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## Leading at the top: Understanding women's challenges above the glass ceiling



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## ABSTRACT

Women leaders contribute positively to organizations yet remain significantly underrepresented in corporate leadership positions. While the challenges women face are well-documented, less understood are the factors that shape the experience and success of women who, against significant odds, rise above the glass ceiling. This paper advances scholarship on women and leadership by analyzing the conditions under which women are promoted to top leadership positions and exploring the opportunities and challenges they face post-promotion. We draw on two data sources: comparison of the career trajectories of all women who have ever served as CEO in the Fortune 500 with a matched sample of men CEOs as well as in-depth interviews with women executives across a variety of sectors. Our analysis reveals that women are more likely than men to be promoted to high risk leadership positions and often lack the support or authority to accomplish their strategic goals. As a result, women leaders often experience shorter tenures compared to male peers. We consider the implication of our findings for theory, research and practice.

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Women leaders have enormous potential to contribute positively to organizations. Recent scholarship suggests that female leaders are associated with greater innovation and profitability, broader consumer outreach and stronger records on corporate social responsibility (Dezső & Ross, 2012; Glass, Cook, & Ingersoll, 2015; Herring, 2009; Webb, 2004). Women's representation in leadership ranks also increases opportunities for women at lower ranks, thus reducing overall gender segregation within organizations (Ely, 1995; Gorman, 2005; Stainback & Kwon, 2012). Despite this evidence, women remain significantly underrepresented in corporate leadership positions.

A great deal of scholarship to date concerns the barriers that prevent women from attaining leadership positions. Sex categorization and gender stereotypes lead decision makers to view women as less capable and competent leaders, while in-group favoritism leads men to prefer other men for high level promotions and appointments, a phenomenon termed 'homosocial reproduction' (Kanter, 1977; Reskin, 2000; Ridgeway & England, 2007; Ridgeway, 1997). Aside from subtle and overt forms of bias and discrimination, women are less likely than men to have access to strong professional networks, social ties to elites, workplace support and insider information, all of which provide critical support to leaders' mobility (e.g., McGuire, 2002; Taylor, 2010).

While the challenges women face are well-documented, less understood are the factors that shape the experience and success of women who, against significant odds, rise above the glass ceiling. Recent theoretical advances have identified a process termed the

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glass cliff whereby women are more likely to be promoted in firms that are struggling or in crisis (Ryan & Haslam, 2005, 2007). Other researchers have applied insights from token theory and role incongruity theory to explore the challenges women face in male-dominated leadership positions (e.g., Eagly & Karau, 2002; Heilman, 2001). This scholarship suggests that women tend to be promoted to high-risk leadership positions *and* face significant constraints post-promotion.

This paper advances scholarship on women and leadership by analyzing the conditions under which women are promoted to top leadership positions and exploring the challenges they face post-promotion. Specifically, we seek to answer three related research questions: First, do female leaders experience a glass cliff in job assignments and/or promotion opportunities? Second, after promotion, do female leaders experience a lack of support and/or challenges to their leadership? Finally, do female leaders experience heightened scrutiny and/or performance pressures that limit their leadership tenure?

To answer these questions we rely on two data sources. First, we collected data on the career trajectories of all women who have served as CEO in the Fortune 500 as well as a matched sample of male CEOs. These data allow us to analyze the promotion and postpromotion trajectory of female leaders. Second, we conducted in-depth semi-structured interviews with 20 female and/or minority leaders across a variety of sectors, including 12 interviews with female leaders who have successfully overcome barriers to promotion and advancement. Interviews explored leaders' career trajectory and various challenges and opportunities they faced along the way.

This research builds upon and extends the literature on gender and leadership in several ways. First, our work extends experimental and quantitative analyses of the glass cliff phenomenon by analyzing the career trajectories and subjective experiences of successful female executives. Very few studies to date have approached the question of promotion context by incorporating the subjective experiences of corporate elites themselves (for exceptions see Davies-Netzley, 1998; Fitzsimmons, Callan, & Paulsen, 2014). Yet to fully understand the mechanisms that drive glass cliff processes, we must understand the perspectives and strategies of women who experience high risk promotions. While scholarship on the glass cliff has primarily focused on the firm-level characteristics of women promoted to CEO (e.g., Adams, Gupta, & Leeth, 2009; Cook & Glass, 2014; Ryan & Haslam, 2005), we expand this approach by analyzing the promotion of top women executives to positions that they considered high risk. We believe this provides more nuanced understanding of the challenges and opportunities women experience as they achieve professional mobility.

Second, our work builds upon and extends research on gender and leadership by analyzing the career trajectories of an elite group of female leaders: CEOs in the Fortune 500. By comparing the career trajectory of every woman who has ever served as CEO in the Fortune 500 to the career trajectories of a matched sample of male CEOs, we can more precisely identify the pathways that allow women to successfully ascend to top positions.

Finally, our work advances scholarship by identifying the challenges women face post-promotion. Understanding challenges that may limit women's ability to lead successfully is critical to advancing women's representation in leadership positions because a lack of success risks reinforcing stereotypes and bias regarding women's leadership capability. By identifying challenges that limit female leaders' success we can inform policy and practice in ways that limit bias and support women's mobility and success.

## Theory & research on women in leadership

#### Promoted off the glass cliff?

While most research on women and leadership focuses on the barriers that limit women's upward mobility in work organizations, a small but growing body of work seeks to identify the conditions under which these barriers might be overcome (e.g., Ely, 1995; Gorman, 2005; Ryan & Haslam, 2007). Recent theoretical advancements have suggested that women's promotion to leadership positions is dependent on firm performance (Ashby, Ryan, & Haslam, 2007; Haslam & Ryan, 2008; Ryan & Haslam, 2005). Specifically, the theory of the glass cliff predicts that women are more likely than men to be promoted in firms that are struggling, in crisis or at risk to fail (Ryan & Haslam, 2007). The current analysis extends this perspective to consider the subjective experiences of women executives in the face of specific jobs or promotions that they deem high risk. We believe exploring the glass cliff in both contexts—CEO promotions in struggling firms and promotion to leadership positions that are high-risk—allows us insight into the subjective experiences of women leaders.

Ryan and Haslam (2005, 2007) identify several mechanisms that may contribute to the phenomenon by which women leaders are promoted to risky positions. First, women may face less competition from men for these positions as highly qualified white male candidates may view these positions as too risky or otherwise undesirable (Ryan & Haslam, 2007: 558). Women, on the other hand, may be more amenable to accepting such positions out of fear that a comparable opportunity may not materialize in the future. Second, there is evidence that the requisite competencies of leaders may be context specific and vary depending on the health of the firm (Eagly & Karau, 2002). Specifically, stereotypically feminine qualities—including emotional sensitivity, strong interpersonal skills, morale building capabilities and a collaborative leadership style—may be more valued during times of crisis (Bruckmuller & Branscombe, 2010; Ryan & Haslam, 2007). Such qualities may also make women candidates more attractive when decision-makers perceive a job or assignment as particularly high risk or challenging. Finally, a crisis or high-risk situation may motivate decision-makers to promote non-traditional leaders, including women, to signal to key stakeholders that the firm is headed in a bold new direction (Khurana, 2002).

A growing body of scholarship finds empirical support for this theory. For instance, experimental studies that ask study participants to match candidates with various leadership positions finds that participants are more likely to appoint female candidates to struggling organizations (Ashby et al., 2007; Haslam & Ryan, 2008). A longitudinal study of CEO transitions in the Fortune 500 over a fifteen-year period concludes that female and minority CEOs are more likely than men to be appointed to struggling firms (Cook

& Glass, 2014). Similarly, firms that experience scandal, turbulence or dramatic change are more likely to have a greater proportion of female executives compared to less volatile firms (Brady, Isaacs, Reeves, Burroway, & Reynolds, 2011; Furst & Reeves, 2008).

This evidence suggests that female leaders may begin their leadership tenure at a deficit. Women promoted 'off the glass cliff likely begin their tenure with the expectation that they rescue the organization, team or branch and this may intensify the scrutiny and performance pressures these women experience. However, the mechanisms that lead to glass cliff outcomes are not yet well understood. A recent analysis of the life course of corporate leaders in Australia found that women are more likely than men to view themselves as turnaround specialists and that women are more likely to attribute their career advancement to a history of succeeding at risky assignments (Fitzsimmons et al., 2014). These findings suggest that female leaders may believe that they must seek out risky appointments in order to establish their credibility as leaders. While this potential does not deny that bias shapes women's career mobility, it does attribute a greater degree of agency to women themselves in terms of selecting risky positions. Our analysis of the career trajectories and experiences of female leaders will shed light on the mechanisms that drive glass cliff processes.

### Scrutiny and performance pressures?

While glass cliff theory predicts the conditions under which women are appointed to leadership positions, token and role incongruity theory identify the potential challenges female leaders may experience post-promotion. According to Kanter (1977), numerical minorities often experience heightened visibility and scrutiny, exaggerated stereotypes and exclusion and isolation. As a result, they experience two types of pressure: pressure to perform as well as pressures to assimilate to the interactive style of their peers in the numerical majority. To the extent that female corporate elites are numerical minorities, these pressures may shape their post-promotion trajectory and tenure in several ways.

Role incongruity theory suggests that not only women's underrepresentation in corporate leadership positions but also the perceived incongruity between women's social roles and the demands of the position will present challenges to successful leadership (Eagly & Karau, 2002; Heilman, 2001). Corporate leadership positions are gendered occupations that privilege a masculine work ethic—hence the phrase 'think manager-think male' (Britton, 2000; Schein, 2001). Cultural schemas that associate leadership with masculinity motivate assumptions about the type of person who can successfully fulfill leadership roles (Gorman, 2005; Schein, 1973). These cultural schemas can distort evaluations of women's fitness for leadership positions, leading to negative evaluations of women irrespective of their preparation, ability or performance (Eagly & Carli, 2007; Eagly & Karau, 2002).

Token theory and role incongruity theory suggest that female leaders will likely experience excessive scrutiny of their performance. Importantly, this degree of scrutiny may weaken women's ability to lead effectively and may increase their turnover. Female leaders often perceive themselves as "outsiders on the inside" and under constant scrutiny to outperform their male peers (Davies-Netzley, 1998; Moore, 1988). Because of women's status as numerical minorities in corporate leadership positions, they are highly visible and their performance constantly scrutinized (Kanter, 1977). They are also often evaluated negatively for engaging in behaviors necessary to lead effectively. For instance, female executives who speak more often than their peers tend to be evaluated negatively, while male executives who speak more often are evaluated positively (Brescoll, 2012). Unlike men, women are also more likely to be penalized for engaging in self-promotion or diversity-advancing behavior (Heckman, Foo, & Yang, 2014; Rudman, 1998). Indeed, women who display any form of dominance or authority risk negative evaluations for failing to conform to traditional gender norms, despite the typical association of these behaviors with effective leadership (Livingston, Rosette, & Washington, 2012).

As a result of this scrutiny, female leaders may experience lower job satisfaction, higher rates of depressive symptoms and higher turnover rates (Jacobs, 1989; Pedrovska & Karraker, 2014; Taylor, 2010). Importantly, these pressures can lead women to underperform relative to their training and capability (Inzlicht & Ben-Zeev, 2003). In fact, women are more likely than men to withdraw from full engagement in organizational decision making (Edmonson, 2002; Ely, Padavic, & Thomas, 2012).

## Lack of support and challenges to authority?

Token theory and role incongruity theory also suggest that women's underrepresentation in corporate leadership positions combined with perceptions regarding their fitness for leadership positions will lead to a lack of support and challenges to the authority of women's leadership. We consider two potential challenges to women's authority: (1) a lack of support and resources available to them and (2) overt or subtle resistance to their authority from subordinates and peers. We expect these challenges to limit women's ability to influence organizational outcomes and to place downward pressure on women's tenure as top leaders.

First, women's token status combined with biases concerning their ability to lead effectively may limit the resources available to female corporate leaders and contribute to an overall lack of support for their leadership. A great deal of evidence suggests that women in male-dominated jobs experience less peer and work-related support than their male peers (McGuire, 2002; Taylor, 2010). Even women who attain leadership positions are less likely to enjoy social and professional network ties to organizational elites, a resource known to increase one's influence over the organization (Higgenbotham & Weber, 1999; Ibarra, 1993). Importantly, when women perceive a lack of workplace support, their overall performance is weakened (Ely et al., 2012).

In corporate settings, a relative lack of resources may mean that female CEOs lack the requisite influence over their board of directors. Boards of directors are responsible for monitoring the CEO and overseeing corporate strategy initiatives (Shropshire, 2010). As such, boards have a significant impact on a CEO's ability to effectively build momentum for strategic change and innovation. Social similarity between the CEO and the members of the board increases trust and cooperation; thus CEOs who are socially similar to board members will enjoy greater influence over board outcomes (Carli, 2001; Westphal, 1999). In the absence of gender diversity on the board, therefore, female CEOs may have relatively low levels of influence over the board. Second, female leaders are also more likely than men to experience subtle and explicit resistance to their authority that can devalue their contributions and weaken their ability to lead effectively. Female leaders are more likely than men to lack control over key organizational resources and financial authority—both critical for leaders' success (Collins, 1997; Smith, 2005). As a result, female leaders tend to be more frugal, constrained and reluctant to 'rock the boat' (Bradshaw & Wicks, 2000; Eagly, Johannesen-Schmidt, & van Engen, 2003; Hogg, 2001).

In corporate settings, this resistance may take the form of greater board monitoring. Poor firm performance tends to lower the board's assessment of the CEO and increase board scrutiny (Hermalin & Weisbach, 1998; Wintoki, Linck, & Netter, 2012). To the extent that female CEOs are more likely to begin their leadership in a poorly performing firm, they may be more likely than their male counterparts to experience heightened monitoring and weaker bargaining power vis-a-vis the board.

Taken together, these insights suggest that female leaders will experience significant challenges post-promotion that may impact their ability to lead effectively and may limit their leadership tenure. However, less is known about how impactful these mechanisms are in shaping the career trajectory of women who survive above the glass ceiling. Also less well known are the strategies successful female leaders use to navigate these challenges. Our analysis will seek to uncover whether and how the challenges associated with token status and role incongruity affect successful female leaders as well as the strategies women use to overcome these challenges.

### Methods

## Sample and procedure

To examine our research questions, we draw on two data sources. The first data source, hereafter termed 'trajectory data', was constructed by the authors and includes biographical sketches and career trajectories of all women that currently serve or have ever served as CEO of a Fortune 500 company. To compile the list of female CEOs, the authors used both the Catalyst website (catalyst. org) which provides detailed lists of female CEOs and the appendix from Zweigenhaft and Domhoff's (2011) book *The New CEOs* which details all female and minority CEOs in the Fortune 500 companies through 2010. Several reference websites such as Business Week, Forbes, Fortune, Bloomberg, company websites, and others were used to provide a comprehensive view of the respective CEO. Information gathered focused on aspects of CEOs' personal and professional life as well as information on the organization and the industry in which it operates.

For this study, we focus on the state of the firm at the time of the leader's appointment to CEO, the power and influence of the appointed CEO as indicated by CEO/Chair of the Board duality, and the tenure of the CEO. To determine the state of the firm at the time of the appointment, we relied on news articles covering the event. Previous research has established that news articles as an appropriate and important source for secondary data (see Arthur, 2003; Arthur & Cook, 2004). Although there are many advantages to using news articles to describe an event, they do not provide complete information. As such, that is a potential limitation of this method. We have put forth the most accurate findings with the public information available. Sources used for the news articles were the *Wall Street Journal, New York Times, Bloomberg Business, USA Today*, and *Forbes*.

Though more detailed information was recorded regarding the situation of the firm at the time of the appointment, the basic coding fell into three categories: struggling/crisis, major restructuring, or solid/fine performance. Within the coding of "struggling/crisis" at the time of appointment, several themes emerged: firms going through a scandal such as a data breach or firing of the previous CEO, firms experiencing a period of declining sales, firms hit hard with the recession or a downturn in the economy, a struggling industry overall, firms experiencing slow growth and strategic missteps, and recent awareness of major problems or losses at the time of the appointment. News articles were coded by two individuals (including one of the paper's authors) to ensure accuracy as to the state of the firm at the time of the leader's appointment. Inter-rater agreement was 96%. For the disagreements, an objective third party provided an assessment of the articles. Example statements from news articles are as follows:

Morrison will be running a company with an uncertain future. Americans seem to have maxed out on their appetite for soup, with consumption dropping steadily in recent years. Even worse, in the ready-to-serve category, Campbell has lost share to rivals. Hard times typically boost consumption of canned soup, but the financial crisis didn't produce a bump.

Spherion fell short of its earnings estimates for the first time, leading to internal and external scrutiny that sparked dramatic changes. An economic downturn exacerbated the financial burdens wrought by the company's near decade-long acquisition campaign. The search for a solution to Spherion's problems led to divestitures, substantial layoffs, and new management [Cinda Hallman].

Avon Products Inc. picked Sherilyn S. McCoy as its new chief executive, betting a seasoned Johnson & Johnson executive will be able to sort out its sprawling international operations while fending off a \$10 billion takeover offer lodged by Coty Inc. Her immediate tasks will be to develop a strategic plan, promised after a string of disappointing results; deal with costly and prolonged investigations into possible overseas bribery; contend with Coty's unwanted advances, and sort out the aftermath of a botched computer-system upgrade that has hurt sales and morale in Brazil, Avon's most important market.

Although previous research has shown mixed results for firm performance as a function of CEO duality (Krause, Semadeni, & Canella, 2014), several scholars have identified benefits of this leadership structure (Alexander, Fennell, & Halpern, 1993; Anderson & Anthony, 1986). Specifically, in the absence of duality, the CEO's ability to provide effective leadership may be hampered in

situations where the board and top management are at odds. By contrast, when firms are characterized by duality, there is a greater potential for alignment and consensus with regard to a firm's strategic vision (Alexander et al., 1993; Anderson & Anthony, 1986). This benefit of duality not only lends itself to greater power and influence for the CEO, but it also facilitates greater alignment with and, hence, support from the board. The CEO/Chair duality measure was coded in one of three ways. One, if the leader was appointed both CEO and Chair of the Board at the onset of her/his CEO tenure; two, if the leader was appointed CEO and then later became Chair of the Board during her/his tenure; and three, if the leader was appointed CEO only and another individual serves as the Chair of the Board.

And tenure was coded in months for the total duration the leader served as CEO of the firm and not as the duration the leader served as CEO of a Fortune 500 firm. In other words, firms go on and off the Fortune 500 list. We looked at tenure as total time with the organization. As an example, Meg Whitman was CEO of eBay starting in March, 1998 yet eBay did not appear on the Fortune 500 list until 2006. Her tenure is calculated from her entire time at eBay from March 1998 until November 2007. We also make note of post-CEO activity and career experience. For example, we noted all boards served on after stepping down as CEO, other executive positions, philanthropic work, among others.

In total, including two interim CEOs, the collection is comprised of 52 female CEOs. This number represents the population, not a sample, of women that have served as CEO in a Fortune 500 company through 2014. By studying a population rather than a sample of women, the internal validity of our findings is strengthened (Gibbert & Ruigrok, 2010). Prior to the year 2000, only seven women had been CEO of a Fortune 500 company. Twenty-four women became CEO between 2001 and 2010, and from 2011 to 2014, 22 women were appointed CEO. For comparison purposes, a 1:1 matched set was also collected of male CEOs. The CEOs were matched based on firm size and industry of operation. The industry was matched using the four-digit SIC Code (Standard Industrial Classification) for each firm. Although the matching dataset was structured around industry and firm size, other aspects are also comparable across both male and female CEOs. Specifically, 52% of men attended ivy or top-rated universities compared to 50% of women; sixty percent of men worked for their organization for 15 years or longer compared to 46% of women; and 64% of men were internal appointments compared to 65% of women.

The second data source, hereafter termed 'interview data', includes transcripts of semi-structured in-depth interviews of twelve women who currently serve in top executive positions. We selected a semi-structured model in order to be flexible with our respondents, and allow them to drive the research (Lee, 1999). Additionally, to ensure the objectivity of the interview process, we carefully wrote and rewrote all the questions (with assistance from an outside third party) both to improve our construct validity and to ensure that we did not lead our respondents in their answers (Gibbert & Ruigrok, 2010; Lee, 1999). Our questions were structured to identify both positive and negative experiences that have occurred over the course of the respondents' career. For example, we asked interviewes if they experienced heightened visibility being one of a few women in the upper echelons of management. If they did, we proceeded to ask about the challenges and/or opportunities that resulted from that heightened visibility. Consistent with suggested best practices (Gibbert & Ruigrok, 2010; Lee, 1999), we took care in writing objective, non-leading questions.

Given the sensitive nature of the topics covered in our interviews, we began each interview with an explanation of our IRB (Institutional Review Board) process, a reiteration of our assurance of confidentiality and an opportunity to allow respondents to ask any questions before we began. Although this process only took a few minutes, it aided in enhancing the level of comfort, trust, and openness of our respondents. By increasing their trust in us, we likely received a more accurate and complete picture of their experiences (Gibbert & Ruigrok, 2010).

Industries represented by interview respondents included automotive, hospitality, insurance, outdoor, airline, non-profit and government. The average size of the interviewees' firms as measured by the number of employees is 90,000. Corporate headquarters range across the United States. Specifically, headquarters of the respective firms are in the Northeast, Southeast, Midwest, Southwest, and Western regions. The women range in age from early to mid-40s to 60s. Seventy-three percent are white, 20% are Black, and seven percent are Latina. For this sample, we relied on knowledgeable informants across the country, including personal contacts in targeted companies, scholarly contacts who have conducted research with targeted companies, and professional contacts with connections to targeted companies and individuals. Both authors conducted each interview together to ensure the accuracy of the interview record, and interviews were contemporaneously transcribed by both authors.

While some interviews were conducted in person in respondents' offices, most were conducted by telephone at a time selected by the respondent. Telephone interviews have been shown to produce as reliable information as face-to-face interviews and, in some cases, may even increase respondents' ability to discuss sensitive information such as experiences of discrimination (Cachia & Millward, 2011; Sturges & Hanrahan, 2004). Telephone interviews are particularly appropriate in research that requires access to geo-graphically dispersed research subjects, such as corporate executives (Sturges & Hanrahan, 2004).

Interview questions focused on four primary areas: the career trajectory and promotion history of the respondent, including key factors that shaped their mobility over time; the primary obstacles and challenges, if any, faced by the respondent throughout their career; the organizational and institutional factors that shaped their career mobility, specifically, we asked if they have been offered promotions in firms that were in crisis or otherwise presented significant risk; and last, we asked about the role of boards, leadership programs, or diversity programs that hindered or facilitated their career success. We emailed the general themes, but not the specific questions of the interview ahead of time to the respondents so they would have time to reflect on their experiences prior to our discussion with them. To identify key themes from the transcripts, both authors independently reviewed the transcripts and then discussed general themes (with inter-rater reliability over 90%), and then both authors independently re-reviewed the transcripts to identify specific themes related to promotion and post-promotion experiences of female leaders (with inter-rater reliability of 85%). For disagreements, further discussion took place. If a disagreement was still present, the passage was not included in our analysis. Given our assurances of confidentiality to our respondents, we did not involve a third party in coding our interviews.

As suggested by Cook and Campbell (1979), our construct validity is strengthened by structuring an objective interview. The objective interview was achieved by first writing and rewriting our questions to ensure an accurate and complete response from the interviewee, second by conducting it as a semi-structured interview in order to have the interviewee rather than the interviewers drive the research, and third by establishing a level of trust with the respondents. This process also lends itself to the credibility and confirmability of the findings (Lincoln & Guba, 1985). Specifically, by establishing a climate of trust, the respondents feel safe in sharing their true experiences. Thus, their experiences, rather than the authors' perspectives, drove the research. For example, we did not include any questions that pertained to image issues such as body weight, dress, or the like. Yet, through our discussions, those topics became a running theme in our interviewees' responses. As passages in this article illustrate, those are important topics for the interviewed women that potentially would have been missed had we been more rigid in our interview format.

Using interview and career trajectory data, logical causal relationships and internal validity are affirmed (Cook & Campbell, 1979). Reliability and dependability have also been illustrated with consistent results from inter-rater agreement on both the interview data and the trajectory data (Cook & Campbell, 1979; Lincoln & Guba, 1985). External validity, the generalizability of the findings, is a potential limitation. Interviews and biographical sketches are generalizable in that many industries are represented; however, the biographical sketches are of CEOs in very large organizations and the majority of the interviewees are also employees in very large organizations. As such, these results may or may not translate to female leaders in smaller firms. The applicability of these findings may be transferable to other contexts, but further examination is needed to attain confidence in their transferability (Lincoln & Guba, 1985). As noted by Cook and Campbell (1979), no single piece of research can satisfy all criteria. And in their view, construct validity, internal validity, and reliability are all paramount over external validity. Lee (1999) echoes their conclusion in his argument that qualitative research is best suited to describe and explain, rather than be generalizable to other contexts.

## Data analysis

Standard calculations were conducted on the 'trajectory' data and compared to the matched set of male CEOs. Basic percentages were computed for the state of the firm at the time of the appointment and for the duality of the CEO/Chair of the Board role. For information on CEO tenure, both the mean and the median were computed. This was largely necessary given the outliers of Katherine Graham and Marion Sandler. Katherine Graham of the Washington Post is noted as the first woman to be CEO of a Fortune 500 company having over a twenty-year tenure, and Marion Sandler of Golden West Financial is noted as the first and longest serving female CEO having a 43-year tenure. In contrast, Claire Babrowski of Radio Shack and Cathie Lesjak of Hewlett Packard (HP) both served as interim CEOs for only a few months. We also examined activity and experiences of the CEO post that position.

Given many of our CEOs still serve in the CEO role, our calculations for post-CEO activity and experiences are based on 22 women and 38 men that no longer serve as CEO. As a clarification, our data are accurate through 2014. For example, Patricia Woertz stepped down as CEO of Archer Daniels Midland (ADM) effective January, 2015 yet still serves as Chair of the Board. Given our analysis focuses on events through 2014 (when she was still CEO), she is not counted as one of the 22 that are no longer CEO and her board activity post CEO is not counted in our tabulations. She is considered, in this reporting, as still being CEO of ADM. For the 'interview' data, the authors separately coded all interviewee responses within the corresponding areas of examination. The authors then compared their individual assessments. The reliability of the coding between the authors resulted in over 90% agreement.

#### Findings

## Glass cliff promotions

In our examination of all women to serve as Fortune 500 CEOs and the corresponding matched sample of male Fortune 500 CEOs, results indicate that women are far more likely than men to be appointed CEO in a firm that is struggling—the standard conceptualization of the glass cliff phenomenon. Within our dataset of 52 women, 42% of the women were appointed CEO when the firm was struggling or in crisis as indicated in news articles at the time of appointment compared to 22% of the men. Furthermore, ten percent of the appointed women started as CEO during a major transition for the firm. None of the men in the matched sample fit this criterion. In contrast, 44% of the women were appointed CEO when the firm was doing well compared to 70% of the men being appointed during solid firm performance.

Several examples of female CEOs illustrate the glass cliff phenomenon. Mary Barra was appointed CEO of General Motors (GM) in January 2014. Immediately following her promotion, Ms. Barra was faced with evidence of product defects, a recall that included millions of GM cars, and congressional hearings to account for these defects. Importantly, evidence suggests that GM decision makers knew about the oncoming recall crisis prior to Barra's appointment. Thus, the timing of her appointment—immediately before news of the defects became pubic—provides important support that her appointment represents an example of the glass cliff.

Phebe Novakovic, appointed CEO of General Dynamics in January 2013, entered her position with an over two billion dollar loss the prior quarter. Anne Mulcahy, serving as CEO of Xerox from August 2001 until July 2009, was appointed at a time the firm was near bankruptcy and going through one of the largest accounting scandals of that period. And Margaret (Meg) Whitman became CEO of HP in September 2011 during a time of slow growth, serious strategic missteps such as the acquisition of the company Autonomy, and the firing of the previous CEO. Brenda Barnes stepped in during a time of major restructuring at Sara Lee, Denise Morrison took over as demand for Campbell's Soup products was experiencing a sharp decline, and Ross Stores had experienced declining sales for the first time in a decade right before Barbara Rentler was appointed CEO. Examples of women being appointed CEO during precarious times for their organizations are plentiful within the Fortune 500. Importantly, in nearly every instance, decision makers

appointed a female CEO—still a rare event in the Fortune 500—knowing the firm was experiencing performance declines, scandals or crises.

Interviews with female leaders confirm that women receive promotions during times of crisis, restructuring or performance declines—a fact that represents an important extension of glass cliff theory that considers individual appointments of women executives to high-risk appointments irrespective of overall firm health. In fact, every respondent indicated that she had, at some point in her career, received a high-risk promotion and/or taken on an extremely risky assignment. The following response to questions about risky promotion offers was typical among our sample. The respondent, a high ranking executive in a global corporation, noted, "I was always picked when there was a problem...one time we were trying to avoid a union takeover, three times I replaced people who were fired for significant reasons." Another respondent, an executive of a major corporation, described an important promotion where she was moved to a position that required her to curb a company-wide union effort. She described the job as a "hideous environment." Another executive reflected, "Both major moves for me have come from taking on roles where there were some difficult times."

Our respondents were also very aware of the long-term career risks these positions presented. They recognized that to fail in these high-risk assignments was to risk derailing their career. One executive described a promotion that put her as a direct report to the man expected to be the next CEO of the company and who was known as very difficult and demanding to work for. She was told, "if you can't make it with him, you become a pariah." She goes on to say:

I knew it was risky working with him. This job was risky ... I had to rebuild an organization from scratch. There wasn't anybody I could go to to see if this was right .... I did worry about the fact that they placed me over here and what would happen if it didn't go well ... I wanted to be successful.

When asked why they took such risky assignments, a few respondents noted that they were offered these assignments by important leaders in their company and a greater risk would have been to turn the promotion down. For example, an executive at a large global company described a risky promotion like this:

[My boss said] 'I am handing you an opportunity but it isn't necessarily the easy way. You have to take the risk.' My first standout opportunity was in disarray .... My peers said, 'You are crazy, it will take you down'. I thought of it as a challenge. I took the path that others weren't willing to take. If you didn't handle it well, it could take you down.

Despite confirming that glass cliff promotions are often the result of encouragement by key decision makers, respondents also challenged key assumptions of glass cliff theory in important ways. While glass cliff theory posits that women are placed in these risky positions due to bias on behalf of decision makers, our respondents indicate that they exercised a great deal of agency in terms of seeking out such assignments. According to all of our respondents, proving themselves as leaders was difficult. In mostly male-dominated executive ranks, our respondents were highly visible as women but not as leaders. To establish their credibility as effective leaders they actively sought out challenging and very risky "promotion-making" assignments. In the words of one executive, "You knew the risk was high but you knew the rewards were high too. You could go up in flames or you could get rewarded and do a great job." Another respondent attributed her career mobility to this willingness to take on risky assignments. When asked what she viewed as the most important factor in her success she stated:

I produced results. I worked on high profile and risky assignments that had a lot of spotlight and attention. I viewed risky projects as an opportunity. I think the higher the risk, the higher the reward. If you want to move ahead at [COMPANY], work on the toughest, most difficult project or position even if it's lateral. If you knock it out of the ballpark, you will get noticed.

Importantly, this strategy led to the development of a strong skill set that was recognized and highly valued by their companies and contributed to their long-term career mobility. While glass cliff assignments were risky and failure may have derailed their career, their effective leadership through times of crisis led to the cultivation of a reputation as effective leaders for crises, change and transformation. One top executive stated, "Everything I've worked on that I've gotten credit for have been big change efforts." Another top executive, who had moved a great deal across her career, described her trajectory in the following way:

My niche tends to be, not crisis per se, but I found that what I do, which involves a lot of change inside companies, tends to be an inflection point. I look not for full on crisis but the openness of doing stuff. It's become my formula. I've identified my niche around change, transformation, etc. because of what I like to do in terms of innovation—multiple different industries, seismic change—I look for the right components to be ready to make that happen.

Overall while we find substantial empirical evidence of the glass cliff in the career trajectories of female CEOs and top executives, we also find that this phenomenon is not merely attributable to bias on behalf of decision makers. In response to their minority status and to the negative visibility that being a woman entails, women develop strategies to become visible for the 'right' reasons. These strategies include a willing acceptance of risky appointments, the development of a skill set based on successful crisis management and the cultivation of a reputation as a transformation expert. Importantly, these strategies are not without risk. Interviews only included those who have successfully navigated the glass cliff pattern; those who failed at highly visible and highly risky positions may not have achieved the level of career success that our respondents have achieved.

## Lack of support & challenges to authority

We now consider how women experience leadership following promotions. Given that women are more likely to be promoted during times of crisis or struggle, we expect their post-promotion experience to be challenging. In this section we consider whether female leaders experience a lack of support and/or challenges to their authority.

To analyze our trajectory data, we assessed CEO/Chair of the Board duality as a proxy for CEO influence and support. Leaders appointed both CEO and the Chair of the Board likely enjoy greater power and support than leaders who are only appointed CEO (Alexander et al., 1993; Anderson & Anthony, 1986). Thus, dual appointments likely reflect a greater degree of power and influence than non-dual appointments. Our analysis reveals stark differences between male and female CEOs. Within our trajectory data of all Fortune 500 female CEOs and the matched sample of male CEOs, only 13% of women started as CEO and Chair of the Board, whereas 50% of the appointed men started as *both* CEO and Chair of the Board. Forty-eight percent of female CEOs serve as the CEO only and are *not* Chair of the Board. This is true for 34% of the male CEOs. We also find evidence of what might be considered a "trial" period for female CEOs. Thirty-eight percent of the women started as the CEO only and later were appointed Chair of the Board. In contrast, this trial period only happened for men 16% of the time. These findings, though, should be taken with caution. The timing of the appointment is another factor that may influence the results. As Krause et al. (2014) suggest, there is a growing trend for non-duality appointments (CEO only) are much more comparable between women and men. However, both duality appointments (CEO and Chair) and "trial" period appointments (CEO first, Chair at a later date) follow the trend noted above regardless of the timing of the appointment.

Women who serve only as CEO and not Chair of the Board may experience greater challenges to their leadership, less support from the board overall, and less power and influence over corporate strategy. The lack of dual status may impact their ability to execute their strategic vision for the firm, and in turn, may result in a shorter tenure in that role. Though many female CEOs in our dataset fit this pattern, it is difficult to determine the true level of support or challenges incurred by the board with the public information available. There are two significant examples, though, that clearly suggest power struggles and differences of opinions that can arise between the CEO and the board of directors when the CEO does not enjoy dual status. The first example is Carol Bartz of Yahoo. She was appointed CEO in January 2009 with the charge of turning around Yahoo and regaining its stature as a leading internet corporation. As CEO, Ms. Bartz set forth a strategic plan for Yahoo's turnaround. Her plan had a 2012 date to come to fruition. In early September 2011, though, Ms. Bartz was abruptly fired via a phone call by the Chair of the Board. This was only 32 months into her tenure as CEO and well short of the realization of her strategic plan. The board obviously had different views and was not supportive of Ms. Bartz as CEO or her strategic plan.

Eileen Scott of Pathmark Stores is another example of a CEO lacking full board support. Ms. Scott served as CEO from October 2002 until August 2005. She was a "lifer" at Pathmark, starting her career with the company in 1969 as a part-time cashier. Working her way through the ranks, she served in many leadership posts. After the current CEO left for a position at Starbucks, Ms. Scott was promoted to CEO but not Chair of the Board. During her tenure, which lasted only 35 months, she secured an investment of over 150 million dollars from a private equity firm. Despite her success in securing the investment, there is evidence that the board believed another CEO was needed to take Pathmark to the next level. Thus, after truly spending her entire career at Pathmark, the board supported her as CEO for only 35 months.

Interviews revealed a routine lack of support for the leadership of women executives. One of the key ways in which female leaders were denied support was in terms of exclusion from professional and social networks on the job. Several respondents mentioned the importance of golf for solidifying and sustaining these networks; as women, respondents were often excluded from golf-related events. According to one top executive this fact not only denied her access to important sources of workplace support but also customer interaction. "Customer events are a big piece—they involve golf—I was excluded from those networks because I did not play." Even when they did play golf, women executives experienced subtle and not-so-subtle messages the golf course was men's space. One women executive described the bias she experienced during a golf tournament in the following way: "The first [tournament] I played in, they put me with this Australian customer. He was appalled that he was playing with me. We were both in the sand trap, he told me to rake it up because that's women's work."

Aside from golf, several respondents stated that as the only woman—or one of the only women—at their rank, they were often ignored or dismissed in top-level discussions of strategy. Perhaps the most notable example from our interviews came from a top executive at a global manufacturing company. This respondent's responsibilities routinely included meetings with the company's board. Yet, despite her rank, the board—comprised entirely of men—failed to recognize her role and support her contributions. According to the respondent:

There are times with our board I feel like a woman. Because they treat me like the admin. They are nice, half of them can't remember my name or they call me [WOMAN'S NAME], the name of the admin that supports them. So I usually ... I'm not invited in to some things there. I feel very much on the outside of that. It's an inner sanctum.

Thus, not only did the board fail to support her leadership in the company but her authority was challenged in that the board members did not know her name and continued to assume she was attending the meeting in an administrative support capacity. She recalled an important discussion with the top leadership team regarding the company's maternity leave policy. Not once in the discussion was she asked to weigh in despite her being the only woman in the room.

Our respondents also revealed that their leadership is often subtly or explicitly undermined by others in the firm. One respondent described an instance when she was in charge of a very large regional segment of the company. The executive who reported to her

refused to acknowledge her authority and sought to exclude her from important work-related discussions. She states, "He would ignore me at meetings. He had a social event, I don't play golf. He would invite the men to golf and then dinner at his house. I was not invited." Many respondents described promotions that placed them over older men who had been with the company longer and who expressed resistance or aggression to having a female boss. One top executive stated, "When I was young—30s, 40s—older men had resentment. [Their attitude is] you don't belong here—this job should be going to a male."

In some instances resistance to women's authority resulted in outright confrontation. One executive for a global firm described the resistance she experienced when she was placed over a large segment of the company. She stated:

A lot of the good old boys wouldn't listen to me, it was bad. I had to go in and have a heart to heart with a couple of them. 'You may not be happy that I'm your boss but we're going to have to figure it out' ... They didn't handle it well. They subsequently ended up quitting.

While in this instance the resistance to her authority was aggressive and explicit, other forms of resistance were subtler. She describes a subtle form of resistance to her authority in the following way: "Our CFO always calls me kiddo. I'm like 45 years old, don't call me kiddo. In meetings, 'good job, kiddo!' What do I say to this guy? ... Things can be very subtle."

Overall we find that female CEOs experience substantially less authority than male CEOs due to the lack of a dual appointment as Chair of the Board. As our trajectory examples attest, this lack of dual appointment can limit women's ability to lead effectively and can shorten their tenure. Interviews with top executives also reveal that female leaders experience a relative lack of access to important social and professional networks, a lack of acknowledgement of their role and responsibilities, and subtle and explicit challenges to their authority.

## Heightened scrutiny & performance pressures

We now turn to an analysis of whether female leaders experience scrutiny and performance pressures. Our analysis reveals that our research questions may be highly connected. If women start in a position at a time of crisis and they lack the support or authority to accomplish what they need to, then they may be increasingly vulnerable to scrutiny and performance pressures. As a result, female leaders may experience shorter tenures compared to their male peers.

In our trajectory dataset, we calculated both the mean and median tenure lengths for male and female CEOs. Our results suggest a mean tenure length for women of 66 months compared to a mean tenure length for men of 69 months. Though the average length is similar for the men and women in our dataset, the median length varies substantially. For women, the median length is only 42 months compared to the median length for men of 60 months. There are some unique aspects in our dataset, however, that may impact the interpretability of the tenure results. Specifically, as noted in the data analysis section, there are some outliers in the women's dataset both of extremely long tenures and extremely short tenures. Katherine Graham of the Washington Post and Marion Sandler of Golden West Financial enjoyed extremely long tenures as CEO. In contrast, Claire Babrowski of Radio Shack and Cathie Lesjak of HP both served as Interim CEOs and had tenures of five and three months, respectively. Also, a large proportion of the women were appointed post-2010 with their tenure tabulated through 2014. Thus, although the tenure data are important and may be suggestive of important trends, we advise interpreting the results with caution.

As suggested above, our research questions connect with one another. Both examples of Eileen Scott and Carol Bartz are illustrative in that both women lacked support and authority and this led to shorter tenures resulting from performance pressures. Ms. Bartz was CEO for only 32 months and Ms. Scott for only 35 months. Another example is Jill Barad of Mattel. She served as CEO from January 1997 until early February 2000. After facing intense scrutiny and performance pressures, Ms. Barad resigned after only 37 months as CEO. At the time of her appointment, she was also appointed Chair of the Board. Mattel had just experienced a flat quarter but had had several years of growth prior to that time. Ms. Barad was appointed CEO with the expectation that she would revive their winning streak. Her failure to do so in a short period of time led to her resignation.

Our findings also suggest that the reasons for stepping down and post-CEO career vary by gender. Specifically, 32% of the women were forced to step down or fired compared with only 13% of the men. Twenty-three percent of the women retired compared to 53% of the men. With regard to their career post-CEO, women are more likely to move to non-profit or charity work (18%) compared to men (none in the sample). Men are also much more likely than women to continue in a corporate position: 27% of former female CEOs continue to serve on corporate boards compared to 67% of former male CEOs.

Interviews with top executives reveal that women experience significant levels of scrutiny and performance pressure. The following statement by a top executive was typical: "people look at everything I do and consider every word I say." In many instances, this scrutiny extended not only to their job performance but to their physical appearance as well. Several respondents mentioned that their physical appearance—including their weight, their hair and their fashion choices—were fodder for critique and examination by their subordinates, peers and superiors alike. One top executive at a global hospitality company mentioned that being a woman was hard but being an overweight woman was even harder: "I am overweight—I don't always look like the typical package." Concerns related to female leaders' body weight was echoed by an executive who described the intense scrutiny another top woman executive at her company experienced:

[Women] are dealing a lot more with this, this whole image thing .... We just brought in a female to head our marketing. Very bright but almost everyone will say to me how she looks. She is kind of heavy. We have many heavy men around here and no one says anything. I am not sure if she has been as successful because she doesn't care [about her weight].

Other women described instances where their hair and/or dress were remarked upon by colleagues. One executive described the scrutiny her female boss received after giving a global company-wide presentation:

She presented at the [NAME OF CONFERENCE]. My HR leader said that someone had come up to talk about her hair. It was not professional. Another commented that the length, color did not look professional. I made the mistake of having to carry on that message. She said, 'You have got to be kidding me? I was talking about strategy and they want to talk about my hair?'

Another executive described this scrutiny in the following way: "I have to look great, dress great, some of these guys, my God, I have to look fabulous. That's part of looking a certain way. That's a pressure on women, not on men. I'm held to a very high standard." Many respondents reported feeling pressured to be flawless in the execution of their job with no room for misstep. This sense of walking a fine line between risk and reward meant that women also shouldered a great deal of angst and anxiety about their performance. One executive remarked, "I think I have to be as close to perfect as possible ... [there is] no room for error." A female executive described the performance pressure similarly: "[Women] have to be better. I can tell you the women at [MY COMPANY] do—women agonize more over their work...we have to be better." A top executive echoed this perception:.

Senior women still question things. [MY COLLEAGUE] will call me and say, 'Should I say this? Should I say that?' Men don't worry about that and I can't imagine them saying that. With women, I hear more worry—how will I be perceived? ... I feel like I have to work twice as hard .... We always feel like we could lose our jobs.

Many respondents described hyper-attentiveness to impression management, from their hair, dress to their mannerisms and manner of speaking. The following example from an executive was typical. She described the skills she had developed working with a male-dominated executive team in the following way: "Tempering your presentation not only in words but body language to make sure you come across more smooth and more even keel. Not reacting right away to criticism or provoking questions in board meetings so you are not being perceived in a negative way." Many women explained the source of this angst as a perception that their male peers were waiting for them to make a mistake to "prove" their incompetence for the job. One executive speculated that her male colleagues were wondering "if I'm going to slip off a pedestal". And, perhaps not surprisingly, scrutiny and performance pressures can lead to declining levels of career satisfaction over time for female leaders. The most compelling example of this came from a top executive who had reached the pinnacle of her career by overcoming significant obstacles, including gender bias and discrimination at every step. She described her attitude toward her career in the following way:

I think there are many women in their 50s that are just done with corporate America. When I look across the board at [MY COMPANY]—Vice Presidents and above—300 people—I am hard pressed to find incompetent women. And there are many incompetent men. Women, to attain these top positions have really fine-tuned their skill sets. Men show up to meetings saying, 'what is this about?' Women come with electronics, come with notes, do follow up.

This respondent expressed during the interview that she is actively looking for an exit strategy from her career. After decades of constantly proving herself and achieving remarkable success, she stated that she is exhausted and unsatisfied. This suggests that women's exit from top positions and their greater likelihood of pursuing post-career activities outside of the corporate sector may indicate agency rather than bias on the part of late-career women. While bias shapes their career in a host of ways, their exit decisions may be shaped by a growing unwillingness to continue to confront bias and 'prove' their abilities later in life.

## Discussion

This study advances scholarship on women and leadership by analyzing the conditions under which women are promoted to leadership positions and the challenges they face post-promotion. Moving beyond the barriers that prevent women from obtaining leadership positions, we focus on the conditions under which women experience mobility above the glass cliff.

Our first research question asks whether women experience a glass cliff in job assignments or promotion opportunities. We conceptualized glass cliff promotions in two ways: the standard conceptualization from extant literature that suggests women CEOs are more likely than men to be appointed in firms that are struggling and an extension of this concept to the individual experiences of women executives who are given high risk assignments or appointed to high risk positions. We find strong evidence of the glass cliff in both our trajectory analysis and interviews. Consistent with glass cliff theory, we find that women are often promoted to positions that are extremely risky. Women CEOs were much more likely to be appointed during times of struggle, and every woman executive interviewed acknowledged being asked to take on a high-risk assignment or a position in crisis.

Contrary to glass cliff theory, however, our findings reveal that women exercise a great deal of agency in seeking out high-risk assignments. Women in our interview sample recognized that they were highly visible as women but not necessarily as leaders. To prove their abilities as leaders, they believed it necessary to establish reputations as transformational leaders and/or crisis managers. While reflective of a higher performance standard for women than for men, this strategy leads to the accumulation over time of extraordinary skill sets. In our trajectory analysis, we also saw evidence of this. For example, Susan [Ivey] Cameron served as CEO of Reynolds American from 2004 until 2011 and then chose to retire to spend time with her husband and participate in philanthropic endeavors. Though enjoying retirement, Reynolds needed her back with her unique skill set. In May, 2014 she once again became CEO of Reynolds American in order to lead them through an incredibly large and complex acquisition. Speculation also ran through the media once Ms. Cameron returned as CEO as to what big event may have brought her back.

There are important theoretical implications of these findings. Interviews with women executives suggest that women's understanding of the challenges they face in male-dominated environments leads them to seek out higher risk positions in order to prove their mettle as leaders. Their greater likelihood of managing crisis and change may, over time, lead to a reputation as capable change agents, crisis managers and/or turnaround specialists. This may imply that women's greater likelihood of being appointed CEO to struggling firms reflects the reputation they have built through their cumulative experience of successfully managing crisis. This is not to suggest that gender bias does not contribute to the glass cliff phenomenon; as we note, women's certainty that they must take on high risk roles in order to achieve positive visibility is a result of women's underrepresentation and resultant bias. And women's need to prove themselves by taking on high-risk assignments creates much greater performance pressures for women executives compared to their male peers. However, our findings suggest that theories of the glass cliff must account for women's strategic agency in building careers within male-dominated corporate environments rather than simply assume bias alone shapes women's promotion opportunities (or lack thereof).

Our second research question asked whether female leaders, post-promotion, experience a lack of support and/or challenges to their leadership. Analysis of the trajectory data reveals that female CEOs are significantly less likely than male CEOs to enjoy dual appointments as CEO and Chair of the Board. In several instances, this resulted in reduced power and authority to implement the CEO's strategic vision and a reduced tenure for female CEOs. As noted in our analysis, the lack of dual appointment presents greater challenges to female CEOs, provides them less board support and less influence over board outcomes. Our interviews confirmed these findings. Female executives reported exclusion from key decision making networks and instances where they were ignored or dismissed by peers, superiors and even subordinates.

Importantly, our respondents reported that the board of directors and/or a powerful sponsor can make a significant difference in terms of the support female leaders receive. In one instance, a respondent reported that her promotion was met with significant resistance from superiors and peers alike. Yet her boss—a long-time senior executive at the company—threatened to leave the company if she were not granted full support in her new position. Several respondents reported that boards of directors can make a big difference in terms of establishing support for women's leadership and authority. According to respondents, there is greater respect and support for female leaders when boards are diverse, establish diversity benchmarks for top management and/or when boards establish formal committees devoted to diversity. According to one senior executive, "[Boards] make a difference. When [diversity] is important to the board, it becomes important for the company. If it's a good board and they are holding senior leaders accountable, that's when change happens."

Our final research question asked whether female leaders experience heightened scrutiny and performance pressures that potentially limit their leadership tenure. Analysis of trajectory data reveals that female CEOs enjoy significantly shorter median tenures compared to male CEOs. Female CEOs are also more likely than men to be forced to step down from their position or fired. Finally, female CEOs are more likely to retire or move out of the corporate arena following their tenure, while men are more likely to continue in corporate leadership positions.

Interviews with female executives affirmed the presence of significant performance pressures. Female respondents reported pressure to be flawless in the execution of their job along with high levels of anxiety about impression management that extended beyond job performance to body size, hair and dress. A few of our respondents reported declining levels of career satisfaction over time despite significant success and mobility. These findings shed light on a recent study that found that women with authority in the workplace exhibit significantly more symptoms of depression than men with authority or women without authority (Pedrovska & Karraker, 2014). The authors conclude that "job authority exposes women to interpersonal stressors that undermine health" (424). In light of the degree of performance pressure and impression management anxiety articulated by our respondents, it is perhaps not surprising that female leaders experience many negative job-related stressors, including those that impact their health. And it may follow that women are more likely than men to exit these jobs early and leave corporate settings after their leadership tenure is over.

Overall our analysis reveals that our research findings are likely highly correlated. If women are promoted to high risk positions and lack the support or authority to accomplish their leadership goals, then they are likely increasingly vulnerable to scrutiny and performance pressures. As a result, female leaders may experience shorter tenures compared to their male peers either due to a greater risk of being fired or replaced or due to self-selection out of leadership positions.

These findings have several implications for practice. First, promotion decisions for senior leadership positions tend to be non-routine, non-standardized, informal, and in the case of senior executive, CEO or board member selection, highly secretive. As a result, these decisions are susceptible to evaluation bias and stereotypes (Reskin, 2000). The lack of formality and standardization for these decisions may increase female leaders' susceptibility to glass cliff promotions. While these promotions may reflect, in part, women's desire to establish their leadership credentials, they also place much greater performance standards on women compared to men. Applying the same degree of formalization and standardization to senior level positions as are routinely applied to lower level positions may reduce the extent to which women are at greater risk for being appointed to leadership positions during times of crisis.

Second, to the extent that female leaders face greater challenges to their authority and receive less support, it is reflective in part of the lack of women's integration into senior leadership positions. It is precisely because women stand out and are highly visible *as women* that their capabilities are viewed with greater skepticism. Aggressive efforts to integrate senior levels would go a long way in reducing the salience of gender at higher echelons. As noted by our respondents, board diversity—or a board's commitment to genuine leadership diversity—can be a powerful tool in enforcing change at the top.

Finally, the scrutiny and performance pressures female leaders experience puts them at greater risk for higher turnover and shorter tenures. Yet, as our research suggests, women who reach the top are exceptional in terms of their skill development and leadership capabilities. This means that shorter tenures and higher turnover for women is bad for companies because it represents

a significant loss of valuable leadership capital. To address these challenges, integration of upper leadership ranks is again critical. Increasing the number of women in leadership positions will lessen the scrutiny women experience in terms of job performance and physical appearance. In gender-integrated workgroups, the salience of gender stereotypes and gender differences is reduced (e.g., Kanter, 1977). By making women less visible *as women*, integration would reduce the pressure on female leaders and expand the range of acceptable leadership styles.

## Conclusion

The current study is limited in ways that can be fruitfully addressed by future research. First, because our trajectory analysis is based on the population of women who have ever served as CEO in the Fortune 500, we are unable to disaggregate the career trajectories of women by race/ethnicity or age/generation. Previous scholarship suggests that the mobility pathways and post-appointment experiences vary between white women and women of color (Bell & Nkomo, 2001; Chung-Herrera & Lankau, 2005; Collins, 1997; Livingston et al., 2012). There have also been several accounts in the popular media that suggest the younger generation of workers (i.e., Millennials) is less biased and more tolerant of differences (e.g., Burstein, 2014; Gregory, 2010), and some empirical evidence supports the notion that younger workers are more tolerant overall than older workers (Pew Research Center, 2010). If true, generational turnover may erase—or at least ease—many of the challenges women face in the workplace. Researchers can build upon the current study by identifying contexts that would allow for disaggregation and separate analysis of various demographic groups, including racial/ethnic minorities and age/generation.

Also, our focus on the Fortune 500 limits our study to a relatively small set of highly visible American firms. As the most highly visible and influential work organizations in the U.S., the Fortune 500 provides important insights into the dynamics of leadership in work organizations. However, the Fortune 500 is not necessarily representative of all work organizations. Thus, future research can build upon our study by testing similar mechanisms in a group of smaller, less visible firms that may not face the same pressures to pursue diversity initiatives, including diversity among top leaders and decision-makers.

Finally, interviews with senior executives and analyses of the careers of female CEOs are limited by our focus on women who have successfully overcome successive rounds of bias and discrimination from career entry to the present. Our sample does not include women who were not promoted, were passed over for various opportunities and/or who self-selected out of the corporate pipeline due to blocked mobility. Our sample also does not include white men executives who may or may not also perceive that they too were required to accept high-risk positions in order to prove their leadership capabilities. It is likely that a sample of less successful women and/or white men may reveal important processes and mechanisms that are not revealed by the "success" stories of the female leaders included in the current study.

#### References

Adams, S. M., Gupta, A., & Leeth, J. D. (2009). Are female executives over-represented in precarious leadership positions? *British Journal of Management*, 20(1), 1–12.
Alexander, J. A., Fennell, M. L., & Halpern, M. T. (1993). Leadership instability in hospitals: The influence of board—CEO relations and organization growth and decline. *Administrative Science Quarterly*, 38, 74–99.

Anderson, C. A., & Anthony, R. N. (1986). The new corporate directors. New York: Wiley.

Arthur, M. M. (2003). Share price reactions to work-family initiatives: An institutional perspective. Academy of Management Journal, 46(4), 497–505.

Arthur, M. M., & Cook, A. (2004). Taking stock of work–family initiatives: How announcements of "family-friendly" human resource decisions affect shareholder value. Industrial and Labor Relations Review, 57(4), 599–613.

Ashby, J., Ryan, M., & Haslam, S. (2007). Legal work and the glass cliff: Evidence that women are preferentially selected to lead problematic cases. William and Mary Journal of Women and the Law, 13(3), 775–793.

Bell, E., & Nkomo, S. (2001). Our separate ways: Black and White women and the struggle for professional identity. Boston: Harvard Business School Press.

Bradshaw, P., & Wicks, D. (2000). Experiences of white women on corporate boards in Canada: Compliance and non-compliance to hegemonic masculinity. In R. Burke, & M. Mattis (Eds.), Women on corporate boards of directors: International challenges and opportunities (pp. 197–212). The Netherlands: Kluwer.

Brady, D., Isaacs, K., Reeves, M., Burroway, R., & Reynolds, M. (2011). Sector, size, stability and scandal: Explaining the presence of female executives in fortune 500 firms. *Gender in Management*, 26(1), 84–105.

Brescoll, V. (2012). Who takes the floor and why: Gender, power and volubility in organizations. Administrative Science Quarterly, 56(4), 622–641.

Britton, D. (2000). The epistemology of the gendered organization. Gender and Society, 14(3), 418-434.

Bruckmuller, S., & Branscombe, N. (2010). The glass cliff: When and why women are selected as leaders in crisis contexts. *British Journal of Social Psychology*, 49, 433–451.

Burstein, D. (2014). Fast future: How the millennial generation is shaping our world. New York: NY: Beacon Press.

Cachia, M., & Millward, L. (2011). The telephone medium and semi-structured interviews: A complimentary fit. Qualitative Research in Organizations and Management, 6, 265–277.

Carli, L. L. (2001). Gender and social influence. Journal of Social Issues, 57, 725-741.

Chung-Herrera, B., & Lankau, M. (2005). Are we there yet? An assessment of fit between stereotypes of minority managers and the successful-manager prototype. Journal of Applied Social Psychology, 35, 2029–2056.

Collins, S. (1997). Black mobility in White corporations: Up the corporate ladder but out on a limb. Social Problems, 44(1), 55-68.

Cook, T. D., & Campbell, D. T. (1979). The design and conduct of quasi-experiments and true experiments in field settings. In M. Dunnette (Ed.), Handbook of industrial and organizational psychology (pp. 223–326). Chicago: Rand McNally.

Cook, A., & Glass, C. (2014). Above the glass ceiling: When are occupational minorities promoted CEO? *Strategic Management Journal*, 35(7), 1080–1089.

Davies-Netzley, S. A. (1998). Women above the glass ceiling: Perceptions on corporate mobility and strategies for success. Gender and Society, 12(3), 339–355.

Dezső, C., & Ross, D. G. (2012). Does female representation in top management improve firm performance? A panel data investigation. *Strategic Management Journal*, 33, 1072–1089.

Eagly, A. H., & Carli, L. L. (2007). Through the labyrinth: The truth about how women become leaders. Boston, MA: Harvard Business School Press.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review*, 109, 573–598.

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.

Edmonson, A. (2002). The local and variegated nature of learning in organizations: A group-level perspective. Organization Science, 13, 128–148.

- Ely, R. (1995). Power in demography: Women's social constructions of gender identity at work. Academy of Management Journal, 38, 589–634.
- Ely, R. J., Padavic, I., & Thomas, D. A. (2012). Racial diversity, racial asymmetries and team learning environment: Effects on performance. Organization Studies, 33(3), 341–362.
- Fitzsimmons, T., Callan, V., & Paulsen, N. (2014). Gender disparity in the C-suite: Do male and female CEOs differ in how they reached the top? The Leadership Quarterly, 25(2), 245–266.
- Furst, S., & Reeves, M. (2008). Queens of the hill: Creative destruction and the emergence of executive leadership of women. *The Leadership Quarterly*, 19(3), 372–384. Gibbert, M., & Ruigrok, W. (2010). The "what" and "how" of case study rigor: Three strategies based on published work. *Organizational Research Methods*, 13(4), 710–737.
- Glass, C., Cook, A., & Ingersoll, A. (2015). Do women leaders promote sustainability? Analyzing the effect of corporate governance composition on environmental performance. Business Strategy and the Environment. http://dx.doi.org/10.1002/bse.1879.
- Gorman, E. (2005). Gender stereotypes, same-gender preferences, and organizational variation in the hiring of women: Evidence from law firms. American Sociological Review, 70, 702–728.
- Gregory, T. (2010). Most tolerant but desensitized? Today's teens present a thorny contradiction. *Chicago Tribune* (Available at: http://articles.chicagotribune.com/2010-11-13/news/ct-met-tolerant-teens-bd-20101113\_1\_millennials-teens-generational-shif).
- Haslam, S. A., & Ryan, M. K. (2008). The road to the glass cliff: Differences in the perceived suitability of men and women for leadership positions in succeeding and failing organizations. *The Leadership Quarterly*, 19, 530–546.
- Heckman, D., Foo, M., & Yang, W. (2014). Does valuing diversity result in worse performance ratings for minority and female leaders? (Unpublished manuscript). Heilman, M. E. (2001). Description and prescription: How gender stereotypes prevent women's ascent up the organizational ladder. *Journal of Social Issues*, 57(4), 657–674
- Hermalin, B., & Weisbach, M. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *The American Economic Review*, 88(1), 96–118. Herring, C. (2009). Does diversity pay? Race, gender and the business case for diversity. *American Sociological Review*, 74, 208.
- Higgenbotham, E., & Weber, L. (1999). Perceptions of workplace discrimination among Blacks and White professional-managerial women. In I. Browne (Ed.), Latinas and African American women at work: Race, gender and economic inequality (pp. 327–353). New York: Russell Sage Foundation.
- Hogg, M. (2001). A social identity theory of leadership. Personality and Social Psychology Review, 5, 184–200.
- Ibarra, H. (1993). Personal networks of women and minorities in management: A conceptual framework. Academy of Management Review, 18, 56–87.
- Inzlicht, M., & Ben-Zeev, T. (2003). Do high-achieving female students underperform in private? The implications of threatening environments on intellectual processing. Journal of Educational Psychology, 95(4), 796–805.
- Jacobs, J. (1989). Revolving doors: Segregation and women's careers.
- Kanter, R. M. (1977). Men and women of the corporation. New York: Basic Books.
- Khurana, R. (2002). Searching for a corporate savior: The irrational quest for charismatic CEOs. Princeton, NJ: Princeton University Press.
- Krause, R., Semadeni, M., & Canella, A. A., Jr. (2014). CEO duality: A review and research agenda. Journal of Management, 40(1), 256–286.
- Lee, T. (1999). Using qualitative methods in organizational research. Thousand Oaks, CA: Sage.
- Lincoln, Y. S., & Guba, E. (1985). Naturalistic inquiry. Beverly Hills, CA: Sage.
- Livingston, R. W., Rosette, A. S., & Washington, E. F. (2012). Can an agentic Black woman get ahead? The impact of race and interpersonal dominance on perceptions of female leaders. Psychological Science, 23(4), 354–358.
- McGuire, G. (2002). Gender, race and the shadow of structure: A study of informal networks and inequality in a work organization. *Gender and Society*, *16*, 303–322. Moore, G. (1988). Women in elite positions: Insiders or outsiders? *Sociological Forum*, *3*, 566–585.
- Pedrovska, T., & Karraker, A. (2014). Gender, job authority and depression. Journal of Health and Social Behavior, 55(4), 424-441.
- Pew Research Center (2010). Millennials: Confident, connected, open to change. Executive summary available at: http://www.pewsocialtrends.org/2010/02/24/ millennials-confident-connected-open-to-change/
- Reskin, B. (2000). Getting it right: Sex and race inequality in work organizations. Annual Review of Sociology, 26, 707-709.
- Ridgeway, C. (1997). Interaction and the conservation of gender inequality. American Sociological Review, 62(2), 218–235.
- Ridgeway, C., & England, P. (2007). Sociological approaches to sex discrimination in employment. In F. J. Crosby, M. S. Stockdale, & S. Ann Ropp (Eds.), Sex segregation in the workplace: Trends, explanations, remedies (pp. 189–211). Oxford: Blackwell.
- Rudman, L. (1998). Self-promotion is a risk factor for women: The costs and benefits of counter-stereotypical impression management. Journal of Personality and Social Psychology, 74, 629–645.
- 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. (2007). The glass cliff: Exploring the dynamics surrounding the appointment of women to precarious leadership positions. Academy of Management Review, 32(2), 549–572.
- Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics among female managers. Journal of Applied Psychology, 57, 95–105.
- Schein, V. (2001). A global look at psychological barriers to women's progress in management. *Journal of Social Issues*, 57(4), 675–688.
- Shropshire, C. (2010). The role of interlocking director and board receptivity in the diffusion of practices. *Academy of Management Review*, 35, 246–264.
- Smith, R. (2005). Do the determinants of promotion differ for White men versus women and minorities? An exploration of intersectionalism through sponsored and contest mobility processes. *American Behavioral Scientist*, 48(9), 1157–1181.
- Stainback, K., & Kwon, S. (2012). Female leaders, organizational power and sex segregation. *The Annals of the American Academy of Political and Social Science*, 639, 217. Sturges, J., & Hanrahan, K. (2004). Comparing telephone and face-to-face qualitative interviewing. *Qualitative Research*, 4(1), 107–118.
- Taylor, C. (2010). Occupational sex composition and the gendered availability of workplace support. Gender and Society, 24(2), 189–212.
- Webb, E. (2004). An examination of socially responsible firms' board structure. Journal of Management and Governance, 8, 255–277.
- Westphal, J. D. (1999). Collaboration in the boardroom: Behavioral and performance consequences of CEO-board social ties. Academy of Management Journal, 42, 7–24. Wintoki, M. B., Linck, J., & Netter, J. (2012). Endogeneity and the dynamics internal corporate governance. Journal of Financial Economics, 105, 581–606.
- Zweigenhaft, R. L., & Domhoff, G. W. (2011). The new CEOs: Women, African American, Latino, and Asian American leaders of Fortune 500 companies. Lanham, MD: Rowman & Littlefield Publishing.