

Then And Now: A Longitudinal Study Of Attitudes Toward Women As Managers

Kathryn E. Lewis, California State University, Chico, USA

ABSTRACT

This paper reports the results of a longitudinal study comparing the attitudes of business undergraduate students toward women as managers. Survey results from 1981, 2000, and 2010 are compared. For all three time periods, females report significantly more positive attitudes toward women as managers than males. Comparing the same sex survey groups, the females of 2000 are significantly more positive toward women as managers than their 1981 counterparts. There is no difference in attitudes when the results from 2000 and 2010 are compared. The attitudes of the males in 2000 are not significantly different from their 1981 comparison group. However, a significant difference in attitudes is found when the results from 2000 and 2010 are compared.

Keywords: women managers, men, gender attitudes

INTRODUCTION

With the brief exception of the “Rosie the Riveter” era during World War II, differences in labor force participation rates as well as marked occupational segregation for women and men remained fairly constant in the U.S. from the early 1900s to about 1970 (Cotter, Defiore, Hermsen, Kowalewski & Vanneman, 1995). In the decade following the passage of Title VII of the Civil Rights Act, attitudes toward women in the workplace slowly began to change. Some examples from the 1970s will establish the backdrop for the investigations reported in this paper.

In 1970, approximately 43 percent of women ages 16 and older were in the labor force (Population Reference Bureau, 2001). By the end of the decade, their participation rate rose to 50.9 percent (Current Population Survey Table 2 [CPS2]). Women accounted for 57 percent of all employees added to the labor force in the 1970s (Rytina & Bianchi, 1984). As noted by Rytina and Bianchi, the greatest increase in female representation was in the “executive, administrative, and managerial” occupational classification used by the U.S. Department of Labor. In 1970, approximately 18 percent of managers were women. By 1980, 31 percent of managers were women. Although women were still underrepresented in this occupational category by comparison with their overall representation in the labor force, significant improvement had occurred. In 1979, the first year for which comparable median weekly earnings data were available, women earned about 62 percent of what men earned (Highlights of Women’s Earnings in 2008 [HWE]).

During the 1970s, numerous research studies investigated the difficulties encountered by women in their efforts to gain access to traditionally male occupations. Of relevance to the research reported in this paper are the studies that focused on the problems that women experienced in managerial positions and the influence of sex-role stereotypes on personnel decisions regarding women for both managerial and nonmanagerial positions. For example, Dipboye, Fromkin, and Wiback (1975) found that management selection decisions made by both university students and recruiters significantly favored males. Terborg and Ilgen (1975) found that when students were asked to allocate starting and second-year salaries to a female or male with the same qualifications and performance record they recommended a significantly higher level of compensation for males than for females. Rosen and Jerdee (1974a) found a bias against women in promotion and development decisions.

In 1974, Peters, Terborg, and Taynor published the Women as Managers Scale (WAMS), which was designed to assess sex role stereotypes toward women in the traditionally male role of manager. The instrument consists of 21 statements about women in management, ten of which are worded in unfavorable terms and eleven in favorable terms. Subjects are asked to indicate how strongly they agree or disagree with each statement using a 7-point Likert-type scale where 1 = strongly disagree and 7 = strongly agree. The ten unfavorable statements about women are reversed scored. Scores on the survey can range from 21 to 147, with higher scores indicating more positive attitudes toward women as managers. The scale has a split-half reliability of .91, corrected for number of items, and was uncorrelated with the Crowne-Marlowe social desirability scale (Peters et al., 1974). The questionnaire includes such statements as "It is acceptable for women to compete with men for top executive positions," and "To be a successful executive, a woman does not have to sacrifice some of her femininity." The instrument's psychometric properties have been carefully studied (for example, Peters, et al.; Terborg, Peters, Ilgen, & Smith, 1977). The conclusion is that the WAMS is a reliable and valid instrument to measure attitudes toward women as managers.

Since its development, the WAMS has been used in a number of studies to test, for example, whether subjects' attitudes toward women as managers will influence their attributions for their success or failure in a management position or whether practicing managers' attitudes are different from undergraduate business students' attitudes (see, for example, Garland & Price, 1977; Stephens & DeNisi, 1980; Terborg, et al., 1977) In all the reported research which uses the WAMS, there is a significant difference between female and male scores, with females scoring higher.

THE 1981 STUDY

By 1981, when the first of three data collections that comprise this research was conducted, women's participation in the civilian labor force had increased to 52.1 percent (CPS 2). Thirty-one percent of executive, administrative and managerial positions were held by women (Rytina & Bianchi). Women's median weekly earnings equaled 64 percent of what men earned (HWE).

A colleague of mine investigated whether female and male undergraduate business students would score differently on the WAMS (Rawlins, unpublished raw data). Based on the published research up to that date, the hypothesis was that the average score for women would be higher than the average score for men indicating that women have more positive perceptions of women as managers.

SUBJECTS AND PROCEDURE

A total of 106 subjects participated in the study, of which 43 were female and 63 were male. Subjects were enrolled in an upper division introduction to management course at a public, AACSB accredited university. All subjects participated voluntarily and responded to the WAMS during class time.

RESULTS

The results support the hypothesis that females' attitudes toward women as managers would be more positive than males' attitudes. The statistical results are presented in Table 1.

Table 1. Comparison of Female and Male Means

Sex of Respondent	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Female	43	124.37	20.28	
Male	63	108.56	24.92	3.45

p < .001, two-tailed

DISCUSSION

On a scale where 7 equals "strongly agree," the highest possible support for women as managers is 147. A score of 126 would mean the average question received a 6 or "agree." In this study, the females' mean score of 124.37 indicates an average question response of 5.92. The males' average question response was 5.17, much closer to the 5 or "slightly agree" response.

These results are similar to those reported in the literature in the few years before this study was done. For example, Terborg, et al. (1977) reported scores for full time employees of 102.11 for males and 119.38 for females. Stevens and DeNisi (1980) reported scores for business students of 109.23 for males and 131.65 for females. The different survey samples may explain the variation in scores.

THE 2000 STUDY

Have things changed in the two decades since that study was done? This was the major research question addressed by a second study conducted in 2000 (Rawlins & Lewis, 2001). The participation rate in the labor force for women had increased to 59.9 percent (CPS 2). Although the number of women in entry-level and middle management had grown quite rapidly in those two decades, the number of women in top management was still very small. Women accounted for approximately 34 percent of all managers (Current Population Survey Table 9 [CPS 9]). They represented 12.5 percent of corporate officers in the Fortune 500, an increase from 8.7 percent in 1995 (Soares, R., Carter, N. M., & Combopiano, J., 2009b). However, 90 organizations in the Fortune 500 still had no women corporate officers (Soares, R., Carter, N. M., & Combopiano, J., 2009a). Women's pay had improved as a percentage of men's, but was still only about 76 cents on the dollar (HWE).

HYPOTHESES

Two hypotheses were tested in this study. Hypothesis 1: the average score on the WAMS for women will be higher than the average score for men indicating that women hold more positive perceptions of women as managers. Hypothesis 2: average scores for both women and men will be significantly higher in 2000 than the scores from 1981.

SUBJECTS AND PROCEDURE

A total of 182 subjects participated in the study, of which 81 were female and 101 were male. Subjects were enrolled in an upper division introduction to management course at a public, AACSB International accredited university. All subjects participated voluntarily and responded to the WAMS during class time.

RESULTS

The results support the first hypothesis that females' attitudes toward women as managers will be more positive than males' attitudes. The statistical results are presented in Table 2.

Table 2. Comparison of Female and Male Means

Sex of Respondent	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Female	81	134.83	8.48	
Male	101	111.39	17.72	10.94

p < .0001, two-tailed

When the data from 1981 were compared to the data from 2000, two very interesting findings arose. When the mean scores for females from 1981 were compared with mean scores for females from 2000, the means increased significantly between the two time periods. Therefore, Hypothesis 2 was confirmed for females. However, when the mean scores for males from 1981 were compared with the mean scores for males from 2000, the increase in their scores was not significant. Therefore, Hypothesis 2 was not confirmed for males. The results of the comparisons are presented in Tables 3 and 4.

Table 3. Comparison of Female Means from 1981 and 2000

Year	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
1981	43	124.37	20.28	
2000	81	134.83	8.48	4.04

p = .002, two-tailed

Table 4. Comparison of Male Means from 1981 and 2000

Year	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
1981	63	108.56	24.92	
2000	101	111.39	17.72	0.43 <i>ns</i>

DISCUSSION

Since the WAMS was developed in 1974, women's attitudes toward women as managers have been significantly more supportive than men's attitudes. And, based on this study, their support for women in managerial positions has not only increased on average, but the standard deviation from the mean has fallen considerably. Females have more and more coalesced around the idea that women are equal to the task of managing. The average response is now half-way between "agree" and "strongly agree."

However the finding that male attitudes toward women as managers had not changed significantly over almost two decades was both surprising and troublesome. It's likely that the students in the 1981 study had limited experience with working women. Statistically speaking, most of them would not have had working mothers. On the other hand, the undergraduates in 2000 were likely to have a mother who worked outside of the home. Additionally, they would have had more experience with women at work in general – managers, professors, newscasters, athletes, authors, politicians, and so on.

Of course, given both the manner in which the sample was chosen and its size, these findings might not have any relevance in reflecting the attitudes of men in general. On the other hand, they may in fact help to support research findings that indicate that as women's participation in the labor force increases, particularly in managerial and other nontraditional jobs, men's attitudes don't become more positive and, in fact, may even become more negative.

THE 2010 STUDY

The years from 2000 to 2010 were tumultuous for the U.S. The 9/11 terrorist attacks and resulting recession, the housing boom and bust, and then the most severe recession since the Great Depression barely affected the labor participation rates of women; participation rates ranged from 59.9 percent in 2000 to 59.2 percent in 2009 (CPS 2). However, these events had a much greater effect on labor participation rates for men, which ranged from 74.8 percent in 2000 to 72 percent in 2009 (CPS 2). Because traditionally male jobs in construction and manufacturing were particularly hard hit by the recession, it's expected that in 2010, for the first time in U.S. history, the majority of workers in the U.S. will be women. In addition to women's growing presence in the labor force, we also witnessed their ascension in politics with Hillary Clinton running for President, Sarah Palin running for Vice President, and Nancy Pelosi assuming the position of Speaker of the House of Representatives. A poll conducted by TIME and the Rockefeller Foundation in 2009 found that 40 percent of women report that they are the primary breadwinner in their household (Shriver, 2010). In January, 2010, women held 38.3 percent of all management positions (CPS 9). In 2009, they held 15.2 percent of Board of Director's seats and 13.5 percent of Executive Officer positions at *Fortune* 500 companies. However, 61 *Fortune* 500 companies still had no women on their boards (Soares, Carter, & Combopiano, 2009a & b). Women's pay had improved as a percentage of men's, but was still only about 81 cents on the dollar (HWE). However in 2007, 22 percent of wives earned more than their husbands compared to 4 percent in 1970 (Fry & Cohn, 2010).

HYPOTHESES

In order to replicate the 2000 study, the same two hypotheses were tested. Hypothesis 1: the average score on the WAMS for women will be higher than the average score for men indicating that women have more positive perceptions of women as managers. Hypothesis 2: average scores for both women and men will be significantly higher in 2010 than the scores from 2000.

SUBJECTS AND PROCEDURE

A total of 244 subjects participated in the study, of which 98 were female and 146 were male. Subjects were enrolled in an upper division introduction to management course at a public, AACSB International accredited university. All subjects participated voluntarily and responded to the WAMS during class time.

RESULTS

The results support the first hypothesis that females' attitudes toward women as managers will be more positive than males' attitudes. The statistical results are presented in Table 5.

Table 5. Comparison of Female and Male Means

Sex of Respondent	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
Female	98	135.42	8.42	
Male	146	118.86	18.50	8.30

p < .0001, two-tailed

When the data from 2000 were compared to the data from 2010, again two very interesting findings arose. When the mean scores for females from 2000 were compared with mean scores for females from 2010, the means were not significantly different. Therefore, Hypothesis 2 was not confirmed for females. The results of the comparison are presented in Table 6. However, when male scores from 2000 were compared with male scores from 2010, the increase in their scores was significant. Therefore, Hypothesis 2 was confirmed for males. The results of the comparison are presented in Table 7.

Table 6. Comparison of Female Means from 2000 and 2010

Year	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
2000	81	134.83	8.48	
2010	98	135.42	8.42	0.64 <i>ns</i>

Table 7. Comparison of Male Means from 2000 and 2010

Year	<i>n</i>	<i>M</i>	<i>SD</i>	<i>t</i>
2000	101	111.39	17.72	
2010	146	118.86	18.50	3.16

p = .0018, two-tailed

DISCUSSION

For women, both the mean scores in 2000 and 2010 and the standard deviations are strikingly similar. For both years, the average score on the WAMS is half-way between the “agree” and “strongly agree” response categories. Therefore, it appears that women’s positive attitudes have stabilized over the decade.

Although women remain more positive in their attitudes compared to men, the men are catching up. For 2010, the average score is now half-way between “slightly agree” and “agree.” While the standard deviations are large in all three studies, they have decreased compared to 1981 indicating that the range of responses is getting closer to the mean.

In October, 2009, “The Shriver Report: A Women’s Nation Changes Everything” was released. As part of the data gathered for that report, TIME and the Rockefeller Foundation polled 3,413 adults (1,814 women and 1,599 men) concerning their views on women and men in today’s society. Respondents to the TIME Rockefeller poll were asked to reply to this statement, “Forty years ago, just one-third of all workers were women. Today, about one-half of all workers are women. Do you think this change has been positive or negative for American society?” Seventy-seven percent of women and 75 percent of men replied that this change was positive. Among 18 to 29 year-old respondents the support was even stronger, 85 percent indicated that this change was positive. It appears that the generally positive scores on the WAMS for both women and men are in sync with the positive response described in the Shriver Report.

THE 2020 STUDY?

As Noble Laureate Niels Bors purportedly stated, “Prediction is very difficult, especially about the future.” The next 10 years will offer interesting opportunities and challenges for the young women and men in this study. The Shriver Report proclaims that we are in the midst of a “fundamental transformation in the way America works and lives” as women become 50 percent of the workforce and gain greater economic power (i). However, government policies, laws, and most business organizations cling to an outdated view of family structure (i.e., families with a full-time breadwinner and full-time homemaker) that fails to accommodate the needs of today’s workers. The Report challenges women and men to champion reforms and hold the government, workplaces, educational, cultural, and religious institutions responsible for building a more just and humane society based on real equality.

A study by Catalyst, published in February 2010, identifies the effect that systemic gender bias in U.S. organizations continues to have on advancement, compensation, and career satisfaction for women (Carter & Silva, 2010). This research tracked more than 4,100 men and women with MBA degrees who graduated between 1996 and 2007. The researchers identified that where an individual started in the first job after earning the MBA (i.e., first level management or higher) had a lasting effect on advancement, compensation, and satisfaction. They found that men started their careers at higher levels than women. Approximately 10 percent of women started at middle management or above compared with 19 percent of men. This finding held true even when controlling for years of work experience, industry, region, career aspirations, and presence of children in the home. A possible explanation for this difference was systemic gender bias that resulted in individuals being placed in jobs not on the basis of their qualifications but on the perceptions of hiring managers who favored men.

Additionally, women earned lower salaries on the first job compared to men. Controlling for job levels and industry, the researchers found that women made, on average, \$4,600 less. These gender differences in starting salary translated into gender differences in salary growth throughout their careers. The research also found that when women start out at lower levels, they don’t catch up. Men progressed higher on the career ladder and they progressed more quickly. It’s not surprising then, that men at all managerial levels above entry level had significantly higher career satisfaction than women. On average, 37 percent of men indicated they were very satisfied with their career, compared with 30 percent of women.

Both the Shriver Report and the Catalyst study call for the need for change. If the young women and men in the present study accept these challenges and work together to prove that gender equality is not a zero sum game (i.e., if women win then men lose) but a win-win outcome for everyone, then my hypothesis for the 2020 study is that there will be no difference in the means between women and men on the WAMS.

AUTHOR INFORMATION

Kathryn E. Lewis is Professor Emerita in the Department of Management of the College of Business at California State University, Chico. She received her Ph.D. in Business Administration from Arizona State University. Her research interests include the effects of sex-role stereotypes in the workplace.

REFERENCES

1. Carter, N. M., & Silva, C. (2010). Women in Management: Delusions of Progress. Retrieved April 19, 2010 from <http://hbr.org/2010/03/women-in-management-delusions-of-progress/ar/1>.
2. Catalyst. (2000). 2000 Catalyst Census of Women Corporate Officers and Top Earners. Retrieved April 3, 2010 from <http://www.catalyst.org/publication/175/2000-catalyst-census-of-women-corporate-officers-and-top-earners>.
3. Cotter D. A., DeFiore, J. M., Hermsen, J. M., Kowalewski, B. M., & Vanneman, R. (1995). Occupational gender desegregation in the 1980s. *Work and Occupations*, 22, 3–21.
4. Dipboye, K. L., Fromkin, H. L., & Wiback, K. (1975). Relative importance of applicant sex, attractiveness, and scholastic standing in evaluation of job applicant resumes. *Journal of Applied Psychology*, 60(1), 39-43.
5. Fry, R., & and Cohn, D. (2010). New economics of marriage: The rise of wives. Retrieved January 22, 2010 from <http://pewresearch.org/pubs/1466/economics-marriage-rise-of-wives>.
6. Garland, H., & Price, K. H. (1977). Attitudes toward women in management and attributions for their success and failure in a managerial position, *Journal of Applied Psychology*, 62(1), 29-33.
7. Peters, L. H., Terborg, J. R., & Taynor, J. (1974). Women as managers scale (WAMS): A measure of attitudes towards women in management positions. *JSAS Catalog of Selected Documents in Psychology*, Ms. N. 585.
8. Population Reference Bureau. (2001). Record number of women in the U.S. labor force. Retrieved March 10, 2010 from <http://www.prb.org/Articles/2001/RecordNumberofWomenintheUSLaborForce.aspx>
9. Rawlins, C. (1981). [Attitudes towards women as managers]. Unpublished raw data.
10. Rawlins, C., & Lewis, K. (2001). Then and now: Attitudes toward women as managers. Paper presented at the International Conference of Allied Academies, Nashville, TN.
11. Rosen, B., & Jerdee, T. H. (1974a). Influence of sex-role stereotypes on personnel decisions. *Journal of Applied Psychology*, 59(1), 9-14.
12. Rytina, N. F., & and Bianchi, S. M. (1984). Occupational reclassification and changes in distribution by gender. *Monthly Labor Review*, 107(3), 11-17.
13. Shriver, M. (2009). The Shriver report: A woman's nation changes everything. Retrieved October 20, 2009 from http://www.americanprogress.org/issues/2009/10/womans_nation.html
14. Soares R., Carter, N. M., & Combopiano, J. (2009a). 2009 Catalyst Census: Fortune 500 Women Board Directors. Retrieved April 3, 2010 from <http://www.catalyst.org/publication/357/2009-catalyst-census-fortune-500-women-board-directors>.
15. Soares, R., Carter, N. M., & Combopiano, J. (2009b). 2009 Catalyst Census: Fortune 500 Women Executive Officers and Top Earners. Retrieved April 3, 2010 from <http://www.catalyst.org/publication/358/2009-catalyst-census-fortune-500-women-executive-officers-and-top-earners>.
16. Stevens, G. E., & DeNisi, A. (1980). Women as managers: Attitudes and attributions for performance by men and women. *Academy of Management Journal*, 23(2), 355-361.
17. Terborg, J. R. & Ilgen, D. R. (1975). A theoretical approach to sex discrimination in traditionally masculine occupations. *Organizational Behavior and Human Performance*, 13, 352-376.
18. Terborg, J. R., Peters, L. H., Ilgen, D. R., & Smith, F. (1977). Organizational and personal correlates of attitudes toward women as managers. *Academy of Management Journal*, 20(1), 89-100.
19. U.S. Department of Labor, Bureau of Labor Statistics. (n.d.). Current Population Survey, Table 2. Employment status of the civilian noninstitutional population 16 years and over by sex, 1970s to date. Retrieved February 16, 2010 from <http://www.bls.gov/cps/tables.htm>.
20. U.S. Department of Labor. Bureau of Labor Statistics. (n.d.). Current Population Survey, Table 9. Employed persons by occupation, sex, and age. Retrieved February 17, 2010 from <http://www.bls.gov/cps/tables.htm>.
21. U.S. Department of Labor. U.S Bureau of Labor Statistics. (July 2009). Highlights of Women's Earnings in 2008. Report 1017. Table 12. Median usual weekly earnings of full-time wage and salary workers, in current dollars, by sex and age, 1979–2008 annual averages, 53-54. Retrieved February 18, 2010 from www.bls.gov/cps/cpswom2008

NOTES