

**BARRIERS TO WORK PLACE ADVANCEMENT:
THE EXPERIENCE OF
THE WHITE FEMALE WORK FORCE**

A Research Monograph

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In Partial Fulfillment of
Requisition No. B9434091 (dated 8/25/93)
Contract No. 42USC252C3

U.S. Department of Labor
Glass Ceiling Commission
Office of the Secretary
200 Constitution Avenue, NW
Washington, DC 20210

December 20, 1993
Revised April 19, 1994

ACKNOWLEDGMENTS

We gratefully acknowledge the contributions of Dr. Diane Brown, Associate Director, Center for Urban Studies, Wayne State University, Detroit, Michigan for her assistance in analyzing corporate human resources survey data; Michael Stoll of the Gaston Institute, University of Massachusetts for assistance in analysis of U.S. Census data; Sheryl Wroblewski, College of Management, University of Massachusetts, for her work on the extensive bibliographic search; Kate Murphy for her invaluable editorial and production assistance; James Jennings, Director of the Trotter Institute of the University of Massachusetts; Muriel Ridley of the Trotter Institute; Edwin Melendez, Director of the Gaston Institute, University of Massachusetts; and Dr. Fuad Safwat, Provost, on behalf of the University of Massachusetts, Boston, for their support of this project. Additional acknowledgment is extended to: Joyce Miller, Executive Director, Glass Ceiling Commission; Sarah Gottbaum, consultant to the Glass Ceiling Commission; and Martha Izzi, Director, Women's Bureau, U.S. Department of Labor, Boston.

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I. Introduction and Executive Summary

Despite progress, the proportion of women at the top of business hierarchies remains nearly unchanged after three decades. Lags have been particularly visible for white women. The white female labor force gained an impressive share of total managerial and professional jobs during the 1970's, growing from 33.5 to 35.57 percent of total managers between 1984 and 1992 while increasing their share of total professional occupations from 37.5 to 44.3 percent over the same period (U.S. Census, Current Population Survey, 1984, 1992). Because of rapid growth in professional education and work experience, white women are likely to be the largest recruitment pool for managerial and professional labor to meet needs of the future economy. Contributing to this overall success was equal opportunity legislation and a decade of economic expansion, particularly of the service economy and white collar jobs. Although white women were a principal beneficiary of the 1964 Civil Rights Act, visible by the mid-1980's in occupational status and compensation growth (Bluestone and Harrison, 1986), by the 1990's this growth had slowed. Gains in entry level management by white women failed to result in promotions to positions of authority and power at the top of corporate America.

Data continues to be limited on demographic composition of top managers in corporate America, but probably no more than 20 percent of the uppermost four levels of corporate hierarchies, or positions of vice president and above are currently filled by women (Korn/Ferry and UCLA, 1993; Fisher, 1991). At the very top in 1992 only a handful of CEOs and presidents were women, virtually unchanged over the past three decades. Compensation patterns reflect the concentration of women in entry level positions. In 1992, U.S. census data reported that overall, the ratio of female to male earnings in management jobs ranged from a low of 50 percent in the banking industry to a high of 85 percent for managers in human services (U.S. Census, CPS 1992).

White women professionals have not fared better than those in management in closing the gap in status and pay. In theory, professional education and licensing requirements provide more

objective criteria for status and pay, yet women's status in the leading professional organizations of health and education, and those in law, accounting and engineering, are similar to those in business. White women professionals in medicine, as an example, are concentrated in low status, less prestigious fields of nursing and pediatric medicine and the proportion of women in prestigious specializations of surgery and orthopedics remains small, as do appointments to the powerful directorships of hospitals and public and private hospital management corporations. In higher education, another important professional field, by 1990 fewer than two percent of the nation's top positions of college president, chancellor or provost were filled by women (American Council on Education, Data on Women College Presidents, Office of Women in Higher Education, 1991).

An explosion in literature on the status of working women has taken place over the past decades, comprising a wide range from journalistic, anecdotal accounts to carefully documented scientific studies of the evolving work place status of women, including progress and stumbling blocks. While there is much consensus around a persistent lag in closing the gap in status and pay between men and women managers and professionals, causes continue to be hotly debated in academic and journalistic circles. Theories most frequently advanced indirectly focus mainly on white women, and have considered alternatively, the behavior and attitudes of women towards work and career commitments (including personal decisions) and the human capital characteristics of women (particularly education, skills and experience) as factors contributing to or impeding career advancement in complex business organizations. With the rapid expansion of women, including those with young children, in professional work during the 1980's, the supposed "competition between work and home responsibilities" and probably "low labor force attachment" as a justification for employer policy reducing wages and responsibilities of women compared to men were largely challenged as empirical nonsense. Similarly, arguments that human capital attributes were the main cause for lower rates of promotion and pay for women were challenged by evidence in both growth in vocational oriented education success of women, and in the broad diversification of specializations elected by college women. White women, for example, virtually closed the gap with men in overall educational attainment and made rapid gains in specialized training and diversified work experience between 1970 and 1980. The cumulative result was growing evidence that factors outside of female lifestyle, education and career choices structured

career and organizational mobility. By the 1980's, new theories challenged traditional neo-classical human capital assumptions and offered growing support for the concept that the economy and the work place, particularly internal systems and decision makers, were the principal agents for mobility for women managers and professionals.

An invisible "glass ceiling" concept has grown in use in policy, practitioner and academic circles, as well as in popular and journalistic use, to describe an artificial "plateau" which acts to stop an otherwise successful progress of promotions and advancement in a complex organizational setting. The term was first used to describe the plight of white women, particularly with the expansion of young, talented management graduates of the 1970's, who failed to achieve at the rates of male colleagues, but was soon extended to minority men and women (Morrison, et al., 1987; U.S. Department of Labor, 1991). The concept of glass ceiling, however, extends well beyond costs to the individual career "plateaus" and "stall outs" which, after all, characterize white males as well, particularly at the top where the traditional pyramid narrows, competition deepens and queuing is legendary. Several other issues are at stake. First is the notion of non-economic, personal characteristics as a "criteria" for advancement. White women, minority women and men, traditionally excluded, may be subject to continuing though less open discrimination. Second is the issue of performance and merit. Since the basis for advancement and promotion in corporate organizations is firmly in the mold of "meritocracy," bias in promotions to the top would challenge the very assumption of an open, performance based system. New evidence on promotion and advancement of women and minorities in business settings suggests that traditionally discriminatory practices prohibited by law may have ended in entry level hiring but evolved into new, more subtle systems of bias (Harlan and Weiss, 1982; Fernandez, 1980; Woody, 1986). A series of well-designed longitudinal studies of male and female graduates from prestigious MBA programs tracked career experiences and earnings beginning in the 1970's (Olson and Frieze, 1987; Wallace 1989). These studies, which probably are the best documentation of contrasts in career experience of men and women managers, found that despite identical educational attainment, ambition and commitment to careers, after starting with similar status and salaries, women and men experienced very different progressions over time with men progressing faster and ending in higher status positions with substantially higher compensation.

The monograph summarized here examines the issue of work place barriers and career mobility of white female labor in managerial, executive and professional roles in the U.S. economy. In addition to current theory and evidence from several frameworks of management, social organization and labor analysis, we look at evidence on job mobility from current research, U.S. Census data and survey research to document both the general problem of mobility for traditionally discriminated labor forces, as well as the special problems faced by white women as a principal recruitment pool for future managerial and professional labor needs in the economy.

The case for evaluating the status of white women as a special labor force is justified to understand the impact of gender status separately from racial minority status as a potential limit on performance. Indeed, as the largest group of women, most literature on professional and managerial women has been dominated by white women. But "white" as race status is also assumed to carry special advantage not enjoyed by minority women for example. For this reason, it is important to examine and document the employment status, mobility patterns and constraints facing white women as a distinct labor force in the economy. A second reason to separate white women from minority women in research is to better understand any differences in behavior and response of the market. This will help labor force planning and policy. Finally, separation of white women in data bases will contribute to better monitoring of the status of women of all races.

From the policy perspective, three reasons justify special attention to the work place barriers faced by the white female labor force. First, white females constitute the largest potential recruitment pool to meet future skilled, professional, technical and managerial jobs in the U.S. economy, an economy increasingly forecast to require more skilled jobs to effectively compete in a post-industrial world (Fullerton, 1993). A second reason is to define the issues of labor force attachment and stability of the white female labor force which has long been considered as having low labor force attachment in traditional labor economics. Despite the myths that women lack commitment to full-time work and demanding careers (Wallace, 1982), U.S. census data indicates that white women's participation expanded dramatically, with the most gains going to married women and women with pre-school children. A final reason is that since passage of the Civil

Rights Act of 1964 and Title IX of the education Act of 1972, legislative, executive, and judicial decision making has reached increasing consensus on the case of discrimination based on sex alone and, as a result, continued to promulgate measures to protect and redress grievances against inequities in the work place¹.

The theoretical and research framework has been limited historically to examining the case of women as full and independent participants in the economy in similar fashion to that of male counterparts. Beginning in the 1970s, research on women centered on analysis of women as socialized into weak, dependent and psychologically inadequate roles and neoclassical economics generally restricted consideration of women save as adjunct household consumers, or, in the human capital theory framework, lacking competitive skills, education, and work experience in other than low productivity work. White women were widely used to support the causes of differential treatment in employment and wages for women compared to men. Evidence based on human capital and behavior, such as lower educational attainment and choice of "women's educational programs" such as humanities, nursing and library science, were translated into lower pay and less productive occupations. Human capital theories cited women's behavior, particularly weak labor force attachment, low labor force participation and work history to justify hiring patterns of hiring women in low mobility and lower pay positions. The research pm women's career behavior hypothesized the psychological makeup of women inhibited their performance in stressful, high powered, competitive work and in supervisory and decision making roles. Finally, lifestyle choices and marriage and family roles were debated as constituting either direct conflict to the demanding contemporary career paths, or illustrating the need to re-think family responsibility in the work place (Bailyn, 1982; Blau and Ferber, 1990). The long history and causes of women's success and failures of women in managerial and business careers in the U.S. (Brown, 1981) was ignored in much research, as was that of women professionals, farmers, blue collar workers, entrepreneurs and minority women.

1. Recent examples of executive decision making include U.S. Department of Labor Secretary Reich's 1993 decision to review a 17-year-old case in which defense contractor Honeywell Corporation was charged with systematically employing men and women in separate jobs, and a recent court decision and award of punitive damages to female employees of the Lucky Food Store chain in similar findings of patterns of job sex-typing, reported on PBS "Nightly Business Report," March 3, 1993.

The view of the status of women in the economy was influenced by a combination of forces. These included the revolution feminist consciousness of the 1960's, the expansion of white collar services and the rising demand for clerical and administrative functions traditionally filled by the female work force. The expansion of the white collar services economy, spurred rising demand for clerical and administrative functions traditionally filled by the female work force. Coincidentally, a combination of growth in feminism and technological innovation freeing women from household responsibility and permitting regulation and planning of family formation, resulted in a flood of white women into full-time employment and rising participation and labor attachment followed. Academic research turned to restructuring theory to incorporate a fuller appreciation of cause and effect in women's work and discrimination issues or non-economic pay and promotion decisions. The results were expanded theories of discrimination in labor markets, hypotheses about broad institutional structures into stratified and segmented systems and finally, theories of organizational behavior, power and status overriding traditional "merit" system outcomes.

Approach and Methodology

To assess barriers to work place mobility of white women, we divided our work into four separate tasks:

1. Review of current relevant literature and research on the status and mobility of white women in managerial and professional work places.
2. Preliminary analysis of U.S. Census, Current Population Survey (CPS) data to establish general trends in the occupational and compensation status of white female labor in the U.S.
3. Summary and analysis of an original data base of senior women managers and human resources executives in 60 Fortune 500 companies to assess barriers and remedies in current practice.

4. Summary report and analysis of current status and work place barriers as constraints on the mobility of the white female work force.

Our general approach builds on the current framework for assessing barriers to work place mobility in general and special issues related to white women. Although there is no generally agreed theory of sex discrimination, two hypotheses about causes of female-male differences in status, dominate the literature on women in paid work: (1) that behavior, attitudes and choices of women facilitate or limit success in lifelong career commitment as well as "performance" and achievements in work, and (2) that external work place barriers limit access to opportunities and thus successful performance outcomes in complex organizational settings. In the first case, a large and expanding body of research has debated whether women make choices which either fail to prepare them for careers (i.e., education , work) or behave in ways inconsistent with traditional patterns of male labor, making them less competitive or committed to work outside the home. Psychologists, social psychologist and labor economists have all considered these hypotheses with a range of contrasting results. External and "institutional" literature also includes a range of social science discipline emphases and consideration of such factors which restrict mobility as internal labor market processes, system structures which influence behavior and finally, the influence of informal decision making and work place culture.

Findings

The principal findings of the research include evidence on work place barriers and findings of the main determinants of success of white women reaching corporate executive status as a basis for our recommendations:

1. Lack of CEO Commitment Is the Principal Barrier in Women Reaching the Top of Corporate Hierarchies - CEO failures include: lack of goal setting and communication of commitments; failure to hold subordinates accountable for

nominating and developing talented women; and personal failure to assign women to high visibility task forces, crisis and problem solving jobs--the primary routes of promotion to the top.

2. Negative and Indifferent Behavior of Senior Managers and Use of Promotion Systems Are Key Behavioral and Structural Barriers to the General Advancement of White Female Managers - Behavior of superiors through performance appraisal, job assignments and recommendations for promotion are key barriers to advancement of white women managers and professionals into mid-management and into upper levels.
3. Structural Barriers Are Mainly Functional Job Assignments and Promotion Processes - White women face barriers in traditional corporate functional organization and job groups which incorporate career ladders. Such systems are frequently closed, sex-typed, hostile to female managers and obsolete in responding to new management styles such as teamwork and more flexible work organization and family responsibilities.
4. Senior Women Who Reach the Top Attribute Achievements Principally to Individual Effort and Limited Support of Mentors, CEOs and Family - Contrary to myth, characteristics and attitudes of high achieving women are that they are well educated, highly committed individuals, with high satisfaction in work achievements, and success in managing personal and professional lives. Most have achieved through visibility in an industry rather than a single company, with lateral as well as vertical movements.
5. Equal Employment Opportunity's Principal Influence on Mobility of White Women has been both direct in opening managerial and professional education programs, and indirect in negotiated court settlements in sex discrimination cases usually affecting lower status employees. Integration of managerial and professional

employment and corporate hierarchies, however, has yet to receive attention of policy makers, particularly in the executive branch.

6. The Closing of the Education and Work Experience Gap with Men by White Women Has Not Translated Into Higher Status, High Paid Jobs - Dramatic narrowing of human capital differences between men and women in education and in specialized and diversified occupation and career experiences has not resulted in more access to top jobs in business and the professions, nor in closing the male-female gap in compensation as demonstrated in studies of elite MBA programs.

Barriers to the advancement of white women are mainly the behavior and choices of senior corporate executives, although structural features of organizations play an important role which may increase with current massive structural changes in organizations, including what we define as corporate "upsizing" resulting from the consolidation of many mid-management levels and functional divisions. The failures of many recent CEO appointments in the country's best known corporations suggest that non-performance factors, including personality variations and internal political alliances and deals, are driving forces behind screening and hiring. In the executive suite, however, CEO commitment to advancement of women into senior positions was found to both work well and to fail as well, depending on the extent to which CEOs (1) established formal goals and timetables in top positions, (2) communicated throughout the ranks and held subordinates accountable, and (3) provided support for visibility and performance, particularly in special assignments, task forces and other high visibility activities on an equal basis with men.

There is general agreement that job assignments, conditioned by job groups and internal functions, are the main formal systems for promotion and career advancement, including into the executive suite. There are arguments that sex-typing of job groups and career ladders is a main barrier to promotion of women generally (Reskin and Roos, 1990; Bielby and Bielby, 1992) and that the criteria, process and outcomes of promotions into the executive suite, contrast sharply with those at lower levels and severely disadvantage women managers (Ferris, Buckley and Allan, 1991; Forbes and Peirce, 1992; Woody, 1991). Career ladder progressions differ widely, however,

from industry to industry and firm to firm, besides being subjected to the strategic change of "up-sizing" resulting in loss of several mid-management levels during the 1980's and 1990's. Job assignments are crucial in establishing potential movement on the "first rungs" on a ladder. The dominant experience of white female managers has been in assignments to less critical functions and those lacking clear, measurable output. A second structure which can assist in identification and commitment to women's progress is succession planning, particularly if such plans are incorporated into senior strategic staffing decision making. Although rare, when implemented, white women were identified in formal succession plans.

The evidence of women achieving the top executive levels of corporate America indicate that individual effort was crucial but not the only factor for their achievement. While a primary explanation was individual effort, opportunity was provided by the expansion of jobs in industry, particularly in the 1970's when civil rights enforcement was active. There is a need to understand more fully, however, how some industry traditions, such as retailing and banking, influence acceptance of women more than in others, such as telecommunications and manufacturing.

While research was dominated during the past two decades by theories about women's behavior as an obstacle to success in managerial professional roles, the behavior of white women has proved just the opposite, first with education and then with work opportunity, tending to constitute a rising "demand." In a short period since 1964, white women nearly closed the gap with men in education and experience. Further, many choices, which in the past were cited as an obstacle to the success of white women in the work place such as family responsibility patterns, have effectively disappeared with increased opportunity and economic growth. But at the top executive levels of business and professional organizations such as health care and law, executive suites remain overwhelmingly white and male, while white women remain low as a proportion of the total in managerial and professional staff pools and are frequently pigeonholed into less demanding, less powerful positions. The domination of white women's employment by staff and overhead "assistant" positions and the absence of line positions with lucrative stock options and bonuses, explains much of the compensation differences between executive women and men. It

raises questions, however, about the extent to which promotions are based on merit and capacity for high level performance.

Finally, we found that during the 1980's, the public policy role was reduced, despite early successes as mediator between individual workers and work place barriers. The decline in enforcement resulted in a visible slowing of expansion of white women to top positions, as well as lags in closing the compensation gap. There may also be lags in perception of the importance of integration of leadership in business and the professions, compared to opening lower ranks. In part a public policy commitment to the top should be cast in terms similar to that of the 1960's, when the space race with the USSR was conceptualized in policy as "crucial" to a future of technological innovation, talent and economic competitive advantage in the world. A second reason to support lowering of barriers at the top is the cost of bias to the individual and the corporation.

The costs of bias in the past have been assumed mainly to be absorbed by the individual. However, recently more attention has been devoted to costs to the corporation and to the economy. Company costs in wasted training, reduced productivity, under utilization of full potential and turnover have recently become the subject of discussion (Stuart, 1992) and cost to the economy of discrimination has recently also received attention (McCoy, 1994).

Recommendations

Recommendations based on findings are divided into (1) organization changes, (2) policy changes, and (3) changes in research agendas and data bases.

We have noted that corporate organizations share structural features which can help or hurt work performance and which may or may not incorporate discrete promotional systems. While promotional opportunities in organizational hierarchies have been substantially reduced as the result of structural change incurred during the 1970's (Stewart, 1993; Ferris, et.al., 1992; Bolt, 1989; and Ginzberg (ed.) 1989), research on promotion systems find that career ladders and opportunity may be reduced with structural change but still reflect a combination of company/industry business

functions, performance and market conditions.

An additional finding of research is that politics are intensified under at least two conditions: (1) where there is ambiguity in criteria for promotion and (2) where market uncertainty is less a factor dictating choice (Ferris, et.al., 1992). Affirmative action programs and other "fast track" development programs, however, are also frequently perceived as political, suggesting that organizations need to develop promotional agendas which address both the perception of "unfairness" of existing staff, as well as opportunity for women and minorities (Olivas, 1993; Jaynes and Williams, 1989).

The following summarizes five recommendations for companies, public policy and for the research community:

1. Communication of clear promotional ladders in the corporation. This includes the criteria for promotion, the responsibilities generally involved, and routes and actions which best achieve these. Management should develop and communicate clear procedures to reduce use of interviews and other subjective biases as the basis for promotion.
2. Incorporation of executive staff planning and development in corporate strategic planning activities to reduce "discretion" and provide openings to female and minority candidates. Most planning involves executive succession plans and only sometimes (e.g., Exxon) includes mid-management levels where most female and minority managers and professionals work.
3. Integration of affirmative action and "fast track" programs in mainstream staff development. This will assist in developing better support at all levels for diversity and reduce misinformation about the selection criteria, process and outcomes. Affirmative action programs can be strengthened to include high performance individuals and state of the art executive recruitment and development, not just entry level and/or "filling out numbers" from current female and minority staff.

4. Improve staff development programs to include assessment centers and multiple ways of demonstrating performance and visibility for women, including such traditional means as task forces, special assignments and rotational assignments, and non-traditional strategies such as corporate board appointments of a female or minority to represent staff interests in corporate decision making.
5. Development of foundation sponsored research to document and analyze costs and benefits to the firm of promotions and barriers to women reaching top positions.

A second set of recommendations is for federal policy makers particularly concerned with improving the management of equal opportunity and promotion success for women and minorities in corporate settings.

Two distinct approaches are recommended, one aimed at streamlining regulatory processes and one aimed at creating incentives for better management of the affirmative action strategies and increasing the rate of promotion of women into upper management positions.

1. Streamlining Affirmative Action Reporting - The Current EEOC-1 process should be analyzed with the input of a sample of business human resources setting of small, medium and larger companies to facilitate and improve reporting results and develop methods to coordinate business planning efforts with requirements for compliance.
2. Improvements to the current "glass ceiling" audit process to include special attention to senior level appointments. Included might be an effort to better identify the process and participants in decisions; the process of reviewing candidates; how appointments relate to strategic plans and other structural changes in the organization; and ways to assist CEO's in exchanging successful experiences in diversifying top positions.
3. Examine the potential for the development of market incentive strategies (through the Office

of Federal Contract Compliance Programs) for better compliance of federal contractors, such as rewards for meeting goals ahead of time tables, innovation in planning for top positions and other improvement in current promotion systems and practice.

4. Consider development of stronger cooperation with other federal agencies (the Departments of the Treasury, Commerce, Energy, and Transportation, for example) for promoting standards and improvements in promotions and diversifying staffing in relevant industry.

A final set of recommendations is to improve the research agenda and data base of managerial and professional labor to permit baseline definitions and ongoing monitoring of a diversified managerial and professional labor force and of the occupational structure and content of managerial and technical work itself. With the expansion of a global economy and increasing demands for skilled labor, government forecasts show principal growth in demand and gaps in managerial and professional labor categories. This underscores the importance of federal agencies in taking the lead in setting research goals related to future labor needs and providing a framework for development, training and education of skilled labor. The research agenda should include special attention to leadership development which responds directly to the increasing diversification of the talent pool for American labor. As in the 1960's when the U.S. was confronted with demands for scientists, the 1990's require a fresh look at the 21st century requirements to shape government education policy and evolving industrial growth policy. Second, current data bases fall short of documenting how women and minorities are distributed in managerial and professional jobs and the level and characteristics of jobs at relevant status positions and pay in the economy. With the massive recent changes in the numbers of managerial and professional jobs as well as changes projected for the future, industrial planning in the U.S. will require far better data bases than are currently available. Such data will also help fill needs of private sector planning for human resources and skilled labor.

1. Set a basic research agenda for the human resources community - Labor research has lagged seriously, as have efforts to examine the changing nature of work, work systems and organization, despite massive demographic shifts, diversification in future work forces and

rising demand for a flexible work place. Setting a basic research agenda will help improve government labor and education policy, provide basic sources for private industry planning, academic research and other audiences.

2. Carry out improvements in standard data bases, particularly U.S. Census series, to improve definitions of labor sub-populations by characteristics, particularly minority sub-populations. A high priority should be placed on identifying demographic characteristics of principal labor groups, as well as monitoring trends, changes in labor force composition, occupations, industrial categories and other relevant work and work place data.
3. Coordinate an ongoing exchange of information and research findings within the public sector, between state, local and federal government agencies, as well as other interested constituencies concerned with managerial, professional and technical labor.

The full report summarizes our literature review, census data analysis and findings on the work place barriers to the white female labor force in four general parts: a framework for analysis, which reviews current theories on women's careers and barriers to successful outcomes in the work place; an examination of current U.S. Census data, particularly the Current Population Census distribution of white female managers and professionals; and an examination of current research on several aspects of women and barriers; and a summary of research findings and recommendations to policy makers and other relevant audiences, including corporate management and the academic research community.

II. FRAMEWORK FOR ANALYSIS: THEORY, TRENDS AND HYPOTHESIS

The research analyzing work status, careers, work contributions and work place rewards has been focused less on specific labor groups such as white women, or on problems associated with discrimination, than on evolving models which link human resources to economic productivity and/or organizational performance and stability. Moreover, until the 1960s, research and public policy addressing discrimination in the economy and the work place centered mainly on race and particularly the status of black men in the work force. Title VII of the 1964 Civil Rights Act and Title IX of the Education Act of 1972, however, marked a turning point providing a legal basis for the status of women and discrimination based on sex to receive more serious attention in economic theory, labor analysis and social theory. Initial work in the U.S. and Europe focused on labor force participation of white and nonwhite women. Women were considered to be only marginally committed to work and much women's work was in low-productivity jobs and in part-time work. Only recently has research turned to the work place and higher level status of women as "mainstream workers." Path-breaking work by Kanter and Henning and Jardim in the mid-1970s signaled change. In addition to documenting women's changing roles in organizational settings, educational choices and achievements were being documented. Finally, by the 1990s, women were beginning to be considered as "underutilized human capital" in managerial and technical fields, as well as in the labor force in general.

The theoretical and applied framework for assessing work place barriers for white women can be divided into three distinct parts: (1) social psychology, including motivation and behavior based on theories of personality, socialization and gender (2) labor theory and economics (3) sociology of organizations, including management sciences, industrial psychology and industrial relations. Each has evolved somewhat separately following both discipline patterns and applied and policy interest in women managers and professionals. We discuss these separately for their impact on barriers to women's opportunity with specific reference to leading research findings.

Social Psychology and the Individual Behavior Perspective

Some of the first real work analyzing women's careers and work undertaken in the 1960s and 1970s contrasted male and female attitudes and behavior in an effort to link achievement with personal characteristics. Influenced by a tradition of "functionalist" theory in sociology and emerging fields of applied social psychology, this research accepted women's domestic roles and generally ignored the work setting as an influence on the behavior of women. An important hypothesis underscoring this work was the concept of gender socialization which reflected sociologist Talcott Parsons' view that women's work and roles in the home reflected a key social function of preservation of family (Parsons, 1947; 1960). Pre-employment institutions such as family and schools and social roles given children were identified as key in shaping lifelong attitudes towards work outside the home (Joffe, 1971, pp. 467-75; Hochschild, 1971, pp. 1011-1029; Maccoby and Jacklin, 1974; Weitzman, 1980; Gilligan, 1982). Some research suggested that female roles were shaped early on in play which emphasized family, nurturing and relationships (Maccoby and Jacklin; Gitelson, Petersen and Tobin-Richards, 1986, pp. 8:411-19), while boys' roles, by contrast, emphasized external influence, power, influence and things (England and Farkas, 1986). Nontraditional occupations such as engineering and science were viewed as typical of the dichotomy; engineering, for example, was "thing oriented" in contrast to traditional "people orientation" of women (Rossi, 1965 pp. 1196-1302; Hacker, 1965, pp. 341-353; Perucci, 1970, pp. 245-259).

Management was viewed early on as "nontraditional" work for women, much like the fields of law, medicine or science. Masculine models dominated traditional scientific management theory and controlling, directing and limiting actions defined managerial behavior and the characteristics of the ideal manager. Management behavior and the manager's role thus contrasted substantially with expected behavior of women which, as late as the 1960s, still reflected values inherited from the 19th century which dictated rigid rules for female behavior based on domestic activities and focus. While 19th century reformers worked to "protect" women from factory work, they also took away rights such as property ownership, rights to sue and custody of children. At the same time, upper class models ignored both individual motivation and satisfaction of women in pursuing

professional careers and the real needs of working class women for adequate earnings from work.

Following passage of the Civil Rights Act in 1965, studies of women in the work place turned to focus on managerial and professional careers frequently using the framework of social psychology and role theory. According to this thinking, women were less likely than men to choose managerial careers and those who did were either products of "accidental career tracks" where a boss or mentor promoted them from secretarial jobs (Hennig and Jardim, 1977; Korn/Ferry, 1982) or deviants with nontraditional lifestyles such as scientists, artists or engineers. A key assumption of the gender socialization thesis, however, was that behavior and attitudes shaped in childhood continued to influence decisions throughout life including education and work choices and performance. Challenges to gender role socialization also emerged quickly based on observations of barriers impeding choice for women. One finding, that career preparation itself, particularly education, arbitrarily excluded women thus making many careers outside the reach of women's "choice." Concurrently, research which started to test the attitudes of matched pairs of men and women managers beginning in the 1960s, found little difference between the sexes in motivation and effort on the job (Rapaport and Rapaport, 1965). Notwithstanding decades of similar findings, the research bias inherited from gender socialization and individual behavior continues to influence the study of women and minority professionals (Wallace, 1989).

1. *Evidence on Institutional Socialization: Early Schooling and Higher Education*

With increased attention to sex role formation, researchers turned to a neglected area of institutional socialization, the elementary and secondary school experience. Work addressed the differences in role socialization between girls and boys. Investigations and summary of research by the Wellesley College Center for Research on Women and the AAUW in 1992 gained widespread national publicity by revealing the scope and impact of contrasting treatment of boys and girls in elementary school with negative consequences for the self esteem and school performance of girls (AAUW, 1992; Ireson and Gill, 1988).

With passage of Title VII of the Civil Rights Act of 1964, the need for equity and an end to

discrimination in post-secondary education received increased attention. College and university trends were evaluated and a major research project was undertaken by NSF beginning in the 1960s to identify and track university formation of PhDs, with specific attention to minorities and women (Vetter, 1981, pp. 1313-1321; Vetter and Babco, 1989). With major growth in non-traditional educational specializations by women, the impact of education on career experience became a major research interest.

Research on post-secondary education has focused on general trends in education of women, particularly in closing the gap with men; the growth in non-traditional specializations by women; and the impact of education on career experience. In undergraduate education, trends indicate that women have closed the gap with men in general and in many non-traditional specializations, shifting from traditional women's fields rapidly during the past decades. As an example, 40-49 percent of degrees in business and management, math and social science; 50-59 percent of degrees in agriculture and natural sciences, area and ethnic studies, liberal and general studies, life sciences, multi-disciplinary studies, and parks and recreation; and 60 percent of degrees in communications, education, foreign language, health sciences, law, home economics, psychology, public affairs and library science were given to women (Christiansen and Hertenstein, forthcoming 1993). These authors note that the only fields where women were less than 30 percent were engineering where women's enrollments were 13 percent and military science where they were 13 percent.

Despite the expansion of women in the mainstream professions of management and science, women tend to concentrate in "women-oriented" fields. For example, women management students are more likely than men to concentrate in accounting and in human resources and less likely to specialize in finance, marketing and general management. In the sciences, women are overwhelmingly concentrated in biology and life sciences, while men concentrate in physical sciences and engineering. Finally, women remain more clustered in the traditional women's fields of humanities and literature, languages and education than men.

A number of analysts have examined how academic and professional experiences influence

career choices and work decisions of women. Engineering education specializations have received considerable scrutiny because of the low interest exhibited by women in taking engineering courses. According to recent studies, the culture of engineering schools improved vastly during the 1980s to favor women and the problems of interaction with male faculty and students, seen as a major problem in decades previously, declined as well (McIlwee and Robinson, 1992, p. 50). Women engineering students were also found to be generally better prepared academically than male counterparts, performance was higher and they were more likely to be represented in honor societies. But despite this superior academic performance, women students were found to continue to be dogged by feelings of a lack of technical competence and stress during college years (McIlwee and Robinson, 1992, pp. 48-49). The changes in engineering schools which resulted in improved enrollments of women, however, have not translated into major changes in the composition of engineering specializations in the work place. McIlwee and Robinson in fact suggest that perception of a "gender unfriendly work place" may continue to be a deterrent to women's academic choice of engineering specializations.

Other education programs evaluated for their impacts on women's status include the professions (law, medicine), business education, science and some traditional women's fields such as library science. In fields where educational curriculum is strongly influenced by external professional organizations and interests such as law and medicine, the education experience becomes very much a prelude to work place socialization. One example, medical school, is described as essentially a continuum into the field. Medical schools typically place enormous emphasis on the personal qualities of potential recruits, often interviewing 700 to 800 objectively qualified applications to choose a class of 100 students, more than any other professional or graduate school (p. 122). While there is little actionable discrimination in medical school admissions, training policies and practices (unfair grading, failure to refer or recommend women for further training or jobs) that would block women from specialization, a "discriminatory environment" was found, with elements ranging from demeaning jokes and other communication at the subtle end, to deeper problems of communication of "male trait desirability" and "devalued female traits" according to Bourne and Wikler (1982, pp. 111-122).

2. Labor Theory and Economics

Neoclassical labor theory devoted little attention to women as a labor force, electing instead to emphasize women's economic contribution as limited to adjunct workers or household consumers (Wallace, 1986; Blau and Ferber, 1986, pp. 33). Women were traditionally considered "outside the labor market" in analysis, with the exception of young unmarried women. Most young unmarried women workers were employed in non-career clerical or blue collar jobs which particularly grew during wartime 1940s (Goldin, 1984; Davies, 1975). A few middle class women were trained and employed in lower status professional occupations, such as school teachers and nurses, which were largely extensions of women's roles in the home (Blau and Ferber, 1986, p. 33).

Theory which explained the status of women argued that, based on human capital theory, women's lesser education and skills were reflected in low productivity jobs or in intermittent employment which permitted women to exit from the work place for family responsibilities. Thus, women were accorded less attention in work place demand and, accordingly, played a generally marginal role in the mainstream work place (Blau and Ferber, 1986, p. 33). Such outcomes as occupational restrictions or concentrations were explained by "women's preferences and tastes." Challenges came to the almost universally accepted theory mainly from trends in educational attainment, the rise in women's consciousness during the 1960s and, finally, what Bergmann points out as a clearly "rising demand" for women's labor reflected in rising wages (1986). At the same time, however, a virtual closing of the gap in education and skills between men and women during the 1970s and 1980s did not result in an expected narrowing of the aggregate wage gap (Blau and Ferber, 1986, p. 217-219; Blau, 1984; England, 1982, pp. 358-370; Corcoran, Duncan and Ponza, 1983). Moreover, in higher status professional and managerial jobs, the gap tends to be even greater than at lower status clerical and blue collar jobs. (See Table 1 below from CPS, 1992.)

The main challenge to neoclassical theory emphasizing human capital was based on theories of discrimination and occupational segregation. This explained the continuing wage differentials between men and women, as well as the limitations on mobility and wage gains in "women's jobs."

Researchers found that women were more likely to work in a narrow band of occupations, "women's jobs," compared to men (Tieman and Hartmann, 1981; Reskin and Hartmann, 1986; Malveaux, 1982), that only modest decreases in occupational segregation occurred as the result of training and experience (Beller, 1984; Beller and Han, 1984), and that women's jobs tend to undergo a "tipping" trend, becoming re-segregated when the number of women increase in a job (McIlwee and Robinson, 1992, p. 8). Other findings were that occupational segregation extends beyond compensation differences to training, promotion and access to power and opportunity (Kanter, 1977; Harlan and O'Farrell, 1982; Epstein, 1983).

Other findings followed detailing women's wage and occupational restrictions. Ghettoization of women into specific occupations was found to translate into isolation from career ladders and promotional opportunities and to explain much of the gap between male and female wages. Research on internal labor markets or systems which limited the normal response of supply and demand forces were seen as a model for institutional processes which aggregated whole groups of jobs into isolation from other job groups, thereby reducing opportunity (Hartmann, 1987, pp. 59-97; Osterman, 1979, pp. 451-64; Osterman, 1984, pp. 163-89). The cause of occupational segregation is still under considerable debate and may reflect efforts to avoid paying different wages to race and sex groups in the same occupation or work group (Blau and Jusenius, p. 19) or the content of new jobs and the rising demand for women as a high quality work force preferred over men because of more realistic expectations for compensation and other rewards in economic downswings.

Institutional and Organizational Analysis

Institutional perspectives reflect distinct lines of thinking related to conceptualization of complex organizations as social units, comprising behaviors, roles, rules and processes and those related more to non-economic factors influencing market processes and decisions. Bureaucratic organization theories, following Weber, have been concerned primarily with a "functionalist" perspective, which emphasizes the meritocratic system, objectivity in organization and rules and a

membership responding mainly to external demands and organizational preservation. As in other social theory, little attention until recently has been paid to the problem of exclusion of women or minorities in bureaucratic settings, or behavior related to discrimination.

Mobility in the work place is considered less a function of organizations and employment systems than related to social status outside the work place. Indeed, American sociology traditions connect social status attainment to family economic and social status, subject to change over time. Individuals move up or down based on inter-generational change in occupations, usually determined by the social and economic background characteristics individuals bring into the labor market, rather than by effort in the labor force acting independently (Blau and Duncan, 1967; Borstein, 1976). Beyond this basic concept, U.S. social theory is divided between functionalist-integrationist perspectives which argue that status differences function to maintain a division of labor in the economy, and social conflict theory which argues that basic divisions between capital and labor reinforce contradictory interests and social conflicts.

Management and leadership theories reflect classical social bureaucratic theory and the inheritance of sociologist Max Weber's "ideal bureaucracy" which emphasized a normative ideal, "scientific" objective decision making, and a generally masculine-paternalistic view of economic organizations. The growth of the professional manager, with the rise of the contemporary corporation and separation of manager from owner, spurred the concept of a "scientific" approach to management best outlined by Frederick Taylor. Taylor's scientific manager thesis proposed a masculine model for managers with behavior characterized as dispassionate, unemotional, forceful and controlling. While the idea was to foster cohesion, motivation and productivity, it also essentially distrusted human behavior and genuine commitment to work .

The scientific manager model was widely criticized, most recently for its influence on the MBA program, for ignoring group processes and for de-personalizing relations deemed essential to foster cooperation and teamwork. Challenged by Mary Follet and Douglas McGregor beginning in the 1920s, the scientific manager and taylorism were denounced by the "human relations" school. Human relations theory advocated working with groups, reducing individual competition,

encouraging teamwork, and redesigning work content and organization to motivate workers and increase productivity. Leadership based on aggressive, masculine traits was also challenged in theories proposing that work situations were more likely to dictate success or failure than characteristics of the leader.

Labor theory has considered institutional or non-economic effects of the work place, such as management practices, work organization, promotional systems and other rules, for their impact on work status and compensation. One important impact assessed has been on different employment, occupation and wage outcomes for blue collar, white and minority men and women (Doringer and Piore, 1971; Gordon, 1982; Gordon, Edwards and Reich, 1982; Hartmann, 1987; Williams, 1988). To simplify what has become a complex analysis, dual or two tier labor markets, hypothesize a post-industrial labor market which is divided between high paid, high status employment and more marginal employment, corresponding to very different employer capital organization, size and market profitability (Gordon, et al., 1982). Observation of markets dominated by a few very large organizations such as the automotive industry, characterized by high capital investment, productivity, relatively stable, protected market environments, supported the thesis that higher compensation, unionization and employment stability were correlated and further permitted a second phenomena, the exclusion of particular work forces based on socially constructed characteristics, particularly race and sex. The concept of market segmentation constituted a further refinement on the concept by finding that internal structures which sometimes simulated restricted labor markets were organized within single industrial organizations, firms, or industry. Hiring patterns in such "markets" might then include deliberate hiring based on race or sex, resulting in essentially segregated markets (Malveaux, 1982; Blau and Jusenius, 1976, Osterman, 1984, Hartmann, 1987).

At the same time, the traditional neoclassical hypothesis that "human capital" and an open market bidding process operated for labor as for other inputs into production was separately challenged for relevance to segmented market and other conditions such as persistent unemployment and underemployment rates (Williams, 1988; Darity, 1982; Bergman, 1982). The hypothesis of institutionally caused labor outcomes held in common an assumption that internal or

restricted labor markets, resulting in the segregation of labor groups, particularly white and minority women work forces by occupation, were the result of management-instituted factors such as hiring rules and work organization and thus constituted barriers or interference with market response to labor supply and bid prices by available workers.

1. *Analysis of Barriers*

A number of theories relate specifically to institutional barriers which helped in defining the evolving status of women in organizations. Included are three which can be briefly mentioned: (1) "tipping" theory (2) "tokenism" and (3) discrimination cost-benefit theory. Tipping expands the concept of occupational segregation and says that as women start to dominate a job or sector, suggesting when jobs become "woman's jobs," wages tend to fall (Malveaux, 1982; Blau and Jusenius, 1976). Harlan and Weiss found contrasts between women-dominated sectors in the treatment of women; the more women in a job, the more barriers to mobility (1981). While Woody (1992) found that wage depressing effects extended to industry. According to these findings, based on Current Population Census data, female intensive industry, or those employing women as more than half the work force, such as retailing and banking, have lower pay structures than industry where few women or less than 20 percent of the work force is female such as transportation and durable goods manufacturing.

In one of the most extensive research efforts on the process of "tipping" or gender work assignments change, Myra Strober and Carolyn Arnold found that when large numbers of women enter a formerly all-male occupation, the job category "tips" and becomes virtually all female. Such change is analogous to "white flight" from a neighborhood when a black family moves into an all white neighborhood (1987). Strober and Arnold further suggest that while some reduction in segregation in the management classifications and professional occupations took place during the 1970s and 1980s, the index of occupational segregation for women stood at about 0.65 in 1987, or the same level it was in 1900. Fully two thirds the U.S. public would have to change jobs to reduce occupational segregation (p. 108). Tokenism has been extensively described in literature as a barrier which can be both deliberate by employers to "discourage" or "set up" minorities and women for

failure (Fernandez, 1982), or as the outcome as it affects the token's performance (Kanter, 1977).

Cost-benefit discrimination analysis assesses the economics of discrimination by applying a market model (Becker, 1960). The model assumes those with tastes for discrimination would be rewarded in the work place with higher pay, reflecting restriction in competition for jobs, and, at least in the short run, would lose by the "opening up of jobs" to more competition. Assuming that the winners outnumber the losers, a discriminatory system prevails (Kaufman, 1986). A variation of the cost-benefit model is "statistical discrimination." This theory hypothesizes that in cases where numbers are too small to provide real evidence of performance, stereotypes of labor force behavior prevail and cause discrimination in hiring practices (Bergmann, 1986; Kaufman, 1986).

Curiously, despite a strong interest in market costs of labor, very little research has been conducted on the costs of discrimination particularly to the market place and employers. Only recently has some effort been made to measure firm costs, based mainly on the potential loss in judgments and settlements involving discrimination (Stuart, 1992; Gross, 1993), while broader costs to the economy have received even less attention (McCoy, 1993). In one case documented recently, costs to one firm of gender bias for 1988 totaled approximately \$15.2 million and were divided into five categories (coaching and mentoring; disparate treatment; transfers and promotions; turnover among management women; and turnover among non-management women) (Stuart, 1992, p. 76).

Presumably costs based on analysis of paired samples of men and women in positions with measurable outputs such as sales volume and dollar values, or professional productivity measures such as publications for university faculty, might provide some preliminary assessments of foregone costs where productivity of women meets or exceeds that of men and illustrates costs to the firm of discrimination in promotion decisions.²

2. Most costs currently estimated are costs to the individual of foregone wages or other benefits resulting from discriminatory hiring and promotion practices which are generally reflected in the awards of court settlements. (See Gross, 1993, for estimates of awards for a recent court settlement involving California-based Lucky Grocery Stores). More global costs to the economy of discrimination against blacks have been estimated by former Federal Reserve Governor Andrew Brimmer based on a combination of wage differences, wages and consumption foregone as the result of differential unemployment rates and other factors (McCoy, 1993). In the case of professionals, Merritt and Reskin (1992) used paired black women and men law faculty to measure different productivity based on publications and other academic output used as the basis for promotion in law school faculties.

III. TRENDS AND CORPORATE POLICIES: CURRENT U.S. CENSUS DATA AND SURVEY RESULTS ON WORK PLACE POLICIES

In principal, changes in the levels of employment of women managers reflect growth or decline in the overall demand for managerial manpower in the economy. Expansion in professional managerial jobs, in turn, reflects multiple economic factors, including business expansion, demographic change generating consumption patterns and the choice and behavior patterns of graduates entering the labor market. Studies assessing demand for college graduates and selected professionals (e.g., engineers, medical personnel) demonstrate that forecasting high end labor is a far from perfect science and more challenging than lower status labor. In the post-W.W. II period, for example, managerial and technical job growth was stable, suffered few layoffs and could even expand during periods of recession, although hiring typically followed business cycles. The late 1980s, however, marked a precedent as, for the first time in the long expansion period of the last three decades, layoffs were prominent in middle management, as well as in technical/professional jobs.³ Moreover, recent U.S. Census forecasts for professional and managerial personnel for the year 2020 based on leading econometric models, anticipate a slowing of growth in many professional occupations, reflecting a combination of productivity initiatives targeting change in functions in mid-management, white collar professional-led functions as well as the general flattening of corporate hierarchies with restructuring and market shakeouts.

White women increased their participation in managerial and professional occupations visibly over the past three decades, but by the 1990s, gains were starting to erode. The proportion of managers in the white female labor force grew from 9 to 13.3 percent of the total between 1984 and 1992, while the proportion of all white women employed as professionals grew from 15.7 percent to 17.7 percent over the same period (Table 1), reflecting the very high concentration in lower status professional jobs (Reskin and Roos, 1990).

3. For example, banking industry layoffs were particularly severe in the later part of the 1980s and 1990s, reflecting consolidations and industry shake outs, the S&L and commercial banking bankruptcies and technological change in the banking industry. See Richard Kindleberger, "Banking Leads Job Cut Parade." *Boston*

Table 1
MANAGERIAL RELATED OCCUPATIONS
1984 -1992
DISTRIBUTION WITHIN RACE/SEX GROUPS

RACE/GENDER	WHITE MEN		WHITE WOMEN		BLACK MEN		BLACK WOMEN		HISPANIC MEN		HISPANIC WOMEN	
OCCUPATIONS												
Managerial	14.1	15.5	9.0	13.3	6.8	7.8	5.5	6.7	7.3	7.0	5.1	8.2
Professional	12.8	13.5	15.7	17.7	6.5	7.2	11.4	11.2	4.9	4.9	7.7	8.8
Technical	12.9	3.5	3.3	4.2	2.1	3.1	3.4	3.5	1.8	2.0	2.7	2.8
Sales	12.2	3.3	13.2	11.8	5.1	5.1	6.9	8.0	6.5	7.8	10.0	10.1
Other	48.0	64.2	58.8	53.0	79.5	76.8	72.8	70.6	79.5	78.3	82.2	70.1

Source: Compiled from Current Population Census data tapes for 1984 and 1992; U.S. Department of Census, Washington, D.C.

a the same time, the proportion of white women in total managerial and professional jobs also underwent a change over the past decade. As Table 2 indicates, white women gained only slightly in reaching parity with white men in management jobs but surpassed white males in professional categories. According to U.S. Census Current Population Survey (CPS) data, between 1984 and 1992 the proportion of total managers who were white women expanded from 33.5 to 35.5 percent during a period when the white male share of total managers declined from 56.2 percent to 42 percent. By contrast, while the proportion of total professionals who were white men remained static, the proportion who were white female rose from 36.5 to 44.3 percent.

Because little actual analysis has been made of white women as a distinct labor force, and U.S. Census reports have neglected documentation of change in the higher status and paid occupational categories of managers and professionals, we preliminarily analyzed a special tabulation of Current Population Survey (CPS) data for six major race/sex groups for three March Survey years, 1984, 1988 and 1992. The results are summarized in the following pages in three parts: (1) general trends in managerial and professional status of white women (2) industry distribution of white female employment, and (3) compensation patterns.

TABLE 2
Changes in the Numbers of White Women
in Total Managerial and Professional Jobs 1984-1992

	Total Whites - 1984 - 000's			Total Whites - 1992 - 000's		
	Total All Races	Male	Female	Total All Races	Male	Female
Managers	7,641	4,293	2,558	8,510	4,231	3,026
% Total	100.00	56.18	33.48	100.00	42.31	30.26
Professio-nals	9,110	3,659	3,415	9,086	3,687	4,029
% Total	100.00	40.16	37.49	100.00	40.50	44.34

Source: U.S. Bureau of Census, Current Population Survey, 1984, 1992

Trends in Occupational Status for White Women Managers and Professionals

White women improved their status in management and the professions over the 1984-1992 period, although they continue to be over represented in "professional categories." Changes in the proportion of white women in total managerial jobs reflects changes in the characteristics of managerial jobs in the economy, as well as industry-generated occupation, function and compensation structures. Change in professional jobs reflect some of these factors, in addition to continuing, very high concentrations of women in traditional jobs of teaching and nursing which weight several industrial sectors. Of six race/sex groups we examined, white women ranked second behind Hispanic females in recent aggregate gains in management employment followed by Hispanic males:

% Changes in Management 1984-1992

White Men	7.2
White Women	47.7
Black Men	23.3
Black Women	35.0
Hispanic Men	43.4
Hispanic Women	128.6
Total Managers	24.5

Industry Variations on Employment of White Female Work Forces

The distribution of white women in managerial and professional occupations was examined using CPS data for 1984 and 1992 to determine the differences between the number of white female employees overall and those employed in management. Table 3 examines this pattern for major hiring by industry and indicates that white women are underrepresented compared to their

employment in manufacturing, retailing, professional services and business services. By contrast, however, they are at parity or more likely to be employed in management in several other sectors, notably the FIRE group and public administration, both significant employers of women, while in the remaining sectors have about equal proportions of women employed in the sector and women in management. The professional services situation has worsened over the period as white women's employment has become even more concentrated than ever, while the proportion of white women in public administration management jobs has declined although still constitutes a very high proportion of employment in the sector. In the finance, insurance and real estate group, and in public administration, two sectors where white women made gains in salary and status during the 1980s, by 1992, losses in managerial jobs were occurring despite the overall gains in employment of women.

Table 3

**CHANGES IN THE INDUSTRY DISTRIBUTION
OF WHITE FEMALE MANAGERS 1984-1992**

INDUSTRY	% TOTAL		%		%		%	
	1984	1992	1984	1992	1984	1992	1984	1992
Agriculture	1.1	1.2	0.5	0.5	0.4	0.4	0.8	1.9
Mining	0.4	0.3	1.2	0.1	0.3	0.1	1.1	0.5
Construction	1.4	1.4	1.6	2.7	0.2	0.1	0.4	0.5
Manufacturing	13.7	12.1	10.9	11.9	4.3	4.2	10.5	9.1
Transportation	4.2	4.3	4.4	4.77	1.1	1.4	2.9	2.5
Wholesale	2.6	2.8	3	3.6	0.2	0.5	0.4	0.4
Retail	20.3	17.4	13	11.5	2.3	2.2	1.6	3.6

F.I.R.E.	8.2	8.9	16.7	15.2	1	1.1	3.5	3.3	
Professional Service	36.2	41.4	22.7	36.1	84.4	84.7	72.7	72.4	
Business Service	7.1	5.7	5.2	5.8	2.7	2.2	1.3	3.4	
Public Administration	4.2	4.4	10.3	8.2	3	3.3	4.9	2.9	
% of Total White Female Workforce				9	13.3	15.7	17.7	3.8	0.1

Source: Compiled from Current Population Census data tapes for 1984 and 1992; U.S. Department of Census, Washington, D.C.

Trends over the period appear to reflect a general downturn in the gains white women made in management jobs during the 1980s.⁴ The proportion of white women in manufacturing and construction, for example, barely improved over the 1984-1992 period. The distribution patterns of white women in professional occupations were even more concentrated than managers relative to their employment in individual industrial sectors. Between 1984 and 1992, white females employed in professional services rose from 16 to 18 percent of the white female labor force. However, nearly 85 percent of all white women professionals were employed in just one sector, professional services composed mainly of health and education, a pattern practically unchanged since 1984. By contrast, approximately 41 percent of the white female labor force was employed in professional services. This domination of both professional jobs and general female employment by health and educational services, reflects the high proportion of elementary school teachers and nurses, rather than a diversity of professional roles, suggesting either continuing occupational sex typing of jobs; discrimination in other employment sub-sectors such as secondary education and

4. See Goodman, William, Stephen Antczak and Laura Freeman, "Women and Jobs in Recessions: 1969-92," *Monthly Labor Review*, July 1993, pp. 26-34, for a discussion of the distribution of losses between women and men during five recessionary periods from the late 1960s through 1991.; women's higher losses in the 1990 recession were attributed to the declines in growth of service producing sectors, although losses were still considerably less than those of men (p. 26).

college teaching or the continuing choices of women to enter traditionally "women dominated" professions.

Compensation

Compensation patterns for white female managers and professionals in selected industry show some of the negative impacts of disproportionate occupational and industrial concentrations compared to white men, as well as patterns of declining employment in managerial jobs. As the following charts indicate compensation varied substantially across occupation and industry groups. Moreover, the compensation gap with white men in 1992 was worse in industrial groups and occupations which were principal employers of white women than in those less likely to hire white women workers.

The narrowest compensation differentials were in public administration and other professional activities (which includes law, accounting, engineering, human services, design professions, etc.). (See Charts 1, 2, 3, 4.) Other narrow differentials were in hospital executive managers and health assistants, which are 80 percent of white male earnings. But high diagnostic occupations, which included MDs, were below 70 percent. In the case of public administration, managers, engineers, math and computer scientists were occupational categories where gaps were generally lower than average.

The widest male-female earnings gaps were in health, finance, insurance and real estate (FIRE) and in education which were all below 80 percent, and in national security. (See Charts 5, 6, 7, 8.) We found substantial differences within related sectors, as between hospitals and health management sub-sectors, in the case of occupations classified as "management related." In the hospital industry, women earned 85 percent of male earnings in management related jobs, while in health management (comprising physicians offices, group practices and nursing homes), women earned only 52 percent of male earnings. Although we could find no current explanation for these differences in research, one possibility is that hospital management jobs have higher status requirements in education and skills than health management jobs, reflecting higher complexity and

more public regulation and standards setting and monitoring. Interestingly, education, one of the largest sectors employing women, showed wide gaps in compensation in professional staff positions, mainly teachers, at both post-secondary and elementary-secondary levels. White females were also disadvantaged compared to men in administrative staff positions and in computer science jobs.

In summary, women generally fare poorly in areas where they are concentrated in significant numbers such as the FIRE group, health care and education. Only in hospitals and public administration did women start to reach parity with white men but in not one case did median earnings exceed 90 percent of white male earnings. These patterns are confirmed by other recent analysis, including that of Reskin and Roos in their case studies of particular industry (1991).

We found substantial differences within related sectors, as between hospitals and health management sub-sectors in the case of occupations classified as "management related." In the hospital industry, the women earned 85 percent of male earnings in management-related jobs, while in health management (comprising physicians offices, group practices and nursing homes), women earned only 52 percent of male earnings. Although we could find no current explanation for these differences in research, one possibility is that hospital management jobs have higher status requirements in education and skills than health management jobs, reflecting higher complexity and more public regulation, standards setting and monitoring. ("Natural scientist" could not be sufficiently identified and numbers are too small to draw conclusions.)

One of the key arguments for increasing the number of women in managerial and professional positions is demographic. Recent forecasts by the U.S. Bureau of Census show a decline in the proportion of white males entering the labor force (U.S. Department of Labor forecasts). Women and minorities thus will increasingly form the recruitment pool for specialized labor, as one recent analysis indicated, the principal justification for recruiting women and minorities (Christiansen and Hertenstein, 1993)

Chart 1

OTHER PUBLIC ADMINISTRATORS

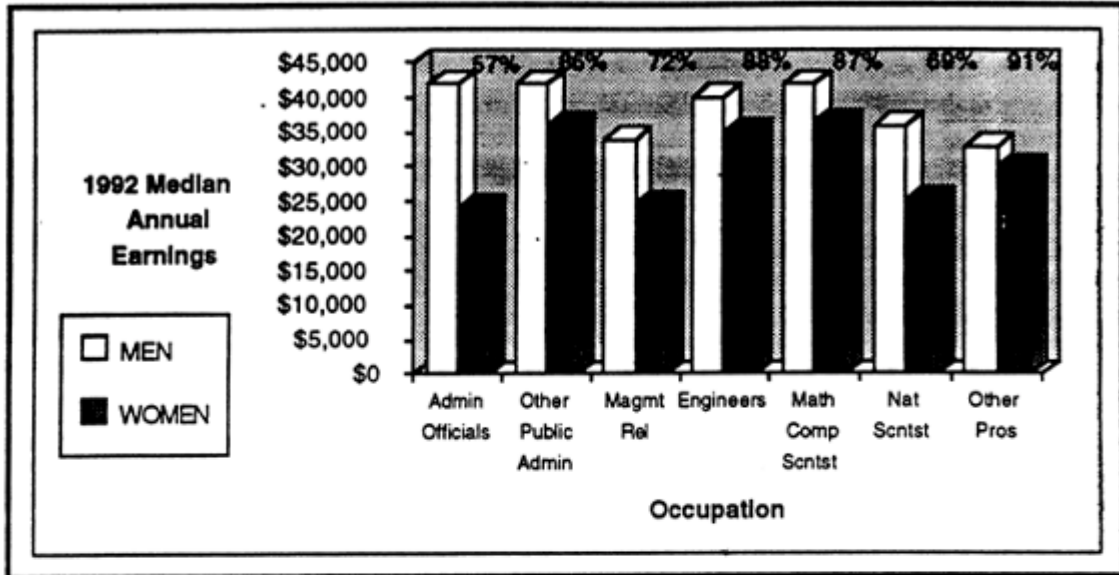
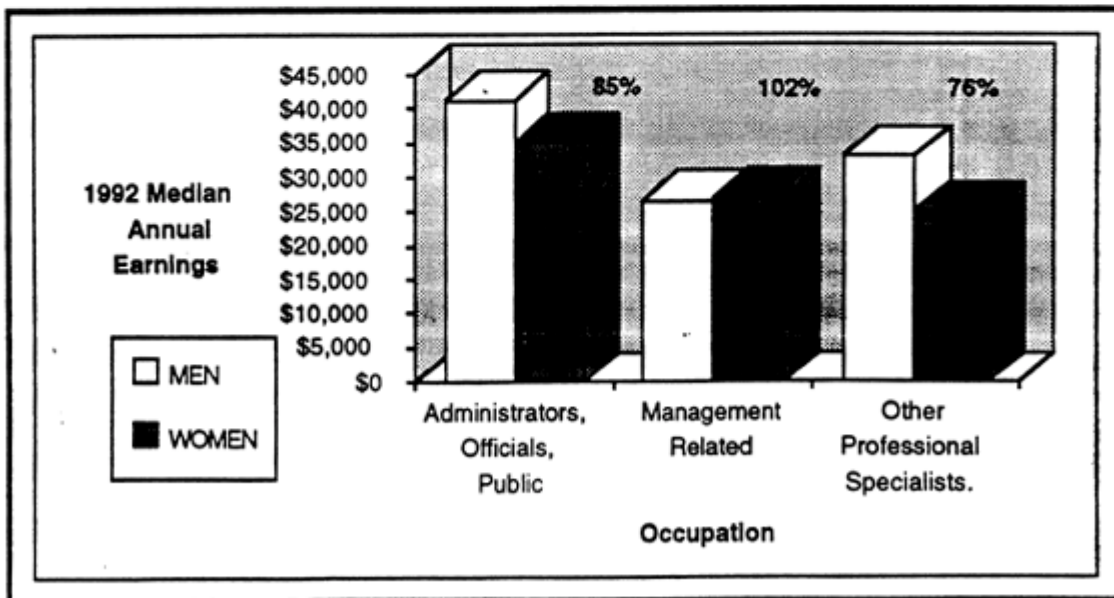


Chart 2

ADMINISTRATION /HUMAN SERVICE



Source: Compiled from Current Population Census data tapes for 1992: U.S. Department of Census, Washington, D.C.

Chart 3
HOSPITALS

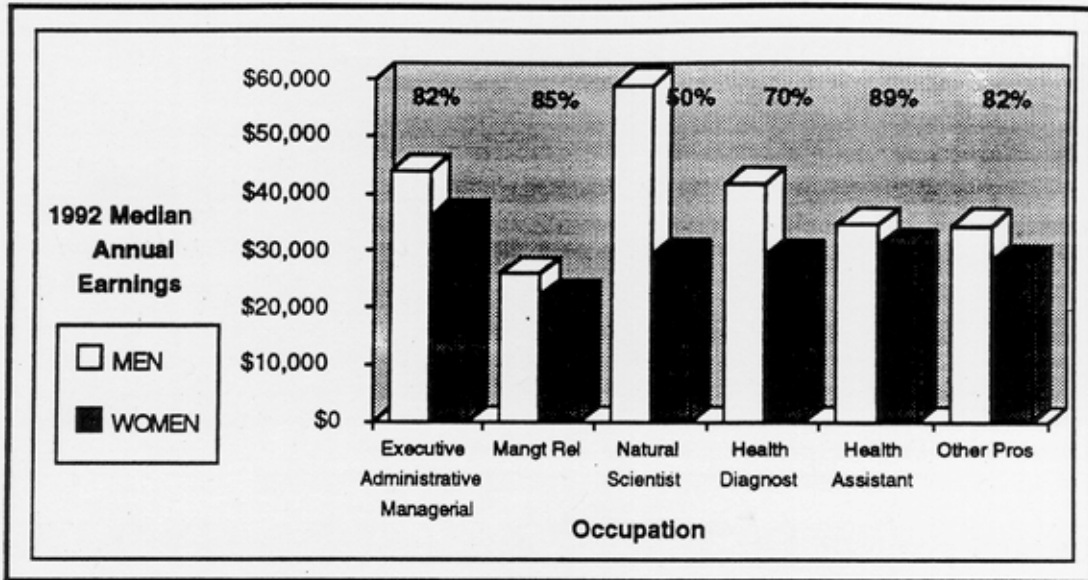
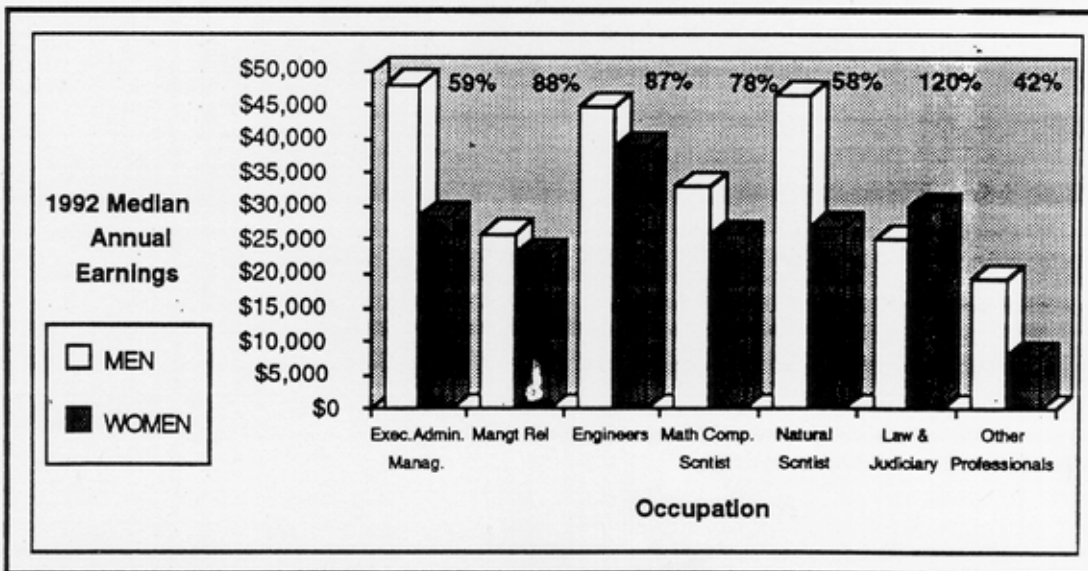


Chart 4
OTHER PROFESSIONALS



Source: Compiled from Current Population Census data tapes for 1992: U.S. Department of Census, Washington, D.C.

Chart 5

JUSTICE /PUBLIC SAFETY

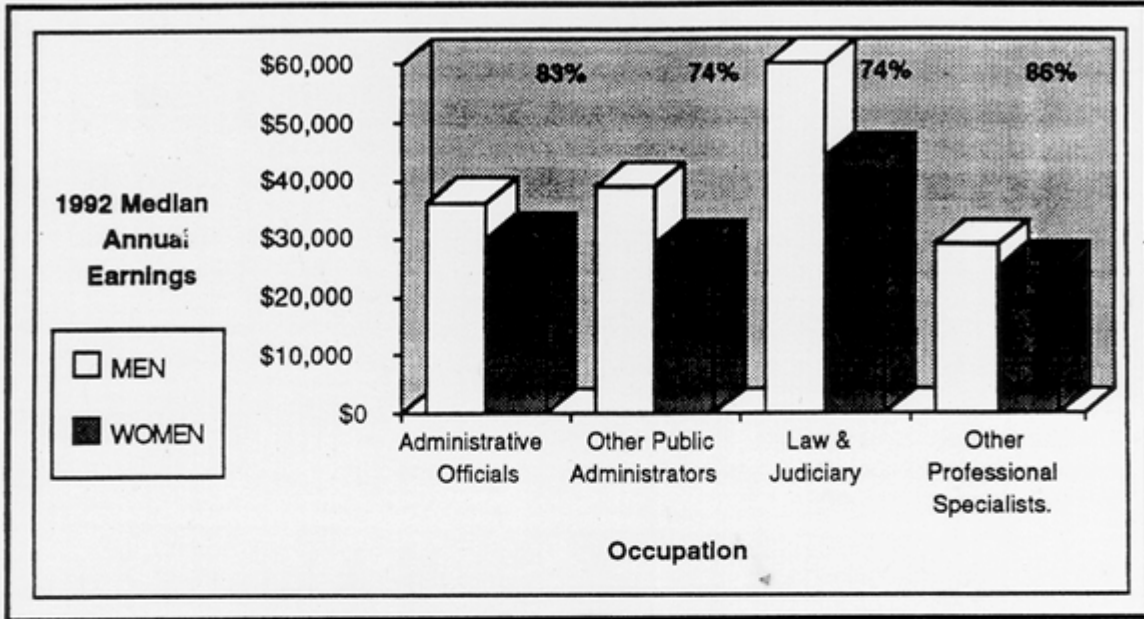
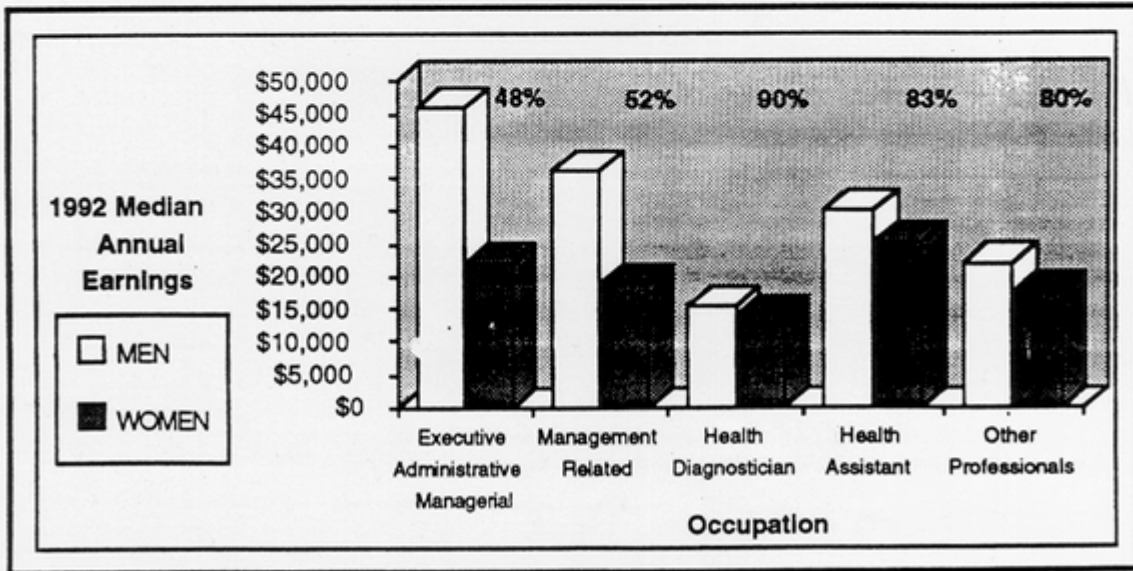


Chart 6

HEALTH



Source: Compiled from Current Population Census data tapes for 1992: U.S. Department of Census, Washington, D.C.

Chart 7
BANKING

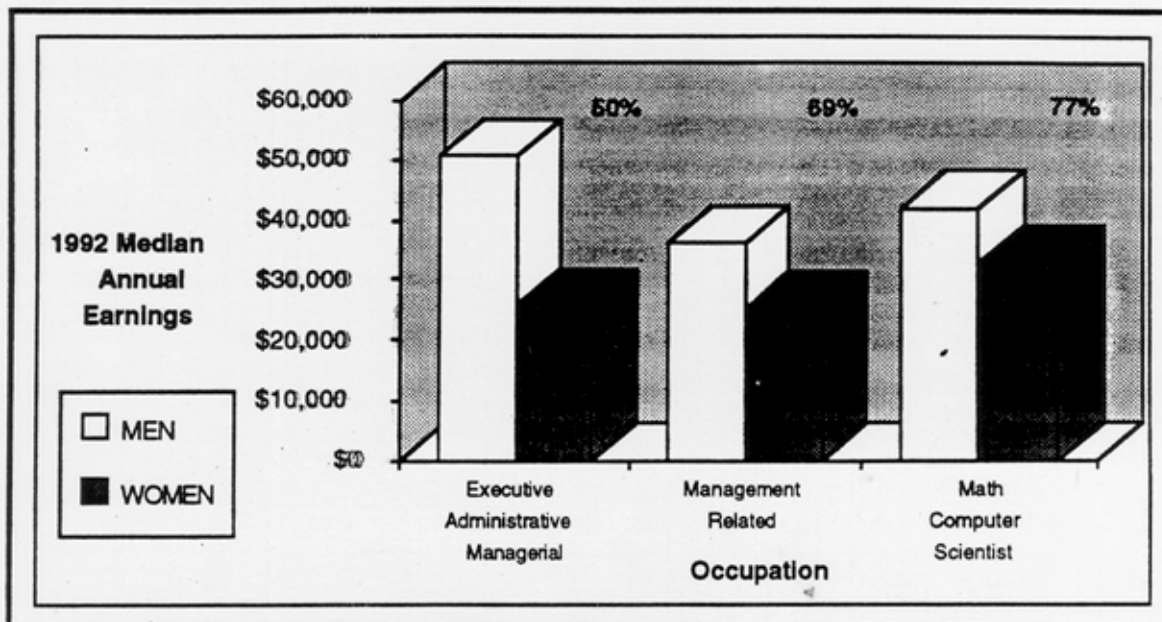
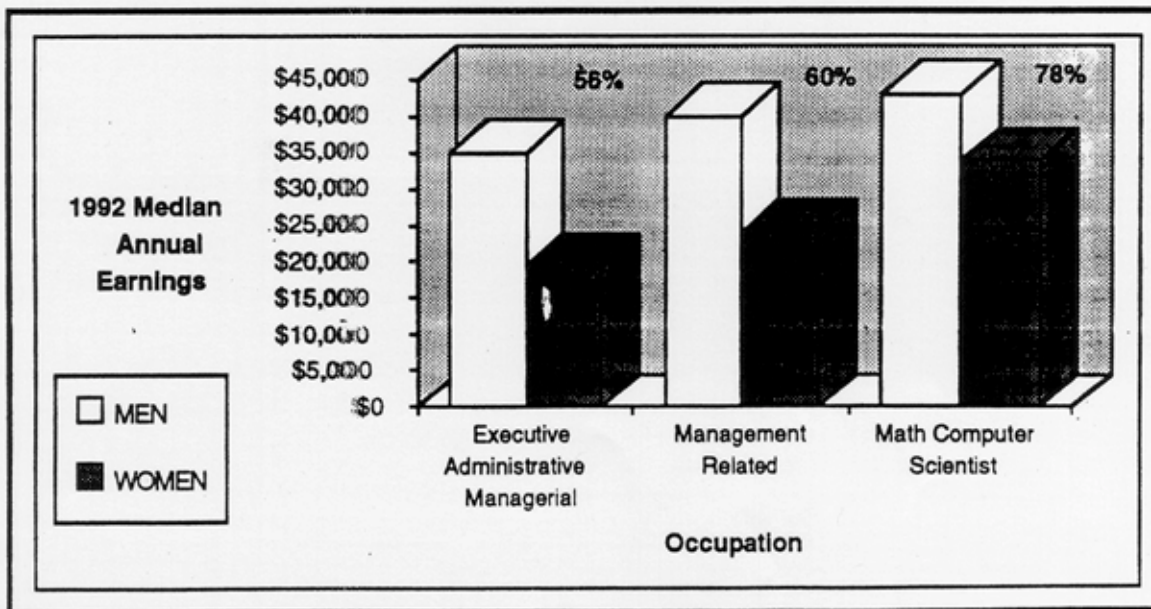


Chart 8
INSURANCE/REAL ESTATE



Source: Compiled from Current Population Census data tapes for 1992: U.S. Department of Census, Washington, D.C.

IV. REVIEW AND ANALYSIS OF CURRENT RESEARCH ON BARRIERS

Research on the extent and impact of work place barriers to the career advancement of white women has expanded rapidly over the past two decades and covers a wide range of methodologies and content. The following summary is divided into two types of analysis: 1) attitudinal and behavioral emphasis and evidence, and 2) institutional analysis.

Research on Attitudes and Behavior of Women

Research on women managers and professionals has been dominated by a focus on the behavior, attitudes and choices of individual women for careers and work. In addition, surveys have tested women and men's career commitments, satisfactions and experiences; examined perceptions of work place barriers and discrimination; and polled both sexes on the managerial style, personality and competency of women as managers and professionals.

Studies in the 1970s tested the widespread belief that the cause of failure of women to achieve in careers could be attributed to individual and self-induced causes. Personality characteristics examined as causes were so-called "female traits" such as passive behavior, emotionalism, a lack of self-esteem and self-confidence, and the fear of failure or fear of success (Horner, 1970). At the same time, work undertaken by researchers at the British Tavistock Institute in the 1970s for the British government, challenged female trait theory by scientific tests of the commitments and satisfactions of women. Using matched pairs of male and female managers, the Tavistock studies found essentially no difference between the sexes and concluded problems in advancement were probably related to causes other than female "behavior" (Fogarty, Rapaport and Rapaport, 1971). Other studies replicated this methodology with similar results. Matched pairs of male and female managers studied in a work setting in the U.S. by Ann Harlan and Carol Weiss in the early 1980s resulted in a close match in ambitions, commitments and satisfactions of men and women, but radically different experiences in seeking support for promotions by the corporate environment. The more ambitious women, in particular, were least likely to be supported for promotion and more likely to receive unfavorable ratings in performance reviews from bosses. By

contrast, less aggressive females were more likely to be promoted (Harlan and Weiss, 1981).

Other survey data tested the perceptions of men and women and found contrasting views on a variety of work, achievement and barriers issues. Highman polled a sample of 310 men and 373 women in a cross section of Fortune 1200 companies on problems and issues of women's managerial style and obstacles. Both men and women saw little negative in women's management style and supervision of others, for example. Men and women rated factors most important for getting ahead similarly. The top three factors were fitting in/people skills; qualifications, experience; and self-confidence, drive, hard work, etc. (Highman, p. 193). In assessing obstacles, both men and women agreed that male chauvinism and lack of qualifications were the top two problems. Men were more likely to find lack of self-confidence, assertiveness and commitment as an obstacle, as well as expectations of preferred treatment; women were more likely to find attitudes and lack of dedication as obstacles (p. 194).

Work and Family Issues

Much of the literature examining the role of women in the work place and the economy centers on the attitudes and behavior of women in domestic roles as an activity which competes with work, rather than on the attitudes, behaviors and performance of women directly related to market work. For this reason, the literature on women and work, compared to that describing male labor force behavior, is weighted towards consideration of women's non-market status as a cause of work behavior.

Women's attitudes and behaviors about work once they are in the workforce are best described by the research that investigates work-family conflict. The outcome of this research is directed to the corporate sector which seems appropriate as 50 percent of women with children under two years old work outside the home, but only one-third of all private corporations have maternity leave policies in place (Carey, 1992). It is suggested that this work-family conflict is stressful for men and women whether they are partners in a dual career relationship, single parents

and/or people with family responsibilities. The stress is expressed in higher health risks, loss in productivity, absenteeism, and high turnover. The challenge for the work place is to address the changes brought about by the increased diversity in the workforce and the accompanying emphasis on family values and quality of life that is laid on the work place.

Research has been conducted that evaluates the frameworks used to explain the connection between work and family. The review suggests that employees may limit their interactions in work or family life to accommodate the other. Susan J. Lambert concludes that the connection between work and family must be better understood so that the effectiveness of support policies for families currently used by corporations can be evaluated (p. 239). The need to better understand the connection between work and family has not disappeared. Today, both spouses in 59 percent of all married couple families are working and 80 percent of all women with young children will be working outside the home by year 2000. Productivity and absenteeism are issues reflected in a survey of 8000 workers in Portland, Oregon. It was reported that women with children below the age of 18 missed more days of work than women employees without children (Haupt, 1993, p.96).

Some researchers suggest a myth that seems to be perpetuated by the media is that working women's life span is endangered by the stress they experience seeking both a successful career and a fulfilling family life. Rosalind C. Barnett and Caryl Rivers suggest that the reasons for this may be backlash against women or indifference towards women (1992, p. 62). However, in a survey of 721 members of the American Women's society of CPAs, reported in 1990 in The CPA Journal by Teresa Tyson King and Jane B. Stockard, one-third of the women CPAs surveyed said they believed that accounting work had some negative affect on their marriage and marital status (1990). The data also reveal that overtime has a negative affect on one's marriage and marital status, and having children limits one's job opportunities. The difference in findings between these researchers suggests that the stress one feels due to the work-family conflict may be more prominent in some industries than others.

The work-family issues investigated by researchers seem to cluster in four groups: roles and relationships, benefits, work-family conflict, and remedies/corporate strategies.

1. Roles and Relationships

Researchers have discovered that the relationship between work and family affects both the way the marriage functions and parenting. Work stress causes depression and reduced concentration which impacts marital functioning and parenting, and depression alone affects marital functioning and job satisfaction. The researchers created a four-stage model to study how sexual satisfaction, general marital satisfaction and psychological aggression were affected by: job satisfaction, job security, ambiguity and role conflict (Braling and MacEwen, 1992, p. 573).

Berry suggests that society sees women and women see themselves as the primary care givers of children. She feels this is not going to change until women want it to change and demand that men take more psychological responsibility for raising their children. Some research has looked into the differences in roles that partners in dual career relationships assume. In a study of dual career couples, researchers Rekha Karambayya and Anne H. Reilly reported that women restructure their work to fit family demands more often than men (1992, p. 585). Couples with high levels of family involvement show lower stress and greater marital satisfaction. Another study of dual career couples indicated that those with young children shared child care. However, it was discovered that women performed more of the child-care tasks than men but the women were satisfied with this situation. Different criteria for child care were used by parents in academia and parents in business. Long hours in academia determined that the parent responsible for academics and husbands' work hours, income and education determined the child care responsibilities (1991). A question this study raises is what factors are women with young children responding to that they appear to find it difficult to share their traditional sex roles as mother and homemaker with their husbands. Both these studies suggest that women cling to the sex role stereotypes about their roles and responsibilities.

2. Benefits

In a special issue on work and family in Human Resource Management (Fall 1992), a study

by Charles S. Rodgers, "The Flexible Work place: What Have We Learned," suggests that a flexible work place is a work system issue and not one that a corporation should address just for women. Judith G. Gonyea and Bradley K. Googins in their research suggest that more child care assistance will not increase productivity. They conclude that the corporate agenda needs to address head-on the quality of work life and better understand how organizational effectiveness and culture impact the quality of work life. On the other hand, others believe that companies which help their workers balance their personal and professional lives are rewarded with more productive employees (Business Week, June 28, 1993).

In this same special issue of Human Resource Management, Sue Sheelenbarger's research is reported as "Lessons from the Work place: How Corporate Policies and Attitudes Lag Behind Workers' Changing Needs." She reveals that despite publicity, discrimination in the work place still exists around family needs and work-family conflict is clearly seen as a woman's issue. Even though employers have responded with family-friendly programs, quality of life is still an issue for employees. She suggests that productivity will decline and workers will leave their jobs unless child-care support, pregnancy and family leaves and other concessions are made to address work-family conflict issues. New legislation in Congress should alleviate some of this problem. However, from this it is clear that further research should be undertaken to discover the impact on family-friendly policies in corporations on productivity and quality of life in the corporation.

3. Work-Family Conflict

Work-family conflict research to date focuses on the differing impacts of this conflict on men and women in general and on dual career couples. Much of the research on work-family conflict that has been done in the past several years concludes that with more career mothers there has been an increase in the effect of stress on family relationships that is brought about by work. The research also notes that as women enter the work place and as men's interests shift from total work to more interest in home, work-family conflict is more of an issue for employers. In a study

by Christopher Alan Higgins, Linda Elizabeth Duxbury and Richard Harold Irving in the February 1992 Organization Behavior and Human Decision Processes, they report that the conflict produces stress that is reflected in higher health risks, less effective performance both at home and in the work place and an overall dissatisfaction with both situations. They recommend that employers begin to look at ways of reducing stress in the work place with focus on people and technology changes.

Researchers have been looking at the interface of work and family and the implications for future research. Michael R. Frane, Marcia Russel and M. Lynne Cooper in Journal of Applied Psychology, February 1992, reported that they had tested a model of work-family conflict. They found that work-family conflicts were not gender or race specific, rather they found differences between white collar and blue collar workers. They recommend that future research look at the work-family interface.

Societal expectations and traditional behavioral norms still define family roles and responsibilities of dual career couples. This is reported in the February 1991, Journal of Applied Psychology by Linda Elizabeth Duxbury and Christopher Alan Higgins. Sharon Lobel, in the July 1991 Academy of Management A Review, suggests that the effects of gender, life stage and culture on the work-family conflict needs to be investigated to better understand people's investment in work and family roles. Barbara Gutek, Sabrina Searle and Lilian Klepa's research reported in the Journal of Applied Psychology August 1991, reaffirms this. Their results support the usefulness of separate indicators of work-family conflict and aspects of both the rational and gender view of this conflict. In the Academy of Management Review, December 1992, Sharon Lobel reported her research with Lynda St. Clair: "Effects of Family Responsibilities, Gender, and Career Identities Salience on Performance Outcomes." They found that both men and women who identified with their careers most strongly received higher merit increase than those who identified more strongly with their families. However, when controlling for strong identity with either career or family neither family responsibilities or gender adversely affected merit pay. The data does reveal that career-oriented men with preschoolers do receive higher merit increases than career-oriented women receive, even though family-oriented women with preschoolers received higher merit

increases than family-oriented men with preschoolers.

Beth Anne Shelton's book, Women, Men and Time: Gender Differences in Work, Housework and Leisure, reaffirms that women do more housework and child care than men and have less leisure time. She re-analyzed quantitative time-use data collected in 1975, 1981, and 1987.

Investigations into small and large businesses indicate that their greatest challenge is coping with the changes brought about by the diversification of the workforce, the shortage in skilled labor and the conflicting demands of work and family responsibilities around dependent care for both children and the elderly (1991).

As more women are entering medicine and men are taking an active role in parenting they are finding that balancing a career in medicine and parenting is difficult. Children need predictability which is difficult for a physician-parent to provide. It is suggested that balance and compromise are the keys to successfully resolving this conflict (Solomon, 1992).

CPA firms have trouble with women CPAs and their priorities, uneasy relationships with other women, and leaving when their spouses are transferred. These dilemmas can be resolved, reports Joy C. Child in the Journal of Accountancy, April 1992, when companies provide flexible hours, part-time work schedules, work at home, and as women CPAs become more established. She suggests that simple reorganization of overtime and travel, delegation of work, and flexible hours will provide the compromises needed that will allow client-accountant relationships to continue without interruptions from women CPAs.

In 1989, Felice Schwartz, director of Catalyst, a corporate funded group founded to pressure for increasing the number of women on corporate boards, authored an article in the *Harvard Business Review* calling for a "mommy track" or separate career path for women who elected to "drop out" for family responsibilities. Although the proposal received notoriety, there is little evidence of it gaining support either among corporate decision makers or women professionals.

Indeed, most evidence suggested that the family responsibilities rarely if ever interfered with committed career women and that family oriented policies should extend to men as well as women. Despite this, research produced evidence that companies may react badly to women with family responsibilities. Swiss and Walker suggest that women face an invisible wall that acts as a barrier to advancement and penalizes them for having a family or investing in activities away from the office. They found women who were welcome in the work place when single faced an increasingly hostile environment when they started having children. Douglas T. Hall's article: "Promoting Work/Family Balance: An Organization-Change Approach," in Organization Dynamics, Winter 1990, suggests corporate strategies to promote work/family balance. These strategies include: work restructuring to make work arrangements more flexible, greater use of home-based work, and acknowledgment that career/family choices are not one-time career decisions.

Sue Newell's research, as reported in Personnel Review, Fall 1992, reveals that women are inclined to continue bearing the "double burden" of work and family, assuming the traditional role of mother and homemaker in the home and equal to men in the work place. She suggests that women will never achieve parity with men as long as they are expected to assume their traditional family role as well as demonstrate their equality with men in the work place. There are many other studies that confirm these findings (Verespej, 1992; McCormick, 1992; Nelton, 1992).

4. Remedies/Corporate Strategies

Among the new challenges facing women are those where traditional spouse roles have been altered considerably with corporate downsizing and other structural changes from cost cutting and mergers. An increasing problem is that of women having to return to work and some companies have established programs to assist in this transition. Weyerhaeuser has pioneered spouse programs for executives who are left behind after downsizing. They have learned that leadership from executives can be attained when there is a good balance between the executive's personal and professional lives (Beinetti, 1992, p. 24).

The best work-family programs in four companies have been identified by the Family and

Work Institute (FWI). The companies are IBM, Johnson and Johnson, Aetna and Corning. The FWI believes that companies may best help their employees by offering flex-time, part-time work, parental leave, flexible benefits, monetary donations, funds for the benefit of employees and child care centers (Matthes, 1992).

Other research suggests that companies hire both partners of a dual career couple working in the same disciplines by splitting a full-time job between them (Menage and Menage, 1993.)

The Conference Board issued a report, "The Emerging Role of the Work-Family Manager," which describes a new position for resolving work-family issues in corporations, the work-family benefits manager (Johnson and Rose, 1992). The work-family manager's responsibilities include the development and implementation of new programs and policies. Companies who employ work-family benefits managers demonstrate their commitment to these issues over and above other corporate benefits (Shalowitz, 1992.)

Other research which has implications for human resource policy-making has been conducted by Teresa J. Covin and Christina C. Brush. Their findings are reported in Group & Organization Management, March 1993, "A Comparison of Student and Human Resource Professional Attitudes Toward Work and Family Issues." The data suggest that human resource professionals are not in tune with women about perceptions of the role of parents, employers and government in regulating and improving the work-family interface - the role of both men and women in the work place and in the home. It is clear that gender affects perceptions of these work-family issues. They compare the perceptions of 240 students and 229 human resource professionals around these issues and how gender affects perceptions of these issues. The results show that human resource professionals and women disagreed more strongly than did men and students with traditional views on child care roles and with statements that women have lower levels of work commitment than men. However, women as a group were more strongly in favor of government or employer supported programs than were human resource professionals.

Corporations respond differently to work-family issues. This is revealed in a study

conducted by Hal Morgan and Frances J. Milliken which is reported in Human Resource Management, Fall 1992. The results reveal that industry type, geographic location, size and use of employee surveys are factors that determine a company's responsiveness to family concerns of their employees. Healthcare, insurance, finance and real estate face high recruitment and training costs which may account for their family orientation. Large companies in the Northwest are also found to be more responsive to family concerns. The study also reveals that if a company surveys employees, then it is likely that the company will pursue the development of work-family benefit programs for their employees.

Women who see men as the main provider will be more apt to turn down a relocation of the family for her job because of her husband's provider role and the loss to the family if they move because of her (Bielby and Bielby, 1992, p.1241). Fifty percent of all women with children work. By 2000, 75 percent of all families will be dual career families and 65 percent of people entering the workforce will be women. Companies will need to adjust to the changing workforce and provide more flexible career planning alternatives for women in the workforce and provide more help for relocation for dual career families (1989, p.36).

Studies confirm these findings: Rushforth, Durward M. Employment Relations Today, Summer 1991; Mikalachki, Alexander and Dorothy Mikalachki. Business Quarterly, Spring 1991, "Work-Family Issues; You Had Better Address Them!"; Across the Board, July-August 1990, Sussman, Harold, "Are We Talking Revolution? What Do Employees Really Want?"

Career Mobility Studies: Longitudinal, MBA and Retrospective Studies

There is a growing body of literature on the career mobility of white women managers and professionals. Although much of the work produced in the 1980s was "career advice" type or anecdotal journalistic accounts of women executives, managers and professionals, more scientific cross-sectional and longitudinal studies of MBA's were also undertaken, as well as other cross-sectional research which contained retrospective analysis of decisions and outcomes. We next

briefly review this literature.

1. *Longitudinal and MBA Studies*

Few longitudinal studies have specifically addressed career mobility of upper status jobs and jobholders. The exception is a selection of MBA studies undertaken at prestigious universities beginning in the 1970s focusing specifically on women at a time when MBA programs were beginning to enroll female students and women were actively recruiting women into managerial and professional jobs. Most of the participants in the MBA programs were white men and women as only a small number of minority women and men entered the programs in the 1970s and 1980s. Columbia, M.I.T., Stanford, Harvard and the University of Pittsburgh were among sites covered. The aims of the studies were (1) identify differences in male/female perceptions and commitments to careers; (2) illustrate career decision making and effort patterns ranging from job search and job change patterns, and management style, effort and performance on the job; (3) support systems and barriers to performance and mobility; and (4) outcomes in status, mobility and compensation.

Most of the studies found only slight differences in perceptions and commitments to careers between men and women. In the elite group of MBAs, for example, Phyllis Wallace surveyed M.I.T.'s Sloan School of Management MBAs from five graduating classes of 1975 through 1979 at four points during the first five years following graduation. The stated purpose of the study was to document the job changes, promotions, salary increases, performance appraisals, problems and concerns. Special efforts were made to identify and track women and minorities who began to enter the program during the 1970s. Tracking encompassed 10 years of data collection activity from 1975 to 1984 (Wallace, 1989, p. 2-3). Wallace's findings, both in commitments and satisfactions (rewards and disappointments on the job and job satisfaction), were similar between men and women for two years out of school. Wallace also found that part of the reason may be that job assignments -- including non-traditional assignments -- were similar, as well as the hours worked per week. Other contributing factors were perceptions that lack of specific work experience was the primary constraint on mobility and 40 percent reported no constraints, compared to 27 percent. Differences reported were mainly in areas of informal assistance where women were more likely to

rely on supervisors, peers and subordinates and by contrast, 26 percent of men and 12 percent of women had no assistance (Wallace, p. 37). Not surprisingly, the compensation differences were not significant.

Follow-up surveys were undertaken after five years and both women and men reported high levels of career and personal success and above-average job satisfaction. Most had reached middle management and one-fifth senior management. Principal findings were there were no significant differences between the compensation of men and women MBAs working full time, with 90 percent of women working full time and 100 percent of the men. This contrasted dramatically with the scholarly literature which found that while men and women MBAs start careers at the same salary, the income gap widens over time (p.39).

Other MBA studies indicate a similar lack of differences in commitments and motivations in seeking managerial careers and experiences carrying over into the first job. Strober's analysis of Stanford MBA's and Devanna's analysis of Columbia MBAs found no significant difference in job satisfaction. Strober found, despite significant differences in earnings, on a 1-7 scale women rated job satisfaction at 6.3 compared to men at 5.9; women were equally highly satisfied with careers to date and life in general (1986, p. 25-44). Strober, however, did find significant differences between women and men's career aspirations in salary and status. Both initially and in follow up surveys four years out, the difference remained while both held similar views on the importance of promotion, variety, impact on society, travel requirements and opportunity, opportunity for responsibility, intellectual stimulation, job location and climate, etc., women ranked salary significantly less than did men, and ranked as more important, independence, compatibility with people and location for spouse. Other values were not significant in difference (p. 35). Finally, life-time career salary expectations were dramatically different with women hoping to achieve about \$115K in 1978 dollars and men aspiring for an average of \$269K. Title expected also varied: half the men expected to be an owner, partner, president or CEO, while only 24 percent of the women expected to achieve these job titles. Devanna also found little difference between initial aspirations of female and male Columbia MBAs.

A recent follow-up study of Stanford MBAs essentially confirmed Strober's initial findings. Surveys conducted by Kaufman Associates found that median annual income for Stanford MBA Class of 1982 employed full-time in 1992 was \$104,200 for women, compared to \$142,500 for men (Smith and Mitchell, 1993, p.1). A partial explanation is offered by the promotion pattern. Of the class, 16 percent of men were CEO, chairman or president of the company, compared to 2 percent of women. In addition, 23 percent of men held the title of vice president and 15 percent held the title of director, compared to women at 10 percent and 8 percent respectively. By contrast, fully 18 percent of women were managers and 22 percent sole proprietor, compared to 9 percent and 8 percent of the men in these respective positions (Smith and Mitchell, 1993).

Outcomes, as measured in terms of job assignments, promotions and compensation contrasted dramatically between men and women and one conclusion is that these reflected a series of formal and informal work place structures and processes which have the effect of limiting women's opportunity. First, industry and job assignments generally contrasted between men and women. This was noted by Thomas Harrell, professor emeritus at Stanford's Graduate School of Business, who stated, "Women MBAs were less frequently in higher paying industries and occupations...such as petroleum, mining and investment banking" (Smith and Mitchell, 1993). If the MBA studies can be considered as a group (i.e., merged), the closer job assignment and industry were for men and women as represented by the Sloan MBAs, the narrower the differences in job content, responsibility, promotional patterns, status and compensation (Wallace, 1989; Smith and Mitchell, 1993; Strober, 1986; Devanna, 1984. See also, Olsen, Frieze and Good, 1987, pp. 532-41).

Many earlier findings of women's behavior and choices have receded in the background of analysis as trends in pre-employment circumstances have dramatically altered theories about the impact of socialization on school performance, on commitment to careers and particularly on the willingness of women to sacrifice career commitments and work to family responsibilities. The more interesting research questions concern the role of job satisfaction; creativity and motivation in performance; management style and approaches influence on work output; and finally, perceptions and attitudes, subtle and open, of men and women towards women as equal to men as peers,

superiors, leaders and subordinates.

Another important study of executive women was undertaken by UCLA's Anderson School of Management and Korn/Ferry International, an executive search firm, sampling men and women executives in a cross section of Fortune 1000 companies over the period 1979 to 1992. Four separate surveys were conducted, two of males in 1979 and 1989 and two of females in 1982 and 1992; some 440 women were polled in 1992 (Korn/Ferry, 1993).

The findings indicated that the position of women had improved, but female executives still lag substantially behind males. Women executives earned more than those sampled 13 years previously, but compensation was still less than two-thirds of male compensation in 1992. Women's functional areas were far more likely than men to be in personnel, marketing/sales/advertising, legal and consumer and public relations, while the men were more likely to work in general management (40 v. 17 percent of women); in finance and accounting (25 percent v. 19 percent for women); and women were more likely to work outside mainstream industry (32 v. 20 percent for men); and in industry, more likely to work for commercial banking and diversified financial (26.2 v. 16 percent of men); and less likely to work in industrial and consumer goods (21 percent v. 30 percent for men).

Men and women contrasted in savvy and understanding of factors behind mobility and what counted most to get ahead. Men appeared very knowledgeable about who would be selected for top positions, for example, while women did not. In naming single factors which contribute to success, men were more likely to name political savvy and people skills, while women were more

likely to cite intelligence, performance, chance and flexibility. In assessing barriers, women were likely to name being female as a barrier (27 percent) and 92 percent of women believe there was a glass ceiling on women executives. Finally, in naming barriers to their future advancement, men were more likely than women to see structural problems (i.e., reorganizations, slow growth industry), while women were more likely to see human factors (i.e., superiors, sex discrimination).

2. Wellesley Surveys of Top Executive Women and Corporate Human Resources Managers

As part of the current study and to explore the principal work place barriers to managerial and technical professional jobs for white women, we analyzed original survey data collected over the past 10 years at the Wellesley College Center for Research on Women as part of the "Women in Management Project" (Harlan and Weiss, 1981, p. 66). More specifically, we examined the framework and process of executives' succession or the criteria and recruitment process for the top three levels of corporate jobs and, second, how senior most corporate women's careers have or have not followed traditional male promotional routes in these companies. The research is based on surveys of two populations, senior corporate managers responsible for human resources policies and systems and senior-most women in the top three levels of a sample of Fortune 500 companies. Questions centered on factors, including support and obstacles, which contribute most to the "success" of women reaching top positions in business. Of the women interviewed, 90 percent were white and the 10 percent included Asian-American, African-American and Hispanic-Latino women. This data, collected in 1986 and updated in 1991, supplemented additional data collected on two firms in 1980. Findings related directly to the issue of barriers and opportunities are summarized below and more detailed analysis of the corporate human resources managers is included in Appendix A.

a. Survey of Fortune 500 Company Human Resources Executives

This survey examined institutional barriers in large corporations which inhibit advancement of women and minorities into the ranks of upper level managers and decision-making authority. Senior human resources executives were polled and thirteen companies provided usable results. Our main findings from the survey about corporate policies and actions to promote women into

senior management positions were:⁵

1. Lack of commitment at the top for bringing women and minorities into senior level positions. Neither CEOs nor existing systems for "executive continuity," formal or informal, acknowledge the advancement of women as a goal.
2. High potential programs, usually in force early in careers, were widely used but unsystematic, were not particularly used for grooming promising women and were frequently subjective in implementation.
3. Promotion is largely decided by subjective evaluations of supervisors rather than by object results tests. Factors also reflected subjective as well as objective tests.
4. Principal structural work place barriers to women's advancement were job assignments and functional positions; women were generally "outside" promotional ladders.

Although human resources executives noted that the "corporations are committed to women," little evidence was visible of commitment by most top executives to the advancement and/or recruitment of women and minorities into the top three levels of corporate organizations. Yet, commitment of CEOs was cited as the single greatest obstacle to women at the top by human resource managers and executive women. Current career-oriented programs, when they exist, remain geared toward entry level staffing, and most training is "up to the individual" or a boss to recommend, rather than incorporated into a career development system. Succession, though not widely practiced (only about 54 percent of companies practice it and many only recently), does not address women and minorities in particular, although the goals are to identify the "best talent" in advance of need. One very serious problem is that many companies stratify their succession planning into three separate levels which may serve to inhibit identification of women and minorities who are overly concentrated at mid-management levels. Other problems were (1) lack of

5. A more detailed summary of findings from this survey are to be found in Woody, Bette. "Corporate Policy and Women at the Top." Wellesley, MA: Working Paper, No. 211, Wellesley College Center for Research on Women, 1990.

satisfaction with the use and performance of the systems; and (2) means of inclusion -- either nomination by a senior manager (i.e., known to the corporate hierarchy), or service on a committee or in a position of visibility.

Two cases were found in which specific commitments were made by respective CEOs to advancing women into top management. This took the form of explicit goal setting and communication of expectations, as well as accountability by senior subordinates. In one case, the CEO of a major insurance company targeted half of 10 top positions at the vice president level, the third level to the top, to be filled by women. Three women were successfully hired within three years. In this and one other case, goals were achieved through aggressive recruitment and a combination of lateral hiring from outside and promotions within the company.

High potential programs and other activities designed to identify and develop young managers do not appear to have been targeted to the development of women managers either, although most of the companies do have at least informal programs. One problem is that the identification is usually from the immediate supervisor, through informal observations, or formal performance review. Informants acknowledged, however, that being selected depended on informal networks, joining the right committee and generally be politically savvy about visibility and getting to meet senior staff.

Promotion processes remain highly dependent on immediate supervisors and where there is substantial opportunity for subjective views and biases to enter in the absence of special protections.⁶ Performance appraisal, for example, was seen by many as ranging from the extreme of "overly positive" to "overly negative." Second, although many companies rely on performance appraisal for a variety of purposes (compensation, high potential programs, career development), it was not clear how many of these goals could be adequately incorporated into the process. One positive finding was that a large majority, or 72.4 percent, of the companies included "development of subordinates" in the performance review of senior managers.

6. Ann Harlan and Carol Weiss found that a principal obstacle to promotion of women middle managers was just this, subjective performance ratings. Harlan

Finally, there was overwhelming consensus by the executives that the biggest barriers to women's advancement are job assignments and tracking. Women were found to be concentrated in "staff and overhead" jobs and out of line management jobs critical to company business. Factors most likely to be emphasized in future leadership were entrepreneurship, personal leadership skills, strategic planning and general management experience, most of which are related to line management experience.

b. Survey of Executive Women in Fortune 500 Companies

A sample of 50 senior corporate women executives occupying jobs in the top three levels of Fortune 500 companies was surveyed between 1986 and 1992 to determine what factors in the work place contributed most to success in their lifetime careers and in firms where they achieved the highest promotions. The sample was selected from a longer list stratified to include a cross-section of U.S. industry and geographical diversity. The interviews, which included both statistical and open-ended responses, described in detail both the perceptions of informal systems and decisions and formal ladders and rules on job assignments, promotions, management style, performance, job satisfaction and achievement experiences over careers and in particular companies.⁷ A profile of the sample below indicates that, as with the general population of women managers in the U.S. Census, there is a concentration in business services, financial services, insurance and professional services such as health care. Career patterns showed most rose through traditional routes and company career ladders, but that women also advanced frequently through what could be called an "industry route." That is, top appointments were obtained through two steps: gaining a track record and visibility in the industry at large, then getting "recruited" in a lateral move which resulted in a substantial gain in promotional levels, responsibility and compensation. This pattern contrasted with the picture of an earlier generation of women described by Henning and Jardim (1977) who moved from the ranks of secretaries and

and Weiss, "Moving Up: Women in Managerial Careers." Wellesley, MA: Working Paper No. 86, Wellesley College Center for Research on Women, 1981, p. 66.

7. Woody, Bette. "Executive Women: Models of Corporate Success." Wellesley, MA: Wellesley College Center for Research on Women, Final Report, 1987.

assistants and obtained management positions with the assistance of bosses and rarely planned management careers. It also contrasts somewhat with other evidence of careers of managerial women ending at mid-management levels in the extent to which line management jobs in main functional areas of the corporations were traceable from line management experiences.

Survey evidence also pointed up the very different environment encountered by women in the very top of the corporate ladder and contrasts with mid-management levels. First, male executives may accept women as equals, however there remain "off limits" areas which may be crucial to exercising authority, such as social-business clubs where deal-making frequently occurs. The issue of "comfort level" for males is reinforced by absence of women, or isolation of one or two at the top. A second characteristic is inclusion in decision-making in ways that share challenging assignments and risk. Most women who reached the top were ambitious, self-starters who undertook major problem solving assignments, expanded a central part of the business or mediated a crisis such as restructuring of operating units.

The survey also assessed approaches to management in an effort to understand the problems of "chemistry" and comfort level of women executives and supervision of top managers by female executives. Success in overcoming the former and obtaining respect in the latter case was achieved principally through choice of a "management style" which many of the women seemed to adopt, characterized as: (1) non-confrontational and motivational, (2) group and relationship oriented rather than output oriented, and (3) team oriented in problem solving and peer oriented in sanctions and rewards for performance and other unit achievements. Personalities did vary widely among the group and we developed a typology of management style and career orientation among women executives, ranging from "charismatic stars" (influencing industry orientation), to "entrepreneurs" (starting a new business within the business), "innovators" (committed to change, reshaping products, customers and/or business practices) and "traditional hands-on managers."

We identified further key barriers to women's mobility and found:

1. lack of commitment of CEOs to women's advancement
2. job assignment and job tracking into low mobility staff and overhead and out of line jobs
3. informal culture and behavior excluding interaction of women with top managers on equal footing with male peers.

Women executives both agreed and contrasted with senior human resources officers. There was agreement that key barriers to women's advancement were the lack of commitment of top management and job assignment in staff and overhead positions. Over half the sample named lack of commitment of the CEO as the biggest barrier to women's advancement, with women themselves being ranked last. Women were less likely to blame women themselves on their failure to be aggressive in seeking opportunity or in networking with the "influential" in corporate environments. Indeed, many senior women felt that the informal networks were a barrier because they excluded women in social activities outside the office such as "duck shooting" or because they took place in "all male sports."

Women felt that the informal culture and behavior were important as obstacles to women's advancement. Cultures of firms and even whole industry such as the energy natural resources group, were seen as impeding women's success, while other industry, such as retailing and some areas in banking (information systems, securities analysis and trading) were more able to create and promulgate "objective" criteria for advancement and promotion.

Finally, we assessed factors which most contributed to success from two perspectives: (1) women who had achieved status in top positions, and (2) other executives in the company. There was a wide range of responses which can be summarized as:

1. Women

<u>Ranking</u>	<u>Factor</u>
1.	Self, hard work, individual effort, performance
2.	Support of family, spouse

3. Early successes on the job, work
4. Recognition in the industry
5. Flexibility, willingness to take multiple job assignments

2. Human Resources Executives

<u>Ranking</u>	<u>Factor</u>
1.	Performance, effort
2.	Fitting into corporate needs, functions
3.	Commitment to the company, work

Institutional Analysis

Analysis of institutional and structural barriers and the interaction between behavior and institutional factors in career making and career outcomes for white women cover a wide range of analysis, from labor and economic theory, emphasizing human capital, occupational segregation and internal markets, to organizational analysis which assesses roles of formal recruitment, hiring, job assignment and staff development and performance assessment to the effects of particular industry, functional make up, or organization or corporate culture. We have divided our assessment into the following parts to report findings of selected current literature and our survey results:

1. Organizational Barriers and Opportunities for Advancement
2. Policies on Promotion, Training and Development and Performance Appraisal
3. Organizational Structure as Barriers: functions; job groups and career ladders; job assignment patterns, including rotational and geographic assignment
4. Barriers in Industry and the Professions

5. Attitudes and Behavior of Superiors, Peers, Subordinates, and Sexual Harassment

1. Organizational Barriers and Opportunities for Advancement

A key goal of a three-year study conducted by Anne Harlan and Carol Weiss, research associates at the Wellesley College Center for Research on Women, was identifying the barriers confronted by women managers that block their advancement in management. This study was completed in 1980. The implications of the findings from this study strongly suggested that organizations needed to invest in programs and efforts aimed at total human resource development in order to reduce the impact of sex bias. They contend that introducing women into management is a change process in itself and that this change process must be managed. They suggest that formal organizational practices such as hiring and placement, training and development, and performance appraisal can be barriers or opportunities for women's advancement and mobility. They also suggest that other factors will affect the success of workforce diversification: the number and scope of other changes occurring within the same system; the speed with which the proportion of women increases; the amount of ambiguity and uncertainty associated with the workforce diversification; and the impact of economic conditions on the organization.

The issues of organizational barriers and opportunities for advancement for women are still being researched and commented upon in the 1990s. The "glass ceiling" is identified as one of the invisible barriers that women experience as they attempt to move into top management positions (Glass Ceiling Initiative Report, Department of Labor, 1991). Some women are also finding glass walls which penalize them for having children or outside interests (Morrison, 1987). Statistics tell us that only two to five percent of top-level positions in corporate America are occupied by women, yet women are 47 percent of the workforce and 41 percent of all managers are women (Hamilton, 1993, p. 24; Saltzman, 1991; Fisher, 1991).

The results of a poll of 201 CEOs commissioned by Fortune (September 21, 1991) revealed that it will probably take at least 20 years before a woman would be selected to be a CEO of their

companies. Sixteen percent believed that it was either "very or somewhat likely" that they would be succeeded by a female CEO within the next ten years. Although a number of reasons are given, the biggest barrier, according to the CEOs surveyed, is something the women cannot do anything about. It is discriminatory attitudes of the men about women that are barriers to women getting to the top. According to this survey men look to other men to succeed them -- someone like themselves. A few of the CEOs (8 percent only) thought that women were not aggressive enough or lacked the drive to get to the top, and only 5 percent of the CEOs thought that women should be more flexible about relocating for a promotion. However, close to half of the CEOs believe that women are not in the functions that lead to the top. Women are too concentrated in staff functions such as communications and human resources.

Historically, perceptions of women managers have been less than positive. Sara Alpern, in Fagenson's Diversity in Management, reports on a 1965 survey subscribers of Harvard Business Review and members of professional and trade groups. At that time, 41 percent of 1000 executives had misgivings about female executives. The comments included, "Women take jobs away from men," and "Men work for a living and women work for a lark, gratification, fun or pin money." The Harvard Business Review survey was repeated by Charlotte Decker Sutton and Kris Moore with a random selection of 1982 Standard and Poor's Register of Corporations, Directors and Executives and 1982-83 Dun & Bradstreet's Reference Book of Corporate Management. Although, according to the 1984 census data, 33 percent of the managerial and administrative positions were held by women compared to 14 percent in 1965, half of those queried did not think a woman would ever be totally accepted in business. Fewer men and women felt women did not seek positions of authority; the percentage of executives who thought women felt uncomfortable working for other women increased, while fewer thought men were uncomfortable working for women. The unfavorable attitude of men declined from 41 percent to 5 percent. Fewer men thought women are too emotional, but the salary disparity of the respondents was high (Fagenson, 1993).

Geis and Butler report in their study of attitudes towards men and women that men are given more approval than women for assertiveness and speaking out. They demonstrated that there is an unconscious bias and stereotype at work against women and minorities in the work place.

They suggest that this may be the reason why women and minorities hit the glass ceiling. The bias, according to Geis and Butler, is not acknowledged or believed to be held by the person who is biased, but their unconscious biases are so entrenched that they do in fact impact on women and minorities in the work place. They suggest that this will only be resolved when those in power (i.e., white men) make a concerted effort to promote large numbers of women and blacks into high status jobs. Experience of women and minorities will change biases and stereotypes. (Geis and Butler, 1990).

In 1993, negative attitudes about women's abilities are still reported to be a real barrier to their advancement into senior management positions. According to a survey on female managers conducted by Crystal Owen and William Tudor in 1992, women face subtle discrimination due to negative attitudes about their abilities. In a study of 36 male managers and 36 female managers, Sue Mize reports that women were ranked higher than men in managing people and attaining high-performance results, however, the myth still prevails that women do not have the qualities needed to advance into senior management and they are often seen as too aggressive or too shrill to be considered for senior posts (Owen and Tudor, 1993, p.12; Mize, 1992, p.60).

In industries where women seemed to be advancing, there are signs that they are facing glass ceilings. For example, when the high tech industry began women were trained as programmers along with the men. But as the industry grew and matured, it was found that women remained in lower level and lower paying jobs than men. According to the U.S. Equal Opportunity Commission, in 1988, only 25 percent of the 53,000 people in top computer management were women, and 92 percent of all the managers were white. Women technical and engineering graduates are also declining (Johnson, 1990, p.93). Kate Colburn reports in EDN that women and minority engineers have penetrated most areas of the electronics field, but they have not made it to the top in significant numbers. The longer women engineers remain in the profession, according to Colburn, the more disenchanted they become. They cite paternalistic attitudes and frequent exclusion from prominent projects as the reasons for their dissatisfaction (1992, p.21).

Some feminists are suggesting an alternative for women who are fighting the battle to gain

equality in a work place where the rules, regulations and policies are made by men for men. The alternative is a work place that is less hierarchical, more flexible, modeled more along feminine lines. Marilyn Loden, a management consultant, suggests that valuing the differences that women bring to the work place is part of the solution. This would allow women to use their intuitive and people skills instead of having to adopt and adapt to the command and control style of the male-dominated work place. There is research which supports the idea that men and women experience the world differently (Moir). Psychologists, scientists and sociologists all have presented theories that indicate behavior of men and women is different; some say it is innate, others say it is learned. The issue remains that there is a glass ceiling that women and minorities who want to get to the top do experience which inhibits their climb to the top. Is it the responsibility of the women to adapt to the male-dominated work place, or is it the responsibility of the work place to be more responsive to the women? What works best? (Saltzman, 1991).

2. Policies on Promotion, Training and Development, and Performance Appraisal

A number of studies have identified organizational policies as barriers. Forbes and Piercy, who studied corporate mobility systems extensively and analyzed data for two time periods on women in senior positions in Fortune 500 companies, note that because most companies promote within and prefer to recruit young, promising managers and mold them in the company's image, policies include early identification of promise, usually based on an early promotion and use of training and development early on to shape young managers. They suggest that women are at a very big disadvantage in the general model because they are (1) rarely identified early as "promotable" and (2) assumed not to justify heavy investment because they have little commitment to career or loyalty to the firm (1991). They further note that, owing to the large commitment to traditional bureaucratic cultures of most firms, women are unlikely to make much headway (p. 85), notwithstanding the admonition of Peters and others that the multi-layered hierarchy is unlikely to "win" in the flexibility contest (Peters, 1987).

Promotion is not always a reward for past performance. It is a complex process and there are many other organizational factors that impact promotion, such as: where one is placed in the

hierarchy when hired, visibility soon after one is hired, access to mentors and sponsors, performance appraisals, promotability ratings, informal networks, high potential designations, career development programs, training and development, and career paths. The research that supports this indicates that women who want to get ahead do have to pay attention to these organizational factors.

Occupational segregation and segmentation as noted throughout this report has been extensively documented for its contribution to depressed wages and wage differentials for female and minority workers. There has been considerable success in arguing sex-typing in major discrimination damage awards and settlements, beginning with the AT&T case in the 1970s. Recently, however, occupational sex typing has been extended to argue that mobility, or career ladders are also sex typed (Reskin and Roos, 1990; Bielby, 1991). While the evidence has not yet been extended to senior most corporate levels where glass ceiling barriers are the most formidable, a recent out-of-court sex discrimination settlement against Lucky Stores of California does accept the finding that some sex typing of career ladders occurs and prevents women from enjoying the same promotional route opportunities as men.⁸

Women CPAs do not have the same access to promotion and mobility as do their male colleagues. This is revealed in a 1992 study of women CPAs in Canada. The glass ceiling is their main barrier to promotional opportunities. C.A. McKeen and A.J. Richardson compared their survey data with a 1985 study of women CPAs' salaries, benefits and level of job satisfaction (1992, p.22). This is not unique to female Canadian CPAs. Women make up only three to five percent of all senior executives. Most major corporations created promotion programs in the 1970s, yet there are still few women in senior management (Etters, 1992, p.16). The glass ceiling is pervasive in both the private and public sector. It is costly to the corporation in terms of money spent to recruit, hire and train people to do a job.

8. Gross, Jane, "Big Grocery Chain Reaches Landmark Sex-Bias Accord," *NY Times*, December 17, 1993. In the out-of-court settlement Lucky Stores agreed to pay \$75 million in damages to women in Northern California who had been denied promotions and invest \$20 million in affirmative action programs for female employment. Federal District Judge Marilyn Chert ruled against the grocery chain in 1992 after a 10-month trial in which she found sex discrimination "standard operating procedure" in the stores and Lucky's defense that women were not interested in being promoted to better jobs "unpersuasive." The jobs were found to be sex typed (women assigned to cashiers jobs and delicatessen jobs, men to grocery and produce jobs). At the same time, men who occupied delicatessen jobs were offered promotions, suggesting sex discrimination outside of job classifications.

Surveys conducted by Peggy Stuart indicate that gender bias and sexual harassment probably would cost a company with 27,000 employees \$22 million dollars. This is one percent of total operating expenses. But discrimination still exists in hiring and promoting employees. The white male model is the guide that executives use, as they tend to want to perpetuate their own self image. It was also discovered that recruiters who do not fit the male model tend to favor applicants who conform to the white male model because they fear being seen as favoring their own race or gender. Stuart also reported that gender bias is perpetuated by the prevailing societal values that are reflected in people's attitudes (1992, p.70).

Mentoring has long been used as a strategy for developing employees. One the one hand mentors are corporate "godmothers or godfathers" who can assist an employee in learning about the corporate culture and what one does or does not do to get ahead in the organization. Studies on mentors suggest there is a correlation between successful executives and mentors where success has been measured in higher compensation at an earlier age and more satisfaction in career than executives who did not have mentors. Mentors have also been seen as particularly important to minority and women managers (Mouton and Finkel, 1993, p. 33; Heidrich and Struggles, 1979). Having a mentor was seen as useful for both women and men managers. However, having only one mentor may be a disadvantage. If the mentor falls out of favor in the corporation, the employee risks falling out of favor as well. It may be more useful to have "multiple helping relationships" to guide an employee's career (Harlan and Weiss, 1981). A study of 244 manufacturing managers revealed that mentoring was positively related to one's rate of promotion, and "psycho-social" mentoring positively impacted one's salary level (Scandura, 1992, p.169). Mentoring is a personal process which requires a fit between the mentor and the person who is being mentored. Choice of a mentor is important. It can be difficult for women to find mentors because men are sometimes uncomfortable being seen alone with women in the work place and/or in public because of the assumptions that others may make about the relationship. Both the women and the men are vulnerable.

Success in careers is measured by such objective factors as compensation and promotion as

well as subjective factors. Women's career choices are complex and influenced by personal, organizational and societal factors. Parenthood, work motivation, work schedules, adult commitments, biological clocks and social norms are primary considerations for women's career management. In this time of downsizing and mergers women are making changes in their definition of success (Powell and Mainero, 1992, p.215).

Informal networks, sometimes called "old boys networks," are very powerful and are often not accessible to women. However, through these informal networks men are able to get information that may not be available through formal communication channels about future job opportunities, impending policy changes or organizational practices that may impact on one's job and/or career. Researchers looked at the interaction of performance, ambition and rewards in the internal promotion process of a Canadian firm. They analyzed differences between men and women of their sustained career progress within the firm. They discovered that women relied more on the bidding process for promotion than the men. The men relied on their informal networks for promotions, which often offset their performance evaluations which were, on average, lower than women's (Cannings and Montarquette, 1991, pp. 212-228).

When women enter human resources, public relations, and/or communications they are usually hired for staff or operational jobs which do not lead to senior management positions. It is important for women (and men) to make sure when they are hired that they are in the "right" department and function if they want to move up in the organization. Factors that influence job promotion rates, transfers, and salary progression are how managers started their careers in the company and the power of the department in which they started. This is reported in the results of a study of 338 managers in one company over a ten year period (Sheridan, et al, 1990, p.578).

Other research notes that women are less likely than men to be included in specialized training and development programs and, when they are, may not be linked to career ladders. Woody's (1986) survey of 35 Fortune 500 human resources executives found that formal corporate high performance programs were in place in most companies, but that many were "add ons" to existing programs to accommodate women and minorities. It was unclear whether the same

treatment of rotational assignments and "job tracking" which characterized the treatment of male "comers" was also given to women, or whether there were "easier assignments" and less geographically remote settings, for example (Woody, 1986). A number of writers indicated that women are less likely to receive on-the-job or specialized training than men (Kanter, 1977).

Performance appraisal is generally agreed to be important as a determinant of promotional potential, if not weighed heavily in actual promotion patterns. Woody found that performance appraisal was rated as a number one component of promotions (1990). Harlan and Weiss found among mid managers performance appraisal could be used as a key obstacle to mobility of women. In their research of matched pairs of men and women managers, they found that women who were self-starters, aggressive and ambitious were more likely to receive poor ratings than women who were passive and less visible, leading to the conclusion that sex-typed behavior strongly interacted in the rating process by supervisors (Harlan and Weiss, 1982, pp. 59-97).

3. Structural Factors as Barriers

Organizational structures as barriers have been assessed for impact on mobility. Job assignments have long been noted as a principal advancement route to executive levels as well as a chief culprit in "steering" women into "women's occupations" (Bergmann, 1986) and away from mainstream jobs with upward mobility potential. The quickest path to the top of organizations, as Forbes and Piercy noted, is through functional areas most crucial to the effective performance of critical tasks (p.88),

Job assignments have recently been analyzed for career impact, whether in shaping early potential or later in providing a means of transition through mid-career changes. Other evaluations of job assignments have assessed their effectiveness in "high potential" development strategies for future executive talent. One recent analysis found that job assignments were crucial to the experiential learning for executives. While most executives begin careers with functional specialty and success comes as the result of technical excellence, non-functional assignments on projects and

task forces help put managers into executive career paths by providing opportunities for growth in situations where old skills do not count and where others may be more knowledgeable than they are (Moulton and Finkel, 1993). The new assignments, which can be from one line to another line function or, more likely, from line to executive staff, are extremely valuable for bringing high visibility to senior management as well as high risk, and for providing a finite time frame, usually six months to a year, for the test. Finally, three types of assignments are most effective for executive suite preparation: installing new systems, negotiating agreements with external parties, or trouble shooting a problem filled situation (Moulton and Finkel, 1993, p. 20).

Major corporations regularly use high visibility staff assignments at top corporate levels to train future senior executives. IBM and other large corporations have used assistants to positions as a major development device for young, high potential managers with typically one or two line management assignments. Finally, in high potential cases, job assignments are incorporated into corporate succession tables and assignments made to top executives usually for one year (Moulton and Finkel, 1993, p. 23).

Traditional routes to top management through functional channels tends to vary by firm and by industry. Studies of senior corporate officers show that most are mobile through one particular function such as marketing, finance, manufacturing, or engineering. At Dupont, the engineering route prevails, at IBM marketing dominates, while at GM, finance or marketing have been traditional paths to the top (Moulton and Finkel, 1993, p. 33). With restructuring of organizations in the 1980s and 1990s, many traditional mobility routes have been transformed; executives now require what Moulton and Finkel call "cross-over mobility" where a manager with a number of different functional experiences can engage in both horizontal and vertical mobility (p. 33).

In contrast to male executives, women are more likely to suffer assignments to staff and overhead positions and be left out of such functions as production and sales which have "bottom line" outcomes. Kanter (1986) also notes that in studies of 11 industries comprising 17 percent of the U.S. work force (motor vehicles, basic steel, communications, retailing, banking, insurance and hotels and motels), as the amount of progression possible in no-supervisory jobs increases or the

number of steps of opportunity it contained, the proportion of women declined substantially (Grunker, et al, 1970). Women represented 67 percent of workers in the jobs with the least advancement opportunities and 5 percent of workers in the highest opportunity jobs (Kanter, 1986, p. 238). Kanter suggests that placement in different opportunity structures reinforce aspirations and behavior (p. 238). Examination of structural barriers include the 1982 Korn/Ferry International/UCLA survey of senior women and men which found that functional routes to the top for men and women varied and that staff, in contrast to line positions, accounted for compensation differences. Thus, while most of the women surveyed were at the senior vice president level, the other one half began their careers in either marketing/sales, finance/accounting or professional/technical fields. Only 1.7 percent started in production or international areas. Although 9 percent of the women started as general managers, compared to less than 4 percent of the men at the time of polling, only 29 percent had moved to general management positions, compared to 44 percent of men polled (Korn/Ferry International, 1982, p. 10).

Although job ladders and groups are organized around basic functions of the company, as has been widely noted, an assignment process, including deliberate decisions, governs how personnel are assigned. The job assignment process is so crucial that many of our respondents named it as the single most important action a company takes in determining mobility (Woody, 1986). Much research on women's careers note that women are steered into activities and jobs which typically have short career ladders, lack specific "bottom line" output, and frequently have little responsibility and supervision. Wood, et al, for example, in analyzing careers of University of Michigan Law graduates found that women were steered into less well-paid parts of the profession, were under represented in large law firms and over represented in government in legal services, factors which led to low earnings compared to men (pp. 417-441). Job assignments reflecting less crucial work were also reflected in shorter work days and weeks for women compared to men (Wood, et. al.; Korn/Ferry International; Strober, 1982).

Sex and race discrimination in job assignments extends to the "normal" rotations that occur among different functions in a company which are considered essential to upward mobility. Job rotation, as well as a variety of geographic assignments within a company, are frequently built in to

development programs such as high potential programs. Women who take different functional assignments are considered to be better "risk takers" than those who do not (Forbes and Piercy, 1992), although frequently women may not be offered assignment options with the same frequency as men. Cynthia Epstein found that young men on fast track professional careers are given varied work assignments and good opportunities to demonstrate their competence, as well as frequent geographic moves (1982). Research on women engineers also found that women were likely to end in less prestigious job assignments than men and to degrade over time. Jagacinski (1987) found female engineers had lower levels of supervisory responsibility than males at comparable levels of experience and a sample of engineers examined by McIlwee and Robinson found women were over represented in marketing, manufacturing and analysis and under represented in design and management positions (1992, p.81; also Jagacinski, pp. 97-110).

Several studies which examined assignments noted that women are less likely than men to have multiple assignments, assignments across functions and rotations patterns which may or may not reflect personal choice. Rotational patterns, however, frequently reflect rates of promotion. In addition to the functional job groups, other patterns may emerge which related to "tracking," or to interest of the individual, or to accelerated moves. The experience of women in Wallace's study of Sloan MBA's contrasted in promotion rates with Strober's reported experience of Stanford MBA's and Devanna's Columbia sample. In the case of the Sloan group, 80 percent of both men and women had changed job titles by the second year as the result of promotions and lateral transfers with the same employers, as well as changes in employers in both intra- and inter-industry shifts (p.30). She noted that a larger proportion of men than women (one third compared to one fourth) changed employers and reasons given were higher compensation and better opportunities for career growth. Thus, women tended to stay within a company for promotions, while men were more likely to move. Despite this, women do not seem to have been penalized in compensation for using internal labor markets. Finally, 90 percent of the women (compared to 80 percent of men) reported receiving at least one promotion between years two and five (p. 45).

A key impact of structural barriers is generally depressed compensation of women compared to men. As noted above, much of the research on executive and managerial women

shows wage differences reflecting different occupations as well as the very different career and promotion rates over time. Many studies of paired men and women graduates, in fact, show degradation of women's compensation beginning five years out (Strober, 1982, pp. 25-44; Devanna, 1984). One recent study of University of Pittsburgh MBAs, an older, more urbanized group, reported significant differences in male and female earnings; regression analysis found that the strongest explanation after five years was lower starting salaries and about half the gender differential in starting salaries was explained by job area and level, industry and type of prior work experience (Olson, Frieze and Good, 1987, pp. 532-541; also reported by Wallace, 1989, *op.cit.*). Harlan's studies of the classes of 1960-75 noted that women lagged behind male colleagues in starting salary and the gap increased over time, with graduates in the 1970s, before women became a large part of the Harvard MBA class, lagging behind men by \$1500 to \$2000 per month (Harlan, 1978). As Wallace noted, Fortune and Business Week have both covered Harvard women MBAs extensively; Fortune reported in 1983 that women lagged behind male peers with a median income of \$57,000 while 35 percent of male peers earned over \$100,000 (Wallace, *op.cit.*, p. 119; also Fortune, July 11, 1983).

Pay differences in managerial and professional work, further, did not appear to be explained by different work history and, particularly, interruptions for family. A 1979 University of Michigan study of 200 white American wage earners found that women took 5.8 years from paid work, but wages were not affected when they returned and, moreover, the leave accounted for only 6 percent of the wage gap; further, only an additional 3 percent was explained by absence from work due to illness or family related (Concoran and Duncan, 1979, pp. 3-20).

4. Barriers in Industry and the Professions

Industry has only recently been examined as a factor contributing to barriers to work place mobility. As in the case of occupations, women tend to be over represented in a few industries generally, although they are generally less dispersed in managerial positions which may reflect a growing demand for white female labor as a substitute for white male managerial personnel. There

are a number of theories about the causes of industry specific outcomes, as well as the effects. One widespread theory is that the newer, less institutionalized settings are less likely to be rigid, are less likely to have adopted formal rules and processes, have fewer individuals with seniority, and tend to be more responsive to external pressures and demands (McIlwee and Robinson, pp. 135-143). This was the finding of journalist Ronald Rosenberg, a reporter specializing in covering biotech industry in the Boston area, although the findings were mixed in firms which retained high status women and in the size of firms with women at the top (1993, p.77). Rosenberg concluded that the culture may be less well formed at the beginning, which helps women, but it is less clear that biotech firms won't follow electrical engineering/computer firms in becoming increasingly rigid when the "professional managers" come in after firms go public. Currently, according to the Massachusetts Biotechnology Council, of its 62 member companies and 324 corporate officers, only 38 are women and only eleven of the 398 corporate directors of all Boston area biotech companies are women (Rosenberg, p.80).

In other studies of industry influence, researchers find that the level of representation, as in the case of occupations, may influence promotional and advancement rates, as well as compensation. Woody found that white and black women overall benefit in the form of higher compensation from jobs in industry where women are under represented, while lower salaries, part-time work and high unemployment characterize women intensive sectors (1992). Other studies which found industry impact effects include those which found positive impacts on women from the banking and high tech industries (Solomon, 1990, pp. 99-105). But most studies show many industries supposedly friendly to women, such as accountancy and law, are no better than manufacturing in terms of promotion rates and pay ("Women in Management," 1993, pp. 17-20; Malveaux, 1982, pp. 101-120; Roush and Eyler, 1993, pp. 27-30). For example, Roush and Eyler reported that while 28 percent of all graduating accounting majors were female as early as 1977, and the majority, or 53 percent, were women in 1991-92, only about 5 percent of firm partners in the big six public accounting firms were female in 1993.

Industry differences in hiring in managerial and professional positions relate both to structural differences among industries such as functional/occupational distinctions and to informal

culture and traditions. Structural effects include manufacturing's production functions, for example, which include occupational ladders and assignments which are considered dirty and are frequently in unpleasant settings, are geographically remote and may involve all male work forces and unions. Moreover, engineering has traditionally been a background for many executives, a field where women are still under represented. While manufacturing has been accused of "sex typing" for not assigning women to plant manager or field site positions, there is equal evidence that such assignments rarely contribute to knowledge needed for general management and central management activities (Bergmann, 1986; Epstein, 1981; Kanter, 1977). This is confirmed by more recent findings that corporate culture, not objective factors such as human capital, interest and commitment or relevance to promotional success, is a chief causes of exclusion of women from industry. As an example, McIlwee and Robinson found that in addition to the behaviors and attitudes of women reinforced by gender socialization, including educational institutions and work/career experiences, real differences in success in women's career outcomes compared with men's are explained only by structural/behavioral interface subsumed in the "engineering work place culture" (1992; see also Hacker, pp. 341-353). They found that women working in different industries and engineering specialties experience different career patterns.

The professions and professionally-driven culture, which extend into academic programs, through government licensing and regulatory agencies and deeply into the work place, present another constellation of barriers which are increasingly acknowledged in the research community. Studies have included: law and medicine (Meritt and Reskin; Bell, 1986; Epstein, 1981; Borthwick and Schau, 1991, pp. 191-193), accounting and finance (Rousch and Eyler, 1993), engineering and science, and a host of "women dominated" professions such as nursing, library science, and elementary/secondary school education professionals.

Engineering is one professional area where there is substantial overlap between industry and work place setting and engineering professional values. Mechanical engineers and those employed by aerospace firms did better than electrical engineers in computer firms and life scientists in biotechnology, despite the perception that the later two are "women friendly" and less sexist (McIlwee and Robinson, 1992). Researchers McIlwee and Robinson (1992) concluded women experience

most barriers in environments where the culture of engineering is most extensive and greatest where culture is minimized by bureaucratization and affirmative action. In other words, where engineers dominate as a group, the culture becomes strongly "macho," emphasizing aggressive displays of technical self-confidence, self-promotion and competitiveness as the criteria for success. Further, to the extent that work place culture demands conformity and "membership," objective criteria of performance are undermined. Thus, performance and other gender roles outside of the "membership club" become devalued and even ignored.

To the extent that a "male defined" view of engineering can be extended to science in general and the scientifically-based work place, it can be an even stronger "culture" obstacle (p. 141; also see Keller, Reflections on Gender and Science, 1985; Ruth Bleier, (ed.), Feminist Approaches to Science, 1986; and stratification theorists such as Gordon, Edwards and Reich, Segmented Work, Divided Workers, 1982; and Braverman, Labor and Monopoly Capital, 1974).

5. Attitudes and Behavior of Superiors, Peers, Subordinates and Sexual Harassment

In addition to more formal rules and patterns, and informal rules related to job performance or culture, attention has been paid to how different roles in organizations act to help or hurt women's mobility. As noted earlier, economists have incorporated a preference to discriminate theory into a more general theory of discrimination (Becker, 1970) and numerous surveys have assessed opinions of leaders, supervisors, peers and subordinates of both sexes and all races about women's effectiveness and general performance at work and in roles of responsibility. While clearly women managers are perceived differently than male managers, the issue has evolved around positive v. negative perceptions. One tendency has been for stated negative perceptions to decay over time, as measured by a number of opinion surveys, including several undertaken of their readership by editors of the Harvard Business Review.

Sexual harassment and the notion of a hostile work place environment as an interference to the conduct of normal business or work place performance, received strong attention in 1992 at the

Senate Judiciary hearings on the nomination of Clarence Thomas, black conservative and former EEO chair under Reagan, as Justice to the Supreme Court. A young black female attorney and former subordinate of Thomas, Anita Hill, gave vivid testimony against Thomas' behavior, setting off a firestorm of controversy and putting in focus the growing issue of harassment. Since then, growth in research and reporting has accelerated on the topic of sexual harassment.

The American Association of University Professors (AAUP), the largest faculty membership organization in the U.S., has focused particularly on this issue to develop institutional policy for management which delicately balances between freedom of speech by faculty, for example, and a non-hostile working environment for women faculty and students who are most often the complainants and victims (Committee A on Academic Freedom and Tenure, 1991; Stern, 1993, p. B1; and AAUP, 1990).

Although there is little scientifically documented evidence of senior managerial and professional women's experience, the recent 1992 UCLA-Korn-Ferry survey included a series of questions regarding personal experiences of sexual harassment. 59 percent of women responded that they had personally experienced sexual harassment. 57 percent reacted to the experience by ignoring it, while 36 percent confronted the harasser privately and 26 percent joked about it. Only about 5 percent filed a complaint (Korn/Ferry International, 1991).

V. SUMMARY OF FINDINGS AND POLICY RECOMMENDATIONS

The findings of the literature search and U.S. Census data and survey research reported in the preceding pages begin to define the work place barriers that contribute to lags in the advancement of the white female work force into positions of responsibility equal to men with equivalent skills and training. The conclusions and recommendations summarized here address the specific needs of the white female labor force in order to achieve an improved presence in the managerial, professional and technical ranks of leading business and nonprofit organizations making up the economy. The recommendations will also improve the career chances of women and men of color. The findings are divided into two parts: (1) those related to work place barriers and (2) those determining current success. Recommendations which follow are designed for three audiences: enterprise managers, public policy makers and the government, and academic research communities.

A. Findings on Work Place Barriers and Mobility to the Top

1. A Lack of CEO Commitment is the Principal Obstacle to White Women Reaching the Highest Positions in Corporate Hierarchies

CEO commitment failures take several forms: (1) failure to afford women the same opportunities as men in special, high visibility assignments to task forces, problem solving assignments or new business assignments, (2) failure to set specific goals for representation of women in top jobs and the lack of follow through in making subordinates accountable for finding and nominating candidates and (3) failure to clarify and communicate criteria for top jobs and incorporate such specifications in corporate succession plans.

2. Work Place Barriers to the Achievement of White Female Managers and Professionals at Senior Levels Include Both Behavioral and Structural Factors

Behavioral obstacles are posed by supervisory personnel who practice bias in decision making in job assignments, evaluation and performance review and in recommendations for promotion which favor male subordinates and inadequately consider females. Structural factors which present principal obstacles to mobility of white females are primarily functional job and career systems incorporating mobility ladders.

3. White Women Have Rapidly Increased Achievement in Formal Education and in Commitment to Managerial and Professional Careers in Diversified Work and Industry Settings

White women rapidly diversified their educational attainment in high demand managerial and professional specializations, successfully moved into jobs in non-traditional industry settings and work places, and demonstrated commitment to careers with expansion into full-time, year-round work as well as making other changes in labor force participation patterns over the past two decades.

4. The Success of White Women in Advancing to Top Positions is Principally Individual Effort

Women who obtained top positions attribute their success principally to individual effort and performance, often with multiple starts and frequently by first gaining visibility in an industry, then making "lateral" moves in order to obtain eventual vertical mobility. Evidence is limited on male support for upward mobility despite claims to the contrary.

5. Public Policy on Equal Employment Opportunity Enforcement has contributed to a climate fostering improvements in the status of white women. This is evident in the successful prosecution of law suits based on discrimination against women in pay and promotions and in the increase in policies which eliminate bias against women as a

class such as in the case of maternity leave. Less success has been achieved in equal employment enforcement for top management positions and senior positions in the ranks of organizations dominated by professionals such as physicians, lawyers, professors and scientists.

The lack of CEO commitment was identified as the single biggest obstacle to increasing the number of white females in the top positions of corporate hierarchies. This was the consensus of surveys of senior women and human resources executives and reflected current literature focused on executive succession processes.⁹ The pattern of commitment failures most often cited includes: (1) failure to set specific goals and timetables for promotion of women and hold subordinates accountable for identifying, recruiting and supporting senior promotions for women, (2) failure to clarify criteria for promotion to top positions and to reduce reliance on "interviews" and other subjective measures of potential to reject promotion recommendations, and (3) failure to afford women similar opportunities as male managers for assignments in high visibility, problem-solving tasks which test performance and provide the basis for promotion into high level positions. Literature which assesses barriers to women's presence at the top and which examines executive success and promotion provides evidence that white women fail to gain top positions primarily because they are never considered "promotable" by corporate CEOs and there is little commitment to overcome other informal decision making down the ranks which open opportunity for men but not for women of the same potential. Where CEOs are committed to increasing the number of women at the top, specific goals and time tables are used and CEOs' goals are communicated through explicit statements and follow up to subordinate high level managerial personnel. Other supportive measures at the CEO level include efforts to institute succession plans which include female talent and special assignments for women to gain performance and visibility in handling significant tasks for the company.¹⁰

9. For example, see Ferris, *ibid.* On succession, strategic planning and diversity, see J. Benjamin Forbes and James E. Piercy, *Corporate Mobility and Paths to the Top*, N.Y., Quorum Books, 1991, where they note, "In hierarchy based reward systems, performance evaluation is subtle and subjective and superiors have a great deal of control over evaluations and...mobility within the firm...", p. 88.

10. Woody, Bette, "Corporate Policy and Women at the Top," Wellesley College, *Working Paper No. 211*, 1990, reports of a survey of human resource managers in Fortune 500 companies. Succession planning was found to hold promise for introducing some objectivity into the selection process for senior managers. Although used only by a few large firms, succession or executive continuity plans have successfully identified managers through detailed information systems which then track "high performing" individuals including women and minorities. In three cases examined, "success" was reported in increasing the number or "promotable"

Barriers in the form of behavior and structure which impeded the achievement of white women in top positions take place at entry, mid-management and top levels and reflect the influential role of supervisors in shaping both opportunity for performance and the promotion of women. Behavior of supervisors include decisions in staffing job assignments--particularly where discretion can be used to make available line opportunities considered key to upward mobility--performance evaluations and annual performance reviews and finally, recommendations for promotions.

Structural barriers to the advancement of white women into top positions contrast from those which prevent entry level hiring and hiring into mid-management positions.¹¹ While some barriers can be identified early in women's careers, such as initial job assignment, more significant are the job systems into which women are assigned later in their careers. Career ladder progressions have recently been consolidated in the range of positions and have been altered in requirements with the corporate restructuring movement, but they are still a formidable presence in promotions. Career ladders vary with industrial sector and, to some extent, the firm's functional emphasis based on tradition, culture and principal business activity. Thus in manufacturing, production and engineering are important routes upward, while in banking there is still emphasis on core activities of commercial credit and foreign exchange, despite the proliferation of new instruments and the technological revolution in consumer banking. Career ladders have been consolidated or "upsized" to incorporate losses in jobs at mid-management levels, resulting in an overall loss of managerial levels from entry level up. Women were found to have been traditionally disadvantaged in initial job assignments which worked against later progress, assignments in less critical functions and lacking clear measurable output, or jobs in overhead, staff and support positions.¹² A second problem, corporate behavior in promotional decisions, contrasts with traditional theories that women's behavior, rather than that of male managers, supervisors and

white female candidates in eligibility pools for appointments to the top four levels of the company.

11. Kanter (1982) defines structural variables as "opportunity structure, power structure and sex ratio" and finds that women have "shorter opportunity chains" than male counterparts. Kahn-Hut, et al., "Impact of Hierarchical Structures on the Work Behavior of Women and Men," 1982, p. 274.

12. A clear case is presented in research of the grocery industry where a senior woman in one national chain reported that the industry traditionally put women in cashiers jobs and men in stock clerk and wholesaling jobs; the later were tracked in to management jobs and up the ladder, while the cashier's jobs were "dead ended." A recent court decision in the case of Lucky Stores (coincidentally the source of the report) confirmed this "tracking" assignment pattern.

decision makers, handicap women's advancement. Two kinds of behavior were identified: (1) bias in decisions involving formal processes such as job assignment and annual performance appraisal by immediate supervisors, and (2) subjective informal decisions such as recommendations for promotion or choice for special assignments or team leadership selections. There is considerable interface between the formal systems such as job assignments and informal behavior of individuals using systems in ways less favorable to women.¹³

Women who have successfully navigated to the top owe their success mainly to their individual effort and performance. A current profile suggests that hard work, single minded focus, willingness to relocate and undertake unpleasant tasks and risk taking, personality, lifestyle and ability to excel in management styles such as "team building," are most conducive to corporate success. Women at the very top have benefited from affirmative action, usually through "indirect" pressures, but also from two key factors: (1) support by the CEO of affirmative action goals, and (2) industry visibility. Many successful top women have passed through multiple corporate settings and obtained mobility through lateral moves rather than through upward progression in the same company.

White women managers have rapidly expanded their educational attainment overall and achieved a spectacular success in such key professions as medicine, law, computer science and social sciences such as economics, psychology and sociology, as well as made inroads into managerial specializations of finance, accounting, marketing and general management. However, the critical mass of white women in corporate management is not uniformly distributed throughout business hierarchies, particularly of large, Fortune 500 companies. In part, this may reflect corporate restructuring in some industries such as banking and insurance where women managers are a high proportion of the total managerial work force. But it also reflects the very low proportion of white women in management positions in whole industrial sectors, such as manufacturing, utilities, natural resources and agriculture, construction and wholesaling. While many myths persist about the behavior of white women in avoiding commitments to work, in failing to gain satisfaction

13. Gerald Ferris, M. Ronald Buckley and Gillian M. Allen, "Promotion Systems in Organizations," *Human Resource Planning*, Vol 15 Number 3, 1992, pp. 47-68; See also Harlan and Weiss *op.cit.*, on behavior of white male managers in performance reviews.

in careers and not being comfortable in the powerful positions of CEO and the inevitable "success" that power might bring, we found no evidence to confirm any part of this kind of non-economic behavior. In fact, white women have flooded career-oriented occupations whenever they opened and now form the bulk of mid-level managers in many industries. Finally, while family responsibilities tend to weigh far more heavily on white women than white men, full-time work with limited career interruption appears as the principal pattern for white women in the current managerial and professional marketplace. There is no strong evidence that women's attitudes or behavior are significant stumbling blocks to high-powered managerial careers based on the significant number of women who choose them.

Finally, public policy has contributed substantially to progress in the success of white women in obtaining a substantial role in the managerial and professional work force. Legal remedies and vigorous enforcement during the 1980s despite opposition resulted in gains in education, in employment opportunity and in other business opportunity. At the same time, however, there have been major problems in the distribution of women throughout industrial sectors and in the crucial decision making positions in business. Only recently has there been recognition of the problem of a "glass ceiling" or limit on mobility at the top as an "artificial barrier" subsequently incorporated into enforcement systems. The relatively new "glass ceiling audit" which forms part of the Department of Labor's OFCCP Program, is too new to judge its effectiveness but probably has potential to help in the case of federal contractors. The current process may be improved, however, by expanding from current periodic reviews to systematic reporting. For other firms, however, it may be necessary to have a systematic reporting requirement geared specifically to managerial and professional work forces replace the current general process under EEOC-1. Finally the current employment data base available to the business community for planning is divided between EEOC summaries which are incomplete in reflecting the national labor force and total establishments in the U.S. and the U.S. Census which is more complete in coverage, but which lacks adequate work place data. Improvements recommended below will help considerably in providing a better framework for both private sector employees and policy makers.

B. Recommendations for Overcoming Work Place Barriers

Our recommendations are divided into three categories corresponding to three separate audiences and frameworks for action: (1) organizations, particularly business executives and human resources systems managers, (2) public policy, including legislative and administrative policy makers, and (3) research agendas, data bases and users, particularly in government and academia.

1. Organizations

Consistent with findings that both structural factors and behavior patterns of decision makers act to limit mobility of white female managers and professionals, recommendations center on change in career and promotion systems first and second on steps to improve decision making at the top to promote more inclusive behavior.

- A. Identify and communicate promotional ladders in corporations from mid-levels through senior-most positions.
- B. Incorporate changes in vertical or horizontal progressions caused by structural changes, mergers and acquisitions or reform.
- C. Incorporate executive staff planning and development in strategic planning activities; include minorities and women in succession plans.

- D. Integrate affirmative action and "fast track" program, including design and candidate selection criteria into mainstream managerial staff and "talent" development strategies.
- E. Consider systematic use of assessment centers for all managerial personnel promotions and weigh findings in with other factors (i.e., track record, interviews) in determining candidates.

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- F. Develop specific task forces, special assignments and rotational assignments to assist women and minorities in obtaining visibility at the top; consider non-traditional strategies such as "corporate board membership" for females and minorities.

Many of these strategies are already in use in corporations and thus may be revised easily to target women and minorities for development. Additional structural changes, such as "family friendly" policies may also be helpful although these are not specifically designed for women managers and professionals.

2. Public Policy Recommendations

Policy has been limited until recently in addressing top jobs. In light of the special requirements for higher status jobs, there are four recommendations; two aimed at streamlining the regulatory processes already in place and two to provide incentives for increasing promotion of women into upper management positions:

- A. Streamlining Affirmative Action Reporting - The current EEOC-1 process should be studied for ways to identify problems and to gain assistance from government policy makers on making change. Federal policy makers should seek the input of a cross section of small, medium and large companies to improve the reporting process and to gain better information.
- B. Improvements and Expansion of the Glass Ceiling Audit¹⁴ - The current program should be expanded to include (1) systematic reporting of upper management turnover and appointments and (2) specific plans to correct identified problems, including incentives and/or sanctions to supervisors of women managers and profession

als.

- C. Develop and use relations with other federal agencies for improved communication and compliance - A range of federal agencies have very close relations with specific business sectors (i.e., Treasury with the banking and financial services industry; Commerce with hospitality and tourism; Energy and Interior with energy and natural resources; Transportation with airlines and trucking, etc.). These connections may be used to help promote standards and improvements in promotions and diversity in staffing through targeting specific industries.

The federal policy approach should extend beyond the issue of traditional enforcement of equal opportunity and build new interest in meeting the goals of a competitive economy for the 21st century. Since labor is critical, it is important that a coordinated effort be made to address the particular needs to strengthen managerial, professional and technical labor forces and to assure that qualified female and minority groups be fully included in the recruitment pool. Policy starts with basic research and forecasts but includes streamlining current enforcement programs to work better to (1) identify and develop talent and (2) assure that best utilization be made, including female and minority labor.

3. Policy Research Agenda

Setting a research agenda and revising the current data bases will permit an ongoing definition of the problem of advancement in organizations. This should include the monitoring of occupational systems and characteristics, job content, and a better profile and documentation of the managerial and professional work force. It is important that federal agencies take the lead in setting research goals for meeting future labor needs, as well as develop uniform definitions of the skilled, managerial and professional labor force.

The following summarizes three recommendations for improving the public policy research agenda to improve women's mobility:

14. Office of Federal Contract Compliance Programs, U.S. Department of Labor, Boston, 1993, Personal Communication.

- A. Setting a Basic Research Agenda for Policy and Human Resources Communities - The proposed agenda addresses a serious need to better understand the future work place, work and the labor force and facilitates planning for the 21st century; improving the understanding of the relationship between work and labor will also respond to recent and projected demographic change, increasing diversification of the work force and the evolution of the future work place. Finally, the basic research agenda responds to the needs of planning, education, job training, unemployment insurance and other programs in private industry, government and the academic community.

- B. Improvements in Standard Data Bases - This addresses the long overdue need for revisions in the U.S. Census series for improvements in definitions of the labor force and particularly demographic sub-populations of racial minorities and women who form the future majority work force in the U.S. It also would recommend revision of codes and other definitions and classification of occupational and industrial categories to better represent contemporary work environment.

- C. Coordinating Ongoing Information and Research Exchange - There is a current need to improve coordination and exchange between the federal government and state and local data collection and planning agencies and other users, particularly private and academic.

As a final recommendation, a research agenda should include (1) economic organization restructuring and impacts on managerial and professional occupations and roles; (2) diversification of the U.S. labor force pool; (3) forecasts for future growth in demand for skilled labor, as well as expansion of supply; and (4) special attention to labor requirements of "growth" areas in the economy and economic sectors supported by policy such as health care. Second, U.S. data bases fall short in documenting the major changes in the labor force, particularly the growing majority of white women and minority women and men, as well as the shifting characteristics of occupations

which now dominate the marketplace. Thus, much of the characterization of labor fails to distinguish minority women from white women and minority males; inadequately defines occupations which now dominate the economy in terms of internal responsibility, skills requirement and reward structure; and finally, data bases are dominated by shrinking sectors such as manufacturing at the expense of growth sectors such as services and health care. Setting an agenda and reforming data bases will serve both public policy and private sector interests and better mobilize the interests in the academic community to build a serious and ongoing basic research capability in labor issues.

APPENDIX A
CORPORATE HUMAN RESOURCES SURVEY

SURVEY RESULTS

Background

The purpose of this study was to examine institutional barriers in corporations which inhibit advancement of women and minorities into upper managerial and decision-making ranks. To gather data on this issue, surveys were conducted with senior staff at thirteen major corporations. Most of the respondents participating in the study were senior corporate officers for personnel or human resources and held the title of vice-president or division manager for that function. The corporations' represented major Fortune 500 industries, including media/advertising, finance, insurance, retailing, manufacturing, communications, mining and petroleum. A range of questions was asked pertaining to the nature of senior staffing programs, the mobility process, commitments and efforts to promote women managers, characteristics which count most in promotion, and effectiveness of efforts to encourage women managers.

Mobility and Formal Succession Programs

When asked if formal career succession systems were utilized to staff senior levels executive positions, only 7 or 53.8 percent of the corporations included in this study actually did. The duration of these programs varied from having recently been implemented in one corporation to having been in place for more than 30 years at two corporations. The median length of time was 15 years. In nearly every instance, the programs served to systematize the executive replacement planning process and in many instances to support a policy of promotion from within. Among the goals of these programs were to identify the best managerial talent and to ensure that potential managers were well trained, knowledgeable about the business and ready to fill top positions.

Approximately, two-thirds of the corporations had a designated position or function whose primary responsibility was to implement executive succession and career planning. The title for these functions varied from human resources planning and development to executive development or executive resources. Although the numbers of persons assigned to these functions varied from corporation to corporation, most reported to the Vice President for Human Resources or similar function.

In only one-third (33.3 percent) of the corporations were there different succession systems for different

organizational levels. Generally, these corporations had three levels corresponding to low, middle and upper levels positions. The need for different levels appeared to reflect differing geographic locations, corporate vs satellite activities, as well as different skills and experiences.

Succession policies and procedures were written and documented in slightly less than one half or 46.2 percent of the corporations. These policies and procedures were usually prepared by the Human Resource Department and distributed to personnel, executive development committees and others involved in personnel selection. However, there did not appear to be any consistent picture across corporations regarding the numbers of persons in upper level management positions who participated in the formal succession system nor in the numbers of women included. Further, the number of hierarchical levels varied from 2 to 6, with an average of 4. Criteria for determining who participated in this succession system also varied by corporation with one corporation requiring that participants be "nominated" by a senior manager. In other instances, participants were selected because they served on corporate or divisional personnel committees. In addition to biographic data on these managers, data were also gathered which provided an assessment of strengths and weaknesses as well as career aspirations.

Formal succession programs appear to have been successful within the past five years for ensuring appropriate top management continuity and effectiveness in 71.4 percent of the corporations. Formal succession programs were viewed as "useful" for the remaining 28.6 percent. However, with regard to its utility within the past five years for women managers, these efforts were less effective. While the succession program appeared to be "useful" for helping women advance to senior positions for 71.4 percent of the corporations, in 28.6 percent it had not been useful at all.

In corporations with no formal succession systems, it is not clear how succession choices are made because there is no published criteria. However, comments from corporate respondents in this survey suggest that these organizations provide opportunities to give presentations so that employees can be noticed. This, however, resulted in a corporate culture that one respondent characterized as "competitive camaraderie." There was no indication from the data however, of the effectiveness of informal processes in promoting women managers to senior level positions.

Mobility Process and Formal Performance Review

Nearly all of the corporations in this study (92.3 percent) conducted a formal performance review of both its middle and senior managers. For middle managers, these reviews were likely to be conducted annually between managers and superordinates. As shown in Table 1, the formal performance reviews were used to identify high potential employees as well as marginal performers; to set salaries, increases and bonuses; and for career planning. For senior managers, there was greater variability in the frequency of formal performance reviews. While senior managers at 70

percent of the corporations were reviewed annually, at the remaining 30 percent reviews occurred every 24 to 36 months. Performance reviews for senior managers involved their superiors (if relevant) or Board of Directors in some cases.

Most (84.5 percent) of the corporations also assessed the developmental needs of its managers. These assessments were most often accomplished during the performance reviews, but sometimes through less formal processes. The developmental needs were most likely to be acted upon through participation in courses, seminars, job moves, the commitment of supervisor and employee and the development of career plans. It is important to note that 72.7 percent of the corporations considered the development of subordinates as a factor in the evaluation of managers, while 58.3 percent considered it important in setting the rate of compensation for managers.

Mobility and High Potential Employees

All of the 13 corporations included in the study recognized some of its managers as "high potential" and therefore valuable to retain. These high potential persons were often identified through formal performance reviews, but were more likely to be identified by senior managers through informal observations of their contribution of new ideas, presentations, interactions in meetings and participation in training sessions. In one corporation which relied upon an informal identification system, it was stated that "visibility was the key to mobility." Employees were encouraged to increase their visibility by joining committees and task forces where they can be exposed to key people.

An example of a formal system for identifying high potential employees is provided by one corporation. This corporation had identified 13 dimensions which the corporation perceives as critical for senior level positions. Unbeknownst to employees, managers are asked to evaluate their subordinates on these dimensions in an effort to identify high potential employees. In another corporation, senior officers are periodically asked to name people in their departments who could replace them; to identify those who are immediately ready; those who need two years to train, and those who will require up to 4 years to train. It was indicated that this provides some idea of the depth or shallowness of available talent.

At most of the corporations in this study, identification of high potential managers often occurred early in one's organizational career, e.g., within 2-5 years, but in some settings identification of high potential employees occurred at different stages of one's organizational career. The percentage of high potential managers ranged from .4 percent to 44 percent, with 1 to 50 percent being women depending on the industry. The average was 16.4 percent. However, in most corporations, high potential persons are not told of their status; in a few they were informed. To facilitate equal opportunity and affirmative action, several corporations maintained a separate list of high potential women and

minorities.

Programs to Develop Managerial Talent

For selection into the top management echelon, most corporations tend to promote primarily from within. Specifically, in 15.3 percent of the corporations, promotion to the top echelon was exclusively from within. Accordingly, all but one of the corporations indicated that they had programs specifically designed to develop managerial talent. These included specific schools and institutes, workshops, learning centers, a corporate university, executive development programs and mentoring programs targeted to different levels of management as well as tuition assistance for taking external college and university courses. On the other hand, only two corporations (15.4 percent) had programs specifically designed for women. One corporation had a director of career development for women who provides assistance in career planning and management. However, the program maintains a low profile "to avoid backlash from men." Generally, in corporations without programs for women it was believed that women and minorities should be in the same training and development programs as all others and not separated out. Several corporations had earlier operated programs for women, but discontinued them because they no longer felt the need.

Even though most corporations in the study did not have special programs for women, there were informal women's groups and information networks in many corporations. Within several of these corporations, women managers held regular meetings with people from other divisions and functions to expand horizons. However, at one of these corporations, it was mentioned that an old boy network prevailed. "Women have to get tapped into it (network). That's one of the reasons that there aren't women at senior management positions." While emphasizing that the consequences of being excluded from the network meant not having access to information, the corporate staffer went on to say "One of the things that is critical here is information. If you have access to it you have power and if you don't, you don't have power -- that's a key factor."

Formal Mentoring Programs

Most corporations have not established formal mentoring/sponsorship programs. In one corporation, the boss/subordinate relationship is viewed as the formal mentoring program. In another instance, organizations within the corporation have established mentor programs for new employees with less than two years of service in an effort to orient them to the organization. In another corporation, various vice presidents served as formal mentors by guiding the career development plans of 3 to 4 mentees through a series of meetings with the mentees' immediate managerial supervisors. However, the mentee is not informed about the relationship to avoid violation of the chain of command. In

the majority of corporations in the study, it was perceived that the development of mentoring relationships was not the responsibility of the corporation, but of the individual employee. In other words, mentoring should be informal whereby an employee seeks out mentoring relationships with various persons throughout their careers.

Information Sources and Factors Used for Managerial Assessment

Corporate senior staff participating in the study were also asked to indicate the extent to which various sources of information were tapped in the assessment of candidates for top-level management position. As shown in Table 2, the most important source of information came from interviews with the candidates' bosses, followed by business results, observations of candidates in close working relationships, and formal periodic review of management talent. Least important were interviews with candidates' subordinates and informal business, professional and trade networks outside of the corporation.

Table 3 gives the ranking of factors which appear to be important in selecting executives for top level positions. The most important factors were leadership ability and outstanding performance over time. Demonstrated loyalty was also important, along with technical competence, management style, and having personal values which match company values. Very little importance was placed on having experience outside the private sector, experience in other industries, internal experience, personal connections or personal background.

The survey also included questions asking if there were characteristics which would be important in choosing the firm's top management in the future more than currently. Corporate senior staffing in eighty-three percent of the corporations responded affirmatively and ranked the three most important for their corporation. The responses are shown in Table 4. In rank order, the most important characteristics for selection of future managers included entrepreneurship, personal leadership skills, strategic planning experience, and experience as a general manager. Significant, though less important were characteristics such as scientific and technical training, marketing experience, aggressive, competitive outlook, and having had experience with external interests.

Commitment to Women Managers

Seventy-five percent of the corporations appeared to have a high level of commitment to promoting women to senior management positions. In only one corporation did there appear to be little or no commitment. In those with a high level of commitment to the promotion of women, support emanated from the top echelons including senior management, the CEO and the Board of Directors. However, it was evident that level of commitment was not matched

by actual effectiveness in the promotion of women. Only 25 percent of the corporations appeared to be effective in promoting women to senior positions. The remaining 75 percent were less effective or not effective at all.

Obstacles for Women in the Corporation

A number of explanations were provided for the slow progress of women up the corporate ladder. At one corporation, it was stated, "Our success in developing women from within is less than satisfactory. Marketing is the way up here and they (women) have had trouble getting to director jobs in that are...they either burn out or can't make the cut when promotion time comes. At the middle management level, things are fine. Some have self-selected out due to the pressures that come from being a working mother in a high pressure job. We do have two women who are VPs in marketing, but in both cases they have do not kids."

At many corporations, women were in staff jobs that do not lead to the top. Geographic relocation and mobility for corporate travel were also viewed as a necessity for promotion to top level positions. However, several respondents in this study indicated that women appeared more reluctant than men to relocate to obtain additional experience in another function. In some instances, relocating a woman manager with a spouse appeared to be problematic especially when the husband could not find a job. One corporate senior staffer stated, "We may buy some employment service for the husband from the outside...we feel the responsibility, but it is costly."

Many responses from the other corporate staffers in the study associated obstacles for women with psychological or personal characteristics. One stated that "women aren't as ambitious; they want more balanced lives with work and family." Another indicated that women tend to be at extremes - too shy or too aggressive.

With regard to the future of women managers in corporations, several did not see women becoming division presidents within the next ten years because women were not in the pool. In several corporations where women were in the pipeline, it was evident that the corporation was undergoing a crisis or the industry's economic growth has slowed. Consequently, the company does not provide a lot of opportunity for the pool of potential managers, irrespective of gender. However, at one corporation, the outlook for women in ten years was very good because of a strong pipeline.

Summary and Conclusions

While women have made advances in corporate employment, findings from this study reveal that barriers continue to exist for the advancement of women to the highest corporate echelons. While the formal succession

programs in effect at many corporations have generally been viewed as an effective means for promotion to the senior level, they have been less effective for women. Further, even though commitment to the advancement of women is espoused by senior corporate staff, the actual progress of women up the corporate ladder has been slow. The process of corporate mobility still appears to be influenced by numerous informal factors, corporate cultures that are uncomfortable with women, and a lack of understanding of how to overcome the institutional barriers that inhibit the mobility of women managers. The statement of one corporate manager is reflective of the view of many corporations regarding the advancement of women into senior staff positions: "In order for a woman to be at the senior management level, she has to be willing to do the same things a man does. We have some women who can do that, but it won't happen overnight. We don't believe in tokenism, it has to be the right person for the job."

TABLE 1

Utilization Purposes of Formal Performance Reviews According to Managerial Level

	<u>% Middle Managers</u>	<u>% Senior Managers</u>
Identify high potential employees	72.7	100.0
Identify marginal performers	100.0	90.9
Set salaries, increases, and bonus levels	81.8	80.0
For staff development/career planning purposes	100.0	90.0

TABLE 2
Mean Ranking of Sources of Information
Used in Assessment of Candidates for Top-Level Managers

	<u>Mean</u>
Interviews with candidates' bosses	4.6
Business results	4.3
Observations of candidates in close working relationships	4.2
Formal periodic review of management talent	4.0
Informal interviews with candidates	3.5
Informal succession planning system	3.5
Formal succession planning system	3.2
Appraisal forms	3.2
Human Resource staff input	3.2
Formal interviews with candidates	3.0
Interviews with candidates' peers	2.3
Executive search firms	2.2
Interviews with candidates' subordinates	1.8
Informal outside networks	1.8

TABLE 3**Mean Ranking of Factors
Central in the Choice of Executives for Top-Level Positions**

Selection Factors	Mean
Leadership ability	4.9
Outstanding performance over time	4.8
Inside the company	4.5
Technical competence	4.3
Management style	4.2
Personal values matching company values	4.1
Background in particular functional area	3.9
Willingness to make total commitment to the company	3.9
Experience in more than one function	3.8
Experience in situations similar to job sought	3.6
Outstanding performance in a particular task	3.5
Demonstrated loyalty	3.5
Negotiating skills	3.4
Business acumen	3.1
Length of service to company	2.8
Age considerations	2.4
Similarity to former job incumbent	2.2
Personal background	2.0
International experience	1.9
Personal connections	1.9
Experience in other industries	1.8
Experience outside the private sector	1.3

TABLE 4

**Characteristics Likely to Be Used
in Choosing Firms' Future Top Management**

Characteristics	Mean Ranking
Entrepreneurship	1.50
Personal leadership skills	1.57
Strategic planning experience	1.60
Experience as a general manager	1.67
Scientific, technical training	1.75
Marketing experience	2.00
Aggressive, competitive outlook	2.14
Experience with government, external interests	2.50

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