activities have been cited as two factors that work to discourage women from actively networking.

Networking, as described by Duvall (1980), is an information giving and receiving system, a support system, and a means whereby women can get ahead in their careers. Welch (1980) contended that networking is the process of developing and using contacts for information, advice, and moral support as one's career progresses, Casbolt and DeWine (1981) claimed the primary reasons for participating in a network are to gain information and to meet other women. It can be seen as a strategy for solving problems and ultimately effecting change (Metha, 1979). "Women's involvement in informal networks in enterprises is essential for obtaining invaluable information, visibility, contact, and support for performing effectively and obtaining higher-level jobs (Johnson, 1991)." One theory suggests that women perceive networking more in terms of information seeking rather than information providing thereby contributes to their lack of involvement in top-level management positions (Johnson, 1991).

Networking and mentoring have similarities and can comfortably overlap. Features in common with both are the sharing of information, the benefits of mutual support, and the potential for tutelage and guidance. Networking and mentoring is a strategy for helping to alleviate the isolation and confusion experienced by upwardly mobile women as they collide with the traditional stereotypic images that work to obstruct the many visible placement opportunities for women (A question of equity: women and the glass ceiling in the federal government, 1992).

Mentoring

Mentors and access to networks are factors that contribute to the development of women. Women need mentors to advance. This relationship helps women to advance by

providing them with self-confidence and less stress. Female mentors are role models for their protégés and can help them cope with discrimination, stereotyping, family and work balance, and social isolation (A question of equity: women and the glass ceiling in the federal government, 1992).

Washburn's (2007) research concluded people who have been successful oftentimes attribute their success to their role model or mentor who helped and/or influenced their careers positively along the way. Mentoring is typically an informal process where a mentor and protégé are paired and form a positive working relationship. The mentor and protégé pairing can be classified as an older, experienced manager pairing with a young potential manager. The researcher also noted one concern is that many mentors tend to gravitate toward younger versions of themselves. Therefore, women and minorities receive less mentoring or less effective mentoring, making it more difficult for career advancement.

The key ingredient for forming a positive mentor and protégé' relationship is one of mutual trust. A mentor can enhance the career of the protégé by sponsoring him or her, making him or her visible within the organization, coaching him or her, protecting him or her, and ensuring that he or she is given challenging assignments where he or she will be noticed and can provide the psychosocial functions of role modeling, acceptance, validation, counseling, and friendship (Wasburn, 2007).

Cianni and Romberger (1995) argued having a manager actively promote your career is a necessity and critical antecedent for gaining visibility among senior managers and can lead to promotions. Formal presentations and informal interactions with senior managers at social events are the two primary vehicles for attaining visibility. Informal interactions can secure high-profile projects and assignments, career counseling opportunities, and organizational

information insight. They further noted that women and minorities report fewer opportunities to interact with higher-level managers. Women attribute their lack of opportunity to interact to gender differences. Minority managers believe their limited social interactions with senior managers adversely affected their career advancement. The lack of information about the organization importance of these social events and the minority managers' own feelings of discomfort contributed to their lack of interaction with senior managers.

Organizational and Government Policies

"Organizational and government policies are critical to achieving gender equity in the workplace and to contributing to women's advancement (Shapiro & Olgiati, 2002)." The government has implemented the Family and Medical Leave Act (FMLA) and Affirmative Action Program or the Equal Employment Opportunity law. The FMLA responds to the unexpected illness needs of families by allowing an employee to take job-protected unpaid leave due to a serious health condition that makes the employee unable to perform his or her job, to care for a sick family member, or to care for a new child (including by birth, adoption, or foster care). The Affirmative Action Program or the Equal Employment Opportunity law prohibit discrimination and encourage equal opportunity (e.g., equal access to work for women and minorities) (A question of equity: women and the glass ceiling in the federal government, 1992).

"Organization policies include providing assistance to dependent care, creating flexible working conditions and providing on-site care facilities (Schmidt & Duenas, 2002)." The above policies have made progress toward the promotion of workplace equality, but more needs to be done in terms of policy implementation and coverage. For example, the FMLA does not apply to many employers. Moreover, Albrecht (2003) commented," FMLA does not

cover all the leave policies that affect women, who are still the primary caretakers of sick children and relatives, such as short-term child illnesses or parent/parent-in-law care (A question of equity: women and the glass ceiling in the federal government, 1992).

Many enterprises around the globe have taken measures to recruit, retain, and promote more women and have adopted an equal opportunity policy. According to Wirth (1998), "Positive or affirmative action approaches often form part of an overall equality policy and are generally viewed as a conscious effort to level the playing field so that everyone has an equal chance."

Training and Development

Employee overall achievement and performance are enhanced by training and development opportunities. Training not only improves the quality of the nation's workforce, it powerfully affects the earnings of individual workers (Smithey, Lewis, 1998). Part of the challenge that women face with their advancement in an organization is the access to education, training, and development. "Specifically, access to formal management training programs, access to the appropriate and relevant training, tailoring training to the needs of women, and training in gender equity are believed to be factors that positively influence women's advancement in organizations (Loutfi, 2001)." Educational programs and advisory groups are practices that support women employees and enhance their career opportunities and workplace environment (A question of equity: women and the glass ceiling in the federal government, 1992).

Training and development initiatives provide women with the skills, credentials, and knowledge needed to succeed in their jobs. A study by BAE (2002) found that women in the United States are less likely to be trained than men (A question of equity: women and the glass

ceiling in the federal government, 1992). There have been a number of strategies recommended to promote women in management, covering areas such as training, networking, career tracking, mentoring, review of recruitment and promotion systems, and policies. Crucial to women entering, remaining, and advancing in non-traditional jobs and to build a critical mass of women at higher levels in enterprises is a supportive work environment and role models. (Wirth, 1998)

According to Wirth (1998) key instruments in providing women with the self-confidence, techniques, knowledge, and contacts to move ahead in an organization are training in management skills, assertiveness training, and on-the-job training in different areas to gain broader experience and knowledge of an organization's structure and functions.

CHAPTER 3
RESEARCH METHODOLOGY

Introduction

The research project explored the career advancement paths of the female employees at the GS-13 through GS-15 level or NSPS Pay Band 2 or 3 and Senior Executive Service (SES) members performing work at the U.S. Developmental Test Command located at the Aberdeen Proving Ground in the state of Maryland and two select females at the same target level located within the Baltimore-Washington Metropolitan Area. The researcher examined the perceived internal and external barriers to advancement for women above the GS-13 level. This study included both quantitative and qualitative methods. The study was used to uncover the challenges and opportunities these women faced while pursuing their aspirations.

Research Design

This research study explored the perceptions of female employees at the GS-13 through GS-15 level or NSPS Pay Band 2 or 3 regarding the reasons they believe that they are underrepresented in senior management levels. The population included women from the Baltimore-Washington Metropolitan Area. Both quantitative and qualitative methods were used to conduct this study. Data was gathered through the use of surveys and individual interview.

By collecting data through the use of a survey, the researcher was able to gather demographic information, as well as extensive written data. The survey was distributed to the female employees at the senior GS-13 through GS-15 levels or NSPS Pay Band 2 or 3. The quantitative data was analyzed and displayed in charts. The second qualitative fragment included in-depth interviews. As a result of the limited number of women selected to participate in the individual interviews, generalization cannot be promised.

Research Questions

1. What career advancement path is best for obtaining a senior management position?

2. What challenges do women perceive they encounter enroute to a senior management position?

3. What opportunities do women perceive to be available to them enroute to a senior management position?

Research Hypotheses

The hypothesis for this research is that organizations have not provided opportunities (e.g., mentoring, networking, training, etc.) for women to move from lower or middle management positions into senior management positions.

Subject Participants, Population, and Sample

The individuals selected to participate in the survey included women who are working at the GS-13 through GS-15 and SES management levels. The population included women from the U.S. Developmental Test Command located at the Aberdeen Proving Ground in the state of Maryland and two select females at the same target level located within the Baltimore-Washington Metropolitan Area. To address the purpose of the study and to answer the research questions, these women were chosen as the targeted population.

The researcher contacted the Director of Test Management at the Developmental Test Command (DTC) with an e-mail requesting permission to conduct this study at their organization. The e-mail request included the initial project abstract for their review and consideration in making their decision. Permission was granted allowing the DTC female employees that fit the targeted population to be surveyed and/or interviewed.

Research Instrument

Each female selected for this study received an electronic copy of the survey, which was designed by the researcher based on the literature review. In the first part of the survey, demographic information was collected to gain a better understanding of the participants. Demographic information included age range, racial background, marital status, children, highest level of education, job series, years in government, and years at present job. The second part of the survey included open-ended questions that were used to answer the research questions. To protect confidentiality, surveys were coded.

The second data collection method used consisted of individual interviews. The individual interviews allowed the researcher to gather in-depth information about the participants. An interview guide was used for accuracy and validity. The interview participants were selected from the survey participants.

Data Collection Procedures

A survey was developed. Many of the issues explored in the survey are designed to address the research questions. The survey was administered electronically in February 2010 to a sample of fulltime, female, white-collar federal employees in grades GS-13 through GS-15 and SES level. The face-to-face or telephonic interviews were conducted in April 2010 from the selected survey participants. The quantitative and qualitative data assembled from these two sources provided a comprehensive understanding of the career advancement process in the federal government, and the nature of barriers that impeded the progress of these women.

Validity and Reliability

To ensure validity, the survey was pre-tested with an expert review. After revisions were made based upon the feedback received, the instrument was field-tested with a selected

number of respondents. The demographic portion of the survey did not change, but a few revisions were made to the survey questions that were ambiguous.

Summary

The purpose of this research study was to review the career advancement paths of the DTC female employees at the senior analyst/management levels (GS-14/GS-15 or pay band 3), as well as to dissect the perceived internal and external barriers to advancement. The analysis used in this research project included quantitative and qualitative research methods. Demographic information was collected through the use of a survey. The individuals who participated in the interviews were survey participants who expressed an interest. Purposeful sampling was used for both methods. By examining the career paths, the researcher was able to identify the keys to achieving success.

CHAPTER 4
DATA ANALYSIS AND RESULTS

Introduction

The purpose of this research study was to review the career advancement paths of the DTC female employees at the senior analyst/management levels (GS-14/GS-15 or pay band 3) as well as to examine the perceived internal and external barriers to advancement. By examining the career paths, the researcher was able to identify the key or keys to achieving success.

This chapter describes the findings of the quantitative and qualitative data collected through the use of surveys and individual interviews. The chapter is divided into two sections. The first section reports the quantitative data collected through the use of the demographic survey; the data are displayed in average rating charts and graphs to help interpret the findings. The second section of this chapter focuses on the qualitative data that were gathered through individual interviews with a sampling of the survey participants. The chapter concludes with a summary of the quantitative and qualitative data.

The study was designed to address the following research questions:

1. What career advancement path is best for obtaining a senior management position?

2. What challenges do women perceive they encounter enroute to a senior management position?

3. What opportunities do women perceive to be available to them enroute to a senior management position?

Data were analyzed using different data sources and data collection methods to reduce the risk of drawing conclusions based upon systematic biases of one method. These methods included a survey and individual interviews.

Methodology Summary

Each female selected for this study received an electronic copy of the survey, which was designed by the researcher based on the literature review. The survey was reviewed and pilot tested by five of the researcher's peers, and their recommended revisions to the survey were incorporated prior to distribution to the sample population. To protect confidentiality, surveys were coded. In the first part of the survey, demographic information was collected to gain a better understanding of the participant. Demographic information included age range, racial background, marital status, children, highest level of education, job series, years in government, and years at present job. The second part of the survey included open-ended questions that were used to answer the research questions. The third and final part of the survey rated the perceived internal and external factors based on the following scale:

1—strongly agree, 2—agree, 3—neutral, 4—disagree, and 5—strongly disagree. External factors include:

- Organization Compatibility;

- Ability to adapt to the culture,

- Accessible to role models,

- Ability to make mistakes without repercussions),

- Career Management;

- Knowledge of career development and planning processes,

- Knowledge of what the job qualifications are for advancement,

- Access to a senior manager who facilitates your career progress,

- Opportunities for meaningful feedback about your strengths and weaknesses,

- Developmental Assignments;

- Access to the right jobs early in your career,

- Access to opportunities to move across various developmental levels,

- Access to jobs that require relocation (domestic), and

- Access to promotions for bigger jobs.

Internal factors include:

- Developmental Relationships;

- Ability to develop relationships with senior management,

- Ability to develop an informal network,

- Ability to develop relationship with co-worker,

- Ability to be assertive,

- Mentoring and Networking;

- Having a mentor or someone who provides good advice on career opportunities,

- Help from your mentor in establishing key relationships,

- Information about organizational policies from your mentor or manager,

- Have access to informal networks,

- Managing Own Career;

- Opportunities to initiate your own job changes,

- Ability to move across various departmental levels,

- Opportunities to take personal risks, and

- Ability to manage work and family obligations.

The second data collection method used consisted of individual interviews. The last question on the survey asks if the participant would be willing to be interviewed. Seven-six percent of the surveyed participants agreed to participate in the individual interview session. The researcher conducted individual interviews as a second data collection method to gather in-depth information about the survey participants. The face-to-face or telephonic interviews were conducted in April 2010, with eight selected individuals from the targeted population. An interview guide was used for accuracy and validity. The interview participants were selected from the survey participants.

The quantitative and qualitative data assembled from the surveys provided a comprehensive understanding of the career advancement process in the federal government, and the nature of barriers that impeded the progress of these women.

Population, Sample, and Participants

The individuals selected to participate in the survey included women who are working at the GS-13 through GS-15 and SES analyst and management levels. The population included women at the U.S. Developmental Test Command located at the Aberdeen Proving Ground in the state of Maryland and two select females at the same target level located within the Baltimore-Washington Metropolitan Area. To address the purpose of the study and to answer the research questions, these women were chosen as the targeted population.

The researcher contacted the Director of Test Management at the Developmental Test Command with an e-mail requesting permission to conduct this study within their organization. The e-mail request included the initial project abstract for their review and consideration in making their decision. Permission was granted allowing the DTC female employees that fit the targeted population to be surveyed and/or interviewed.

Results

Quantitative Research Findings

   The survey located in Appendix A was distributed electronically to 43 females from the DTC. The researcher received a 48.8 percent response rate. In the first part of the survey, demographic information was collected to gain a better understanding of the participants. Demographic information included age range, racial background, marital status, children, highest level of education, job series, years in government, and years at present job (see Table 1).

DTC participants	N = 21	%
Age Range	less than 30	4.8%
	30-35	0.0%
	36-40	4.8%
	41-45	19.0%
	46-50	23.8%
	greater than 51	47.6%
Racial Background	American Indian	0.0%
	Asian or Pacific Islander	4.8%
	Hispanic	4.8%
	African American/Black	9.5%
	White	81.0%
	Other	0.0%
Martial Status	Single	19.0%
	Married	61.9%
	Divorced or Separated	19.0%
	Widowed	0.0%
Children	Yes	71.4%
	No	28.6%
Highest Level of Education	High School	4.8%
	Associate	0.0%
	Bachelors	52.4%
	Masters	42.9%
	Doctoral	0.0%
	No response	4.8%
Job Series occupational groups	200: Personnel Management and Industrial Relations Group	9.5%
	300: General Administrative, Clerical, Office Services	14.3%
	500: Accounting and Budget	33.3%
	800: Engineering and Architecture	23.8%
	1500: Mathematical Sciences	19.0%
Years in government	less than 20	9.5%
	20-30	61.9%
	30-40	23.8%
	40-50	4.8%
Years in present position	1-4	42.9%
	5-10	52.4%
	greater than 10	4.8%

Table 1. Survey Participant's Demographic Information

The second part of the survey included open-ended questions that were used to answer the research questions. The results of the open-ended questions are as follows:

1. Table 2 shows that 33 percent responded that their Individual Development Plan (IDP) prepared them for their current position and 38 percent responded that a mentor played a role with their career.

DTC participants N=21	Did your Individual Development Plan (IDP) prepare you for your current position?	Did a mentor play a role on your career?
Yes	33%	38%
No	62%	62%
No response	5%	0%

**Table 2. IDP and Mentor Open-Ended Question Results**

2. Survey participants listed the following information as to what they looked for in a mentor : (a) someone to discuss career ideas; (b) someone who prepares you both professionally and personally; (c) someone to respect and trust and who has high values with morality, work ethics, and an optimistic outlook; (d) someone who looks out for your best interest; (e) someone who sets an example, provides inspiration, and is a good listener; (f) someone who is an effective communicator and provides guidance and advice; (g) someone who is knowledgeable and has experience and possesses honesty, integrity, and a willingness to teach; (h) someone who walks the talk, willing to share information, and enthusiastic about the job.

3. The percentage of these women who completed a developmental assignment and leadership training are 19 percent and 52 percent, respectively. The types of leadership

31

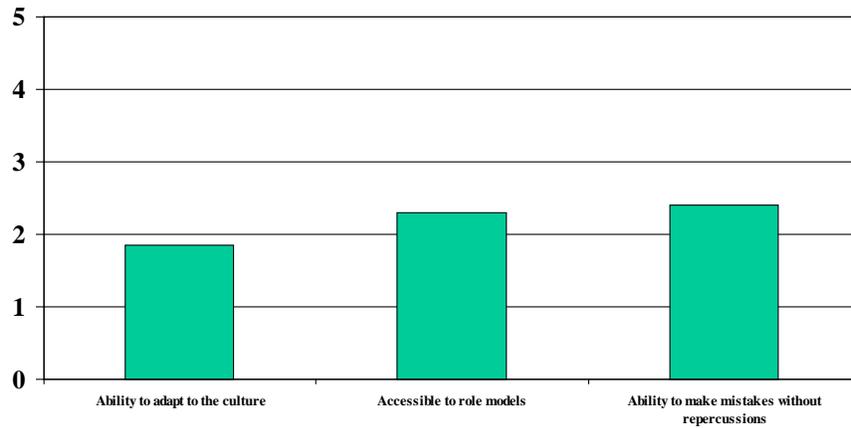training and/or developmental assignments that significantly impacted the survey participant's careers are :

1. Developmental assignments;

    a. Army Budget Office,

    b. Assistant to an Senior Executive Service (SES) member,

    c. Sister organization,

    d. Training;

    e. Leadership and Development Course (LEAD),

    f. Local Community College leadership course,

    g. Civilian Education System (CES) basic,

    h. Intern Leadership Development Course (ILDC),

    i. Army Management Staff College (now called Sustainment Base Leadership Management),

    j. Intern training,

    k. Harvard University Program for Senior Executive Fellows ,

    l. Defense Acquisition University courses such as Acquisition 450, Leading in the Acquisition Environment,

    m. Department of Defense (DoD) Executive Leadership Development course,

    n. Senior Leaders Cohort,

    o. Organization Leadership Executive (OLE),

    p. Program Management Executive (PME),

    q. Leadership for Democratic Society, and

    r. On-the-job day-to-day

2. Survey participants identified that the pursuit of higher learning such as a Master's degree was key to the attainment of their current position.

3. The survey participants identified the following leadership attributes one must possess to be a successful leader in the government:

   a. Never say "not in my job description,"

   b. Be willing to help others,

   c. Take risks,

   d. Fair and consistent,

   e. Possess people skills,

   f. Commitment, dedication, humbleness,

   g. Mentor employees,

   h. Ability to multi-task,

   i. Knowledgeable,

   j. Assertive but flexible,

   k. Open-minded,

   l. Effective communicator,

   m. Ability to balance personal and professional responsibilities,

   n. Strong work ethic,

   o. Leads by example,

   p. Ability to follow-up on tasks,

   q. Appropriate appearance,

   r. Vision and goals, and

   s. Politically savvy.

The third and final part of the survey rated the perceived internal and external factors based on the following scale: *1—strongly agree, 2—agree, 3—neutral, 4—disagree, and 5—strongly disagree.* Figure 1 shows that the factors received an overall favorable rating. The factor with the highest favorable rating is developmental assignment and the least is developing relationships. Figures 2 through 7 breaks down the external and internal factors average ratings.
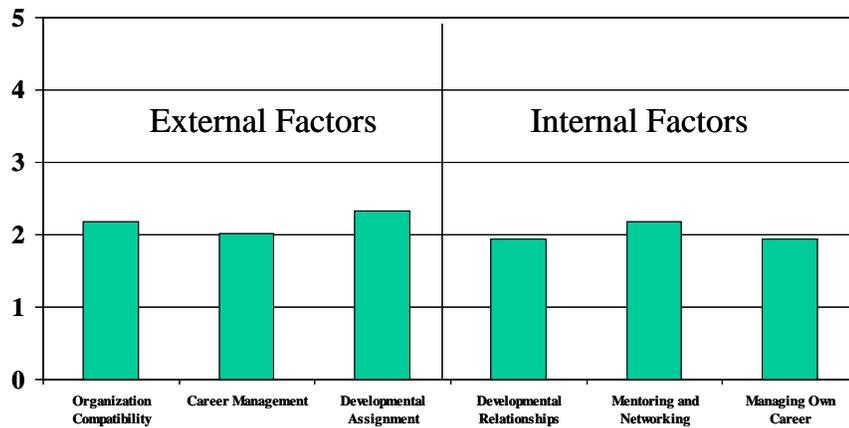
Figure 1. External and Internal Factor Results Average Ratings

Figure 2. Organizational Compatibility Average Ratings
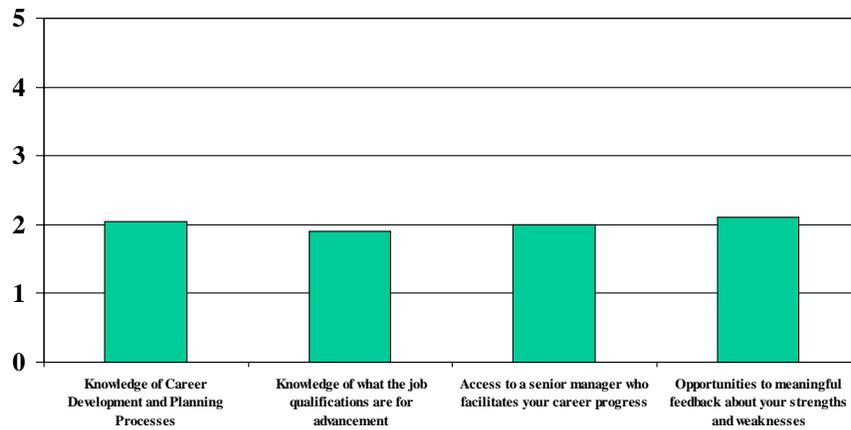
Figure 3. Career Management Average Ratings

Figure 4. Developmental Assignments Average Ratings

Figure 5. Development Relationships Average Ratings

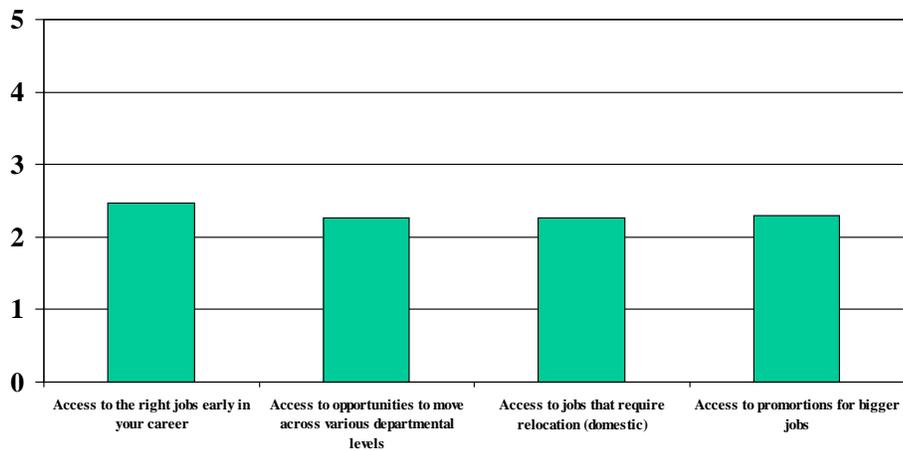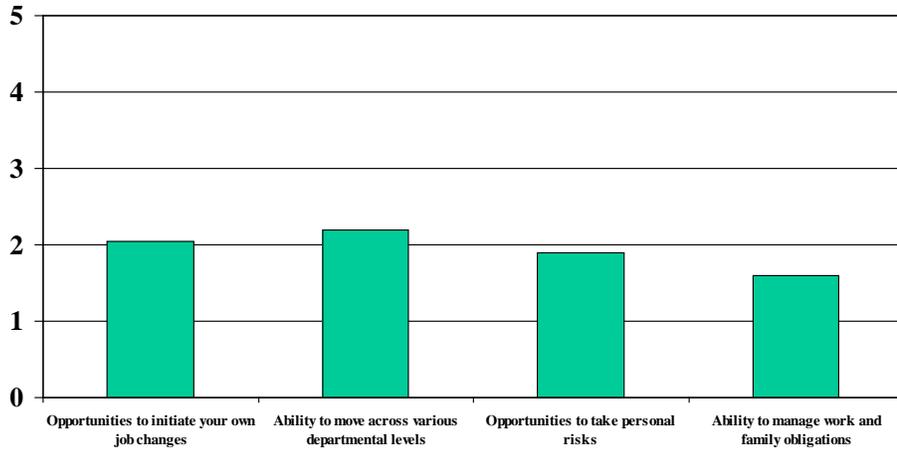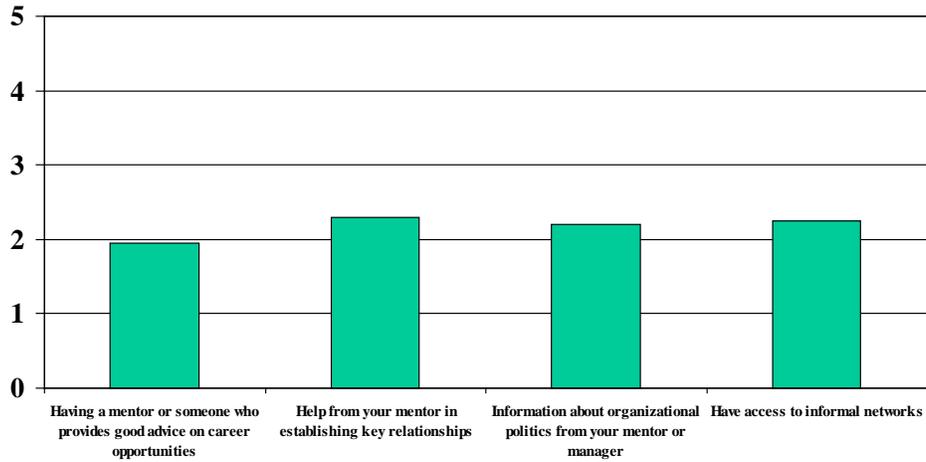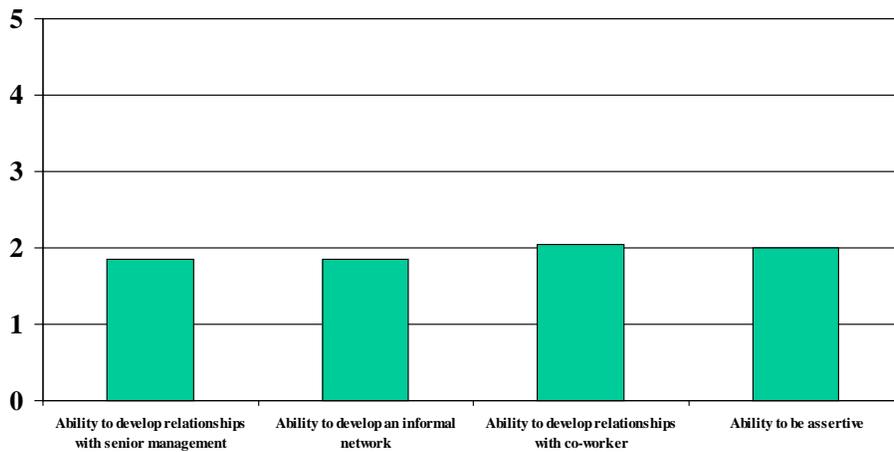**Figure 6. Mentoring and Networking Average Ratings**

Figure 7. Managing Own Career Average Ratings

Summary of Quantitative Findings

The first section in Chapter Four reports the demographic information collected through the survey. The demographic information revealed that the majority of the females who have achieved their aspirations are older than 51 years of age (48 percent), white (81 percent), married (62 percent), and the mother of children (71 percent). The average female has 26 years of government service and has been at her present position for five years. Her educational background is basically split 50-50 between having a bachelor's and master's degree.

The open-ended questions of the first section of the survey were reported as they related to IDPs, mentoring, leadership training, and developmental assignments. The data for responses were reported in its entirety as text above and highlighted the following: (a) that few women have IDPs and mentors; (b) the types of training and developmental assignments that have helped these women to advance their careers; and (c) the types of attributes these women look for in a mentor and leader.

Qualitative Research Findings

The second data collection method used consisted of individual interviews. The researcher conducted interviews as a second data collection method to gather in-depth information about the participants. The last question on the survey asked survey participants if they would be willing to be interviewed. Based upon the responses received, selections were made using purposeful random sampling and their interest in taking part in the study.

The interviewees were contacted the week of the interview via e-mail and/or telephone confirming the date, time, and vehicle preference (face-to-face or telephonic). For accuracy and validity, the interviews were tape recorded with the participant's permission. Six interviews

were conducted over the phone and two face-to-face at the individual's place of employment. An interview guide was also used for accuracy and validity.

Each woman was asked the same questions, and the interviews lasted between 30 and 45 minutes. The research thanked the interview participants at the conclusion of the interview. Fabricated names have been used to protect confidentiality. The interview questions are included in Appendix B.

The research findings collected through the individual interviews support the survey findings. The following research questions are addressed in the qualitative section of this chapter:

1. What career advancement path is best for obtaining a senior management position?

2. What challenges do women perceive they encounter enroute to a senior management position?

3. What opportunities do women perceive to be available to them enroute to a senior management position?

Table 3 shows the demographics of the eight selected individual interviewees. The face-to-face or telephonic interviews were conducted in April 2010.

Interviewees	N=8	%
Age Range	less than 30	12.5%
	41-45	37.5%
	46-50	25.0%
	greater than 51	25.0%
Racial Background	White	50.0%
	Other	50.0%
Martial Status	Married	50.0%
	Other	50.0%
Children	Yes	50.0%
	No	50.0%
Highest Level of Education	Associate	12.5%
	Bachelors	50.0%
	Masters	37.5%
Job Series occupational groups	500: Accounting and Budget	25.0%
	800: Engineering and Architecture	50.0%
	1100: Business and Industry	25.0%
Years in government	less than 20	12.5%
	20-30	75.0%
	30-40	12.5%
Years in present position	1-4	37.5%
	5-10	62.5%

Table 3. Demographics of Interviewees

Interviewee 1

Abigail graduated with a mechanical engineering bachelor's degree from the University of Delaware in 2004. Upon graduation, she was employed at Aberdeen Proving Ground (APG) located in the state of Maryland. She completed a developmental assignment with another organization at APG in 2009. Abigail is taking the following steps toward a senior management position such as working toward a master's degree in management with a concentration in project management, several leadership courses through the Army—e.g., completed the Intern Leadership Development Course (ILDC) and pursuing Civilian Education System (CES) basic course with aspirations of completing all three levels of this program (basic, intermediate, advance), working toward obtaining other certifications

(currently, level 3 certified in Test and Evaluation), pursuing developmental assignments with other organizations, and actively seeking opportunities for mentoring. Her challenges include her age and lack of a former supervisor's support. Abigail's current supervisor has been extremely helpful with providing her with direction and guidance for obtaining a senior management position and offering opportunities such as developmental assignments with other organizations. She does not currently have a mentor, because she has not made it a priority and has not developed a connection with anyone. Abigail hopes to get a mentor soon. She does not like formal mentoring programs and believes that this relationship should be developed informally.

Although Abigail has not experienced any barriers personally, she perceives the "good ole boys" network still exists. She is the only female within her division and feels excluded from the social network. Abigail feels that it is important for women to search out opportunities, gain more information, try to be the best at their discipline, and to address barriers when needed.

Interviewee 2

Paula attended Ohio State where she earned a bachelor's degree in social work and a dual master's in social policy and public administration. Her initial plan was to be a director in social work but ended up working for the Department of Defense in an internship program for procurement in 1984. Although Paula has remained in the acquisition field, her career has moved her from Richmond, Virginia, to Cleveland, Ohio, and back to Washington, D.C., in 2000 where she currently works.

Paula believes that in pursuit of a senior management position, you should plan your own career path, work extra hours, gain more experience, learn the business, network, and

continue to develop professionally by taking leadership and technical training. She has not had many challenges because she has been fortunate to have mentors and supervisors who have helped her career along the way. Senior leaders have noticed that Paula is a hard worker, wants to learn, and is focused on her mission, which has helped her career. Paula has had great supervisors her entire career who have pushed her to take on higher areas of responsibility. Resistance has been experienced with peers, and they have been her toughest challenge. These challenges arise because one day she is a peer, and the next day, she is serving as their supervisor.

Paula's supervisors have continually supported her when she volunteers to take on extra work and takes the initiative to learn new things. Her supervisors provide her with the opportunities to grow in current and new areas and offer guidance when she is challenged with working with other people or contracts. She is currently on a developmental assignment but has never asked for or sought after these assignments. Her supervisors or other senior managers have traditionally nominated her for developmental assignments. Paula does not have one mentor per se right now. She currently is seeking the guidance and directions from previous supervisors who have pushed her in the past to expand her current area of expertise and to increase her knowledge base. The barrier for Paula is competing with peers for those senior management positions. Paula believes there are barriers, but it depends on the culture of the organization. By looking at the makeup of the senior leadership organization, you can visually see if there is diversity (age, race, gender, etc.) and opportunity to advance. There has been a tremendous increase over the last 25 years of the makeup of women in leadership positions; nevertheless, we still need to stress and strive for senior management positions such as Senior Executive Service.

Interviewee 3

Maggie started her career as a secretary stenographer in 1984 working in real estate, where the natural progression is in the reality job series (clerk [GS-5], assistant [GS-7] specialist [GS-9 through GS-11]). She moved into a senior reality specialist as a GS-12 non-supervisory. In 2000, Maggie moved to higher headquarters working on policy as a non-supervisory GS-13. She applied and was selected for a GS-14 position. Maggie was one of four internal candidates competing for the director's position. She was the only internal candidate not interviewed, but was ultimately selected for the position where she is now the assistant director for property and grants agreements.

Maggie believes the deciding factor for selection to this position was interpersonal skills. She has completed the Harvard Senior Executive Fellows program. Next year, Maggie is planning to participate in the Federal Executive Institute in Virginia. Her current organization has a senior leadership program for leaders at the GS-13 level and below.

Maggie's challenges include dealing with personalities, organizational fit, and establishing a balance between work and personal life. She has not experienced any resistance from others, but feels that she may be the resistance because she has been pushed faster then she is ready to go. Maggie had a Senior Executive Service (SES) supervisor who believed that you have to wait your turn to advance. Her current organization's primary criteria for hiring and/or promoting an individual are the individual's accomplishments and their path forward. Maggie completed several developmental assignments and believed this helped her career.

Maggie does not have a mentor other than her support from her current supervisor who is fulfilling his role as a supervisor. She attributed not having a mentor because she has not

participated in any of the formalized mentoring programs offered at her current place of employment. Maggie considers being selected for a position for any other reason than merit is a barrier. Maggie has not seen barriers that are preventing women from obtaining a senior management position.

Interviewee 4

Susan started her career in 1985 as a GS-3 clerk typist at Aberdeen Proving Ground in the state of Maryland. She worked as a GS-4 and then entered into an intern program. While completing the program, she went from a GS-5 to GS-11. Susan was promoted to GS-12 as a branch chief, and ultimately was promoted to a next level of higher responsibility as a GS-13. Susan competitively competed and was selected for a GS-14 position at another organization. While at this organization, Susan was successful at achieving her next level as a GS-15.

When Susan entered the workforce, she identified, for her career field, the available opportunities. She has always wanted the next position. Susan worked hard and did whatever necessary to get in position for that next position. She took the following steps in pursuit of her senior management position: attended college at night to earn her bachelor's degree and completed leadership training such as Army Management Staff College (AMSC). She believes that the technical knowledge is there, but what sets you apart from others is the leadership piece. Susan's greatest challenge was co-workers earlier in her career, specifically females because they sometimes felt threatened. Once she proved herself, the challenge was short-lived.

Susan has been blessed with great supervisors throughout her career. Her supervisors recognized Susan's potential and provided her with exposure and opportunities to succeed. Susan is currently succession planning and preparing specific individuals for her current position. She likes her current position but continues to prepare to compete for the next level.

Susan had one developmental assignment in Washington, D.C., and believes it played a part in her career. This assignment showed her desire to develop, to go outside her comfort zone and the personal sacrifices made. Her mentor is her current supervisor. One barrier experienced by Susan was when she was working for a senior leader who wanted a "yes" person. She ultimately determined that she had to move. Because Susan has been successful in her career, the only other barrier is the limitations she places on self such as not wanting to become an SES, not willing to give up any more time, maintaining a life balance, etc. She believes the biggest barrier for women is themselves because you have to decide what you want and what you are willing to do to reach that point. Unfortunately, there are still organizations that exist that believe women cannot be senior managers. Susan's perspective is to leave that organization; no one is holding you hostage. Women have to be flexible in the beginning of their careers in order to find their niche, gain exposure, and take on anything and everything to learn and get that breath of experience. Every leader should be grooming someone to take his or her place so, if you work hard, a leader will notice and take you under his or her wing.

Interviewee 5

Alice started with the Army 21 years ago as an intern (GS-7 to GS-11) where she was matrixed to an organization located at APG. While assigned there, she became the senior engineer at the GS-9 level because the current leader vacated the position unexpectedly. The step Alice took in pursuit of a senior management position involved taking the initiative to continue to gain knowledge in her area of expertise. Alice has several certifications.

Her challenges include being in the engineering career field as a female, where there are no visible female senior managers in the organization. Alice experienced resistance from a

direct support who refused to take directions from a female. She also has experienced resistance from a senior leader who said "she did not have what it took to lead" because her leadership style was perceived by this individual as passive. Alice, in this situation, did not match the organizational culture. With her current organization, it is not resistance but it is that there are very few opportunities. When an opportunity becomes available, then it is based on your turn. Her supervisors have been very supportive of career endeavors. She has not taken advantage of developmental assignments because it is personal. By having a family, Alice cannot move at this time; however, taking a developmental assignment is part of what she wants to do eventually. Alice does not have a mentor and has never had a mentor because her career path has placed her in positions of leadership starting as early as the GS-9 level. Barriers include few opportunities for advancement and unconscious question marks and non-spoken views about females with families. At the senior levels, you are expected to be available 24/7. Alice believes that you can have a family and pursue your career, but currently, having a family is seen as a barrier for women advancing. The government has rules that allow an employee the ability not to abandon his or her family, although each organization can choose to use them or not. Alice believes a barrier for women can be organizational.

Interviewee 6

Jamie received her bachelor's degree approximately 24 years ago in the engineering field. Upon graduation, she accepted an internship. Jamie was hired as a GS-7 general engineer with an accelerated promotion option. The accelerated promotion option requirements were to spend 6 months at school while maintaining a 3.0 GPA and be promoted to GS-9. The internship program promotions were yearly, and one could be promoted from a GS-9 to GS-11 to GS-12. After spending that year with the internship, Jamie went to work at APG at the GS-12 level with full performance to a GS-13 in 1989. She took the initiative and was approved to

take a sabbatical in pursuit of a master's degree with the stipulation that it had to be completed within one year. She had a few graduate-level classes along the way that allowed her to earn her master's degree in one year from a local college in the state of Maryland. She attended school at night and earned her master's degree within one year. The knowledge gained helped her to do her job. She was offered a position to work for a technical director on a developmental assignment for four months, helping him to define a new mission area. At the conclusion of her developmental assignment, she was reassigned to the newly established mission area office. Because of the level of her work that dealt with stakeholders from the Department of the Army and the Department of Defense, Jamie's position was justified via a desk audit to a GS-14. She remained in this office until promoted to her current position at the GS-15 level.

Jamie has taken the following steps to become a senior manager: educating herself (earning a master's degree), serving as project lead (overseeing entire program), attending Army Management Staff College (AMSC), being a team player, surrounding herself with people to get their help, seeing opportunities and volunteer to take on areas no one wants to work on (this is a great way to learn because you set the parameters), taking on new challenges, reading management leadership books, taking cohort leadership training, pursuing developmental assignments, and observing how current leaders operate.

Jamie has not encountered any difficulties or any resistance from others in enroute to a senior management position. When she applied for positions, she typically got it. Her immediate supervisor is very supportive by supporting her nomination in the cohort leadership training and looks to her to backfill during his absences. Developmental assignments were instrumental in her obtaining a senior management position. While working at her first

developmental assignment with a technical director (TD), Jamie's supervisor witnessed her leadership potential, which resulted in her being assigned to a position of higher responsibility. As for her second developmental assignment with another TD, she benefited from learning how leadership operates at that level. In the first developmental assignment, the TD approached her through her immediate supervisor. In the second developmental assignment, she applied for it and was selected. Jamie's mentor is not a person at work but a family member. She talks with this person about her career and/or work. Her mentor possesses the ability to explain to her how she should see herself in the workplace or how she should consider handling a situation. In her view, her mentor has played a key role in the career development.

Barriers that women encounter are perceptions, because some people believe that certain jobs are better suited for males then females unless proven otherwise. In her view, women tend to have to work harder and better to show that they can help with the job more than males do. She thinks she works very hard in order to gain other peoples belief that she understands the technical or financial issue being worked.

She thinks women have to stand up for what they believe. In other words, if I need to stand up to what I believe, if I disagree with something, I need to get my point of view across. It is not that easy so that other people can understand where I am coming from. I am not a yes person all the time. Women need to open up to opportunities and be fair. According to Jamie, her career has been good.

Interviewee 7

Kylie worked for 15 years at the same organization before accepting a position with another organization. She worked at her second place of employment for five years before

deciding to accept the position she is currently working at the GS-13 level. She believes her career path would have probably moved quicker if she had been willing to move around more. Kylie considers training as a step that should be taken toward the achievement of a senior management position. Because she is a minority, her biggest challenge is breaking into a network where everyone is not comfortable with you.

Kylie has experienced resistance enroute to the senior management position but it has not been blatant. It is small things, like giving her a lesser performance rating. Her belief is that these small things add up. Kylie believes there are few opportunities at Aberdeen Proving Ground beyond the GS-14 level. She thinks most of the GS-15 and SES members are PhDs, and rightfully so, because they are experts in their field.

Kylie recollects two different experiences with an immediate supervisor. She worked for one supervisor who stated that he would never rate his employee's performance with a top rating. Her other experience was with a supervisor who protected and shielded his employees. Kylie has not participated in any developmental assignments, but has completed AMSC, which allowed her to gain a better understanding of the Army. She does not have a formal mentor per se, but she emulates some senior women who have since retired. Kylie's mentors typically have been minorities. She believes mentors do help with career advancement.

Her biggest barrier is limiting herself. Kylie does not believe there are barriers that are preventing women enroute to a senior management position. She believes that, for some reason, people are not necessarily comfortable with women. If you look at Aberdeen, she only knows of one female SES. The numbers should be a little bit better than what they are. Let's face it; there are some really smart women in Aberdeen. When Kylie first entered into the

government, there was a big push to hire women and minorities, but that push seems to have diminished.

Interviewee 8

Kayla attended school at night and earned her bachelor's degree. Kayla is not interested in any long-term training at this point in her career. She has taken the LEAD course and was approached about becoming an instructor for this course, but her organization at that time discouraged it. Kayla encountered the following challenges: women, a political senior staff, and the Civilian Personnel Office (CPO) system. Women are a challenge because women are not advocates for women. A political senior management staff is a challenge because it appears that individuals are promoted by way of politics—such as you scratch my back and vice versa. The CPO system is a challenge because she questioned why her name was not referred for a position and come to find out CPO made a mistake but by the time it was discovered, the position was already filled. In Kayla's view, some of the challenges are the people while others are the system.

Kayla has not encountered any resistance enroute to a senior management position but considers favoritism an obstacle. She feels there is no support from immediate supervisors for anyone in the organization. She believes that developmental assignments are good and not good because it is dependent on the type of assignment and the person with the responsibility of developing the individual and their abilities to mentor and teacher. Kayla currently does not have a mentor because she has not identified anyone whom she would like to teach her something. Her view is that the people in her inner circle are too narrowly scoped.

Her barrier is working for an organization that is not fair and consistent across the board and does not promote teamwork. Kayla believes that women are prevented from obtaining senior management positions because she believes women hold women back.

Summary of Qualitative Findings

The second method in Chapter Four reports the participant responses collected through individual interviews. The individual interviews revealed there is no one prescribed path for women career advancement success. Their beginning paths varied from being hired as a clerk to entering into a formalized internship program.

Regardless of an individual's humble or accelerated beginnings, they have achieved career advancement success. Some common steps identified by the individual interviewees toward achieving a senior management position are to work hard, show initiative by taking on the job that no one wants, gain exposure, and take training. The individual interviewees were in agreement that having a supportive supervisor, mentor, and taking advantage of developmental assignments are key factors in pursuit of a senior management position. The majority of the individual interviewees have not experienced challenges or resistance enroute to a senior management position, although they do recognize and acknowledge that barriers still exist for women. Barriers include themselves, women, balance between work and family, existing perceptions about women as senior managers, organizational culture, and selected for reasons other than merit.

Summary of Results

The quantitative and qualitative data assembled from these two methods have provided a comprehensive understanding of the career advancement process in the federal government, and the nature of barriers that impede the progress of women.

Research Question 1:

What career advancement path is best for obtaining a senior management position?

With regard to Research Question 1, data were collected through the survey and individual interviews. Participants revealed their career paths in both the survey and in response to one of the interview questions. The data collected does not support a best career path for obtaining a senior management position. It revealed that success is possible through various routes. Women's advancement to a senior position is not a one size fits all. As the possible paths are endless, it is up to the individual to identify their prescribed path and execute it.

Research Question 2:

What challenges do women perceive they encounter enroute to a senior management position?

With regard to Research Question 2, data were collected through the survey and individual interviews. Participants revealed the following factors that they had to or believed women have to overcome toward the attainment of a senior management position:

1. Perception that female and family obligations cannot be as dedicated or responsible as male counterparts.

2. Seen as aggressive versus assertive.

3. Women do not mentor other women.

4. Perceived as less competent.

5. Need to be provided opportunities to showcase talents and strengths.

6. Long working hours.

7. Good ole boy network.

8. Access to informal networks.

9. Ability versus outward appearance.

10. Obtained position because of reasons other than merit.

11. Glass ceiling.

12. Managers promote people who look like them.

13. To be taken seriously.

14. Must work harder, be twice as good as male counterpart.

15. Being a female.

Research Question 3:

What opportunities do women perceive to be available to them enroute to a senior management position?

With regard to Research Question 3, data were collected through the survey and individual interviews. Participants revealed the following factors that contributed toward their attainment of a senior management position:

1. The women in the study benefited from participating in developmental assignments within and outside their organizations.

2. The women in the study believed that technical and on-the-job training are expected ; however, what sets you apart from your competing peers is leadership training such as the Cohort and Harvard Executive Fellows programs.

3. Survey participants identified that the pursuit of higher learning such as a master's degree was key to the attainment of their current position.

4. The women in the study raved about their support from their supervisors.

5. The women in the study also benefited from being provided opportunities to lead early on in their career development.

6. Although the women in the study believed that having a mentor is important, many do

   not have one.

CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

Introduction

Women have made progress over the last 25 years with assuming management positions at the lower and middle level; nonetheless, more strides need to be made with advancing from those positions into senior management positions. The purpose of this research project was to review the career advancement paths of the DTC female employees at the senior analyst/management levels (GS-14/GS-15 or pay band 3), as well as to examine the perceived internal and external barriers to advancement. The study sought input from female senior analyst and managers at the U.S. Army Developmental Test Command (DTC) at Aberdeen Proving Ground in the state of Maryland. Both quantitative and qualitative methods were used to examine the personal and professionals backgrounds of the women participating in this study. A survey designed to gather demographic and narrative information was distributed to 43 female senior analyst and managers at DTC. The quantitative data obtained from the responses on the survey are displayed in the bar charts located in chapter four. The qualitative segments of the study included eight interviews. The data gathered from the interviews were reviewed to search for emerging themes and commonalities. A discussion of the importance of the findings is presented in this chapter. The study was designed to address the following research questions:

1. What career advancement path is best for obtaining a senior management position?

2. What challenges do women perceive they encounter enroute to a senior management position?

3. What opportunities do women perceive to be available to them enroute to a senior management position?

Interpretation and the Implications of the Results

The purpose of this research project was to explore the career paths of senior analysts and managers. The researcher collected personal background information about the females at the GS-13 through GS-15 and SES levels through the data analysis collected from the surveys. Moreover, the qualitative data collected through individual interviews provided additional personal and professional information regarding the participants' career background, challenges, resistance, management support, developmental assignment opportunities, and mentoring, as well as the barriers they or other women in general have faced enroute to a senior management position.

Research Question 1

What career advancement path is best for obtaining a senior management positions?

Discussion

The survey (Appendix A) was divided into three sections: (a) demographic background, including age range, racial background, marital status, children, highest level of education, job series, years in government and years at present job; (b) open-ended questions on career background, IDP, mentoring, and training and developmental assignment opportunities; and (c) external and internal factors such as organization compatibility, career management, developmental assignment, developing relationships, networking and mentoring, and managing own career. Based upon the 21 female senior analysts and managers who participated in the quantitative portion of the survey, the average respondent was older than 51 years of age (48 percent), white (86 percent), married (62 percent), and the mother of children (71 percent) with 26 years of

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government service, has been at their present position for five years and split 50 percent between a bachelor's and master's degree.

Research Question 2

What challenges do women perceive they encounter enroute to a senior management position?

Discussion

The survey identified a number of challenges women perceived facing while in pursuit of a senior management position, whereas the individual interviews revealed that majority of the women who participated had not directly experienced any but still recognized and acknowledged that barriers are there for women. Barriers captured from the survey are summed up and include themselves, lack of opportunities, balance between work and family, good ole boy network, glass ceiling, and competence. Barriers captured from the individual interviews include themselves, women, balance between work and family, existing perceptions about women as senior managers, organizational culture, and selected for reasons other than merit.

Research Question 3

What opportunities do women perceive to be available to them enroute to a senior management position?

Discussion

The survey and individual interview questions identified the following opportunities that are available to women seeking to obtain a senior management position.

1. The women in the study benefited from participating in developmental assignments within and outside their organizations.

2. The women in the study believed that technical and on-the-job training are expected; yet what sets you apart from your competing peers is leadership training such as the Cohort and Harvard Executive Fellows programs.

3. Survey participants identified that the pursuit of higher learning such as a master's degree was key to the obtainment of their current position.

4. The women in the study raved about their support from their supervisors.

5. The women in the study also benefited from being provided opportunities to lead early on in their career development.

6. Although the women in the study believed that having a mentor is important, many do not have one.

The research project examined the career advancement paths and internal and external barriers and facilitators of advancement of the DTC targeted population. Based on the findings located above in the section titled findings of research and lessons learned and the answers to the three research questions, the DTC females' believed that their organization is providing the necessary climate and culture to advance in their careers based on the average positive rating for the internal and external factors. The average responses for these women with respect to the internal and external barriers were very positive. The keys to success identified by these women were developmental assignments, supportive leadership, mentor, master's degree, and leadership training. The percentage of these women who completed a developmental assignment and leadership training are 19 percent and 52 percent, respectively. DTC had two females to successfully complete the senior leadership Cohort Program while in its first year as well as two other females to successfully complete the Harvard Senior Executive Fellows program. In addition, the researcher who is also an employee at DTC, will successfully

graduate in May 2010 as one of the first graduates of the SSCF program located at Aberdeen Proving Ground in the state of Maryland.

Recommendations for Future Research

1. This study was limited to females who were currently working at the Developmental Test Command (DTC), Aberdeen Proving Ground located in the state of Maryland. Another quantitative and qualitative study should be conducted with a comparison to male counterparts.

2. Because this study was limited to one organization, DTC, and one state, Maryland, another qualitative study should be conducted with an expanded study population.

3. Because only 48.8 percent returned the survey, a more in-depth qualitative study should be conducted using other methodology methods to solicit data from this targeted population.

4. Further study is warranted to explore the factors that contributed to the obtainment of senior management positions. Why were these women viewed as senior leaders? What specific leadership qualities did they demonstrate? How does one prepare for a senior leader position?

The future research projects are focused on the DTC training program because the research project findings indicated that very few DTC females are benefiting from a mentor (38 percent) and their IDP (33 percent), attending leadership training (19 percent), or completing a developmental assignment (52 percent), even though the majority believes all these opportunities are important for their career advancement.

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APPENDIX A: CAREER ADVANCEMENT SURVEY

	Please complete all of the questions in the survey below. Your responses will remain completely anonymous.		
Organization Name:	Please enter in last column.		
	Survey Questions	**Please provide your answers in the columns below**	
DEMOGRAPHICS			
1	Age range	Select age range from drop down menu	
2	Racial background	Select racial background from drop down menu	
3	Marital status	Select marital status from drop down menu	
4	Do you have children? If yes, please provide how many?	Select (Y/N) from drop down menu	
5	Highest Level of education	Select education level from drop down menu	
6	Job Series	Provide in the next column (e.g. 1515, 0301, etc.)	
7	Years in the government	Provide in the next column	
8	Years in present position	Provide in the next column	
BACKGROUND			
1	What is your current job title?		
2	"Briefly" describe your career progression since joining the government.		
3	Did your Individual Development Plan (IDP) prepare you for the current position?	Select (Y/N) from drop down menu	
4	Did a mentor play a role on your career?	Select (Y/N) from drop down menu	
5	What do you look for in a mentor?		
6	What type of leadership training and/or developmental assignments had a significant impact on your career?		
FACTORS	**Please provide your responses to the questions below using the following scale: 1 - Strongly Agree, 2 - Agree, 3 - Neutral, 4 - Disagree, 5 - Strongly Disagree**		
	External Factors require social and institutional change		
	Organization Compatibility		
7	Ability to adapt to the culture	Select response from the drop down menu	
	Accessible to role models	Select response from the drop down menu	
	Ability to make mistakes without repercussions	Select response from the drop down menu	
	Other, please specify		
	Career Management		
8	Knowledge of Career Development and Planning Processes	Select response from the drop down menu	
	Knowledge of what the job qualifications are for advancement	Select response from the drop down menu	
	Access to a senior manager who facilitates your career progress	Select response from the drop down menu	
	Opportunities for meaningful feedback about your strengths and weaknesses	Select response from the drop down menu	
	Other, please specify		
	Developmental assignments		
9	Access to the right jobs early in your career	Select response from the drop down menu	
	Access to opportunities to move across various departmental levels	Select response from the drop down menu	
	Access to jobs that require relocation (domestic)	Select response from the drop down menu	
	Access to promotions for bigger jobs	Select response from the drop down menu	
	Other, please specify		
	Internal Factors are those that can be overcome by individual change		
	Developing Relationships		
10	Ability to develop relationships with senior management	Select response from the drop down menu	
	Ability to develop an informal network	Select response from the drop down menu	
	Ability to develop relationships with co-worker	Select response from the drop down menu	
	Ability to be assertive	Select response from the drop down menu	
	Other, please specify		
	Mentoring and Networking		
11	Having a mentor or someone who provides good advice on career opportunities	Select response from the drop down menu	
	Help from your mentor in establishing key relationships	Select response from the drop down menu	
	Information about organizational politics from your mentor or manager	Select response from the drop down menu	
	Have access to informal networks	Select response from the drop down menu	
	Other, please specify		
	Managing Own Career		
12	Opportunities to initiate your own job changes	Select response from the drop down menu	
	Ability to move across various departmental levels	Select response from the drop down menu	
	Opportunities to take personal risks	Select response from the drop down menu	
	Ability to manage work and family obligations	Select response from the drop down menu	
	Other, please specify		
13	Are you actively applying for a higher senior level management position? If yes, provide in the next column the steps you have taken thus far.	Select (Y/N) from drop down menu	
14	Identify what do you believe are the perceived challenges females face as they aspire to senior level management positions?		
15	Identify what you believe are the professional and personal attributes one must possess to be a successful leader in the government.		
16	Are there any other experiences or comments regarding your advancement into a senior level management position that you would like to share? If yes, provide in the next column.	Select (Y/N) from drop down menu	
17	Would you be willing to participate in an individual interview session with me as part of my research study? If yes, please provide in the next column your contact information.	Select (Y/N) from drop down menu	
	Thank you for taking time to participate in this research study		

APPENDIX B: STRUCTURED INTERVIEW QUESTIONS

CAREER ADVANCEMENT FOR WOMEN:
WHAT IS THE PRESCRIBED PATH FOR SUCCESS?

CONTEXT: The interviewer is writing a research paper in support of her Senior Service College Fellowship (SSCF) program graduation requirements. The paper centers on the following problem statement:

This research study is to review the career advancement paths of the DTC female employees at the senior analyst/management levels (GS-14/GS-15 or pay band 3) as well as to examine the perceived internal and external barriers to advancement. By examining the career paths, the researcher will be able to identify the key or keys to achieving success and aid in the development of a DTC prescribed best practice or business model.

The purpose of this structured interview is to garner from senior analyst/managers, their paths to success to include their opportunities and challenges experienced.

INTERVIEW QUESTIONS

1. Please share your career background with me.

2. Discuss the steps that you have taken (or will be taking) to become a senior manager. (Career Management)

3. Describe any challenges that you have encountered, if any, enroute to obtaining a senior management (leadership) position. (Career Management)

4. Have you encountered resistance from others enroute to a senior manager or currently as a senior manager? If so, please explain. (Internal Factor and Career Management)

5. How has or (how did) your immediate supervisor support(ed) your advancement into a senior manager position? (Internal Factor)

6. Have you applied for (or taken advantage of) developmental assignments? If so, was the assignment a factor in obtaining a senior management position?

7. Do you currently have a mentor? If so, what role did your mentor play in assisting you in your career advancement? If not, why not?

8. Describe, if any, barriers you have encountered while pursuing a senior management position.

9. Do you believe there are barriers that prevent women from obtaining a senior management position? If so, please describe.

10. Is there anything else that you would like to share?