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Above the Glass Ceiling? A Comparison of Matched Samples of Female and Male Executives

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In this study the authors compare career and work experiences of executive women and men. Female (n = 51) and male (n = 56) financial services executives in comparable jobs were studied through archival information on organizational outcomes and career histories, and survey measures of work experiences. Similarities were found in several organizational outcomes, such as compensation, and many work attitudes. Important differences were found, however, with women having less authority, receiving fewer stock options, and having less international mobility than men. Women at the highest executive levels reported more obstacles than lower level women. The gender differences coupled with women's lower satisfaction with future career opportunities raise questions about whether women are truly above the glass ceiling or have come up against a 2nd, higher ceiling.

Whereas much has been written during the past decade about the underrepresentation of women in senior management, little is known about the women who have passed through the glass ceiling to attain executive positions. Relatively few women have managed to do this, because only 3 to 5% of senior managers, defined as vice president or above, are women (Glass Ceiling Commission, 1995; Korn/Ferry International & UCLA Anderson Graduate School of Management, 1993; Woody & Weiss, 1994). Although there is little empirical research on executive women, anecdotal accounts and research on managerial women suggest that their experiences are probably different from those of their male counterparts. This study was designed to learn about executive women and how their experiences compare with those of executive men. In addition, we are interested in finding out whether these women have truly passed through the glass ceiling and achieved parity with their male counterparts.

To address these questions, we compared matched samples of men and women in senior management positions of a large multinational financial services corporation. Although their jobs are not identical, we chose executive men and women in jobs that are comparable in important characteristics such as organizational level and line or staff position. Because there is no previous research comparing matched samples of women and men in executive positions, we thought this study would enhance understanding of executive women and their similarities and differences from their male counterparts. Additional insights are provided by the broad array of variables that we examined, including both organizational variables such as job characteristics and rewards and individual variables such as work attitudes and career histories.

Theory, Research, and Predictions

This study is guided by research and theory about differences in organizational experiences of women and men who are below executive levels. Whereas the women in our study have risen above the ceiling to obtain executive-level positions, it is important to learn whether any of the gender differences found at lower levels persist at executive levels. Our literature review identifies gender differences in organizational outcomes that would be predicted from theory and research on sex stereotypes. On the basis of theories and research that highlight the value women place on family and relationships as well as the organizational barriers they must overcome, we also predict gender differences in career histories. In addition, we make pre-

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dictions about how female executives' perceptions and work attitudes vary from those of their male counterparts because of differences in their organizational experiences. The following sections summarize the relevant literature and introduce the predictions to be tested.

Organizational Outcomes

Several authors have suggested that overt or covert sex discrimination, or differential treatment of women and men because of their gender, is a major reason that women's experiences in organizations differ from men's as well as an explanation for the glass ceiling (Gutek, Searle, & Klepa, 1991; Heilman, 1995; Larwood & Gattiker, 1987; Morrison, 1992; Powell & Mainiero, 1992). The underlying cause of sex discrimination is thought to be sex stereotypes, defined as widely shared beliefs about the attributes of men and women (Heilman, 1983; Ruble, Cohen, & Ruble, 1984). Research has shown that the attributes ascribed to men as a group are similar to those used to describe successful managers, but different attributes tend to be ascribed to women (Heilman, Block, Martell, & Simon, 1989; Schein, 1973, 1975).

Organizational Stature

One consequence of sex stereotypes is that women are less likely to be chosen for traditionally male positions, such as those in senior management. This occurs because the perceived lack of fit between the job requirements and the stereotypic attributes ascribed to women leads to expectations that they will fail (Heilman, 1983). Research has shown that many of the conditions associated with senior management positions, such as the small proportion of women in these positions, increase the likelihood that sex stereotypes will be salient (Kanter, 1977b). Perhaps as a result of sex stereotypes, labor economists have noted that there is fairly widespread sex typing of jobs, or occupational segregation by sex (Bielby & Baron, 1986; Blau & Ferber, 1992; Reskin & Roos, 1990). According to dual labor market theory, women tend to be found in disproportionate numbers in secondary jobs that are located at lower levels in the organization and in less critical or staff functions that do not provide career paths to senior management (Baron, Davis-Blake, & Bielby, 1986; Blau & Ferber, 1992; Morrison & von Glinow, 1990; Reskin & Roos, 1990; Woody & Weiss, 1994). Even when women's and men's jobs are at the same organizational level, the women's jobs may not be comparable in status, authority, or advancement potential (Baron et al., 1986; Eagly & Johnson, 1990; Reskin & Ross, 1995; Terborg, 1977). Although this study compares samples of female and male executives who are matched on pay levels, the sex stereotype and occupational segregation literatures lead to the prediction that there will be gender differences in organizational stature.

> *Hypothesis 1:* Female executives' positions will have less authority than those of male executives.

Compensation

A second consequence of sex stereotypes is that women's achievements tend to be devalued or attributed to luck or effort rather than ability or skill (Deaux, 1976; Greenhaus & Parasuraman, 1993; Heilman, 1983; Nieva & Gutek, 1980), which may reduce the organizational rewards they receive. There is a great deal of evidence that despite their progress, female managers continue to lag behind their male counterparts in compensation (Blau & Ferber, 1992; Haberfeld, 1992; Reskin & Ross, 1995). Longitudinal studies that track comparably qualified men and women, such as graduates of the same MBA program or law school, have shown that over time there is degradation of the women's compensation that cannot fully be explained by differences in qualifications, work history, experience, or career interruptions (Cox & Harquail, 1991; Olson, Frieze, & Good, 1987; Strober, 1982; Wallace, 1989; Wood, Corcoran, & Courant, 1993). Sex disparities in compensation are reported for managers and executives, even after other factors such as human capital and motivational and organizational variables are taken into account (Judge, Cable, Boudreau, & Bretz, 1995; Stroh, Brett, & Reilly, 1992). Although our study compares matched samples of female and male executives, pervasive patterns within the societal context of U.S. industry lead to predictions of sex differentials in organizational rewards.

> *Hypothesis 2:* Female executives' compensation will be lower than that of male executives.

Developmental Opportunities

A third consequence of sex stereotypes is that women receive fewer developmental opportunities than men. Research has indicated that managerial development results from job characteristics associated with higher level positions, such as high stakes, opportunities to manage diverse businesses and external pressure, as well as from opportunities to work in unfamiliar areas of the business (McCauley, Ruderman, Ohlott, & Morrow, 1994). Consistent with the sex stereotype and occupational segregation literatures, research on managerial development has shown that women are less likely than men to report that they have job characteristics associated with higher level positions (Ohlott, Ruderman, & McCauley, 1994). Perhaps because of expectations that they will fail, women are less likely to be chosen for assignments involving risk or working in unfamiliar areas of the business (Larwood,

Szajkowski & Rose, 1988; Ruderman & Ohlott, 1992; Van Velsor & Hughes, 1990). Women's jobs have also tended to be less rich in developmental characteristics than men's jobs at the same organizational level, suggesting that there will be gender differences in developmental opportunities for our executive samples.

Hypothesis 3: Female executives' positions will have less of the developmental characteristics associated with higher level jobs or exposure to unfamiliar areas than will the positions of male executives.

Career Histories

Career Interruptions

Because of the importance of relationships and family to women, it has been suggested that a model of career development for women should emphasize both career achievements and personal or family relationships, with the understanding that women place varying degrees of emphasis on the two domains at different points in time (Powell & Mainiero, 1992). This perspective is supported by research evidence that the career histories of women reflect more accommodation to nonwork concerns than do men's career histories. For example, research findings have indicated that women are more likely to interrupt their careers to fit family demands (Gallese, 1985; Parasuraman & Greenhaus, 1993; Powell & Mainiero, 1992; Strober, 1982).

Hypothesis 4: Female executives' career histories will reflect more interruptions than will those of male executives.

Mobility

Perhaps because of their accommodation to family concerns, some research has indicated that women are also less likely to relocate for advancement than are men (Markham, 1987; Northcraft & Gutek, 1993). Although a study of managers who had previously relocated found no gender differences in willingness to relocate again (Brett, Stroh, & Reilly, 1993), it is unclear to what extent these results apply to managers who have never relocated. In fact, a study of 1,648 managerial and professional employees, including both those who had and had not previously relocated, found that women indicated significantly less willingness to relocate either for career enhancement or for company needs than did men (Landau, Shamir, & Arthur, 1992). Another study of managers who had previously relocated found that after controlling for years in the workforce and company tenure, the male managers' career histories reflected significantly more geographic moves than did the women's (Stroh et al., 1992). In addition to self-selection, it is possible that women may not be offered assignments that require relocation because of stereotypic assumptions that they are unwilling to relocate. This notion is supported by research showing that women are less likely to be chosen for overseas assignments (Adler, 1984). Regardless of whether it is due to self-selection or lack of opportunities, we predict that women will be less mobile than men.

Hypothesis 5: Female executives' career histories will reflect less mobility than will those of male executives.

Work Experiences and Attitudes

Obstacles

In addition to their role in affecting organizational outcomes, sex stereotypes are probably related to gender differences in other types of organizational experiences. There is a great deal of research evidence, for example, that female executives experience greater obstacles than their male counterparts. Leadership research has shown that employees are often reluctant to have a female supervisor, resulting in a less supportive environment for female managers (Eagly & Johnson, 1990; O'Leary, 1974; Terborg, 1977). Management development research has indicated that, in the absence of the challenging opportunities experienced by their male counterparts, female managers' development has been found to result primarily from overcoming obstacles such as lack of organizational support (Ohlott et al., 1994). Structural research on skewed sex ratios has shown that when only small numbers of women are included in a job category, such as senior management, they encounter obstacles such as being excluded from information networks and not being recognized for their achievements (Kanter, 1977b). Whereas Kanter (1977b) suggested that these outcomes could occur for either gender when they were a minority group, recent research and reviews have indicated that these outcomes occur only for women in predominantly male occupations (Konrad & Gutek, 1987; Ragins & Cotton, 1996; Yoder, 1991). On the basis of these findings, women would be predicted to experience even more obstacles when they advance to higher levels in organizational hierarchies because there tend to be proportionately fewer and fewer women with each move up the hierarchy. Thus, we predict that executive women at all levels will experience more obstacles than executive men, and because of the increasingly skewed sex ratios, we predict differences between the highest level women and women at lower executive levels.

Hypothesis 6: Female executives will experience greater challenges stemming from obstacles or lack of organizational support than will male executives.

Hypothesis 6a: Women at higher executive levels will experience greater challenges stemming from obstacles or lack of organizational support than will women at lower executive levels.

Lack of Culture Fit

In addition to obstacles, male dominance of senior management positions presents other challenges to women. When sex ratios are skewed, women may feel that they are not a good fit with the prevalent culture or that they need to change in some way to fit in (Cox, 1994; Kanter, 1977a, 1977b). In fact, Kanter's (1977b) research indicated that when only small numbers of women are included in a job category, the dominant group (men) tends to heighten its cultural boundaries through exaggerating the token women's differences from them and excluding the women from informal interactions where critical information is exchanged. Consistent with our predictions about obstacles, we predict that executive women at all levels will perceive themselves as fitting less well with the culture than will men and that the highest level women will perceive the least culture fit.

Hypothesis 7: Female executives will perceive themselves to fit less well with the organizational culture than will male executives.

Hypothesis 7a: Women at higher executive levels will perceive themselves to fit less well with the organizational culture than will women at lower executive levels.

Work Attitudes

In view of the challenges they face, women might be expected to have more negative work attitudes than men. Whereas early research on work attitudes uncovered many gender differences, these differences were later shown to be caused by lack of comparability in women's and men's jobs, organizational levels, ages, education, etc. (Deaux, 1985; Freedman & Phillips, 1988; Lefkowitz, 1994; Rosin & Korabik, 1995). There is some evidence, however, that even in well-controlled studies of managers and professionals, women appear to be less satisfied than men with their income and promotional opportunities (Cannings & Montmarquette, 1991; Lefkowitz, 1994; Miller & Wheeler, 1992). These findings are consistent with the pervasive sex differentials in compensation noted above, as well as women's disproportionate representation in secondary jobs and career ladders with less advancement potential.

Hypothesis 8: Female executives will report less satisfaction with compensation than will male executives.

Hypothesis 8a: Female executives will report less satisfaction with career opportunities than will male executives.

Work–Family Conflict

Consistent with the value that women place on nonwork concerns, there is research evidence of gender differences in perceptions of work–family conflict. These issues were clarified by a recent study of senior managers that distinguished two different types of work–family conflict: work interference with family and family interference with work. Whereas no gender differences were found in reports of family interference with work, women were significantly more likely to report that work interfered with family (Gutek et al., 1991). Male and female managers reported similar amounts of time devoted to paid work, but women reported significantly more hours of family work, which is consistent with earlier empirical findings (Hochschild & Machung, 1989) as well as sex role expectations (Gutek et al., 1991). This suggests that there will be gender differences in perceived work interference with family.

Hypothesis 9: Female executives will report more work–family conflict due to work interference with family than will male executives.

Method

Participants

The study participants were drawn from the 1994 succession planning review of a large multinational financial services corporation, where the top business and human resource officers identified and assessed performance and advancement potential of senior-level managers who held the most critical positions. Because only 10% of those reviewed were women, all of the women (n = 69) were included in our study, and men were chosen (n = 69) who best matched them on criteria identified by the organization's senior human resource officers. Every effort was made to create matched samples of executives that differed only in sex. The male and female samples were matched on their positions in the reporting structure, pay level, line or staff position, age within a 5-year band, and organizational ratings of performance and advancement potential. It should be noted that the male and female samples were matched on pay level, which is a *job* characteristic reflecting the value of the job to the company as well as its position in the organizational hierarchy. The samples were not matched, however, on actual compensation.

Studying men and women from the same organization helped to ensure good matching on critical variables such as position in the hierarchy. Participants in this study were drawn from four specific executive levels, whereas participants in studies across organizations can only be assigned to broad categories such as middle-level manager or executive. (See, e.g., McCauley et al., 1994).

Our final samples (for the archival data) were reduced to 51 women and 56 men because of promotions and resignations that occurred during the study as well as a decision to drop the participants from the lowest pay level. (The eliminated pay level was judged by organizational human resource officers to be more similar to middle management than to senior executives; including these participants would not be consistent with the goals of the study.) Comparison of the final samples on the original matching variables (Table 1), such as pay level, performance and potential ratings, and line or staff position, indicates

Table 1
Means, Standard Deviations, Reliability Estimates, and Gender Comparisons

Variable	α	Women			Men			t	Effect size (d)
		n	M	SD	n	M	SD		
Organizational outcomes									
Log-number of subordinates (H1)		38	3.79	1.71	34	4.68	1.93	−2.04*	−.48
Log-base salary (H2)	.99	50	12.04	0.25	55	12.03	0.21	0.24	.05
Log-bonus (H2)	.98	48	12.46	0.98	54	12.51	0.84	−0.26	−.05
Log-stock options (H2)	.98	48	8.77	0.80	55	8.97	0.62	−1.40	−.28
Developing new directions (H3)	.74	38	12.61	4.40	33	12.00	3.91	0.61	.15
High stakes (H3)	.67	38	19.45	3.37	34	18.91	3.53	0.66	.16
Managing business diversity (H3)	.74	37	11.08	2.93	34	10.24	3.46	1.12	.27
Handling external pressure (H3)	.74	38	6.79	3.54	34	8.38	4.10	−1.75*	−.41
Job overload (H3)	.81	38	11.16	3.32	34	11.24	2.61	−0.11	−.03
Unfamiliar responsibilities (H3)	.56	37	5.41	2.40	34	5.03	1.90	0.74	.18
Career histories									
Number of leaves of absence (H4)		38	0.42	0.83	34	0.00	0.00	3.14**	.74
Total months of leave (H4)		38	1.12	2.37	34	0.00	0.00	2.91**	.69
Interest in international assignment (H5)		43	0.70	0.47	53	0.74	0.45	−0.41	−.08
Restrictions on international assignment (H5)		27	0.37	0.49	37	0.70	0.46	−2.76**	−.70
Total work locations (international and domestic) (H5)		44	1.54	0.88	54	2.77	1.83	−4.33***	−.88
Number of international staff assignments (H5)		45	0.22	0.70	55	1.64	2.58	−3.89***	−.78
Number of domestic locations (H5)		45	5.49	3.46	55	4.55	3.02	1.46	.29
Work experiences and attitudes									
Influencing without authority (H6)	.68	37	12.08	2.88	34	11.12	2.63	1.47	.35
Lack of personal support (H6)	.76	38	9.92	3.93	33	9.33	3.89	0.63	.15
Perceived fit with culture (H7)		38	3.89	0.80	34	4.03	0.94	−0.66	−.16
Satisfaction with compensation (H8)	.74	38	9.42	2.61	34	8.82	2.42	1.00	.24
Satisfaction with career opportunities (H8a)	.79	38	11.97	3.22	34	13.35	3.82	−1.66*	−.39
Work interference with family (H9)	.86	38	13.26	3.77	34	12.88	3.88	0.42	.10
Work attitudes									
Affective commitment	.78	37	17.78	3.60	34	18.47	3.87	−1.43	−.34
Continuance commitment	.66	38	9.45	2.49	34	10.26	3.65	−1.10	−.26
Normative commitment	.77	37	14.41	3.24	34	15.62	3.85	−1.44	−.34
Job involvement	.64	37	19.70	2.68	34	19.76	3.38	−0.09	−.02
Intent to remain	.76	38	14.47	3.15	34	15.15	2.69	−0.97	−.23
Job satisfaction	.88	37	18.46	4.43	34	19.18	4.77	−0.66	−.16
Demographic characteristics									
Marital status (married = 1; single = 0)		38	0.74	0.45	34	0.91	0.29	−2.00*	−.47
Lives with children		38	0.47	0.51	34	0.79	0.41	−2.96**	−.70
Dual career		38	0.71	0.46	34	0.18	0.39	5.35***	.12
Age		51	45.36	4.22	56	46.28	4.89	−1.04	−.20
Education (highest degree)		43	3.00	0.65	51	2.80	0.57	1.56	.32
Race (Caucasian = 1; other = 0)		51	0.94	0.24	56	0.84	0.37	1.71	.33
Citizenship (U.S. = 1; other = 0)		51	0.88	0.33	56	0.91	0.29	−0.48	−.09
Organizational tenure		51	14.49	7.53	56	16.95	6.80	−1.77	−.34
Matching variables									
Performance rating		48	1.81	0.70	56	1.73	0.62	0.62	.12
Potential rating		48	1.92	0.61	56	2.04	0.69	−0.93	−.18
Currently in line vs. staff position		51	0.55	0.50	56	0.55	0.50	−0.05	−.00
Organizational level		51	2.53	0.88	56	2.43	0.81	0.62	.12

Note. H = hypothesis. One-tailed significance levels are provided for the *t* tests based on hypotheses; two-tailed significance levels are provided for the other variables.
* $p < .05$. ** $p < .01$. *** $p < .001$. Missing alphas indicate single-item measures.

that the attrition did not produce any significant gender differences in these characteristics.

The majority of both women and men were Caucasian and U.S. citizens. Average age was 45 years for the women and 46 years for the men. Whereas the gender differences in age are not statistically significant, male executives had more organizational tenure than their female counterparts, $t(105) = -1.77$, $p = .079$, $d = -.34$. Both groups were well educated, with 79% of the women and 72% of the men having completed graduate degrees and the remainder having completed bachelor's degrees. They were divided between line (55%) and staff (45%) positions and had been in their present positions an average of 40 months.

Procedures

Demographic, career history and compensation variables and ratings of performance and potential were obtained from organi-

zational databases and succession planning inventories. The other variables were measured with a survey based on published instruments and research as well as in-depth interviews with senior-level women (n = 5) and men (n = 5) from the organization.

Surveys were mailed to participants in 1995 with a personalized cover letter from the chairman. Respondents were asked to complete the survey "to help to frame our strategy for developing and retaining identified talent and creating an environment that provides all [employees at name of organization] with the best possible chance of succeeding." The letter also provided assurance that responses would be confidential. The survey instructions discussed the goal of learning about career experiences and attitudes of senior managers with no mention of gender comparisons. Participants returned their surveys anonymously in postage-paid envelopes to an external vendor for processing.

We received completed surveys from 38 women and 34 men, yielding response rates of 75% and 61%, respectively. To assess representativeness of survey respondents, we compared them with our total samples of 51 women and 56 men on pay levels and organizational tenure. No significant differences were found for expected versus observed distributions of pay levels, $\chi^2(3, N = 38) = 3.10$, $p = .38$, for women and $\chi^2(3, N = 34) = 2.97$, $p = .39$, for men; organizational tenure, $t(36) = -.38$, $p = .71$, for women and $t(33) = -.26$, $p = .80$, for men; or age, $t(37) = -1.27$, $p = .21$, for women and $t(33) = -.41$, $p = .69$, for men.

Measures of Hypothesized Variables

Organizational Outcomes

Organizational stature. We used a survey measure of the number of subordinates to assess position authority (Hypothesis 1). Number of people supervised was chosen because it is frequently used by organizations to evaluate the importance of managerial positions and locate them within the organizational hierarchy (Milkovich & Boudreau, 1994). Also, number of subordinates has been used in prior research as a measure of managerial authority (Reskin & Ross, 1995). A natural logarithmic transformation was applied to normalize this highly skewed variable (Gerhart & Milkovich, 1990). The raw medians were 34 subordinates reporting to female executives and 130 to male executives. The female and male samples were matched on other measures of organizational stature or authority, such as line or staff position and pay level, so these variables could not be used to test the hypothesis.

Compensation. We obtained three measures of compensation (Hypothesis 2) from the organizational database: 1992–1995 base salaries, 1992–1994 performance bonuses, and 1992–1994 stock options. The organization's compensation system had a broad band for each pay level. Each salary band had a spread of about 100% at executive levels, that is, the maximum salary for a pay level was twice as large as the minimum salary. For example, the lowest (and smallest) of the salary bands ranged from about $100,000 to $200,000. Including men and women whose base salaries fell within this range allows for considerable variance in base salaries. As was explained earlier, the male and female samples were matched on pay level, which is a job characteristic, but not on actual salaries.

Year-end bonuses represent short-term rewards for performance in the previous year, whereas stock options represent a longer term retention incentive. The men and women were not matched on bonuses or stock options, and executives who fell within the same pay level received widely differing bonuses and stock options. For example, the 1994 performance bonuses ranged from zero to more than five times the base salary.

Natural logarithmic transformations were applied to normalize all of the compensation variables (Gerhart & Milkovich, 1990). Examples of raw medians were $168,950 for women's and $174,800 for men's 1995 base salaries. To increase reliability of the compensation variables, we used 3- or 4-year composites in the analyses. The alphas for the composites range from .98 to .99.

Developmental opportunities. We used shortened versions of the Developmental Challenge Profile (DCP) scales (McCauley et al., 1994; Ohlott et al., 1994) to measure the developmental characteristics of the participants' positions (Hypothesis 3) as well as the obstacles they faced (described below). The original DCP scales contain 4 to 11 items. Shortened versions with 3 to 5 items were developed because of concerns about survey length. Items were selected on the basis of factor loadings (C. D. McCauley & P. J. Ohlott, personal communication, May 4, 1995) as well as appropriateness for senior-level managers and the organization. Items were presented in scrambled order, with instructions to indicate the extent to which each item is descriptive of the respondent's current job, on a scale ranging from 1 (*not at all descriptive*) to 5 (*extremely descriptive*). The coefficient alpha measures of reliability range from .56 for Unfamiliar Responsibilities to .81 for Job Overload, which are similar to the range of .60 to .79 for the original eight scales. The only shortened scale that appears to be below acceptable reliability ranges is Unfamiliar Responsibilities, which had an alpha of .77 in its original format with 7 items, but an alpha of .56 in our study.

We used six DCP scales to test Hypothesis 3. Developmental characteristics associated with higher level jobs were measured with the Developing New Directions, High Stakes, Managing Business Diversity, Handling External Pressure, and Job Overload scales (McCauley et al., 1994). Developmental characteristics associated with exposure to unfamiliar areas were measured with the Unfamiliar Responsibilities scale.

Career Histories

Career interruptions. We measured career interruptions (Hypothesis 4) with survey items asking participants how many leaves of absence they have taken from [name of organization] and total months of leave.

Mobility. We measured mobility (Hypothesis 5) by analyzing career history records to determine the number of cities (both domestic and international work locations) where each executive had worked during his or her career at the organization. Additional measures were the executives' interest in (coded *yes* = 1 or *no* = 0); and restrictions on international assignments (coded *yes* = 1 or *no* = 0).

Work Experiences and Attitudes

Obstacles. Consistent with prior research, obstacles (Hypotheses 6 and 6a) were measured with shortened versions of two DCP scales, Lack of Personal Support and Influencing Without Authority (Ohlott et al., 1994). The Lack of Personal Support scale includes items about exclusion from informal networks, which was identified by Kanter (1977b) as an obstacle for women in predominately male work environments, thus making this a particularly appropriate measure.

Lack of culture fit. We assessed perceived culture fit (Hypotheses 7 and 7a) with the item "I am a good 'fit' with the [name of organization] culture." Participants indicated the extent of their agreement on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Satisfaction with work outcomes. We measured satisfaction with work outcomes with two scales: Satisfaction with Compensation (Hypothesis 8) and Satisfaction With Career Opportunities (Hypothesis 8a). Satisfaction items were rated on a scale ranging from 1 (*very dissatisfied*) to 5 (*very satisfied*). Compensation items were "base salary," "bonus compensation," and "compensation other than base and bonus, e.g., stock options." The items representing satisfaction with career opportunities were "opportunity to develop your skills, abilities, and/or expertise," "long-term career opportunities," and "[name of organization]'s commitment or concern for you." We included an additional item where respondents indicated on a 5-point scale the extent of their agreement or disagreement with the statement "It is likely that I will be able to achieve my career goals at [name of organization]." Alphas for the scales were .74 and .79.

Work–family conflict. We measured work interference with family (Hypothesis 9) with a 4-item scale developed by Kopelman, Greenhaus, and Connoly (1983) and used with managers by Gutek, Searle, and Klepa (1991). Alpha for the scale is .86.

Measures of Work Attitudes and Demographic Characteristics

In addition to variables where gender differences were predicted, measures of several other important work attitudes and demographic characteristics were included to provide a more comprehensive understanding of female and male executives. All work attitude items were presented in scrambled order with instructions to indicate the extent of agreement or disagreement on a scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Consistent with recent research (Hackett, Bycio, & Hausdorf, 1994; Meyer & Allen, 1991; Meyer, Allen, & Smith, 1993), we measured three facets of organizational commitment. Shortened versions of the Meyer et al. (1993) scales were developed to measure affective commitment (five items), continuance commitment (four items), and normative commitment (five items). Alphas for these scales ranged from .66 to .78. Job involvement was measured with the commonly used 6-item short form of the original Lodahl and Kejner scale (Lodahl & Kejner, 1965). Alpha for the scale was .64.

We developed a 4-item measure of intent to remain. Two items assessing the likelihood that respondents would still be working for the organization in 1 year and "several years from now" are similar to items used in other research (Begley & Czajka, 1993; Colarelli, 1984; Katzell & Thompson, 1987; Meyer et al., 1993; Thompson & Katzell, 1994). Additional items concerned frequency of thoughts of leaving the organization (Begley & Czajka, 1993; Colarelli, 1984) and plans to look for a new job (Colarelli, 1984; Katzell & Thompson, 1987; Thompson & Katzell, 1994). Alpha for the scale was .76.

We measured job satisfaction with 5 items such as "job challenge," "level of responsibility," and "opportunity to use your skills and abilities." Participants indicated their satisfaction level on the 5-point scale described above. Alpha for the scale was .88.

We obtained demographic variables, such as sex, age, education, race, and citizenship, from organizational databases. Education was coded as highest degree earned on a scale of 1 (*less than college degree*), 2 (*bachelor's degree*), 3 (*master's degree*) and 4 (*advanced graduate degree*). Sex was coded as *female* (0) or *male* (1). The survey contained self-report items for demographic variables including age, country of origin, race, and education. Because most respondents were born in the United States, citizenship and country of origin were coded as *U.S.* (1) or *Other* (0). Similarly, because most respondents were Caucasian, race was coded as *Caucasian* (1) or *Other* (0). Education was coded in the survey as 1 (*some high school or high school graduate*), 2 (*some college or technical training*), 3 (*bachelor's degree*), 4 (*master's degree*) or 5 (*advanced graduate degree*).

The survey also included lifestyle measures such as marital status, whether the spouse or significant other was employed, and number and ages of children living with the respondent. Marital status was coded as *married* (1) or *not* (0). A respondent was coded as *being in a dual career relationship* (1) if he or she lived with another adult, such as a spouse or significant other, and that person was employed full time; any other living and employment arrangement was coded as *other* (0). Having children at home was coded as *yes* (1) or *no* (0).

Measures of Matching Variables

We obtained the variables used to match the male and female executive samples from organizational databases. Pay level was coded according to 4 levels where 1 = *low* and 4 = *high.* Jobs were classified as line or staff by human resource officers at the organization; line jobs were coded 1 and staff jobs 0. Performance and potential ratings ranged from 1 (*high*) to 3 (*low*). Age was measured in years.

Results

Analyses

Gender differences in hypothesized variables were analyzed with one-tailed (directional) *t* tests, whereas gender differences in other variables were analyzed with two-tailed *t* tests. Effect sizes (*d*) were computed with correction for unequal sample sizes (Hunter & Schmidt, 1990, p. 273). Effect sizes represent differences between the group means in standard deviation units (Cohen, 1988)

and are included to aid in the interpretation of results. We relied on Cohen's (1988) conventions for labeling the magnitude of effect sizes. We also examined the gender difference results with partial correlations to control for human capital variables and career interruptions. The archival data included human capital variables such as organizational tenure, education, age, and performance rating. The survey data included human capital variables, such as age and education, as well as career interruption measures such as number and duration of leaves of absence.

Tests of Hypotheses 6a and 7a required computation of correlations between specified survey variables and pay level for female executives. Therefore, intercorrelations were computed among the survey variables for female executives; intercorrelations were also computed for male executives so that comparisons could be made. Hypotheses 6a and 7a assume that the proportions of women at each pay level decline as one moves up the organizational hierarchy. Examination of organizational records indicated that this was true because percentages of women in the participants' pay levels range from 14% in the lowest pay level to 7% in the highest.

The means, standard deviations, reliability estimates, *t* tests of gender differences, and effect sizes (*d*) are shown in Table 1. Intercorrelations are shown in Table 2 (archival data) and Table 3 (survey data).

Tests of Hypotheses

Organizational Outcomes

Tests of the three hypotheses suggesting that women receive fewer positive organizational outcomes or rewards produced mixed results. Hypothesis 1 was supported because female executives' positions had less authority, as indicated by their having significantly fewer subordinates than their male counterparts, with a medium effect size, $t(67) = -2.04$, $p < .05$, $d = -.48$. We found similar results when we computed partial correlations (*pr*s) controlling for human capital variables, career interruptions, and organizational level.

Contrary to predictions (Hypothesis 2), there were no significant gender differences in base salary or bonus. As noted above, the female and male samples were matched on pay level for their jobs, but no attempt was made to match them on base salary within a pay level or on bonuses. Also, the executive salary ranges were so broad that large gender differences were possible. Gender differences in stock options were close to significance, however, in the predicted direction, $t(88) = -1.40$, $p = .083$; $d = -.28$, with women receiving a median of 2,767 stock options and men receiving a median of 3,333 stock options per year over the 3-year period.

When we computed partial correlations between com-

Table 2
Means, Standard Deviations, and Intercorrelations of Archival Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Log-base salary	12.03	0.23	—																	
2. Log-bonus	12.49	0.90	.38	—																
3. Log-stock options	8.88	0.72	.68	.58	—															
4. Interest in international assignment	0.72	0.45	.04	.15	−.05	—														
5. Restrictions on international assignment	0.56	0.50	−.15	−.14	−.08		—													
6. Total work locations (international and domestic)	2.22	1.59	−.08	−.02	.04	.20	.15	—												
7. Number of international staff assignments	1.00	2.09	−.13	.02	.00	.23	.24	.75	—											
8. Number of domestic locations	4.97	3.24	.21	−.08	.14	−.26	−.31	−.13	−.32	—										
9. Age (years)	45.84	4.59	.41	−.05	.22	−.26	−.14	.12	.06	.11	—									
10. Education (highest degree)	2.89	0.61	.14	.07	.00	.13	−.04	−.00	.01	−.17	−.14	—								
11. Race (Caucasian = 1; other = 0)	0.89	0.32	.14	.01	.02	−.15	−.18	−.15	−.18	.03	.04	.04	—							
12. Citizenship (U.S. = 1; other = 0)	0.90	0.31	−.08	−.17	−.03	−.00	.20	.09	−.02	−.01	.04	−.06	−.02	—						
13. Performance rating	1.77	0.66	.05	.04	−.13	.09	−.20	.02	−.04	.10	−.07	.15	.15	−.12	—					
14. Potential rating	1.98	0.65	−.03	−.10	.07	−.36	.32	−.06	−.07	.12	.30	−.18	.13	.18	−.40	—				
15. Currently in line vs. staff position	0.55	0.50	.22	.31	.30	−.13	−.32	.02	−.21	.16	.09	−.06	.16	−.06	.09	.00	—			
16. Organizational level	2.48	0.84	.73	.42	.73	−.03	−.07	−.07	−.07	.19	.33	.14	.10	−.03	−.06	.07	.22	—		
17. Organizational tenure	15.78	7.23	.23	.03	.34	−.23	−.06	.29	.19	.50	.38	−.23	.06	.07	−.16	.32	.07	.25	—	
18. Sex (women = 0; men = 1)	0.52	0.50	−.02	.03	.14	.04	.33	.39	.34	−.15	.10	−.16	−.16	.05	−.06	.09	.00	−.06	.17	—

Note. *ns* ranged from 94 to 107 except restrictions on international assignment, where $n = 64$. $rs \geq .20$, $p < .05$, two-tailed.

pensation measures and gender, controlling for human capital variables, we found no significant gender differences for either base salaries or bonuses. However, partial correlations with stock options indicated different patterns of results, depending on which human capital variable was included. The gender differences in stock options were less evident when we controlled for organizational tenure ($pr = .09$, $p = .19$) or age ($pr = .12$, $p = .11$). Because men have more organizational tenure, these analyses provide an alternative explanation for why men might have received more stock options. However, gender differences remained when we controlled for education ($pr = .14$, $p = .088$), performance rating ($pr = .13$, $p = .093$), and organizational level ($pr = .27$, $p < .01$). These analyses indicate that male executives received more stock options than female executives with comparable education and performance ratings and who have attained positions at comparable levels in the management hierarchy.

Only limited support was provided for Hypothesis 3, that female executives' positions would have fewer developmental characteristics associated with higher level jobs or unfamiliar areas of the business. Consistent with predictions, male executives scored significantly higher on the Handling External Pressure scale, $t(66) = -1.75$, $p < .05$, $d = -.41$, a characteristic associated with higher level positions. We found no significant gender differences, however, for the Developing New Directions, High Stakes, Managing Business Diversity, Job Overload, or Unfamiliar Responsibilities scales. We found the same pattern of results when partial correlations were computed that controlled for human capital variables and career interruptions.

Career Histories

The findings provide support for predictions that women's career histories will reflect more interruptions than men's (Hypothesis 4). Women reported significantly more leaves of absence, $t(37) = 3.14$, $p < .01$, $d = .74$, and more total months of leave, $t(37) = 2.91$, $p < .01$, $d = .69$, with large effect sizes. In fact, none of the men reported taking a leave of absence.

Women's career histories also differed from men's because the women were significantly less mobile (Hypothesis 5), as measured by number of work locations, $t(78) = -4.33$, $p < .001$, $d = -.88$, and number of international staff assignments, $t(64) = -3.89$, $p < .001$, $d = -.78$, with large effect sizes for both analyses. There were no significant differences in number of domestic work locations, however, suggesting that the significant gender differences in work locations are due to lack of international mobility for the female executives. Whereas women did not differ from men in the proportions who expressed interest in future international assignments, the interested women were significantly more likely to indicate restrictions than were their male counterparts, $t(62) = -2.76$, $p < .01$, $d = -.70$. Content analysis of the restriction responses indicates that the most frequent restrictions mentioned by the women are dual career and timing concerns.

Because men had more organizational tenure and tenure was significantly related to number of work locations ($r = .29$, $p < .01$), number of international assignments ($r = .19$, $p = .056$), and number of domestic assignments ($r = .50$, $p < .001$), we computed partial correlations to control for these effects. Results indicated that after controlling for tenure, gender differences in mobility remain, with men's careers including more work locations ($pr = .36$, $p < .001$) and more international assignments ($pr = .32$, $p < .01$). After controlling for tenure, we found that women's careers included more domestic work locations ($pr = -.27$, $p < .01$) than the careers of their male counterparts.

Work Experiences and Attitudes

We found mixed support for the predictions that women's and men's experiences and attitudes would differ. There was some evidence of gender differences in one of the two measures of obstacles. As predicted (Hypothesis 6), women had higher scores than men on Influencing Without Authority, and the difference was close to significance, $t(69) = 1.47$, $p = .074$; $d = .35$. We found no significant gender differences, however, in Lack of Personal Support. There was also no evidence of significant gender differences in perceived fit with the organizational culture (Hypothesis 7). We found similar results when we computed partial correlations that controlled for human capital variables. However, when we computed partial correlations that controlled for career interruptions (measured as the number and duration of leaves of absence), the gender difference in Influencing Without Authority was no longer close to significance ($pr = -.13$, $p = .14$, and $pr = -.14$, $p = .13$, controlling for number and duration of leaves, respectively).

Tests of Hypotheses 6a and 7a were based on correlations between survey responses and pay level for the female executives. (Intercorrelations are shown above the diagonal for the female executives and below the diagonal for the male executives in Table 4.) Mixed support was provided for Hypothesis 6a, which predicted that higher level women will experience more obstacles than lower level women. The correlation between pay level and Lack of Personal Support was significant ($r = .42$, $p < .01$), but the correlation between pay level and Influencing Without Authority was not. However, the effect size of .35 for the gender difference in Influencing Without Authority suggests that executive women may perceive this to be an obstacle regardless of their level in the hierarchy.

Table 3
Means, Standard Deviations, and Intercorrelations of Survey Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9
1. Log-number of subordinates	4.22	1.86	—								
2. Developing new directions	12.32	4.16	.36	—							
3. High stakes	19.19	3.43	.08	.53	—						
4. Managing business diversity	10.68	3.20	.33	.62	.45	—					
5. Handling external pressure	7.54	3.87	.16	.29	.25	.39	—				
6. Job overload	11.19	2.99	.14	.51	.54	.42	.26	—			
7. Unfamiliar responsibilities	5.23	2.17	−.05	.16	.12	.14	.12	.21	—		
8. Number of leaves of absence	0.22	0.63	−.25	.12	−.01	.15	−.03	−.02	.20	—	
9. Influencing without authority	11.62	2.78	−.13	.22	.34	.41	.21	.33	.25	.15	—
10. Lack of personal support	9.65	3.90	.01	.15	.10	.18	.26	.20	−.05	.05	.25
11. Perceived fit with culture	3.96	0.86	.03	−.07	.03	.07	−.23	−.18	−.03	−.16	−.14
12. Satisfaction with compensation	9.14	2.52	−.10	−.05	−.03	−.06	−.10	−.05	.11	.13	−.01
13. Satisfaction with career opportunities	12.63	3.56	.11	−.06	.03	.06	.15	.04	.14	.04	−.12
14. Work interference with family	13.08	3.80	.12	.30	.29	.16	.23	.65	.05	.09	.17
15. Affective commitment	18.11	3.72	.07	−.06	−.03	.00	−.15	−.07	−.01	−.17	−.00
16. Continuance commitment	9.83	3.09	.07	−.02	−.07	−.18	.04	.13	−.00	−.14	−.04
17. Normative commitment	14.99	3.57	.29	.14	.00	.17	.21	.13	.09	−.12	.05
18. Job involvement	19.73	3.01	.11	.15	.29	.19	.21	.37	−.18	−.25	.11
19. Intent to remain	14.79	2.94	.03	−.18	−.08	−.12	−.00	−.26	.04	−.14	−.17
20. Job satisfaction	18.80	4.58	.06	.30	.25	.29	.30	.30	.27	.06	−.00
21. Marital status (married = 1; single = 0)	0.82	0.39	−.05	−.06	−.12	−.11	−.02	.08	−.02	.17	−.13
22. Lives with children	0.63	0.49	−.00	.10	.04	.01	.04	.16	.17	.23	−.08
23. Dual career	0.46	0.50	−.18	.04	.02	.20	.04	.08	.08	.38	.15
24. Age (years)	45.17	4.36	.07	−.12	.01	−.09	−.03	−.18	−.37	−.20	−.12
25. Education	4.69	0.94	−.08	−.06	.05	−.00	.27	.19	.04	−.03	.02
26. Race (Caucasian = 1; other = 0)	0.82	0.39	−.05	.04	−.08	.05	−.09	−.13	.10	.05	.08
27. Organizational level	2.50	0.77	.27	.21	.00	.08	.39	.07	.04	.09	.06
28. Organizational tenure	15.31	6.69	−.16	.03	.06	−.05	.08	−.03	−.13	.02	.26
29. Sex (women = 0; men = 1)	0.47	0.50	.24	−.07	−.08	−.13	.21	.01	−.09	−.33	−.17

Note. *n*s ranged from 69 to 72. $rs \geq .23$, $p < .05$, two-tailed.

Support was provided for Hypothesis 7a because higher level women reported significantly less perceived fit with the organization's culture than do women at lower organizational levels ($r = -.42, p < .01$). The results indicated that perceived culture fit is highly correlated ($r = .67$, $p < .001$) with Affective Commitment, which is also negatively correlated with organizational level for women ($r = -.44, p < .01$). It is interesting to note that correlations of pay level with perceived culture fit, Affective Commitment, and Lack of Personal Support are not significant for male executives (Table 4). Thus, the overall pattern of results suggests that women report more obstacles than men, and that higher level executive women report more obstacles than lower level executive women.

The tests of gender differences in satisfaction with organizational outcomes (Hypothesis 8) were consistent with the objective measures of organizational outcomes reported in the previous section. There were no significant gender differences in satisfaction with compensation, which is consistent with the finding that the women's compensation is comparable to the men's. Female executives were significantly less satisfied, $t(70) = -1.66$, $p < .05$; $d = -.39$, with their career opportunities than male executives, which is consistent with gender differences in organizational stature. The gender differences in satisfaction with career opportunities remained significant when we computed partial correlations that controlled for human capital variables, organizational level, and career interruptions.

We found no significant gender differences in work conflict due to work interference with family (Hypothesis 9).

Work Attitudes and Demographic Characteristics

As would be expected with female and male managers who are closely matched on pay level and job characteristics, we found no statistically significant gender differences in other work attitudes including affective, continuance and normative commitment, job involvement, intent to remain, and job satisfaction. However, closer examination of the findings revealed that women's attitudes were more negative on the organizational commitment and intent-to-remain scales. Effect sizes ranged from .23 to .34.

The demographic variables (Table 1) revealed some interesting gender differences. The female executives were significantly less likely to be married, $t(64) = -2.00$, $p < .05$, $d = -.47$, or have children, $t(69) = -2.96$, $p < .01$, $d = -.70$, than their male counterparts. The women were also more likely to be in dual career relationships,

10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
—																			
−.44	—																		
−.32	.04	—																	
−.55	.28	.36	—																
.26	−.24	−.09	−.16	—															
−.53	.57	.32	.49	−.23	—														
.21	−.42	−.07	−.16	.30	−.10	—													
−.17	.16	.20	.45	−.05	.44	.17	—												
−.11	.17	.02	.09	.30	.33	−.04	.12	—											
−.56	.31	.29	.70	−.43	.58	−.14	.32	.06	—										
−.38	.11	.28	.67	.13	.19	−.12	.22	.09	.40	—									
−.22	.10	−.05	.12	.19	.01	−.12	.00	−.03	.03	.11	—								
−.16	−.07	−.04	.15	.10	−.12	.14	−.06	−.18	−.00	.13	.53	—							
.26	−.18	−.15	−.22	.18	−.23	.06	−.29	−.01	−.24	−.13	−.08	−.09	—						
.13	−.13	.13	−.13	−.11	−.01	.17	−.00	.03	.01	−.16	−.10	−.04	−.14	—					
−.11	−.12	.04	.28	.04	−.12	−.09	−.01	−.01	.14	.25	.12	.15	.03	−.13	—				
.21	−.19	−.00	−.23	.03	−.11	.30	−.09	−.09	−.07	−.15	−.22	−.07	.14	.05	−.19	—			
.20	−.35	.09	.03	.07	−.29	−.02	.05	.05	−.05	.10	.07	−.02	.02	.12	.06	.12	—		
.07	.00	.25	−.04	.09	.14	.29	.17	.13	−.10	−.07	−.16	.00	−.11	.32	−.13	.15	.12	—	
−.08	.08	−.12	.19	−.05	.09	.13	.17	.01	.12	.08	.23	.33	−.54	.18	.04	−.28	.00	.20	—

whereas the men tended to be in traditional marriages with nonworking spouses, $t(70) = 5.35$, $p < .001$, $d = 1.26$. We found large effect sizes for the living with children and dual career measures. As can be seen in Table 3, being in a dual career relationship was negatively correlated with many important work attitudes. Those in dual career relationships reported significantly less affective commitment ($r = -.23, p < .05$), less normative commitment ($r = -.29$, $p < .05$), and less intent to remain at the organization ($r = -.24$, $p < .05$).

Discussion

This study provides a greater understanding of the experiences and attitudes of executive women by comparing them with a matched sample of executive men on a wide array of important variables. The overall findings suggest that there are more similarities than differences between these female executives and their male counterparts. They do not differ significantly, for example, in many important organizational outcomes and work attitudes.

The results raise questions about why we did not find many of the gender differences in organizational outcomes, such as compensation and developmental opportunities, that are reported in the literature. The lack of gender differences in the executives' bonuses is particularly notable because prior research has suggested that most of the difference in total pay between men and women is due to men receiving larger amounts of pay that is contingent on performance (Chauvin & Ash, 1994). One explanation for our results is that we were more successful in *matching* our male and female samples on salient organizational characteristics, such as pay level and line or staff position, as well as age. It is possible that some of these variables may have been responsible for differences attributed to gender in other research. For example, it has been suggested that the observed wage gap between men and women may be due to unmeasured job-related variables such as the tasks performed and the value of tasks to the organization (Auster & Drazin, 1988). As was previously noted, many studies drew male and female samples from different organizations, making it impossible to match them precisely on organizational level. Thus, other studies' reported gender differences in compensation or developmental opportunities may have occurred because men's jobs were higher in the organizational hierarchy than women's jobs. Also, because men are more likely to be in line jobs and women in staff jobs, some of the gender differences found in other research may be due to differences in job characteristics. One should keep in mind,

Table 4
Intercorrelations of Survey Variables for Female and Male Executives

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Log-number of subordinates	—	.35	.09	.38	.20	.18	−.12	−.27	−.16	.30	−.00
2. Developing new directions	.44	—	.31	.63	.22	.57	.19	.14	.24	.29	−.14
3. High stakes	.10	.79	—	.25	.16	.49	.18	−.06	.48	.19	−.07
4. Managing business diversity	.35	.61	.62	—	.33	.59	.17	.18	.37	.32	−.21
5. Handling external pressure	.03	.43	.38	.51	—	.27	.21	.07	.33	.53	−.50
6. Job overload	.10	.42	.62	.25	.26	—	.37	−.02	.59	.38	−.32
7. Unfamiliar responsibilities	.07	.09	.03	.08	.08	−.06	—	.23	.36	.06	−.22
8. Number of leaves of absences								—	.14	.04	−.22
9. Influencing without authority	−.03	.19	.15	.42	.16	−.06	.05		—	.17	−.28
10. Lack of personal support	−.23	−.06	−.01	.03	.03	−.07	−.22		.32	—	−.46
11. Perceived fit with culture	−.00	.02	.14	.32	−.06	−.02	.19		.04	−.43	—
12. Satisfaction with compensation	.14	.00	−.19	−.07	−.02	−.08	−.01		−.13	−.48	.00
13. Satisfaction with career opportunities	.24	.08	.03	.16	.22	.20	−.00		−.23	−.67	.28
14. Work interference with family	−.14	.12	.30	−.12	.21	.61	−.23		.06	.09	−.22
15. Affective commitment	.26	−.03	.00	.22	.06	.14	.19		−.04	−.66	.54
16. Continuance commitment	.02	−.17	−.18	−.39	.02	.10	.05		−.05	.29	−.48
17. Normative commitment	.52	.19	.00	.24	.17	.13	.09		.02	−.36	.16
18. Job involvement	.05	.21	.32	.31	.23	.51	−.17		−.04	−.23	.29
19. Intent to remain	.31	−.05	−.14	.11	.10	.00	.18		−.13	−.66	.31
20. Job satisfaction	.11	.36	.33	.22	.39	.34	.03		−.28	−.61	.19
21. Marital status (married = 1; single = 0)	−.06	−.11	.02	−.07	−.18	.27	.00		−.03	−.36	.12
22. Lives with children	.04	.12	.22	.06	−.11	.39	.12		.19	−.13	.10
23. Dual career	−.26	−.18	.03	.13	.11	.17	−.13		.10	.47	−.01
24. Age (years)	.22	.18	.15	.10	.02	.00	−.32		.09	.36	−.35
25. Education	−.35	−.24	−.10	−.33	.17	.19	−.26		−.28	−.00	−.38
26. Race (Caucasian = 1; other = 0)	−.03	−.05	−.07	−.15	−.15	−.22	.22		.15	.23	−.19
27. Organizational level	.31	.18	.00	.05	.21	−.02	.10		−.09	−.07	−.28
28. Organizational tenure	−.19	−.04	.00	.06	.05	.00	−.17		.38	.16	−.09

Note. Correlations for women are above the diagonal, and for men, below the diagonal. *ns* = 38 women, 34 men. Empty cells indicate that correlations could not be computed because no men took leaves of absence.

however, that failure to find significant gender differences in compensation for women and men in comparable positions in this study does not rule out the possibility of sex discrimination in assignment to positions, which has also been shown to be an important contributor to gender gaps in compensation (Haberfeld, 1992).

It is also possible that in many respects the women we studied appear to have passed through the glass ceiling to hold critical organizational positions and achieve parity with their male counterparts. If this is true, then the findings lead to additional questions about how these women passed through the ceiling that has restricted the progress of so many others. There is a great deal of evidence to suggest that one explanation is that these women are unusually *competent.* Their inclusion in a succession planning review and the lack of gender differences in performance and potential ratings suggests that they are probably well regarded by senior management. The importance of competence is supported by research with executive women in Fortune 500 companies who most frequently mentioned factors such as competence and hard work as explanations for their success (Woody, 1991). Research has shown that undervaluation of women because of stereotyping is less likely to occur when decision makers have unambiguous information about performance or competence (Heilman, Martell, & Simon, 1988; Larwood et al., 1988; Tosi & Einbender, 1985) and are motivated to make accurate decisions (Fiske & Neuberg, 1990; Tetlock & Kim, 1987). Thus, it is possible that the women's clearly demonstrated competence overcame the influence of sex stereotypes that would have otherwise held them back.

The importance of perceived competence was underscored by research showing that successful female managers are perceived differently than women in general or female managers (Heilman et al., 1989). Those findings suggested that the successful female managers had been placed in a *subcategory* characterized by fewer stereotypic attributes of women and more attributes associated with men and the managerial role (Heilman et al., 1989). If the female executives in our study are perceived to be successful, they may also be perceived as having more of the attributes needed for senior-level positions than would be predicted by traditional stereotypes of women.

Another key to the success of the female executives is suggested by gender differences in *lifestyles.* Findings that the female executives are less likely than male executives to be married or have children suggest that they may have been so ambitious or involved with their careers that they sacrificed nonwork interests to devote more time to their jobs. These results are also consistent with research show-

12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
−.27	−.17	.42	−.19	.08	−.05	.16	−.28	−.05	−.15	−.19	.13	−.13	.07	.12	.26	−.21
−.11	−.15	.44	−.07	.16	.12	.11	−.25	.27	−.01	.15	.12	−.30	.03	.13	.24	.10
.09	.06	.27	−.05	.10	.03	.25	−.00	.19	−.19	−.03	−.07	−.07	.14	−.17	−.00	.13
−.08	−.00	.46	−.24	.17	.15	.03	−.30	.40	−.09	.07	.18	−.22	.20	.32	.11	−.12
−.14	−.03	.29	−.45	.01	.19	.20	−.15	.18	−.00	.04	.24	−.15	.35	.15	.57	.03
.04	.09	.69	−.24	.16	.13	.26	−.42	.28	−.00	.03	.07	−.30	.19	−.05	.12	−.06
.17	.30	.24	−.16	−.03	.12	−.20	−.03	.49	.00	.27	.14	−.39	.17	−.07	.01	−.07
.13	.18	.11	−.21	−.17	−.11	−.41	−.14	.12	.31	.48	.33	−.20	−.02	−.09	.12	.12
.05	.04	.25	.07	.03	.14	.28	−.17	.27	−.14	−.18	.04	−.22	.19	−.13	.17	.24
−.22	−.42	.40	−.39	.14	.04	.04	−.48	−.17	−.14	−.16	.11	−.02	−.16	.17	.42	.02
.10	.26	−.26	.61	−.37	.12	.00	.31	.02	.07	−.27	−.31	.03	.02	−.16	−.42	.07
—	.30	−.15	.27	−.00	.21	−.08	.22	.24	−.13	−.03	−.12	.21	.08	.05	−.01	.31
.49	—	−.18	.13	−.15	.21	−.09	.57	.69	−.02	.12	−.00	−.08	.36	.09	−.03	−.07
−.05	−.12	—	−.44	.17	.00	.18	−.60	.13	.25	.09	.22	−.35	−.04	−.00	.23	−.10
.40	.78	−.00	—	.02	.42	.25	.41	−.12	−.16	−.37	−.29	.18	−.11	.04	−.44	.19
−.10	−.23	.43	−.22	—	.32	.29	−.26	−.10	−.23	.06	.23	.04	−.23	.37	−.02	.16
.24	.61	−.10	.44	.04	—	.42	.08	.15	−.11	−.22	−.18	.06	−.03	.25	.07	.21
.11	.21	.40	.40	−.23	−.08	—	.08	−.25	−.16	−.48	−.16	.07	.05	.15	.13	.16
.44	.84	−.21	.79	−.08	.56	.05	—	.26	−.10	−.13	−.20	.18	.14	.01	−.19	−.19
.35	.65	.15	.47	−.15	.26	.35	.57	—	−.00	.20	.00	−.27	.24	.10	.09	−.08
.19	.25	.15	.23	−.09	.08	.13	.21	.25	—	.45	.28	−.21	.08	−.18	.00	−.27
.05	.05	.17	.10	.16	−.03	.12	.08	−.01	.61	—	.37	−.12	.24	−.11	−.07	−.21
−.45	−.29	.14	−.14	.09	−.32	.15	−.23	−.23	−.40	−.34	—	−.10	.06	−.19	.18	−.03
.08	−.28	.19	−.27	.26	−.13	−.01	−.28	−.06	−.03	−.09	.00	—	−.13	.11	.05	.28
−.03	.19	.20	−.15	.07	−.02	−.12	.12	.29	.19	−.09	.07	−.17	—	−.17	.01	−.17
−.10	−.35	.03	−.17	.35	−.22	−.22	−.09	−.28	−.20	.15	.13	.11	−.26	—	.19	.10
.22	.10	−.11	−.13	−.03	.05	−.04	.14	.11	.21	.05	−.21	.21	.15	.09	—	.36
.25	−.09	.33	.05	.36	.06	.10	−.03	−.08	−.12	.18	.04	.32	−.05	.32	−.19	—

ing that executive career success is related to motivational variables, such as desiring to work more hours per week (Judge et al., 1995). In fact, the senior-level men and women we interviewed all stressed the need to work long hours and prioritize work above personal and family concerns to succeed in this organization's demanding culture. The more negative work attitudes reported by executives in dual career relationships might also be interpreted as a reflection of the difficulties associated with trying to balance nonwork responsibilities with the demands of a senior-level position.

Persistent Gender Differences

Although many hypothesized gender differences were not found, some of the executive women's objective outcomes and subjective experiences differed from those of their male counterparts in important ways. Examined together, these findings appear to form a disturbing pattern that may be cause for concern.

Despite our careful matching of the male and female samples, there was evidence that the women's jobs had less authority than the men's, as measured by the number of subordinates they managed. Although we did not find gender differences in base salary or bonus, the female executives received fewer stock options than the male executives, even after controlling for level of education, performance rating, and level in the management hierarchy. In this organization, stock options are viewed as a long-term incentive for retaining the most critical managers, suggesting that the women may be valued less than their male counterparts. These findings are also consistent with a review of prior research on sex effects on evaluation (Nieva & Gutek, 1980), where it was found that more promale bias by evaluators occurs when extrapolation from available data to future contexts is required (as in awarding stock options), whereas bias is less likely in evaluating past performance because less inference is required (as in awarding performance bonuses).

Perhaps related to the gender differences in objective outcomes, such as stature and stock options, were the differences in the women's and men's subjective reports of their organizational experiences. The women indicated that they experienced more obstacles, such as having to influence others without authority. Consistent with predictions based on skewed sex ratios, women at the highest executive levels reported more obstacles due to lack of personal support and less culture fit than did lower level executive women. Of most concern was the finding that

these talented female executives reported significantly less satisfaction with future career opportunities than the male executives. This may also be related to the fact that the women's career histories included fewer overseas assignments, and increasing emphasis is being placed on international experience as a prerequisite for promotion to senior executive levels in multinational corporations such as theirs. It is troubling to note that despite their progress to date, many of these successful female executives apparently perceived limits to their prospects for future advancement.

All of the gender differences we found are consistent with the sex stereotype and occupational segregation literatures suggesting that women are more likely to be found in jobs that are not comparable to men's jobs at the same organizational level in status, power, or advancement potential. Discovery of these differences in our executive samples raises troubling questions about the extent to which these women have made it above the glass ceiling versus coming up against a second, higher glass ceiling than the one that holds most women down.

Limitations of This Study

Studying executives from a single organization enabled us to conduct the first research comparing carefully matched samples of executive women and executive men. It does, however, present a limitation to the generalizability of the findings. Because there were relatively few women in senior management positions, the sample sizes were small, which limited the power of the analyses and made it inappropriate to carry out multivariate analyses. Even though we were able to obtain a number of variables from organizational databases and records, some important variables were measured with self-report items. For example, position authority was measured with self-reported number of subordinates because other measures of the executives' authority (e.g., size of budget) were unavailable. Future research should correct these issues by examining the generalizability of the findings across multiple organizations in different industries with larger samples and multimethod data collection. Ideally, a longitudinal design would be used as well, which would permit the identification of causal relationships.

Directions for Future Research

Among the issues that warrant attention is the exploration of the processes by which executive women have attained their positions. As is the case in many other companies, a minority of critical senior-level positions in this organization were held by women. This raises questions about how these women made it through the glass ceiling. What experiences and other factors facilitated their career advancement? Moreover, do the career facilitators for executive women differ from those of executive men? For example, the women we studied were less likely to be married or have children than the men, who tended to be in traditional relationships with nonworking spouses. Future research is needed to explore whether being single facilitates women's advancement into executive ranks. Are single women perceived as better suited for executive-level responsibilities or does being single make it more likely that these women can put in the long hours required for advancement? Finally, our understanding of career facilitators for women would be further enhanced by comparing executives to middle-level managers and professionals who are considered to be in the pipeline for future advancement as well as to those who have plateaued.

Our data suggest that we ought to learn more about obstacles to executive women's career development and success as well. The executive women's positions had less authority than those of the male executives and the women also reported having to influence others without authority more often. Investigators need to examine how sex stereotyping and bias affect the work experiences of women in the executive ranks, particularly at the highest levels in the hierarchy.

Another important area for future research concerns the women's lower reported satisfaction with future career opportunities. Our findings indicated that women's career histories reflected more interruptions than men's and that they were more likely to take such leaves if they had children. To what extent do such leaves of absence represent a barrier to women's career development and advancement? For example, does the timing of leaves of absence interfere with critical developmental experiences?

The female executives' relative lack of international assignments represents another potential barrier to future career opportunities in their multinational organization. Given the increasing globalization of today's organizations, we believe this finding raises a number of important questions. How and when do managers learn about the importance and availability of overseas assignments? Do women and men have equal access to this information? Are some assignments required at early career stages in order to be considered for later, more critical assignments? Most important, how are selection decisions for international assignments made? To what extent are women considered qualified for these assignments? Are stereotypic assumptions made about women's unwillingness to relocate overseas because of their family or dual career situations? Is there flexibility in the timing of these assignments to accommodate nonwork responsibilities?

At least two of our specific findings raise provocative questions for future research about women's mobility. On the one hand, we found that whereas women expressed interest in international assignments, they indicated re-

strictions due to timing and dual career concerns. Future research should focus on the extent to which women may be self-selecting out of critical assignments because of nonwork considerations and whether there might be alternative approaches to providing the necessary development. On the other hand, we found that after controlling for tenure, our female executives had worked in more domestic locations than their male counterparts. This finding may argue against the hypothesis that women were unwilling to relocate and raises questions about whether they were as likely to be offered overseas opportunities as were their male counterparts.

Our data concerning dual career managers require further inquiry as well because these managers tended to report more negative work attitudes and less intent to remain at the organization. Given the increasing prevalence of dual career couples in the workforce (Blau & Ferber, 1992), it is important that we gain a better understanding of their concerns to guide organizations in development of strategies for retaining talented executives.

We hope our research will interest others in learning more about executive women. The provocative findings from this study suggest that more detailed investigation is needed into executive women's experiences and the possibility that they are confronted with a second, more subtle glass ceiling once they reach senior-level management positions. As we have indicated, studying carefully matched samples of male and female executives revealed that they are remarkably similar in important work attitudes and organizational rewards. Yet, the findings also make it clear that certain important gender differences remain, particularly with respect to career histories and expectations about future advancement.

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