

---

Theses and Dissertations

---

2009

## Women in leadership and the financial performance of the Fortune 500

Margaret A. Thurmond

Follow this and additional works at: <https://digitalcommons.pepperdine.edu/etd>

---

### Recommended Citation

Thurmond, Margaret A., "Women in leadership and the financial performance of the Fortune 500" (2009). *Theses and Dissertations*. 36.  
<https://digitalcommons.pepperdine.edu/etd/36>

This Dissertation is brought to you for free and open access by Pepperdine Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of Pepperdine Digital Commons. For more information, please contact [Katrina.Gallardo@pepperdine.edu](mailto:Katrina.Gallardo@pepperdine.edu), [anna.speth@pepperdine.edu](mailto:anna.speth@pepperdine.edu), [linhgavin.do@pepperdine.edu](mailto:linhgavin.do@pepperdine.edu).

Pepperdine University  
Graduate School of Education and Psychology

WOMEN IN LEADERSHIP AND THE FINANCIAL PERFORMANCE  
OF THE FORTUNE 500

A dissertation submitted in partial satisfaction  
of the requirements for the degree of  
Doctor of Education

by

Margaret A. Thurmond

August, 2009

Michelle Rosensitto, Ed.D. – Dissertation Chairperson

This dissertation, written by

Margaret A. Thurmond

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

May 21, 2009

---

Michelle Rosensitto, Ed.D., Chairperson

---

Kent Rhodes, Ed.D.

---

John Tobin, J.D.

---

Eric R. Hamilton, Ph.D.  
Associate Dean

---

Margaret J. Weber, Ph.D.  
Dean

© Copyright by Margaret A. Thurmond (2009)

All Rights Reserved

## TABLE OF CONTENTS

	Page
LIST OF TABLES .....	vi
DEDICATION .....	vii
ACKNOWLEDGMENTS .....	viii
VITA.....	ix
ABSTRACT.....	xi
Chapter 1. Introduction .....	1
Statement of Problem.....	2
Purpose of the Study .....	6
Research Question .....	6
Significance of the Study .....	6
Limitations of the Study.....	6
Definition of Terms.....	7
Organization of the Study .....	8
Chapter 2. Literature Review .....	10
Evolution of Leadership Theories.....	10
Gender and Leadership .....	13
Transformational Leadership .....	13
Role Congruity Theory .....	15
The Glass Ceiling.....	26
The Glass Cliff.....	31
The Glass Escalator.....	34
Tokenism and Critical Mass .....	35
Summary .....	38
Chapter 3. Methodology .....	40
Research Question .....	40
Hypothesis.....	40
Research Design.....	41
Population and Sample .....	41
Data Source.....	42
Data Collection Plan .....	44
Analytical Techniques .....	46
Summary .....	47

	Page
Chapter 4. Results .....	49
Restatement of the Purpose.....	49
Restatement of the Research Question .....	49
Results for the Research Question .....	49
Descriptive Statistics for Variables.....	50
Companies Employing 20% Female Corporate Officers.....	53
Correlations for Four Financial Measures and Percentage of Women Corporate Officers.....	54
Summary .....	57
Chapter 5. Conclusions .....	58
Summary of the Study .....	58
Summary of the Findings.....	58
Descriptive Statistics for Variables.....	59
Companies Employing 20% Female Corporate Officers.....	59
Correlations for Four Financial Measures and Percentage of Women Corporate Officers.....	59
Discussion .....	60
Recommendations for Future Research .....	62
Policy Recommendations.....	64
REFERENCES .....	66

## LIST OF TABLES

	Page
Table 1. Descriptive Statistics for Selected Variables .....	51
Table 2. Companies that Employed at Least 20% Female Corporate Officers .....	54
Table 3. Spearman Rank-Ordered Correlations for Four Financial Metrics and Percentage of Women Corporate Offices (N = 110) .....	55

DEDICATION

To my daughters Laura and Christina.

You are my greatest gift and my greatest joy.



## ACKNOWLEDGMENTS

I want to thank my chair, Dr. Michelle Rosensitto, for all of her guidance through this process as well as her encouragement by ending every email with, "You are almost done." I also want to thank my committee members, Dr. Kent Rhodes and Judge John Tobin, for their insight, assistance, and encouragement. The fourth person who was crucial to completing this dissertation was Dr. Tom Granoff, with his statistical guidance and assistance.

I would like to thank Dr. Vance Caesar for his participation in this journey and to recognize that he is the person most responsible for my entering this program in the first place. His continued support has been very helpful to me. Dr. Angela Tripoli helped me find my doctoral "voice" and helped me refine my thinking. I am truly grateful for that.

The following people assisted me with my research, and I appreciate their efforts on my behalf: Dora Szalontai, Vikash Garg, Mahesh Pathak, and Devyani Shrama. Without their help, I would not have been able to finish as expeditiously as I did.

To Nancy Turskey, Cherie Capriulo, and Mary Colston, your continued support has kept me going. To my fellow cohort members, thank you for taking me along on the journey.

I also want to thank my brothers, Dennis, Mike, Terry, and Brian O'Donnell, and their families for their support as well as my grandmother, Darline Dopps. All of the phone calls of encouragement really helped.

Most importantly, I want to thank my two daughters, Laura and Christina, who have grown up to be amazing young women and who continually surprise me with their insight, humor, compassion, intelligence, and joie de vivre.

## VITA

Margaret A. Thurmond

## Professional Experience

Chief Financial Officer McGladrey Capital Markets, LLC, Costa Mesa	2003-present
Chief Financial Officer myCFO, Irvine, California	2001-2003
Vice President, Finance Kinko's, Ventura, California	1998-2001
Director of Finance and Administration Deloitte & Touche, Los Angeles, California	1995-1998
Chief Financial Officer Associated Travel, Santa Ana, California	1993-1995
Managing Director, Finance American Airlines, London, England, and Fort Worth, Texas	1989-1993
Accounting Lecturer University of Texas at Arlington	1981-1989
Senior Accountant Arthur Andersen, Dallas, Texas	1978-1981

## Education

Ed.D., Organizational Leadership Graduate School of Education and Psychology Pepperdine University, Irvine, California	2009
Master of Public Accounting Graduate School of Business, University of Texas at Arlington	1978
Bachelor of Business Administration-Accounting School of Business, University of Texas at Arlington	1977

### Licenses/Certifications

Certified Public Accountant, Texas	1978
NASD Series 27 License	2003
ISS Certified	2008

### Publications and Presentations

Women in Leadership: Does Gender Matter?  
Paris International Conference on Education, Economy & Society, July 17-19, 2008  
(Published proceedings)

Women in Leadership: The Contradiction Between Theory and Reality  
Hawaii International Conference on Education, January 2008  
(Published proceedings)

### Professional Affiliations

Board Member and Treasurer, Orange County 211

Board Member, Association for Corporate Growth, Orange County

American Institute of Certified Public Accountants

Texas State Society of Certified Public Accountants

Financial Executives International

Forum for Corporate Directors

## ABSTRACT

Despite more than 30 years of women moving into professional, managerial, and executive positions, very few women have reached the senior ranks of leadership. Although 51% of middle management is female, only 15% of corporate officers in the Fortune 500 are women, and women continue to be sparsely represented in senior leadership positions.

Research on this phenomenon has been inconclusive. To further our understanding of women's underrepresentation in senior leadership, the purpose of this study was to determine whether there is a relationship between the financial performance of companies in the Fortune 500 and the number of women in senior leadership positions in these companies.

This study examined companies that were in the Fortune 500 each year between 1999 and 2008. Two financial data points for each company, return on equity and total shareholder return, were collected and averaged over the 10-year period. Average return on equity and total shareholder return was expressed in  $z$  scores. The  $z$  scores were averaged, creating an overall index, sorted from high to low, which reflected financial performance. The list was then divided into quartiles.

The number and gender of the corporate officers were obtained for the top and bottom quartiles for each year. Spearman rank-ordered correlations were run to determine whether a relationship existed between the financial performance of Fortune 500 companies and the number of women corporate officers in these companies. The results indicated that there was no correlation between financial performance and the number of

women corporate officers. Companies that performed well financially were just as likely to have women corporate officers as were companies that performed poorly.

This study contributes to the literature on the gap between parity for women at middle management and the professional level as well as the lack of women in senior leadership. Importantly, this study demonstrated that the gender of corporate officers has no bearing on a company's financial performance.

## Chapter 1

### Introduction

Despite more than 30 years of women moving into professional, managerial, and executive positions, very few women have reached the senior ranks of leadership. The senior ranks can be defined as chief executive officer, president, chief financial officer, managing director, and partner. Members of the board of directors are also considered a senior rank. Given that women now account for more than 50% of college graduates (U.S. Bureau of Labor Statistics, 2005), more than 50% of professional degrees such as M.D. and J.D. (U.S. Bureau of Labor Statistics), and hold 50.6% of management, professional, and related occupations (Catalyst, 2007), a natural shift to a more gender-balanced senior management should be a reasonable, expected outcome. This has clearly not happened, as only 2.4% of Fortune 500 CEOs are women (Catalyst).

Women's corporate and political leadership is on the rise; however, there is still a notable gender gap (Catalyst, 2005). According to the U.S. Bureau of Labor Statistics (2005), women held half of the management, professional, and related occupations in 2004; this rose to nearly 51% in 2007 (Catalyst, 2007). They led 12 Fortune 500 companies and 10 Fortune 501-1000 companies (Catalyst, 2007). Women also constitute 18% of the Congress of the United States (CRS Report for Congress, 2008) and 16% of state governors (National Governors Association, 2008). Recently, elite and high profile leadership positions have been filled by women such as Nancy Pelosi, Speaker of the House; Indra Nooyi, CEO of PepsiCo; Drew Gilpin-Faust, President of Harvard University; and Hillary Clinton, a former United States Senator who ran a serious

campaign for President of the United States and is currently Secretary of State. Her predecessor, Condoleezza Rice, was the second female Secretary of State.

These advances for women are indicative of the evolving context of women in corporate and political leadership. However, men still occupy far more positions that confer “decision-making authority and the ability to influence others’ pay or promotions” (Eagly & Carli, 2003, p. 809). Further, although women have gained increased access to supervisory and middle management positions, “they remain quite rare as elite leaders and top executives” (Eagly & Karau, 2002, p. 573). Thus, the question that has plagued leadership scholars and has driven contemporary research efforts is: Why does this gender gap exist?

#### *Statement of the Problem*

Women enter the professional and managerial ranks in equal or greater numbers than do men (Catalyst, 2005, 2007; U.S. Bureau of Labor Statistics, 2005), yet there are very few women in the senior leadership ranks of the Fortune 500. As recently as 2005, 67 Fortune 500 companies, or 13%, had no women officers and 264, or 53%, had two or fewer women corporate officers, virtually unchanged from 2002 (Catalyst, 2006). In 2006, the number of Fortune 500 companies with two or fewer women corporate officers was a relatively flat 266, but the number jumped to 297, or 59%, in 2007, a nearly 12% increase year over year (Catalyst, 2008).

Women continue to be sparsely represented in senior leadership positions in the Fortune 500. “In 2005, women held 16.4 percent of corporate officer positions, up just 0.7 percent from 2002” (Catalyst, 2006, p. 2). In 2006, that number dropped to 15.6%, and in 2007, it dropped to 15.4% (Catalyst, 2008). Research by Catalyst (2005, 2006,

2007) has demonstrated that women come into the professional and managerial ranks in equal or greater numbers than do men. Somewhere along the way, however, the presence of women begins to diminish. In this regard, Catalyst (2006) stated:

Women face three significant barriers men rarely face: gender-based stereotyping, exclusion from informal networks and a lack of role models. These obstacles combine to restrain women from top positions by pigeonholing their talents, restricting access to essential information and discouraging their ambitions. (p. 4)

Only after these barriers are removed will women be able to advance in large numbers to officer positions (Catalyst, 2006). In the meantime, however, the growth of the numbers of women in the top ranks has been slow. “At the estimated growth trend for the past 10 years (.82 percentage points per year), it will take 40 years for women to reach parity with men in corporate officer ranks” (Catalyst, 2006, p. 2).

Additional research has been conducted to determine why women leave the corporate or professional environment. Theories that include life balance and childcare responsibilities have been advanced as reasons for this problem (Eagly & Karau, 2002; Kelly & Dabul Marin, 1998; Morrison, 1992). More recently, research has focused on the effects of gender bias (Carli, 1990; Catalyst, 2005, 2007; Eagly, 2007; Rudman, 1998), a subtle bias that may occur as a result of socialization and expectations that affect both men and women. In this regard, the theory of role congruity posits that men and women are viewed positively when they align themselves with the typical requirements of their respective genders and negatively when they do not. The theory concerns the prejudice that exists when one person hold beliefs or stereotypes about a group that are inconsistent with the behavior thought to be necessary to succeed in a specific role (Eagly & Karau; Eagly, Karau, & Makhijani, 1995).



According to socialization theories, such as role congruity, because a common expectation of women is that they are communal or caring or should be in a deferential role, women in leadership positions may find themselves viewed negatively (Eagly, 2007; Eagly, Makhijani & Klonsky, 1992; Weyer, 2007). Other research, however, indicates that it has not been possible to demonstrate the relationship between such theories and that there are very few women leaders in the Fortune 500 (Furchtgott-Roth, 1998).

Other research has linked the financial performance of publicly traded companies to the number of women in senior leadership positions (Catalyst, 2004; Shrader & Blackburn, 1997; Smith, Smith, & Verner, 2005). Catalyst analyzed the financial performance of the Fortune 500 between the years 1996 and 2000 using widely accepted financial measures. The companies were ranked from most to least in terms of the number of women in senior leadership positions and were then subdivided into quartiles. The top and bottom quartile companies were examined to determine financial performance in each company. The top financially performing companies had the highest number of senior women executives. While causality of superior financial performance to the number of women in senior leadership positions has not been shown, there does appear to be a relationship between the two.

Shrader and Blackburn (1997) also examined financial performance outcomes and the number of women in management, top or executive management, and on the board of directors for 200 U. S. firms that had the largest market value and that were in compliance with the Equal Employment Opportunity Commission guidelines for 1992 and 1993. They found “no significant positive coefficients for the percentage of women

in top management and financial performance relationships” (p. 365). One explanation offered was that there were too few women top managers to allow proper statistical analysis. In this study, women were only 4.5% of top management, and there were no women CEOs. The authors acknowledged that, because so few studies in this area have been conducted, their research was exploratory. Moreover, given their brief timeframe, they encouraged future studies to take a longer-term perspective.

In a similar study, Smith et al. (2005) examined “the relationship between management diversity and firm performance for the 2,500 largest Danish firms observed during the years 1992 to 2001” (p. 1). This study included both private and listed or publicly traded companies. The data needed to conduct this study were available, even for the privately held companies, because Danish law requires the filing of a proscribed data set with Statistic Denmark, which collects information on all Danish firms.

After controlling for such factors as company age, size, and industry, the results indicated that “the proportion of women among top executives and on boards of directors tends to have a significantly positive effect on firm performance” (Smith et al., 2005, p. 2). In testing for causality, Smith et al. found that “the positive relationship is due to board diversity affecting firm performance and not the opposite” (p. 2). The question still remains as to whether firms with explicit diversity hiring goals or more ambitious and intentional recruitment policies have other characteristics that were not observed in the study, such as a good, welcoming, and accepting overall environment.

Many theories have been developed to explain why the number of women in senior leadership positions within the Fortune 500 has remained fairly static over the years. Thus far, however, no definitive explanation has emerged.

### *Purpose of the Study*

Using the Catalyst (2004) study as a framework, the purpose of this study was to determine whether there is a relationship between the financial performance of companies in the Fortune 500 and the number of women in senior leadership positions in these companies.

### *Research Question*

Between 1999 and 2008, was there a relationship between the financial performance of Fortune 500 companies, as measured by the widely accepted standard financial measures of total shareholder return and return on equity, and the number of women corporate officers in these companies?

### *Significance of the Study*

The significance of the study is related to the potential economic and financial performance of the Fortune 500. Stakeholders of a corporation expect that the company will appropriately maximize revenue and profit. If companies that have more women in their senior executive ranks have better financial performance, then are companies that do not have women in senior executive positions missing an opportunity to enhance or improve the financial results? Fortune 500 companies spend significant sums of money looking for competitive advantages and other means to improve their bottom lines, yet little research has been conducted to determine whether the gender mix of senior management and the board of directors correlates to financial performance.

### *Limitations of the Study*

This study was not able to correlate financial performance with the number of women in senior leadership positions within the Fortune 500 over a specific period of

time, 1999 to 2008, or to demonstrate causality between financial performance and the number of women in senior leadership positions.

Gender designation was based on the first name of the corporate officer.

Traditional male and female names were used for gender designation purposes. If the name was ambiguous with regard to gender (e.g., Chris, Pat, Lee, or initials only), the default gender was male. Women comprise only 15.4% (Catalyst, 2008) of the officers of Fortune 500 companies, so the likelihood that an ambiguous name is male is 84.6% or about 5.5 times more likely. It is possible that an erroneous count of women officers was made for some companies in some years.

No analysis or segregation of industry specific data is included in this study.

Certain industries (e.g., airlines or consumer products) may have very different underlying factors that make head-to-head comparisons difficult. Cultural issues within certain industries and companies also were not considered. For example, Coca-Cola, a bottom quartile company, has operations all over the world and often hires in-country nationals to run operations outside of the United States. The globalization of many of these companies in operations, leadership, and ownership may also have an effect on the corporate officer selection process. This study focused only on companies that were on the Fortune 500 during a defined period of time. Other qualifiers were not considered.

#### *Definition of Terms*

*Agentic behavior* is typically associated with stereotypical masculine traits such as assertiveness, aggression, dominance, independence, and self-reliance.

*Communal behavior* is typically associated with stereotypical feminine traits such as caring, concern, and nurturance as well as being gentle and soft-spoken.

*Corporate officer* is a person listed on the Directors and Executive Officers of the Registrant page in Form 10K, filed annually with the Securities and Exchange Commission. This is generally Item 10 in the Form 10K table of contents. The Catalyst (2004) study defined corporate officers in their study based on data obtained from their annual census of women corporate officers and top earners of the Fortune 500. These data are published each year. In their annual census report, prior to 2006, corporate officers were self-defined by the company. After 2006, Catalyst changed their definition to those positions that are board-appointed or board-elected. The result of the definitional change was a reduction in the number of corporate officers overall.

*Return on equity (ROE)* is the ratio of income (before extraordinary items) to average shareholder equity for the year.

*Senior or executive leadership* includes chief executive officer, president, chief financial officer, managing director, partner, or other similar titles.

*Stakeholder* is anyone who has a vested interest in the performance and financial outcome of a company. This includes, but is not limited to, shareholders, employees, and the board of directors.

*Total shareholder return (TSR)* is the sum of the stock price movement plus reinvestment of dividends declared. This is also referred to as total return on investment.

#### *Organization of the Study*

Chapter 1 introduced the problem that women continue to be sparsely represented at the senior leadership level in the Fortune 500. Research that attempts to explain possible reasons for this was introduced, and the problem statement, purpose of the study, significance of the study, and the limitations were presented.

Chapter 2 consists of a summary of the relevant literature on women, leadership, and gender. Leadership theories and how they apply to women are discussed. Then the literature on several gender theories that fall under the broad category of role congruity theory is presented. Finally, the glass ceiling, the glass cliff, the glass escalator, tokenism, and critical mass are discussed.

Chapter 3 outlines the quantitative methods that were used to answer the research question. The research design was descriptive correlational in nature, and data, including company demographic characteristics, were gathered from a purposive sample. Chapter 4 presents the results of the study, while Chapter 5 provides a summary and discussion of the findings, along with recommendations for future research and policy.

## Chapter 2

### Literature Review

This chapter provides a review of leadership theory as it applies to women and presents a foundation to understand certain expectations and attitudes relating to women in leadership positions. Theories such as role congruity and gender bias are presented, and concepts such as the glass ceiling are discussed, in the context of why women are noticeably absent from the top leadership of the Fortune 500. A new theory, the glass cliff, which is related to the glass ceiling, is also presented. Finally, the concepts of tokenism and critical mass are discussed.

The literature suggests that gender differences in leadership styles have important and significant theoretical and practical utility. Contemporary approaches to gender and leadership involve understanding style and effectiveness differences between men and women and determining whether there is a relationship between these differences and the gender gap. Although research focusing on women as leaders has expanded greatly since the 1970s, this topic still remains greatly understudied (Lowe & Gardner, 2001).

#### *Evolution of Leadership Theories*

Leadership is a universal, highly valued commodity, and the literature abounds with distinguished scholars' attempts to define and understand the concept of leadership. Stogdill (1974) believes that there are almost as many different definitions of *leadership* as there are people who have tried, in one way or another, to define it.

Early scholars and researchers studying leadership defined the field of leadership in a strictly male context. Not surprisingly, these scholars and researchers were men; men practiced leadership and men wrote about it. This male dominance in leadership history is

perceived as a major reason for the exacerbation of the problem of “women not being seen as an appropriate fit in a management or leadership role” (Jogulu & Wood, 2006, p. 236). The road to raising the profile of women in leadership has been a long and difficult journey fraught with controversy.

In the 18<sup>th</sup> and 19<sup>th</sup> centuries, philosophers suggested a theory of leadership known as the Great Man theory (Denmark, 1993). The great man was believed to have innate “unique and exceptional features and qualities that distinguished him from his followers” (Jogulu & Wood, 2006, p. 237). This theory was constructed as a male model at a time when women were not visible in paid employment. The mere title of this theory suggests that women were not perceived as leaders, resulting in research during this time period that was focused solely on males (Jogulu & Wood).

Spawned from the Great Man theory were the trait theories of leadership. Trait theories were prominent in literature from 1904 to 1947. These theories focused on traits that were “fundamentally describing traits in masculine terms, and these characteristics were considered vital for successful leadership” (Jogulu & Wood, 2006, p. 237). Again, few women held management or leadership roles during this period.

Soon after the 1940s, researchers began to suggest that traits alone were not sufficient to explain effective leadership, thus giving birth to the behavioral theories (Jogulu & Wood, 2006). Research during this era was beginning to recognize the importance of concern for people, a more feminine behavior, as being an effective leadership quality, thus injecting the first notion of women as leaders into literature. Jogulu and Wood stated, “A concern for people could be seen as a behavior more typically associated with feminine characteristics” (p. 239). Although the behavioral



theories were proposed in the 1930s, they did not gain prominence until the 1960s.

Women in position of authority or power in organizations were still relatively infrequent at this time.

During this same time period, situational theories also gained in popularity. These theories, also known as contingency theories, embrace both leadership traits and situational aspects of leadership. Because these theories were developed and researched during a period where women were more likely to be in supportive, non-management type roles, these theories “would have predominately been seen as applying to males in management or leadership roles” (Jogulu & Wood, 2006, p. 239).

In the 1980s, three styles of leadership were proposed in situational leadership theories: autocratic, democratic, and laissez-faire. The democratic style, defined as a style “whereby the leader pursues an open, trusting, and follower-oriented relationship” (Jogulu & Wood, 2006, p. 240), aligned leadership to favorable feminine characteristics, thus calling attention to women in leadership. Unfortunately, even though research was beginning to acknowledge women, the perspective appeared to be that the differences noted in women leaders were equated with deficiency (Fagenson, 1990).

In the early 1990s, there was a new era in the literature that could be seen as contributing to women’s career advancement in leadership. “The beginning of gender differences theories marked a shift in the leadership literature, as the behavior, skills, and attitudes of women were considered, recognized, and evaluated” (Jogulu & Wood, 2006, p. 243). Burns (1978) developed a comprehensive theory of transactional and transformational leadership. It was not until Bass (1985), who built upon Burns’ work, that such theories of leadership “opened opportunities for further investigation of the

leadership styles of men and women” (Eagly, Johannesen-Schmidt, & Van Engen, 2003, p. 570). Burns’ (1978) work aligned transactional leadership style with strong masculine characteristics and qualities of competitiveness, hierarchical authority, high control, and analytical problem solving. In contrast, transformational leadership was more closely aligned with feminine qualities such as cooperation, collaboration, lower control, and problem solving based on intuition and rationality (Klenke, 1993).

### *Gender and Leadership*

The topic of gender and leadership has become increasingly popular over the past three decades. This roughly corresponds with the rise of the women’s movement and the influx of college-educated, career-focused women into the work force. Thus, research questions have shifted from whether women can lead to the biases associated with women rising up the corporate ladder. Meta-analyses (Eagly & Johnson, 1990; Eagly et al., 1992; Eagly et al., 1995) and research have revealed that there are very few differences between male and female leaders. The one potentially significant difference that was detected is that women use a more participative and democratic style and are less autocratic and directive in their leadership style than men (Eagly & Johnson).

*Transformational leadership.* As women increasingly enter traditionally male-dominated roles, there is a growing interest in the relationship between gender and transformational leadership. Approximately one-third of leadership research has focused on transformational leadership (Lowe & Gardner, 2001), demonstrating a growing interest in the relationship between leader and follower. This popular approach to the conceptualization of leadership has “arguably evolved to be central to the field” (Hay & Hodgkinson, 2006, p. 145). The transformational leader motivates followers to “aspire to

and maintain higher levels of productivity than they would have reached if they had been operating only through the transactional process” (Bass, 1985, p. 40).

In an empirical study, Mandell and Pherwani (as cited in Jogulu & Wood, 2006) found that “transformational leadership to a large extent . . . characterizes a feminine model of leadership, built around cooperation, lower levels of control, collaboration, and collective problem-solving and decision-making” (p. 244). Because many of the aspects of transformational leadership are considered communal in nature, women who adopt a more transformational style of leadership may be viewed as more effective (Eagly et al., 2003; Scott & Brown, 2006). In today’s organizations, which are flatter and less hierarchical in structure, these are precisely the characteristics and qualities that are required of effective leadership.

A meta-analysis by Eagly et al. (2003) concerned the effectiveness of transformational leadership and concluded that “all of the aspects of leadership style on which women exceeded men relate positively to leaders’ effectiveness, whereas all of the aspects on which men exceeded women have negative or null relations to effectiveness” (p. 569). These findings confirmed that women are more likely to possess leadership characteristics and attributes that are effective in contemporary organizations as compared with their male counterparts.

An increasing number of authors assert that “a female advantage in leadership, whereby women are more likely than men to lead in a style that is effective under contemporary conditions” (Eagly & Carli, 2003, p. 807). Sharpe (2000) stated, “After years of analyzing what makes leaders effective and figuring out who’s got the Right Stuff, management gurus now know how to boost the odds of getting a great

executive: Hire a female” (para. 1). Leadership experts have developed several theories to support these bold assertions.

The current research emphasizes transformational leadership in terms of follower empowerment and the need for organizations to become less hierarchical, more flexible, team-oriented, and participative (Kark, 2004). Follower empowerment can be associated with how women are expected to act as leaders, based upon common stereotypes (Kark). Studies by Kark have shown that women are perceived, and perceive themselves, as transformational leaders more than do men. Eagly and Carli (2003) found small but significant gender differences that rated women higher than men on all transactional factors. Yammarino, Dubinsky, Comer, and Jolson (1997) found that women leaders provided a working environment that “encourages considerate, warm, participative, and interpersonal relationships” (p. 219), thus facilitating stronger dyadic bonds that fostered productivity, effectiveness, satisfaction, and commitment. As such, they provided support that transformational and contingent reward leadership are positively related to follower empowerment and female leadership.

*Role congruity theory.* As a Western society, we have certain expectations about how men and women should dress, act, interact with others, and comport themselves. Women are viewed positively when they meet or align themselves with the typical requirements of the female role. The same can be said for men. Roles and group norms come from the various groups that of which individuals are a part (Robbins, 2005). The largest group is gender. Nationality, religion, region of the country, and age, are among many other groups that people use to define themselves and others. “Groups exert pressure on members’ behavior into conformity with the groups’ standards” (Robbins, p.

105). There are still traits that women, as a gender, are expected to embody and personify because they are women. These traits include “an interpersonally sensitive orientation in which the individual is both concerned with the welfare of others and their connection to others” (Scott & Brown, 2006, p. 232). In other words, women are expected to be sympathetic, nurturing, and kind, among other similar qualities. Men, in contrast, are expected to have a “self-interested, task focused orientation . . . strive to master, dominate and control the self and the environment” (Scott & Brown, 2006, p. 232).

Role congruity theory is defined as the prejudice that exists when one person holds beliefs or stereotypes about a group that are inconsistent with the behavior thought to be necessary to succeed in a specific role (Eagly & Karau, 2002; Eagly et al., 1995). “This inconsistency lowers the evaluation of the group member as an actual or potential occupant of the role” (Eagly & Karau, p. 574). Social role theory and expectations states theory are subsets of the role congruity theory. These theories focus on “structural/cultural explanations” (Weyer, 2007, p. 484) that seem to hold true across cultures and that define the differences in gender perceptions as discrepancies in power and status.

Under social role theory, a variant of role congruity theory that some authors use, the “distribution of men and women into social roles is the root of broader gender roles, or shared expectations stemming from a person’s identification as a man or a woman” (Diekmann & Goodfriend, 2006, p. 369). Occupations and broader social role expectations fall under the theory, which leads to the generalized assumption that, to the extent that women “typically occupy social roles related to caring for others (e.g., homemaker, nurse), the communal characteristics that are required by these specific roles (e.g., kind,

sensitive) are associated with women” (Diekman & Goodfriend, p. 369). Conversely, leadership and power roles are expected to be held by men, and men are expected to have characteristics such as independence and competitiveness as a result.

The social role contains all of the direct and indirect messages that a child receives growing up in a certain culture. Leaders, whether male or female, carry these messages around with them and, theoretically, these messages are part of who that leader is and how he or she performs. The same holds true for the followers.

Effective leadership has been studied for some time, but comparing women leaders with male leaders in terms of style and effectiveness is a more recent area of research. The style used by women tends to be “less hierarchical, more cooperative and collaborative, and more oriented to enhancing others’ self-worth” (Eagly et al., 2003, p. 569). Under social role theory, leaders “occupy roles defined by their specific position in a hierarchy and simultaneously function under the constraints of their gender roles” (Eagly et al., p. 572).

Another difference between men and women is that they face significant gender biases if they self-promote. Self-promotion may be a way to counteract gender stereotypes in the workplace because it enhances the perception of competence (Rudman, 1998). However, women who behave assertively and confidently and adopt a direct, task-oriented leadership style are evaluated more negatively and are not as well received as men who engage in exactly the same behavior. These opposing expectations for women translate into fewer growth opportunities for them. Very often women are put at a disadvantage early on because the double standard is so pervasive. “While men are perceived to hold an intrinsic right to managerial roles, many women are merely tolerated

as interlopers and bear the burden of proving that they belong in management” (Swiss, 1996, p. 52).

Beyond gendered expectations of the followers, the leaders have “internalized their gender role to some extent. As a consequence of the differing social identities that result, women and men tend to differ in their expectations for their own behavior in organizational settings” (Eagly et al., 2003, p. 572). Thus, gender roles create an inconsistency that exists between the communal qualities of caring and kindness associated with women and the agentic qualities, such as assertive and competence, associated with a leader. The problem is that leadership qualities (agentic) are the same qualities used to describe males; the socialization process has produced the expectation that male social qualities also happen to be leadership qualities.

Thus, when women are in a leadership position, they should demonstrate agentic qualities, fulfilling the expectation that leaders are assertive, masterful, competent, and dominant. However, agentic behavior is viewed to be less desirable in women, creating the classic double standard that favors men.

Prejudice occurs when leadership behavior carried out by women is rated less favorably than the same behavior demonstrated by men under similar circumstances. In their meta-analysis of 45 studies, Eagly et al. (2003) stated:

Particularly consequential are the negative reactions that women may encounter when they behave in a clearly agentic manner, especially if that style entails exerting control and dominance over others. When female leaders fail to temper the agentic behaviors required by a leader role with sufficient displays of female-typical communal behaviors, they can incur a backlash where by they may be passed over for hiring and promotion. (p. 573)

Using Lord and Brown’s (2004) follower-centered model of leadership, Scott and Brown (2006) developed a study to detect biases that individuals encode as they take in

new information relative to male and female leaders. The authors believe that preexisting gender stereotypes may interfere with an individual's ability to accurately assess leadership behavior. They conclude that, because of the bias, women experience substantially more difficulty in being seen as leaders and that the bias may undermine their effectiveness and added that "stereotypes color how behavioral information is encoded . . . and as a result, women may be viewed as a female first and a leader second" (p. 240).

The incongruence of agentic behavior with female leaders is further exacerbated when the leader role is expected to be culturally masculine or the environment is highly male dominated. This incongruence "not only restricts women's access to such leadership roles but also can compromise their effectiveness. When leader roles are extremely masculine, people may suspect that women are not qualified for them and they may resist women's authority" (Eagly, 2007, p. 6). The cross-pressure of communal qualities that people prefer in women and agentic qualities that people prefer in leaders puts a tremendous burden on women leaders who are trying to find a leadership style that works for them. The consensus of much of the research is that a "coach/teacher style, as epitomized by transformational leadership, might approximate this middle way because it has culturally feminine aspects, especially in its 'individualized consideration' behaviors and is otherwise considered androgynous" (Eagly, p. 4).

Expectations states theory "proposes that the lower status of women causes the bias" (Weyer, 2007, p. 484), rather than the incongruence of role with gender, seen in social role theory. Characteristics such as gender, education, wealth, or relative attractiveness each have an independent value, based on stereotypical traits shared by the



greater society. Under this theory, gender roles are considered background identity (Ridgeway, 2002) and therefore “exert tremendous influence in the workplace” (Weyer, p. 486). The female gender carries certain expectations of behavior and a leadership role carries certain expectations. Women who act like a leader in a leadership role fail to meet gender role requirements and vice versa. The tendency to define leadership in terms of a more masculine, task-oriented view may reflect the choice of men over women rather than a blind assumption that men are better leaders than women (Weyer, 2007).

Stated differently, men are leaders not because men are preferred as leaders. “Rather most leaders are men because leadership is described as a task that requires behavior deemed masculine” (Weyer, 2007 p. 486). If women become leaders, they will likely behave out of the bounds of expected behavior based on gender role stereotypes.

The discussion of gender encompasses aspects of both social role and expectations states theories. Rudman and Kilianski (2000) stated that, while social roles have changed, gender roles have not. “The gender authority hypothesis posits that labor divisions within the workplace signify different status expectancies for men and women” (p. 1315). If gender creates legitimacy, women are not seen as leaders because they are not fulfilling their social role as a caretaker; it is because they are not men.

The primary aim of Rudman and Kilianski’s (2000) research was to determine “why men are more readily accepted than women in positions of power. Results showed consistent support for the gender authority hypothesis. Associating men with high authority and women with low authority covaried with negative attitudes toward female authority” (p. 1325). Women in male-dominated or authority roles may be disliked because they break expectations, are unfamiliar, or may be viewed as threatening.

A discussion of gender necessitates a discussion of sexism and discrimination based upon sex or gender. Sexism is a prejudice, but it is different from other types of prejudice such as ethnicity (Glick & Fiske, 1996). Sexism requires a deeper look because women are viewed both with hostility and in a restricted but positive tone. Glick and Fiske define these seemingly opposing viewpoints as hostile sexism and benevolent sexism.

Hostile sexism fits the classic definition of prejudice or antipathy based on faulty generalization or an unfavorable opinion based on disregard for the facts. Benevolent sexism is:

a set of interrelated attitudes toward women that are sexist in terms of viewing women stereotypically and in restricted roles but that are subjectively positive in feeling tone (for the perceiver) and also tend to elicit behaviors typically categorized as pro social (e.g., helping). (Glick & Fiske, 1996, p. 491)

Glick and Fiske do not consider benevolent sexism a good thing because “its underpinnings lie in traditional stereotypes and masculine dominance” (p. 492). Further, the recipient does not necessarily experience the sexism as benevolent.

Hostile sexist beliefs can become legitimized through this benevolence. Hostile sexist beliefs, such as women are the weaker sex and therefore must be restricted to domestic roles or women are incompetent at agentic tasks, meaning they are not fit to have power over social or economic institutions, get translated to benevolent sexism’s rationalization that women belong only in domestic roles or women must be provided for and taken care of (Glick & Fiske, 1996). The need for sex and procreation further complicate the issue. This creates a positive image for men that reinforces the belief of men’s dominance over women. Glick and Fiske call this seemingly conflicted view of women ambivalent sexism.

Glick and Fiske (1996) demonstrated that men tend to divide women into two groups. These groups consist of the favored in-group that embraces traditional roles (i.e., homemaker) and the disliked, out-group (i.e., feminists) who challenge the traditional notions. Women are not considered women as a whole but members of two distinct subgroups that can be viewed and treated differently.

Glick and Fiske (1999) turned the tables and looked at women's ambivalence toward men. Women hold both hostile and benevolent beliefs about men. Women may resent the power and status held by men but have traditionally been dependent on men for procreation, social status, and economic survival. These dependencies have changed dramatically for women over the last 30 years. Despite these changes, there is still a status difference between men and women. Glick and Fiske stated, "subtle status differences between groups lead to consensual stereotypes that assign favored traits to members of the high-status group as a way of explaining the status difference" (p. 521). The belief that girls are not good at math as an explanation of why so few women become engineers is an example of this type of thinking.

The research of Glick and Fiske (1999) demonstrates that women are as conflicted as men regarding their beliefs of the opposite sex. Based on their research, they stated, "Some women simultaneously hold beliefs that actively support and justify male dominance (benevolence) at the same time that they resent the consequences of this dominance (hostile)" (p. 533). The dominants make sure that subordinates have enough ownership in the system so there is something to lose if the subordinates rebel (Jackman, 1994). Glick and Fiske further stated, "Given men's ability to reward women who adopt

traditional roles and punish those who do not, it is not surprising that many women would adopt benevolent beliefs about men that justify male power” (p. 533).

The “lack of a fit model” (Heilman, 1997, p. 880) is another possible explanation of the gender-based stereotypes with which women are faced, especially at the senior management level. Loden and Rosener (1991), however, challenged the idea of fit, stating “Unlike institutions that still attempt to retrain, coach, counsel and cajole *others* to ‘fit’ within the mainstream, leading-edge organizations focus on modifying policies and systems to support diversity” (p. 165). Instead of blaming the individuals for lack of chemistry or poor fit, the company takes the responsibility. Companies that Loden and Rosener consider leading edge have proactive recruiting efforts that seek out women for all positions.

Catalyst (2006) takes the position that top management, but primarily the CEO, must be the change agent that makes diversity happen by demanding commitment and accountability from everyone. According to Loden and Rosener (1991), successful diversity efforts are “opportunity focused” (p. 198) rather than “problem focused,” (p. 198) and they “assume integration” (p. 198) rather than assuming assimilation. While these may seem like subtle differences, diversity becomes an opportunity to enhance the overall culture and work experience of all employees instead of an issue of people needing to be fixed.

Research has demonstrated that women are equal to men in leadership roles in organizational settings (Dobbins & Platz, 1986; Eagly & Johnson, 1990), have the same motivation as men (Miner, 1977; Morrison, White, & Van Velsor, 1987) and, at least in one study, are more committed to their careers than are men (Hymowitz & Schellhardt,

1986). Yet 30 years after some of these studies were published, there are still very few women at the top. The lack of a fit model or gender-based stereotypes may be the reason.

According to Heilman (1997):

Performance expectations are determined by the fit between the perceptions of the attributes the individual brings to the work setting and the perception of the job's requirements in terms of skills and orientation. If the fit is a good one, then success will be expected. (p. 880)

Taking a forceful leadership role, demanding resources, and making difficult decisions are not stereotypically viewed as actions that a woman takes, even though those very actions are well within the role of any executive. The "fit-derived performance expectations whether positive or negative, play a key role in evaluation processes, because there is a cognitive tendency to perpetuate and confirm them" (Heilman, 1997, p. 880). Women do not behave this way; therefore, the cognitive filter interprets this behavior as negative for women.

Glick and Fiske's (1996, 1999) work developed the concept of descriptive and prescriptive stereotypes. Descriptive stereotypes concern how most people in a group supposedly behave and their competencies. Prescriptive stereotypes concern how certain groups should feel, think, and behave. Glick and Fiske (1999) stated that both are forms of social control but that prescriptive stereotypes are especially used for social control. Stereotypes protect the status quo (Berry, 2007). Berry further stated, "Prescriptive gender stereotyping is associated with 'disparate treatment' while descriptive gender stereotyping is associated with 'disparate impact'" (p. 17).

Heilman (1997) further stated that "stereotypes flourish in ambiguous performance settings" (p. 881) and that "the more unstructured the actual decision making procedure, the more apt are stereotypes to influence decision making" (p. 881). In

environments for which there are multiple sources of information and the decision making process is structured, automatic stereotyping is greatly diminished (Heilman). However, the selection and evaluation of senior management is not structured and the criteria tend to be subjective and vague (London & Stumpf, 1983; Stumpf & London, 1981). Chemistry and fit, those elusive and indefinable characteristics, are often used as the major criteria for executive leadership hiring decisions (Ragins, Townsend, & Mattis, 1998). The lack of a structured decision making process is:

likely to foster the use of stereotypes in promotion decisions at executive levels, giving rise to erroneous inferences about women and prompting different aspects of their attribute profile to take precedence in decision making than would be the case for men. Thus the potential for biased decision making is very high. (Heilman, p. 881)

Regardless of whether differences in leadership behavior result from each gender behaving according to the expectations of that gender, as social role theory predicts, or performance expectations of both the leader and others come from a difference in status and power between men and women, as expectation states theory predicts, or a perceived lack of “fit,” women have not been able to successfully assume top leadership roles on a broad scale. Specific expectations about individual behavior in certain roles (Eagly et al., 2003) and “gender status beliefs create a network of constraining expectations and interpersonal reactions that is a major cause of the ‘glass ceiling’” (Ridgeway, 2002, p. 637).

As previously stated, research interests shifted from whether women can lead to biases associated with women trying to climb the corporate ladder. Gender bias against women, as a result of socialization and style differences in how women present themselves in the role of a leader, are two significant areas that have been studied for the

past 15 to 20 years. Numerous authors have researched these topics, but Eagly, alone and with various co-authors, has written extensively about these issues since at least 1990. Her research is commonly cited in many of the articles, books, dissertations, and research papers written about gender bias.

The tendency of society to label events or phenomena based on gender bias, whether real or perceived, in the work place and in society, has led to the use of the word glass in naming certain phenomena. The glass ceiling, which was the first to be named, has been followed by the glass cliff and the glass escalator, which are all discussed below. While the phenomena may have different names, at the core, the fundamental explanation is gender bias, which results in different expectations and outcomes for men and women in the same situation.

*The glass ceiling.* Of interest here is whether a glass ceiling prohibiting women from ascending to the upper echelons of a corporation really exist. If it does, then it is useful to determine how it came about and the strategies that women can use to break through this barrier. Numerous studies have attempted to determine why a glass ceiling exists. The Federal Glass Ceiling Commission (1995) described the glass ceiling as the intangible barriers that slow women's progress to the top. A detailed examination of the glass ceiling is presented, including arguments from the opposing side and myths about working women. A review of the relevant literature supports the notion that a glass ceiling, which prohibits women from entering top management positions, exists.

A common explanation for the glass ceiling is that women have invested less in education, training, and work experience. A "lack of general management or line experience" (Ragins et al., 1998, p. 34) along with the perception that not enough women

have been in the pipeline long enough is often cited as the reason for the small number of women senior executives. Nevertheless, Catalyst (2005) noted that women occupy more than half of all management and professional positions. According to the U.S. Bureau of Labor Statistics (2005), women make up nearly half of the U.S. labor force. Women also receive 57.5% of all bachelor's degrees, yet they represent only 15% of the United States Congress and 2% of the top wage earners in Fortune 500 companies.

A significant assumption of the pipeline theory is that the playing field is level all the way to the top. Therefore, the issue lies with the women who are filling up the pipeline. Women executives, however, cite exclusionary corporate cultures that create obstacles and barriers for women. From this perspective, the problems lie with the “attitudes and subtle barriers in the organizations which foster an inhospitable corporate culture” (Ragins et al., 1998, p. 36).

The pipeline theory has no substantive data to support it (Heilman, 1997). Gallagher (1996) found the average length of time that a woman takes to reach the executive level of her company is 11.5 years. Given that over a decade has passed since the Gallagher study was published, allowing for another entire class of the pipeline to come through, and the number of women executives in the Fortune 500 has been relatively unchanged, the pipeline theory has not received support as an explanation for the glass ceiling.

In 1991, the Federal Glass Ceiling Commission was formed to foster the advancement of women and minorities. In 1995, the commission reported that women have made some progress in advancing to upper-level management positions but continue to face obstacles to promotion. The commission ultimately identified several major



barriers for women in achieving senior management positions, including being placed in dead-end assignments, a lack of mentoring, lack of job rotations and high visibility assignments, exclusion from informal communication networks, and a general gender bias. These findings support the viewpoint of the existence of a glass ceiling for women, preventing many from attaining senior-level positions (Federal Glass Ceiling Commission, 1995).

Culture plays a role in reinforcing the glass ceiling and contributing to gender bias. Regarding male senior executive hiring managers, one female executive stated, “They all dress alike, they all look alike, they tend to hire people that look like them, and they play by very similar rules” (Swiss, 1996, p. 77). While working for an investment banking firm, Swiss observed how her male colleagues would become nervous when she entered a room versus how they would relax when a tall guy or man with gray hair came in behind as her alternate or teammate. According to Swiss, “none of the women I met, even those at the top of their organizations deny the existence of unequal treatment on the job. Among senior managers, 62% believe the old boys’ network perpetuates gender bias to a great extent” (p. 69). Women are adversely affected when vying to back-fill a position. “It doesn’t mean that all men bond really well with all other men. They don’t, but there’s just something about being the same gender that generally makes you bond faster” (p. 53).

Often women are not allowed into the key networks, what some term the Good Old Boy Network. Swiss (1996) stated, “A lot of senior women are disappointed to discover that a big part of their effectiveness is dependent upon the people they know and how they network; this fact is not a surprise to men” (p. 53). In 1994, *Business Week*

magazine published a cover story by Galen and Palmer (1994), titled “White, Male and Worried.” The essence of the article was the worry that white males face in response to the changing of demographics in the workplace. Nevertheless, according to Galen and Palmer, white men recognize that they are still calling the shots and getting most of the promotions. Swiss believes that although women threaten men’s long-standing workplace entitlements, the old boys’ network remains the powerhouse behind the double standard.

There is an opposing viewpoint regarding the glass ceiling; specifically, there is a belief that it does not exist. Furchtgott-Roth (1998) believes that “the glass ceiling is a myth promoted by feminists in an attempt to gain unfair preferential treatment for female workers” (p. 73). She contends that women have made tremendous strides in terms of gaining equality and that the only reason for a pay gap is a conscious choice on the part of women. Glaser and Smalley (1999) would agree, stating, “For a variety of reasons, there are times in many women’s careers when it makes sense to refuse promotion, transfers, and jobs that require long hours, frequent travel, or impossible workloads” (p. 50).

This notion of maintaining the status quo or not striving for that next promotion provides women with ways to keep working, without sacrificing a sense of balance and well being. Some women decide to plateau after witnessing first hand the stress and burnout that take place when career is chosen over a work-life balance. Other women decide to stay because they enjoy the job that they currently have and are therefore in a comfort zone. Anne Sweeney, President of Disney/ABC Cable Network (as cited in Pestrak, 2001) stated, “I’ve never been a proponent or a believer in the glass ceiling. That kind of thinking has held more women back than helped them” (p. 20).

Furchtgott-Roth (1998) made another important argument against the existence of a glass ceiling. Current data would suggest that fewer than 5% of the Fortune 1000 CEOs are women (Catalyst, 2005), and proponents of the existence of a glass ceiling will cite this as proof that women are not being given equal opportunities to compete for top management positions. In reality, most top management positions require 25 years of experience along with a Masters in Business Administration. Further, Furchtgott-Roth stated, “Women received less than 5 percent of graduate degrees in the sixties and seventies, and these are the graduates who are at the pinnacle of their professions” (p. 76). This supports the pipeline theory that women have not reached the top in greater numbers because they have not been in the pipeline long enough.

Furchtgott-Roth (1998) challenged the fundamental makeup of the Federal Glass Ceiling Commission, which was comprised of 75% women. The commission included a U.S. Senator, two U.S. Representatives, a bank president, corporate vice-presidents and senior vice-presidents, attorneys, and presidents of consulting firms. According to Furchtgott-Roth, “ambition has taken on new meaning if these women consider themselves held down by the glass ceiling” (p. 75). Since 1982 women have earned more than 50% of all bachelor degrees and all masters degrees. Similar trends hold for doctoral and medical degrees. “In 1996 women represented 54 percent of the class admitted to Yale Medical School” (Furchtgott-Roth, p. 75). As such, Furchtgott-Roth believes that barriers (and a glass ceiling) for women have disappeared. “When discrimination does occur, there are legal remedies to deal with it under the Civil Rights Act and the Equal Pay Act. Women are bringing these cases to court and winning” (Furchtgott-Roth, p. 77).

*The glass cliff.* A relatively new concept, called the glass cliff, has emerged from the U.K. Ryan and Haslam (2005) coined the phrase, stating:

Women are particularly likely placed in positions of leadership in circumstances of general financial downturn and downturn in company performance. In this way, such women can be seen to be placed on top of a 'glass cliff', in the sense that their leadership appointments are made in problematic organizational circumstances and hence more precarious. (p. 87)

Their research was conducted in response to an article that appeared in the Times (United Kingdom), which stated that an “analysis of FTSE 100 shares shows that companies that decline to embrace political correctness by installing women on the board perform better than those that actively promote sexual equality at the top” (Judge, 2003, p. 21).

Ryan and Haslam (2005) discussed the flaws that they perceived in Judge’s (2003) work. By taking the same data and using more sophisticated analytical techniques, Ryan and Haslam concluded that companies that appointed men to their boards had relatively stable financial performance both before and after the appointment. However, “companies that appointed a woman had experienced consistently poor performance in the months preceding the appointment” (Ryan & Haslam, p. 86). What they also found was that, “in a time of a general financial downturn in the stock market, companies that appointed a woman actually experienced a marked *increase* in share price after the appointment” (Ryan & Haslam, p. 86).

Ryan and Haslam (2005) concluded that, while women already face more challenges than do men to get ahead, when women get there, they receive more scrutiny and fewer positive evaluations. In addition, it appears that the roles that women occupy are less promising and more precarious. In the event that there is failure, regardless of the reason, women “may be singled out for blame and humiliation” (Ryan & Haslam, p. 88).

A contrary position is taken by Adams, Gupta, and Leeth (2007). Using the Ryan and Haslam (2005) study as a baseline, they tested a sample of CEO appointments in the United States and ran it against stock returns and other financial measurements for a defined time period both before and after the appointment of the new CEO. They found that “women appointed to the CEO position at firms that are doing better than firms that appoint male CEOs” (Adams et al., p. 5) and concluded that “there is no statistical difference in corporate performance for firms that appoint male versus female CEOs” (Adams et al., p. 6). Adams et al. recognize that there is significant underrepresentation of women in the top ranks of corporate America, but the reasons are still not clear and deserve further study.

Ryan and Haslam (2009) responded to Adams et al.’s (2007) research, stating that the initial investigation of the glass cliff led them to look at financial performance but that financial performance is not “a universal phenomenon” (p. 14) that could explain the glass cliff. The “notions of precariousness and risk” (Ryan & Haslam, p. 14) along with the “social, organizational and psychological process” (Ryan & Haslam, p. 14) need to be taken into consideration to understand when and why women are appointed to senior leadership positions instead of men.

The tenure of women in the CEO position in the United States is 4.8 years compared with the average for men of 8.2 years (Blanton, 2005). This indicates that there may be some precariousness and risk for women CEOs outside of financial performance. According to Ryan and Haslam (2008), “the security of men and women’s leadership positions is far from comparable” (p. 15).

Based on their research Ryan, Haslam, and Postmes (2007) determined that a significant majority of women believe the glass cliff exists, while over 50% of men deny its existence. The list of reasons for the existence of the glass cliff include sexism, in-group favoritism, expendability of women, lack of opportunity, lack of networks and support, gender stereotypes, equality, and company factors. With the exception of lack of networks and support, women's explanations for why women experience the glass cliff were relatively equally spread across all of the reasons. Both men and women felt that a lack of networks and support was a less compelling reason, and both men and women gave this a fairly similar score. The only significant reason given by men who believe that a glass cliff exists was company factors. Company factors include strategic decisions to try something new when faced with a looming disaster or a public relations problem. Men largely discounted all of the other reasons, especially the three most insidious: sexism, in-group favoritism, and the expendability of women.

The current "poster child" for the glass cliff in the United States is Erin Callan, former Chief Financial Officer (CFO) of the now-defunct Lehman Brothers. Ms. Callan became CFO in December 2007. A 13-year veteran of the firm, she came up through the investment banking side of the firm, not finance, accounting, or treasury, the usual routes for CFOs. Ms. Callan was clearly different from her all-male predecessors,. She strove to be more transparent when discussing Lehman's earnings, business, and strategy (Craig, 2008a). The CFO is the financial spokesperson of a company. Six months into her tenure as CFO, Ms. Callan was removed from her position. According to the *Wall Street Journal* (Craig, 2008b), the firm's credibility came into question. On September 16, 2008, Lehman filed for bankruptcy. The federal prosecutor was concerned with when Lehman

knew that its financial position was so precarious and why this was not disclosed by the firm.

An argument could be made that the CFO position at Lehman was a classic glass cliff situation with no possibility of a winning outcome. Ms. Callan had no finance or accounting background, and Lehman's \$1.9 billion asset write-down and the need to raise \$4.0 billion in new capital after she became CFO (Craig, 2008b) were situations that she inherited, not ones that she created. Yet the market's loss of confidence in Lehman led to her removal.

*The glass escalator.* The glass escalator describes the phenomenon of males who enter traditional female occupations and are encouraged to quickly move to administrative or more prestigious roles, often with the aid of other men in the same profession. Unlike women who enter nontraditional occupations and often experience "legal, informal and cultural" (Williams, 1992, p. 254) discrimination, men do not experience discrimination when entering female-dominated professions. Rather, there seems to be a "preference for hiring men" (Williams, p. 255).

Men who enter teaching, for example, especially at the K-6 level, are often quickly pressured to move to administrative jobs, which are considered more appropriate for men and are generally more prestigious and better paying (Williams, 1992). Men "face pressure to move up in their professions" (Williams, p. 256) and because there are so few of them, they often get fast tracked, creating the "glass escalator" (Williams, p. 256).

Grimm and Stern (1974) found that men have more opportunity to advance than do their women colleagues in traditional female professions. In social work, men are

more likely to hold administrative and supervisory positions, even though women make up two-thirds of the profession. More than 80% of librarians are women, but men are more likely to be head librarians (Blankenship, 1971). In 1973, when male nurses represented just 1% of the profession, they were significantly overrepresented as nursing directors (Grimm and Stern).

Both men and women experience discrimination when they enter nontraditional occupations (Williams, 1992). However, that discrimination is very different. Men do not experience discrimination in the workplace. Rather, they receive negative comments and stereotypical reactions from people outside of their profession. These negative reactions “contribute to the ‘glass escalator effect’ by channeling men into more ‘legitimate’ (and higher paying) occupations” (Williams, p. 264). Women, in contrast, encounter discrimination and negative stereotypes in the workplace.

#### *Tokenism and Critical Mass*

Tokenism is the low proportion of women in male-dominated or nontraditional environments. Kanter (1977) believes that if enough women, through affirmative action and appropriate recruiting and hiring practices, came into the work environment, alleviating the token status of women, equality could be achieved. Specifically, anything less than an 85:15 ratio of majority to minority is tokenism; a ratio of 84:16 to 60:40 moves the tokens to minority status; and at 60:40 to 40:60, the group is considered balanced.

Kanter’s (1977) position is that the problem of women failing to achieve higher positions in the workplace is not related to the fact that they are women but rather to the lack of power associated with the positions that women typically fill. Even when women



break through, they are such a small percentage of the group, often less than 15%, that they are only tokens.

In 1995, 8.7% of corporate officers were women, and in 2005, 16.4% were women (Catalyst, 2006). On the surface, it appears as if the percentage of women nearly doubled over the 11-year period. However, when looking at the annual changes, all but .7% came in the first seven years. The lack of growth between 2002 and 2005 in the number of women corporate officers in the Fortune 500 “could indicate that many companies have succumbed to the comforts of tokenism” (Catalyst, p. 5). In 2006, the percentage of Fortune 500 women corporate officers dropped to 15.6%, and in 2007, the percentage dropped even further to 15.4% (Catalyst, 2008). This is a full percentage point drop in just two years, but it also represents a 6% decline in the number of women who hold corporate officer titles in the Fortune 500. Based on Kanter’s (1977) scale, women are still firmly in the token range and there appears to be a downward trend in terms of participation in the corporate officer ranks.

Zimmer (1988) believes that it is not the number of women in an organization that will create the breakthrough to parity but rather the acknowledgement and understanding that much broader cultural and social issues are at the core of the problem. While changes to an organization may have some positive effect, “even when organizational structures are set up to eliminate discrimination, males may be able to develop informal strategies for applying discrimination and limiting women’s chances for success” (Zimmer, p. 72).

Zimmer further stated:

Men’s negative behavior toward women in the workplace, then, seems to be much less motivated by women’s presence in a numerical minority than by men’s evaluation of women as a social minority—an opinion based on notions of inferiority rather than scarcity. (p. 72)

Zimmer's conclusion is that, even if the point of balance (Kanter, 1977) is achieved between men and women, evidence suggests that men will not be deterred in their actions against women, however subtle those actions might be. Focusing on sexism in the workplace and in society in general will go much further in eliminating workplace discrimination than focusing on tokenism and numbers.

Rosener (1995) discussed several instances for which she believes that the concept of critical mass made a significant impact on the outcome. One political example of critical mass comes from the United States Senate. Prior to 1994, only two of the 100 Senators were women. In 1994, five new women senators were elected. An admiral, who was up for promotion to four-star admiral (which requires Senate approval), was challenged by the women based on his behavior at a Tailhook convention. Women naval officers were routinely sexually harassed at these conventions, but this was not common public knowledge. Although the women senators were not ultimately successful in withholding or denying the promotion, the inappropriate and unacceptable behavior at Tailhook conventions became public, resulting in changes in both behavior and expectations in the military toward women officers. "In this context, it can be said that seven women constituted a critical mass because they had an impact" (Rosener, p. 121).

In the media, *USA Today* has a unique culture, which may have come from the fact that two of the five founding managing editors and three of the seven planning editors were women (Rosener, 1995). In the field of medicine, until women reached a critical mass in medical school, teaching focused on male anatomy, and female differences were presumed to be irrelevant and unimportant. Research trials were conducted on men, assuming that, if it works for men, it must work for women. "The

emergence of women's health as a medical issue can be directly tied to the impact of female students, female physicians, and female professors in the medical school teaching process" (Rosener, p. 134).

Based on the above examples, one could argue that, from a broader perspective, the changes seen have been positive for both men and women. The military is more professional, the media has more balanced coverage of issues that affect men and women, and medicine has made huge strides in identifying and treating all types of diseases and ailments on a more personalized and specialized basis, regardless of gender. If critical mass has made a difference in politics, the media, and medicine, it seems possible, if not likely, that a critical mass of women in the senior-most ranks of the Fortune 500 would also make a difference.

### *Summary*

Leadership theory holds that women are perfectly suited to lead in today's environment. Traditional and command-and-control leaders do not produce the consensus-building, team-oriented environments that business requires now. The glass ceiling and other constraints still hold women back from realizing their full potential as leaders of organizations. Although some scholars believe that the glass ceiling is fictitious and has been brought about by feminists to further their cause, there is evidence that a glass ceiling for women does indeed exist. This position has been validated by research suggesting that obstacles such as gender bias, lack of networking opportunities, and dead-end jobs for women support the glass ceiling. In the cases in which women hold leadership positions within an organization, they suffer from pay inequity.

In addition, women are required to walk a fine line between what is considered appropriate behavior for a leader and what is considered appropriate behavior for a woman. The traditional definitions of leadership behavior are agentic or traditionally male. Women who demonstrate agentic behavior are behaving contrary to traditional and expected female behavior, creating conflict and potential discrimination. However, the concept of critical mass may override the “appropriate behavior” issue as more women move into roles previously dominated by men.

## Chapter 3

### Methodology

This study examined the financial performance of the Fortune 500 for the years 1999 to 2008 and the relationship between that financial performance and the number of women in senior leadership positions. Standard and common financial measures, total shareholder return, and return on equity were calculated for the companies who were on the list for all ten years. The top and bottom 25% of the companies, as measured by their financial performance, were then examined to determine the number of executive women over the same timeframe in each of these companies.

This chapter presents the research question, hypothesis, research design, population and sample, data source, and data collection procedures. The chapter concludes with a summary.

#### *Research Question*

Between 1999 and 2008, was there a relationship between the financial performance of Fortune 500 companies, as measured by the widely accepted standard financial measures of total shareholder return and return on equity, and the number of women corporate officers in these companies?

#### *Hypothesis*

There is a positive correlation between better financial performance and the number of women corporate officers in Fortune 500 companies.

### *Research Design*

The research design was descriptive correlational in nature, and data, including company demographic characteristics, were gathered from a purposive sample. The study compared company performance with company demographic characteristics and the percentage of women corporate officers.

### *Population and Sample*

The population for this study was all Fortune 500 companies between the years 1995 and 2008. The Fortune 500 list for each year is generally published in April and is based on the financial performance of the preceding year. Therefore, the 2008 Fortune 500 list reflects the financial performance for 2007. The year stated on the list is related to the year it is published, not the year of the financial results that it quantifies. A significant number of these companies have calendar year ends and their respective earnings releases and Securities and Exchange Commission (SEC) filings are due by the end of March of the following year. Data to evaluate companies that have a fiscal year end, or have a business year end other than December 31, were taken from their respective SEC filings issued within that year.

The criteria for being listed on the Fortune 500 is that the company be a publicly traded company on a U.S. exchange and have sufficient revenue to be among the 500 companies that have the highest revenue. Thus, the composite of the Fortune 500 is always changing. Between the years 1995 and 2008, 913 companies made at least one appearance on the Fortune 500. The Catalyst (2004) study, on which this study was based, required that a company be on the list four out of the five years (1996 to 2000) to be included in their study.

Much like the Catalyst (2004) study, the sample for this study included companies that had been on the Fortune 500 list for all 14 years between 1995 and 2008. This created a sample of 232 companies that had been on the Fortune 500 list every year. The actual years that were included in the study were the ten years from 1999 to 2008. This timeframe is similar to what mutual funds and financial publications such as *Forbes* and *Fortune* use when analyzing or ranking a company's financial performance. The assumption is that ten years covers a long investment window and will generally include up and down market cycles along with other business, political, or economic events that may affect stock and company performance. In this case, the period from 1999 to 2008 includes both up and down markets, the terrorists attacks of September 11, 2001, Enron and other corporate scandals, the collapse of Andersen, and the introduction and implementation of Sarbanes-Oxley. The sample was selected to create a broad range of the largest, by revenue, public companies in the United States. These companies are widely institutionally held by mutual funds and other investment vehicles, and many are household names.

It is also important to note that, in this study, the impact of the 2008 financial crisis and stock market collapse were not studied because it would require utilizing the 2009 Fortune 500 list. This is an area for future research.

#### *Data Source*

Two primary data sources were used in the study. To create the population, the Fortune 500 list for each year between 1995 and 2008, inclusive, was retrieved from CNNMoney.com (2008). Capital IQ, a division of Standard & Poor's, was used to pull total shareholder return (TSR) and return on equity (ROE). Capital IQ (2009) "serves as

the primary information source for tens of thousands of investment bankers, financial analysts and fund managers. Combining proprietary research with third-party content, Capital IQ provides highly structured profiles of public and private companies” (para. 1). Companies that use Capital IQ include Yahoo, Aetna, Morgan Stanley, Cisco, Bain Capital, and the Royal Bank of Scotland. Yahoo Finance is powered by Capital IQ. The company for which the researcher works has a subscription to Capital IQ and allowed the researcher to utilize it for this study.

TSR and ROE are also available through such sources as Yahoo Finance and Fortune’s Compare Tool. The ticker symbol and year must be entered to get company specific data. The data can also be calculated from the Form 10K for each company for each year. This information can be accessed through the SEC filings link in Yahoo Finance for each company. This directs the reader to a list of filings that are available. The reader clicks on Form 10K and is taken to a website for H&R Block’s 2008 10K filing, for example. All SEC filings are available through Edgar. The same financial data can also be obtained from each individual company by either calling their investor relations department or going to their website and clicking on investor relations or a similar title. Many publicly traded companies make their annual reports and SEC filings available through their investor relations website. While much older annual reports may not be readily available, most Form 10Ks include summary financial data for the previous five or ten years.



### *Data Collection Plan*

This study replicated the Catalyst (2004) study's use of TSR and ROE as the financial measures. These measures were chosen because they are commonly used financial measures in financial publications such as *Forbes* and *Fortune*.

TSR and ROE measure two different perspectives of company performance. TSR, or return on investment, as it is sometimes referred to, is the stock price appreciation or decline plus reinvested dividends. This measures value from the stockholder's perspective. It is an investor-based measure. ROE measures how well a company uses its reinvested earnings to generate additional earnings. In other words, this is a measure of what the company does with its excess earnings to create more value. It is a corporate-based measure. All of the Fortune 500 companies are publicly traded and are required to file numerous documents with the SEC. The financial data needed to perform the financial measurements are available in the 10K, an annual required filing of all publicly traded companies. Additionally, all of the officers, their positions, and their compensation are disclosed in the 10K. This disclosure also applies to the board of directors.

The TSR and ROE for each year from 1998 to 2007, based upon the Fortune 500 lists for 1999 to 2008, were obtained via a query written against the Capital IQ database. The ticker symbol and the date range were given and the query returned the two data points for each year. For 12 companies on the list of 232 companies, no ROE was available. Nine of the 12 companies are insurance companies (e.g., Mass. Mutual Life, Northwestern Mutual). As mutual insurance companies, the shares are owned by the policyholders, and the companies report somewhat differently to the regulatory agencies. The other three companies are not mutual insurance companies, so it is not known why

Capital IQ did not return an ROE. However, to maintain consistency in data collection, the 12 companies were excluded from the list, reducing the list to 220 companies.

The two data points for each company, ROE and TSR, for each year were collected and each averaged for the 10-year period. Averaged TOE and TSR were expressed in  $z$  scores. The  $z$  scores were averaged, creating an overall index, sorted from high to low, which reflected financial performance. This list was sorted from high to low, with high representing the best financial performance. The list was then divided into quartiles. The top and bottom quartiles were extracted for further research.

Approximately 55 companies were in each quartile or 110 for the next phase of the research.

The data regarding the number of women corporate officers was obtained by looking at the officer listing in Form 10K for each year. This is generally Item 10 in the table of contents of the Form 10K filing. The information is either listed there or the reader is directed to go to another section of the Form 10K or other regulatory filings where the names of the officers are also disclosed.

The name of the officer was used as an indication of gender. If the name was ambiguous with regard to gender (e.g., Chris, Pat, Lee, or initials only), the default gender was male. Women make up only 15.4 % (Catalyst, 2008) of the officers of the Fortune 500 companies, so the likelihood that an ambiguous name is male is 84.6% or about 5.5 times more likely. Approximately 1% of the names were ambiguous.

The total count of officers as listed was recorded as well as the number of women officers for each company for each year of the study. These data were also obtained through Capital IQ. The company for which the researcher works has a research

department in India, and the researcher was given permission to utilize the research staff for this study.

The financial data were obtained via the query and were downloaded onto a spreadsheet. The researcher engaged a statistician to assist with the aggregation of the data and the creation of the overall index and sorting. The sorted list was divided into quartiles, and the 110 companies in the highest and lowest quartiles were given to the research department in India.

### *Analytical Techniques*

The objective of the study was to compare company financial performance with company demographics, specifically the percentage of women officers. This was a two-step process. All of the financial information is ratio-level financial data.

First, two financial measures, ROE and TSR, were used to analyze the sample of 220 Fortune 500 companies selected for this study. ROE is the ratio of income (before extraordinary items) to average shareholder equity for the year. The TSR measure reflects the sum of stock price appreciation plus reinvestment of dividends declared. The two data points for each company, ROE and TSR, for each year were collected and averaged for the 10-year period.

As noted above,  $z$  scores were calculated for each 10-year averaged ROE and TSR. Then the  $z$  scores for each ROE and TSR for each company were averaged together, creating an overall index reflecting financial performance. This list was then sorted high to low, with high representing the best financial performance and low the worst financial performance. The list was broken down into quartiles. The top 25% and the bottom 25% were selected for the second part of the research. Approximately 55

companies were in each quartile, for a total of 110. The data regarding the number of women corporate officers was obtained by looking at the officer listing in Form 10K for each year.

The aggregate number of officer positions for all companies in each quartile was calculated along with the total number of women officers in each quartile. The primary purpose of this study was to determine whether a relationship exists between the financial performance of Fortune 500 companies and the number of women corporate officers in these companies. To make this determination, Spearman rank order correlations were performed. Due to the pronounced skews in many of the variables, Spearman rank-ordered correlations were used instead of the more commonly used Pearson product-moment correlations.

### *Summary*

Previous research by Catalyst (2004) looked at Fortune 500 companies over a 5-year period to determine which companies had women in their corporate management and to review their financial performance to see whether companies that had more women had better financial performance. The Catalyst study showed a positive correlation between the number of women and better financial performance.

This study calculated the financial performance measures as the first step and then compared the number of women officers relative to the total officer pool in the high and low financially performing companies. In addition, the sampling timeframe was expanded from five years to ten years because ten years is commonly used to evaluate investment performance for mutual funds and other investment vehicles. A longer horizon was taken into consideration, which included both up and down markets as well

as other economic and political events that can affect financial performance. In this case, the timeframe included the terrorist attacks of September 11, 2001, which had a material effect on the stock market. Two years of this study, 1999 and 2000, overlapped with the Catalyst (2004) study.

The methodology for this study was altered from the Catalyst (2004) study to determine whether similar results could be obtained by approaching the issue from a different perspective. The researcher noted that, in the Catalyst study, when companies were first sorted by number of women in senior leadership positions and then examined for financial results, there was a correlation between gender and financial performance. Thus, the concern of this study was whether the same correlation would exist when the data are examined from the financial perspective first.

## Chapter 4

### Results

This chapter provides a detailed reporting of results pertaining to the relationship between the financial performance of Fortune 500 companies and the number of women corporate officers in those companies. The purpose and research question are restated, followed by the results for the research question. The chapter concludes with a summary.

#### *Restatement of the Purpose*

Using the previous Catalyst (2004) study as a framework, the purpose of this study was to determine whether there was a relationship between the financial performance of companies in the Fortune 500 and the number of women in senior leadership positions in these companies. Public records for 110 companies were used for this study.

#### *Restatement of the Research Question*

Between 1999 and 2008, is there a relationship between the financial performance of Fortune 500 companies, as measured by the widely accepted standard financial measures TSR and ROE, and the number of women corporate officers in these companies?

#### *Results for the Research Question*

The Fortune 500 for the years 1995 to 2008 was analyzed, revealing 232 companies that had been on the list every year. The timeframe for this study was reduced to the 10-year period, 1999 to 2008, a timeframe that is common in financial performance analysis. Using the Fortune 500 lists for the years 1999 to 2008 requires looking at actual financial performance for the years 1998 to 2007. The Fortune 500 list is named for the

year it is published. The published year, such as the 2007 Fortune 500, reflects the revenue numbers of companies from the preceding year, 2006. Using Capital IQ, TSR and ROE were obtained. For 12 companies on the list, no ROE was available from Capital IQ, so these companies were dropped from the sample. The corporate officers of the remaining 110 companies were analyzed for gender. Ambiguous names and initials were assumed to be male.

*Descriptive statistics for variables.* The purpose of the study was to determine whether a relationship exists between financial performance and the number of women corporate officers in the Fortune 500. The financial performance, as measured by ROE and TSR, along with the total number of corporate officers were the independent variables. The number of women corporate officers was the dependent variable. Table 1 displays the descriptive statistics for selected variables. These variables included the independent variables return on equity ( $M = -1.33$ ,  $SD = 95.30$ ), total shareholder return ( $M = 3.77$ ,  $SD = 17.48$ ), average 10-year corporate officer membership size ( $M = 11.99$ ,  $SD = 5.08$ ), and the dependent variable, average 10- year percentage of women corporate officer members ( $M = 9.73$ ,  $SD = 8.56$ ).

Table 1

*Descriptive Statistics for Selected Variables (N = 110)*

Variable	<i>M</i>	<i>SD</i>	Low	High
Return on Equity	-1.33	95.30	-721.06	171.37
Total Shareholder Return	3.77	17.48	-100.00	56.24
Total Members 1999	12.33	6.84	0.00	35.00
Total Members 2000	12.75	6.86	0.00	33.00
Total Members 2001	13.05	6.95	0.00	35.00
Total Members 2002	12.65	7.01	3.00	38.00
Total Members 2003	12.03	6.31	4.00	36.00
Total Members 2004	11.56	5.81	3.00	35.00
Total Members 2005	12.08	6.31	3.00	39.00
Total Members 2006	11.85	5.93	3.00	37.00
Total Members 2007	10.91	5.29	3.00	32.00
Total Members 2008	10.68	4.96	3.00	29.00
10-Year Membership	11.99	5.08	4.00	30.90
Percentage of Women 1999	6.54	8.80	0.00	60.00
Percentage of Women 2000	8.61	9.18	0.00	60.00
Percentage of Women 2001	9.41	9.58	0.00	57.14
Percentage of Women 2002	9.44	9.14	0.00	44.44
Percentage of Women 2003	10.49	12.20	0.00	75.00
Percentage of Women 2004	10.03	11.59	0.00	75.00
Percentage of Women 2005	10.32	11.73	0.00	75.00
Percentage of Women 2006	10.65	10.90	0.00	50.00
Percentage of Women 2007	10.77	12.27	0.00	66.67
Percentage of Women 2008	11.00	11.20	0.00	38.46
10-Year Percentage of Women	9.73	8.56	0.00	56.33



The mean (*M*) represents the average of all of the company 10-year averages for each variable. For example, return on equity shows a high ROE of 171.37. This means this company (Avon) had a 10-year average ROE of 171.37%. The low of -721.06 (UAL, the parent company of United Air Lines) had an average negative ROE of 721.06%. The average ROE of all 110 companies was -1.33. This means that the average ROE for all ten years over all 110 companies was -1.33%. The standard deviation (*SD*) represents the average amount that the ROE, for example, differs from the mean. Given the nearly 900-point spread between the high and low score, a standard deviation of 95.30 is not surprising.

Total members for 1999, 2000, and 2001 show the low as 0. It is impossible for a publicly traded company to have no corporate officers. However, no corporate officer data or 10Ks could be found for Wellpoint for those years. Rather than remove Wellpoint from the study, the researcher left it in, with no results for those three years. The percentage of women shows 0 as the low for each year. This is because in each year certain companies had no women corporate officers.

The 10-year membership is the average of the individual years shown in the table. The mean of 11.99 can be understood as an average of approximately 12 corporate officers in each company each year over the 10-year period. The standard deviation was 5.08, and the range was from an average low of four corporate officers to a high, on average, of approximately 31.

For the 10-year percentage of women, there was an average of 9.73% women corporate officers, with a standard deviation of 8.56%. This means, on average, approximately 10% of all corporate officers across the companies in the sample over the

10-year period were women. The range was from 0 to 56.33% women corporate officers on average over the 10-year period.

*Companies employing 20% female corporate officers.* Table 2 displays the companies that employed women in at least 20% of their corporate officer positions between 1999 and 2008. Of the 110 companies in the study, ten met this criteria. The highest percentages were for Avon (56.3%) and Gap (37.2%). Retail sales (Gap and Sears Roebuck) represent 20% of the list. The remaining eight companies represent a wide cross-section of industries, from consumer products to equipment manufacturing. The companies were evenly split between the top and bottom quartiles. Five companies (Avon, Cummins, Wellpoint, Campbell Soup, and Owens & Minor) were in the top performing quartile. The other five companies (Gap, Sears Roebuck, UAL, Viacom, and International Paper) were in the bottom quartile. Notably, for 9.1% of the companies in the study women comprised more than 20% of their corporate officers. Virtually all of these companies are household names. Given the diversity of the companies and their respective industries, it seems that no one industry draws more women than any other or that women more easily move to the top in certain industries over others.

Table 2

*Companies that Employed at Least 20% Female Corporate Officers*

Company	Industry	10-Year Average	
		Corporate Officer Members	Percentage of Women
Avon Products	Consumer products	4.80	56.3
Gap	Retail stores	5.90	37.2
Cummins	Equipment manufacturing	11.00	24.5
Wellpoint	Hospital/medical service plans	9.00	23.9
Sears Roebuck	Retail stores	13.70	23.4
UAL	Air transportation	7.50	23.2
Campbell Soup	Food products	12.20	21.7
Viacom	Cable and television	10.10	21.0
International Paper	Paper products	5.20	21.0
Owens & Minor	Wholesale medical/hospital supplies	13.50	20.3

*Correlations for four financial measures and percentage of women corporate officers.* Table 3 displays the Spearman rank-ordered correlations for four measures of financial performance for the 110 Fortune 500 companies, along with ten years of data concerning the percentage of women corporate officers employed by these companies. The four financial measures used to analyze companies for this study were quartile group (0 = lowest quartile, 1 = highest quartile), ROE, TSR, and a combined metric based on the aggregated z scores for TOE and TSR.

Table 3

*Spearman Rank-Ordered Correlations for Four Financial Metrics and Percentage of Women Corporate Officers (N =110)*

Variable	Quartile	ROE	TSR	Combined
Quartile Group <sup>a</sup>	1.00			
Return on Equity (ROE)	.63*****	1.00		
Total Shareholder Return (TSR)	.84*****	.52*****	1.00	
Combined Metrics <sup>b</sup>	.87*****	.75*****	.89****	
Percentage of Women 1998	-.08	.06	-.21*	1.00
Percentage of Women 1999	-.10	-.02	-.20*	-.13
Percentage of Women 2000	-.08	.04	-.18	-.14
Percentage of Women 2001	-.18	-.04	-.27***	-.07
Percentage of Women 2002	-.07	.03	-.16	-.15
Percentage of Women 2003	-.04	.02	-.11	-.07
Percentage of Women 2004	-.07	.10	-.14	-.01
Percentage of Women 2005	-.11	.06	-.17	-.02
Percentage of Women 2006	-.03	.09	-.14	-.05
Percentage of Women 2007	-.06	.07	-.16	-.04
Total Members 1998	.07	.13	-.02	.05
Total Members 1999	.10	.12	.03	.08
Total Members 2000	.16	.14	.10	.13
Total Members 2001	.27***	.21*	.21*	.24**
Total Members 2002	.29***	.17	.21*	.21*
Total Members 2003	.28***	.20*	.17	.21*
Total Members 2004	.25**	.19*	.16	.20*
Total Members 2005	.21*	.17	.16	.18
Total Members 2006	.30*****	.20*	.24**	.25**
Total Members 2007	.34*****	.29***	.24**	.28***

*Note.* a. Quartile group: 0 = lowest quartile, 1 = highest quartile. b. Combined metric is based on aggregated *z* scores for return on equity and total shareholder return.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*\*  $p < .001$

Due to the pronounced skews in many of the variables, Spearman rank-ordered correlations were used instead of the more commonly used Pearson product-moment correlations. For example, the spread on ROE was nearly 900 points, with the data heavily skewed to the negative side. The lowest average return on equity was a negative 721.06%, while the highest average return on equity was 171.37%. The total number of corporate officers ranged from 0 (Wellpoint data for corporate officers for 1998, 1999, and 2000 were not available) to 39 corporate officers. Excluding Wellpoint, the smallest number of corporate officers was 3. The average large group of corporate officers was approximately 30 or ten times as large as the average small group of corporate officers.

The same data spread occurred in the percentage of women corporate officers. In every year, there were companies with no women corporate officers. Some companies in some years had women representing 75% of their corporate officers. In an effort to compensate for the wide range of numbers in the various categories, the Spearman rank-ordered correlation was used.

Inspection of Table 3 for the 40 correlations (four financial metrics correlated with ten years of women corporate officers) found only three of those correlations to be statistically significant. Specifically, shareholder return was negatively correlated with the percentage of women corporate officers for the years of 1998 ( $r_s = -.21, p < .05$ ), 1999 ( $r_s = -.20, p < .05$ ), and 2001 ( $r_s = -.27, p < .005$ ).

Also in Table 3 are the 40 Spearman rank-order correlations for the same four financial metrics with ten years of corporate officer data. Significant positive correlations were noted for 22 of 40 correlations. The two largest correlations were for the quartile group variable with total members in 2006 ( $r_s = .30, p < .001$ ) and total members in 2007

( $r_s = .34, p < .001$ ). This means that companies that have better financial performance have a larger number of corporate officers. However, only 12% of the reason for better financial performance can be attributed to the number of corporate officers. The other 88% is attributable to reasons other than the number of corporate officers. The opposite position, a greater number of corporate officers correlates to better financial performance, is not supported by the data.

### *Summary*

The results of this study demonstrate that there is no correlation between the number of women corporate officers and financial performance for Fortune 500 companies in the sample that was studied. This means that the presence of women corporate officers cannot be shown to improve financial performance. Therefore, the hypothesis was not supported. The results also demonstrate that the presence of women corporate officers is not detrimental to the financial performance of the company. Additionally, while there is a slight positive correlation between positive financial performance and a higher number of corporate officers, having a larger number of corporate officers does not correlate to better financial performance.

That companies in this study that had more than 20% women corporate officers were not clustered in any particular industry. Moreover, the financial performance of the companies that had the greatest number of women corporate officers ranged from Avon, who was the number 3 ranked company in terms of financial performance, to UAL, which was ranked 220 out of 220 companies for financial performance. Again, the implication is that there is no relationship between gender and financial performance.

## Chapter 5

### Conclusions

This chapter presents a summary of the study and the findings, including a discussion of how they relate to the reviewed literature. The chapter concludes with recommendations for future research and policy.

#### *Summary of the Study*

Using the previous Catalyst (2004) study as a framework, the purpose of this study was to determine whether there was a relationship between the financial performance of companies in the Fortune 500 and the number of women in senior leadership positions in these companies. Two financial data points for each company, TOE and TSR, were collected and averaged over the 10-year period. Average return on equity and total shareholder return was expressed in  $z$  scores. The  $z$  scores were averaged, creating an overall index, sorted from high to low, which reflected financial performance. The index was then divided into quartiles, and the top and bottom quartiles were extracted. Approximately 55 companies were in each quartile, for a total of 110. The number and gender of the corporate officers were obtained for the top and bottom quartiles for each year. Spearman rank-ordered correlations were run to determine whether a relationship existed between the financial performance of Fortune 500 companies and the number of women corporate officers in these companies.

#### *Summary of the Findings*

The results of this study indicated that there was no correlation between the number of women corporate officers and financial performance for Fortune 500 companies. This means that the presence of women corporate officers cannot be shown to

improve financial performance. It also demonstrates that the presence of women corporate officers is not detrimental to the financial performance of the company. So few studies have measured the relationship between financial performance and the gender composition of senior executives that it is difficult to draw any conclusions about how this study relates to the literature that was reviewed. Clearly, more research needs to be conducted in this area.

*Descriptive statistics for variables.* As noted in the previous chapter, over the 10-year period, across all companies, the average ROE was -1.33%. The lowest ROE was -721.06% and the highest was 171.37%. TSR averaged 3.77% over the 10-year period, with the lowest TSR at -100% and the highest at 56.24%. The average number of corporate officers was 11.99. The average low number of corporate officers was four and the average of the high number of corporate officers was 30.90. Over the 10-year period, the companies in the sample averaged 9.44% women corporate officers. The range of women corporate officers as a percentage of the total number of corporate officers ranged from 0 to 56.33%.

*Companies employing 20% female corporate officers.* Ten companies averaged more than 20% women corporate officers over the 10-year period. Two companies were in retail and the remaining eight represented a wide cross-section of industries from consumer products to equipment manufacturing. The companies were evenly split between the top and bottom quartiles of financial performance. The implication is that the presence of women corporate officers is not related to financial performance.

*Correlations for four financial measures and percentage of women corporate officers.* The four financial measures used to analyze companies for this study were



quartile group, ROE, TSR, and a combined metric based on the aggregated  $z$  scores for ROE and TSR. The Spearman rank-order correlations for the four financial metrics over the ten years of the corporate officer data showed a correlation between better financial performance and a larger corporate officer group. In other words, companies that have better financial performance tend to have more corporate officers, irrespective of gender. However, a larger group of corporate officers does not correlate with better financial performance. This means that a company that has a large group of corporate officers will not necessarily have better financial performance.

### *Discussion*

Overall, the results of this study indicate that the presence of women in senior executive positions does not harm a company's performance. These findings are in keeping with as well as contradict several of the studies reviewed.

Shrader and Blackburn (1997) examined financial performance outcomes and the number of women in executive management and on the board of directors for 200 U.S. firms that had the largest market value. They found there were “no significant positive coefficients for the percentage of women in top management and financial performance relationships” (Shrader & Blackburn, p. 365). The Shrader and Blackburn study was conducted over a brief timeframe and included women on the board of directors. The current study was conducted over a 10-year timeframe and the board of directors was not examined. Adams et al. (2007), in their study of CEO appointments and financial measures, found that “there is no statistical difference in corporate performance for firms that appoint male vs. female CEOs” (p. 6).

Catalyst (2004) and Smith et al. (2005) both found a positive correlation between the number of women in senior executive positions and financial performance. The Catalyst study looked at Fortune 500 companies, while the Smith et al. study looked at Danish companies. Neither of these studies could identify causality or address whether any of the companies had other factors such as more ambitious, intentional recruitment policies. However, it is important to note that the correlation between the number of women in senior executive positions and financial performance was consistent for two different countries.

If financial performance can be eliminated as a reason that women are underrepresented in senior executive positions, then other reasons must be examined. The concepts of gender bias and the impact of socialization or expectations about how men and women are supposed to behave have been studied extensively. Numerous studies (Diekman & Goodfriend, 2006; Eagly, 2007; Eagly et al., 1995; Eagly & Karau, 2002; Eagly et al., 2003; Robbins, 2005; Scott & Brown, 2006; Weyer, 2007) point to gender bias as the fundamental issue in regard to women's advancement. Scott and Brown believe that preexisting gender stereotypes may interfere with an individual's ability to accurately assess leadership behavior. This results in women being viewed as female first, leader second.

The incongruence of agentic behavior required in a leadership role and a woman engaging in leadership behavior, especially in a highly male dominated situation, can compromise effectiveness and restrict access to leadership roles in the first place. Research shows that people suspect women of not being qualified and, therefore, resist or reject their authority (Eagly, 2007). Because men are 5.5 times more likely to be selected

from a pool that is evenly divided, it appears there is some validity to the concept that women are restricted from these leadership roles solely because they are women.

Rudman and Kilianski (2000) looked at why men are more readily accepted into positions of power than women. Their results showed consistent support for such a gender authority notion.

The most important implication of the findings of this study is that gender is not related to the financial performance of a company. As such, there is no justification for women's exclusion or lack of proportional representation in the senior executive ranks of corporate America.

#### *Recommendations for Future Research*

This study examined only the gender of the corporate officers. Research on whether the gender of the board of directors has an impact on financial performance should be done. It is possible that the gender composition of the board has more influence on the company than does the gender of corporate officers. Additionally, a study that combines the gender composition of the board and the corporate officers may yield important findings. The broader issue of diversity should also be examined in relation to financial performance. Diversity of not only gender, but also race and ethnicity at the corporate officer level and board level may have an effect on financial performance.

As noted above, this study did not take into consideration the current financial crisis. As such, this study should be updated for 2009 and 2010 to see whether there was any change in the companies that were in the top and bottom quartiles and whether the composition of the corporate officers has changed along gender lines. In keeping with the

use of a 10-year timeframe, which was determined to be appropriate, the earliest two years would be dropped off and 2009 and 2010 added on.

The methodology of the Catalyst (2004) study should be replicated with this data set. Using the 220-company population, the gender of the corporate officers could be determined first, using the same parameters as this study. A stack ranking of most to least number of women corporate officers would be created. TSR and ROE would then be retrieved and aggregated in the same manner as this study. A side-to-side comparison of the results could then be made.

Additionally, a secondary study, using the percentage of women corporate officers relative to the entire number of corporate officers, could be conducted. In the recommended study above, the focus is on absolute numbers, while, in this recommended study, the focus would be on the percentage of the whole. While it would seem logical that the lists would be similar in ranking, a company that employs three women out of 30 corporate officers may have a different result than a company that employs three women officers out of ten. Examining the same data, three different but related methods may shed more light on the impact of women corporate officers on the financial performance of their companies.

Looking at the average tenure of the women corporate officers relative to men for the companies and the industry group of the company might also shed light on this issue and address such concerns as the ages that women versus men become corporate officers. Although causality cannot be determined, the aggregate data may lead to the development of a better understanding of the impact of women corporate officers on

company performance. The data may also afford women who aspire to corporate officer roles insight into how they can be more effective in achieving their goals.

### *Policy Recommendations*

Given that the issue of the underrepresentation of women in senior executive positions was raised over 30 years ago and is still being researched and discussed, the time seems right for boards of directors to take a leading role to ensure that the selection and evaluation of senior management is based on clear criteria and that performance is monitored. As part of appropriate corporate governance, established and documented criteria may help not only women but also minorities move into senior leadership. If the criteria and expectations are clear, those who aspire to these types of positions will have a better understanding of what they need to do to prepare themselves.

Large institutional shareholders and activist shareholder groups can also insist on more transparency and accountability in the selection process. As with Sarbanes-Oxley, it is likely that the current financial crisis will require more transparency and accountability from boards of directors. The impact of Sarbanes-Oxley reshaped many boards, adding the requirement of a certain number of independent directors and the stipulation that independent directors must head the audit and the compensation committees. The impact of the financial crisis on boards of directors will not be known for some time, but it is possible that boards will take a more active role in the selection of corporate officers. Again, in this regard, it is important to have objective criteria and clearly defined expectations.

Boards of non-public companies and not-for-profit organizations should also consider the criteria used for promotions and selection for a corporate officer role. Given

that the middle management ranks are 51% women (Catalyst, 2007), all boards should be asking themselves why so few women are selected for senior management roles.

Questions about which criteria should be used, whether the criteria are objective, whether all candidates fairly evaluated, and what expectations are associated with this position should be asked about every vacancy at the senior level.

Boards should also insist that opportunities for line versus staff positions, mentoring, and inclusion in informal networks be made available to women and that success in this area will be considered part of the criteria on which senior leadership will be evaluated. If the claim is that women are not ready, then existing senior leadership should be held accountable for making sure that women get ready to move up, as “women face three significant barriers men rarely face: gender-based stereotyping, exclusion from informal networks and lack of role models” (Catalyst, 2006, p. 4). It is the responsibility of existing senior leadership to remove these barriers, and it is the responsibility of the board to ensure that senior leadership acts.

## REFERENCES

- Adams, S. M., Gupta, A., & Leeth, J. D. (2007). Are female executives over-represented in precarious leadership positions? *British Journal of Management*, 20(1), 1-12.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Berry, M. (2007). *The role of stereotypes, social cognition and emotions in judgments of agentic women*. Retrieved from ProQuest Digital Dissertations. (AAT 3282706)
- Blankenship, W. C. (1971). Head librarians: How many men? How many women? In A. Theodore (Ed.), *The professional woman* (pp. 93-102). Cambridge, MA: Schenkman.
- Blanton, K. (2005, February 18). Above glass ceiling footing is fragile: Factors appear to work against longer tenures for women CEOs. *Boston Globe*, p. D1.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Capital IQ.com. (2009). *Total Shareholder Return And Return On Equity For Specified Companies*. Available from Capital IQ web site: <https://capitaliq.com/main.asp>
- Carli, L. L. (1990). Gender, language, and influence. *Journal of Personality and Social Psychology*, 59(5), 941-951.
- Catalyst. (2004). *The bottom line: Connecting corporate performance and gender diversity*. New York: Author.
- Catalyst. (2005). *Women "take care," men "take charge": Stereotyping of U.S. business leaders exposed*. New York: Author.
- Catalyst. (2006). *2005 catalyst census of women corporate officers and top earners of the Fortune 500*. New York: Author.
- Catalyst. (2007). *Catalyst census of women corporate officers and top earners of the Fortune 500*. New York: Author.
- Catalyst. (2008). *2007 census: Corporate officers and top earners*. New York: Author.
- Craig, S. (2008a, May 17). Lehman's straight shooter. *Wall Street Journal*. Retrieved December 10, 2008, from <http://online.wsj.com/article/SB121098034130400069.html>
- Craig, S. (2008b, June 13). Lehman shuffles 2 key jobs in bid to restore confidence. *Wall Street Journal*. Retrieved December 10, 2008, from <http://online.wsj.com/article/SB121327559415967781.html>

- CNNMoney.com. (2008). *Fortune 500*. Retrieved May 10, 2008, from <http://money.cnn.com/magazines/fortune/fortune500>
- CRS Report for Congress. (2008). *Women in the United States congress: 1917-2008*. Washington, DC: Congressional Research Service.
- Denmark, F. L. (1993). Women, leadership, and empowerment. *Psychology of Women Quarterly, 14*, 233-256.
- Diekman, A. B., & Goodfriend, W. (2006). Rolling with the changes: A role congruity perspective on gender norms. *Psychology of Women Quarterly, 30*(4), 369-383.
- Dobbins, G. H., & Platz, S. J. (1986). Sex differences in leadership: How real are they? *Academy of Management Review, 11*, 118-127.
- Eagly, A. H. (2007). Female leadership advantage and disadvantage: Resolving the contradictions. *Psychology of Women Quarterly, 31*(1), 1-12.
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. *The Leadership Quarterly, 14*(6), 807-834.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. *Psychological Bulletin, 129*(4), 569-591.
- Eagly, A. H., & Johnson, B. (1990). Gender and the emergence of leaders: A meta-analysis. *Psychological Bulletin, 108*, 233-256.
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*(3), 573-597.
- Eagly, A. H., Karau, S. J., & Makhijani, M. (1995). Gender and the effectiveness of leaders: A meta-analysis. *Psychological Bulletin, 117*, 125-145.
- Eagly, A. H., Makhijani, M., & Klonsky, B. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 111*, 3-22.
- Fagenson, E. A. (1990). At the heart of women in management research: Theoretical and methodological approaches and their biases. *Journal of Business Ethics, 9*(4/5), 267-274.
- Federal Glass Ceiling Commission. (1995). *Good for business: Making full use of the nation's human capital*. Washington, DC: U.S. Department of Labor.
- Furchtgott-Roth, D. (1998). *No: The so-called glass ceiling is a myth, but we're all paying plenty to tear it down*. San Diego, CA: Greenhaven Press.



- Galen, M., & Palmer, T. A. (1994, January 31). White, male and worried. *Business Week*, 3356, 50-55.
- Gallagher, C. A. (1996). Windows in the glass ceiling: The importance of professional relationships. *Dissertation Abstracts International: Section B. The Sciences and Engineering*, 57, 4068. (UMI No. 9634649)
- Glaser, C., & Smalley, B. (1999). *When money isn't enough: How women are finding the soul of success*. New York: Warner Books.
- Glick, P., & Fiske, S. T. (1996). The ambivalent sexism inventory: Differentiating hostile and benevolent sexism. *Journal of Personality and Social Psychology*, 70(3), 491-512.
- Glick, P., & Fiske, S. T. (1999). The ambivalence toward men inventory: Differentiating hostile and benevolent beliefs about men. *Psychology of Women Quarterly*, 23(3), 519-536.
- Grimm, J., & Stern, R. (1974). Sex roles and internal labor market structures: The "female" semi-professions. *Social Problems*, 21, 690-705.
- Hay, A., & Hodgkinson, M. (2006). Rethinking leadership: A way forward for teaching leadership? *Leadership & Organizational Development Journal*, 27(1-2), 144-158.
- Heilman, M. (1997). Sex discrimination and the affirmative action remedy: The role of sex stereotypes. *Journal of Business Ethics*, 16, 877-889.
- Hymowitz, C., & Schellhardt, T. D. (1986, March 24). The glass ceiling: Why women can't seem to break through the invisible barrier that blocks them from the top jobs. *Wall Street Journal*, p. 1.
- Jackman, M. R. (1994). *The velvet glove: Paternalism and conflict in gender, class, and race relations*. Berkeley, CA: University of California Press.
- Jogulu, U. D., & Wood, G. J. (2006). The role of leadership theory in raising the profile of women in management. *Equal Opportunities International*, 25(4), 236-250.
- Judge, E. (2003, November 11). Women on board: Help or hindrance? *The Times* (United Kingdom), p. 21.
- Kark, R. (2004). The transformational leader: Who is (s)he? A feminist perspective. *Journal of Organizational Leadership*, 17(2), 160-176.
- Kanter, R. M. (1977). *Men and women of the corporation*. New York: BasicBooks.
- Kelly, R. M., & Dabul Marin, A. J. (1998). Position power and women's career advancement. *Women in Management Review*, 13(2), 53-66.

- Klenke, K. (1993). Meta-analytic studies of leadership: Added insights or added paradoxes? *Organization Behavior and Human Performance*, 12(4), 62-86.
- Loden, M., & Rosener, J. B. (1991). *Workforce America: Managing employee diversity as a vital resource*. Homewood, IL: Business One Irwin.
- London, M. & Stumpf, S. A. (1983). Effects of candidate characteristics on management decisions: An experimental study. *Personnel Psychology*, 36(2), 241-259.
- Lord, R. G., & Brown, D. J. (2004). *Leadership processes and follower self-identity*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lowe, K. B., & Gardner, W. L. (2001). Ten years of the Leadership Quarterly: Contributions and challenges for the future. *Leadership Quarterly*, 11(4), 459-514.
- Miner, J. B. (1977). Motivational potential for upgrading among minority and female managers. *Journal of Applied Psychology*, 62(6), 691-697.
- Morrison, A. M. (1992). *The new leaders: Guidelines on leadership diversity in America*. San Francisco: Jossey-Bass.
- Morrison, A. M., White, R. P., & Van Velsor, E. (1987). *Breaking the class ceiling: Can women reach the top of America's largest corporations?* New York: Perseus.
- National Governors Association. (2008). *Current governors*. Retrieved December 10, 2008, from <http://www.nga.org/portal/site/nga/menuitem.42b929b1a5b9e4eac>
- Pesttrak, D. (2001). *Playing with the big boys: Success secrets of the most powerful women in business*. Carlsbad, CA: SUN.
- Ragins, B., Townsend, B., & Mattis, M. (1998). Gender gap in the executive suite: CEOs and female executives report on breaking the glass ceiling. *Academy of Management Executive*, 12(1), 28-42.
- Ridgeway, C. L. (2002). Gender, status and leadership. *Journal of Social Issues*, 57(4), 637-655.
- Robbins, S. P. (2005). *Essentials of organizational behavior*. Upper Saddle River, NJ: Pearson.
- Rosener, J. B. (1995) *America's competitive secret: Utilizing women as a management strategy*. New York: Oxford University Press.
- Rudman, L. A. (1998). Self-promotion as a risk factor for women: The costs and benefits of counterstereotypical impression management. *Journal of Personality and Social Psychology*, 74(3), 629-645.

- Rudman, L. A., & Kilianski, S. E. (2000). Implicit and explicit attitudes toward female authority. *Personality and Social Psychology Bulletin*, 26(11), 1315-1329.
- Ryan, M. K., & Haslam, S. A. (2005). The glass cliff: Evidence that women are over-represented in precarious leadership positions. *British Journal of Management*, 16(2), 81-90.
- Ryan, M. K., & Haslam, S. A. (2009). Glass cliffs are not so easily scaled: On the precariousness of female CEOs' positions. *British Journal of Management*, 20(1), 13-16.
- Ryan, M. K., Haslam, S. A., & Postmes, T. (2007). Reactions to the glass cliff. *Journal of Organizational Change Management*, 20(2), 182-197.
- Scott, K. A., & Brown, D. J. (2006). Female first, leader second? Gender bias in the encoding of leadership behavior. *Organizational Behavior and Human Decision Processes*, 101(2), 230-242.
- Sharpe, R. (2000, November 20). As leaders, women rule: New studies find that female managers outshine their male counterparts in almost every measure. *Business Week*, p. 74. Retrieved October 1, 2007, from [http://www.businessweek.com/2000/00\\_47/b3708145.htm](http://www.businessweek.com/2000/00_47/b3708145.htm)
- Shrader, C. B., & Blackburn, V. B. (1997). Women in management and firm financial performance: An exploratory study. *Journal of Managerial Issues*, 9(3), 355-373.
- Smith, N., Smith V., & Verner, M. (2005, August). *Do women in top management affect firm performance?* (Discussion Paper No. 1708). Bonn, Germany: Institute for the Study of Labor.
- Stogdill, R. M. (1974). *Handbook of leadership: A survey of theory and research*. New York: Free Press.
- Stumpf, S. A., & London, M. (1981). Management promotions: Individual and organizational factors influencing the decision process. *Academy of Management Review*, 6(4) 539-549.
- Swiss, D. J. (1996). *Women breaking through: Overcoming the final 10 obstacles at work*. Princeton, NJ: Peterson's/Pacesetter Books.
- U.S. Bureau of Labor Statistics. (2005). Characteristics of the employed: Table 9: Employed persons by occupation, sex and age. *Current population survey, annual averages: Household data*. Retrieved January 17, 2007, from <http://www.bls.gov/cps/cpsaat9.pdf>
- Weyer, B. (2007). Twenty years later: Explaining the persistence of the glass ceiling for women leaders. *Women in Management Review*, 22(6), 482-496.

- Williams, C. L. (1992). The glass escalator: Hidden advantages for men in the “female” professions. *Social Problems*, 39(3), 253-267.
- Yammarino, F. J., Dubinsky, A. J., Comer, L. B., & Jolson, M. A. (1997). Women and transformational and contingent reward leadership: A multiple-levels-of-analysis perspective. *Academy of Management*, 40(1), 205-222.
- Zimmer, L. (1988). Tokenism and women in the workplace: The limits of gender-neutral theory. *Social Problems*, 35(1), 64-78.