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ORIGINAL PAPER

Power, Status and Expectations: How Narcissism Manifests Among Women CEOs

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Abstract
Firms face mounting pressure to appoint ethical leaders who will avoid unnecessary risk, scandal and crisis. Alongside mounting evidence that narcissistic leaders place organizations at risk, there is a growing consensus that women are more ethical, transparent and risk-averse than men. We seek to interrogate these claims by analyzing whether narcissism is as prevalent among women CEOs as it is among men CEOs. We further analyze whether narcissistic women CEOs take the same types of risk as narcissistic men CEOs. Drawing on social role and token theories, we test hypotheses related to gender differences in the prevalence and impact of CEO narcissism on firm-level practices. Using a unique dataset that includes a large sample of CEOs of S&P 1500 companies from 1992 through 2014, we create a narcissism composite score for each CEO based on their photograph size in the annual report, and their cash earnings and non-cash earnings relative to the next highest paid executive. We find that women CEOs are less likely to exhibit narcissistic personality traits compared to men CEOs. Furthermore, we find that gender moderates the relationship between narcissistic CEOs and our outcome variables of risk-taking and questionable behaviors.

Keywords Narcissism · Gender · Chief executive officers · Risk-taking · Questionable behaviors

Introduction

In the wake of the recent global financial crisis, companies have witnessed renewed pressure to appoint more ethical leaders who will steer clear of scandal (Kauflin 2017). Indeed, policy-makers, shareholders and consumers alike have called on firms to appoint leaders who will govern in ways that are accountable, transparent and that limit excessive risk (e.g., Fasan et al. 2016; Soltani 2014). In seeking to reduce risk, some firms have sought to better understand the personality characteristics of ethical and unethical leaders and to identify those leaders who will govern responsibly. This recent emphasis on executive personality has led to realizations regarding the harmful effects of "dark-side" personality traits, such as narcissism, on organizational outcomes (Resick et al. 2009). Conversely, research surrounding the organizational benefits of appointing women to executive roles has also gained traction in recent literature (Cook and Glass 2016; Hoobler et al. 2016; Krishnan and Park 2005). Therefore, deriving from these concerns a new consensus has emerged: narcissistic leaders are bad and women leaders are good for firms.

Narcissistic leaders can be harmful to the health of the organizations they lead (Chatterjee and Hambrick 2011; De Hoogh et al. 2015; O'Reilly et al. 2014; Olsen et al. 2014). Indeed, narcissistic CEOs tend to be associated with aggressive risk-taking and ethically questionable business practices (Amernic and Craig 2010; Chatterjee

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and Hambrick 2007; Olsen et al. 2014; Olsen and Stekelberg 2016; Zhu and Chen 2014). Further, a marked lack of ethical behavior manifests in the increased propensity for managerial fraud that is directly associated with the risk-taking and questionable behaviors espoused by narcissistic CEOs (Johnson et al. 2013; Rijsenbilt and Commandeur 2013). These findings have led observers to seek ways to weed out potentially dangerous leaders or to seek ways to better identify more responsible leaders. This has led many to claim that the answer lies in the appointment of more women to top leadership roles. Research suggests that women have a greater ethical inclination than men (Albaum and Peterson 2006; Betz et al. 1989), and there is a growing consensus that women leaders transcend the risks brought about by narcissists because they are more fair, transparent and ethical (Ko 2013). There is mounting evidence that compared to men women are more risk-averse and lead with a long-term rather than short-term outlook (Watson and McNaughton 2007). There is also mounting evidence that women leaders may be vital for firms seeking to limit corruption, risk and scandal (Prügl 2012; Roberts and Soederberg 2012; Roberts 2001). Some calls for the advancement of women to leadership roles even position women as superior leaders in terms of collaboration, emotional intelligence and ethical leadership (Sherwin 2014).

The current literature concerning CEO narcissism is predominantly grounded in the reductionist psychological paradigm, which asserts organizational outcomes are based upon the individual personality differences of leaders, such as narcissism (Chatterjee and Pollock 2017). Few studies have examined gender in the context of CEO narcissism despite the prescribed differences in leadership between men and women. The current study extends upon extant literature by applying a gendered lens to CEO narcissism in order to empirically interrogate whether the social context within which leaders operate constrain or liberate narcissistic CEOs and their impacts to the firm. We aim to analyze the conditions under which CEO narcissism leads to detrimental outcomes for the firm and whether appointing women to CEO positions mitigates the ethical concerns and risks facing firms led by narcissistic leaders. Specifically, we analyze whether narcissism is as prevalent among women CEOs as among men CEOs *and* whether narcissistic women CEOs engage more, less or equally in risk-taking and questionable behaviors as narcissistic men CEOs. Rather than assuming men and women are essentially different or that men and women necessarily bring different leadership styles and priorities to their firms, we analyze organizational-level factors that may encourage or limit the manifestation of narcissism among top leaders. We also analyze the organizational mechanism that may limit the ability of women CEOs—irrespective of personality trait—to shape organizational practice. In doing so our work advances two heretofore-distinct studies: research on the organizational impacts of narcissism and the research on the organizational impacts of women leaders.

To date, research on leader narcissism has focused almost exclusively on men because most CEOs are men. Few studies have analyzed whether CEO gender increases or decreases the risks faced by organizations led by narcissists. Filling this gap in our understanding is important for two reasons. First, there is evidence that the manifestation of narcissism varies by gender and that narcissistic behaviors are perceived differently when displayed by women than by men (Grijalva et al. 2015). Further, narcissism may manifest differently among leaders due to the social construction of gender norms and the disparate treatment between genders (Jørstad 1996). For instance, women leaders who display narcissistic personalities are perceived by men subordinates as less effective leaders than equally narcissistic men leaders (De Hoogh et al. 2015), which suggests narcissistic women leaders may face biases that narcissistic men leaders do not. This bias may be due to the fact that narcissism is compatible with norms of masculinity dominant in the USA, including aggression, competition, entitlement and self-advancement, but less compatible with dominant norms of femininity, which tend to privilege teamwork, cooperation and self-sacrifice (Pullen and Rhodes 2008).

Though women remain underrepresented in corporate leadership (Dezső et al. 2016), recent research has sought to uncover the ways in which organizations led by women CEOs differ from organizations led by men CEOs (Perryman et al. 2016). Compared to firms led by men CEOs, firms led by women CEOs are more likely to implement policies and practices associated with equity, fairness and transparency (Glass et al. 2016; Glass and Cook 2016). However, recent research also suggests that the ability of women CEOs to implement their strategic vision may be limited by their token or solo status within a corporate hierarchy (e.g., Glass and Cook 2016). Token status can limit women CEOs by limiting their access to critical resources and support and by increasing the scrutiny and negative evaluation bias they face (Acker 2006; Eagly and Karau 2002; Kanter 1977a; Ryan et al. 2016). Taken together this research suggests not only that women may lead differently than men irrespective of personality, but also that women's ability to drive corporate practice—risky, destructive or otherwise—may be limited by their structural position as low-status numerical minorities.

This study advances previous research on the organizational effects of leader characteristics by considering gender. Do women CEOs display comparable levels of narcissism as their male counterparts? And does narcissistic leadership negatively affect organizations led by women CEOs as it does in organizations led by men CEOs? Answering these questions is vital to better understanding of the organizational contexts that support sustainable and ethical leadership.

To answer these questions, we analyze firm behavior of a large sample of organizations within the Standard and Poor's (S&P) 1500. Following the procedures established in previous research (Chatterjee and Hambrick 2007, 2011; Olsen et al. 2014; Zhu and Chen 2014), our measure of CEO narcissism includes a composite measurement for CEO narcissism determined by assessing the prominence of the CEO photograph in annual reports, and the cash pay of the CEO and the non-cash pay of the CEO relative to the next highest paid executive. Drawing on social role and token theories, we examine whether and how narcissism affects firm-level practices in organizations led by women CEOs as compared to men CEOs.

Research and Theory

Organizational Impacts of Narcissism

Research on CEO narcissism can be linked to upper echelons theory, which posits that organizations are reflections of their executives' priorities and values (Hambrick and Mason 1984). According to this theory, the personality of top leaders will drive organizational outcomes because such leaders will exert influence over firm strategy, policy and practice (Hambrick 2007). As a result, this perspective warrants attention to CEO personality as a measure of key influence over organizational trajectory.

Extant research on CEO narcissism has indeed revealed that CEO personality can have significant and lasting impacts on organizations (Galvin et al. 2015). Narcissism originates in Greek mythology with the story of a youth falling in love with his own reflection. Campbell et al. (2010) identified three primary components of narcissism: the self, interpersonal relationships and self-regulation strategies. These components manifest as personality traits, which are characterized by an inflated self-view, self-absorption, arrogance, entitlement and a need for admiration (American Psychological Association 2013). By emboldening individuals with an inflated self-view, narcissism may encourage individuals to pursue top leadership positions that increase their status, visibility and authority (Campbell and Campbell 2009). Indeed, studies analyzing leader emergence have demonstrated that narcissists are more likely to be selected as leaders than those with lower levels of narcissism (Brunell et al. 2008; Nevicka et al. 2011a; b). This tendency leads CEOs to demonstrate higher rates of narcissistic traits than the general population.

Narcissistic CEOs believe that their superior personal abilities will always positively affect the outcome of business initiatives. Thus, they believe that any gamble they undertake will pay off (Chatterjee and Hambrick 2011). Narcissistic CEOs are inclined toward bold and highly visible initiatives that demonstrate their superior ability and fulfill their need for admiration (Kets De Vries and Miller 1986). Moreover, self-absorption and need for praise places organizations at risk due to the inability of the narcissist to separate self-serving behavior from organization-serving behavior (Galvin et al. 2015). Thus, narcissistic behavior may blind these leaders from the signs of organizational distress.

Research has identified a range of questionable and potentially harmful practices associated with CEO narcissism (Campbell et al. 2010; Hornett and Fredericks 2005; Chatterjee and Hambrick 2007). For instance, firms led by narcissistic CEOs are more likely to engage in unethical accounting methods that aim to increase public performance indicators, corporate tax sheltering aimed at boosting earnings and manipulating key financial measures, and inflated CEO compensation packages (Amernic and Craig 2010; Duchon and Drake 2009; Olsen et al. 2014; Olsen and Stekelberg 2016; Schwartz 1994). Narcissistic CEOs also tend to use their authority to control organizational strategies and introduce initiatives that will advance their personal interests even at the expense of organizational health. Narcissists are motivated more by rewards than punishment, which leads to higher risk-taking (Foster and Trimm 2008).

Despite these risks, narcissistic leaders are often viewed as very personable, likeable and charismatic (Maccoby 2004). Indeed, narcissistic leaders new to organizations often appear as highly driven and motivational leaders (Campbell et al. 2010). However, the lack of empathy the narcissist has poses problems over the long term. Narcissistic CEOs have been shown to be less likeable over time and no more competent than non-narcissistic CEOs (Brunell et al. 2008; O'Reilly et al. 2014). After some large failed initiatives, narcissistic CEOs often jump to other companies where they can repeat their mistakes and leave the damaged company and employees behind (Campbell et al. 2010).

Gender, Leadership and Narcissism

While many studies generalize findings to all CEOs, most research focuses largely on men CEOs simply because most CEOs are men (Zarya 2016). No previous study has sought to analyze whether narcissism is equally prevalent among women CEOs or whether and how narcissism affects firm practices in organizations led by narcissistic women. This gap is particularly notable given that rates of narcissism tend to vary by gender (De Hoogh et al. 2015; Grijalva et al. 2015) and that leader gender impacts organizational practice (e.g., Glass et al. 2016). Researchers have largely ignored the prevalence and the effects of female narcissism at the CEO level. Our study aims to fill this gap by analyzing gender differences in the manifestation and impacts of

CEO narcissism. To frame our analysis, we draw on social role and token theory to consider gender differences in the leadership trajectory of CEOs and the likely impacts of CEO narcissism in firms led by women as compared to firms led by men. Specifically, we draw on a large body of research on the factors that shape women's path to leadership as well as on the challenges women leaders face "above the glass ceiling." We then derive testable hypotheses regarding CEO gender, narcissism and firm outcomes.

Social Role Theory and Gendered Paths to Leadership

Due to the increased opportunity for status, visibility and power offered by top positions, narcissists are naturally drawn to organizational leadership roles (Campbell and Campbell 2009). However, the construction of a feminine gender identity and the ways in which feminine behavior is rewarded or penalized in organizations is often at odds with narcissistic personality traits. Social role theory provides a framework for examining the behavior and performance expectations for female CEOs. Social role theory posits that the orientation individuals bring to an organization is shaped by their position within the organizational hierarchy as well as by existing social roles and expectations related to their social group (Eagly and Karau 2002; Eagly et al. 2000). Because women face significant limitations on their ability to display typical leadership qualities such as dominance, competitiveness and assertiveness, women's path to top leadership is constrained and distinct from the path that men leaders follow (Glass and Cook 2016). Thus, we predict that men and women are selected for leadership based on different characteristics, leading to differences in the manifestation of narcissism among men and women CEOs.

Gender role expectations are constructed based on the interaction between the gendered experience of the individual and the societal expectation for their position within the group or organization (Correll and Ridgeway 2006). This means that in order to emerge as successful corporate leaders, women must navigate often-competing social expectations for gender and for elite leadership positions—a pathway scholars term the double bind (e.g., Eagly and Carli 2007). While leaders are expected to display competitiveness, assertiveness and dominance, women are expected to be deferential, self-sacrificing and compliant (Eagly and Carli 2007; Schein 1973). Because social role expectations for leaders are incompatible or inconsistent with expectations for appropriate feminine behavior, women who violate gender expectations through displays of self-promotion or assertiveness often face backlash (Eagly and Karau 2002; Livingston et al. 2012; Rudman and Glick 2001).

Gender role expectations regarding appropriate displays of emotion are particularly salient in high-status positions and leadership roles, creating a complex environment where women must constantly monitor how much and what types of emotions to exhibit (Brescoll 2016). In her comprehensive analysis of gender stereotypes among top leaders, Brescoll (2016) concluded that women leaders risk penalties for even minor displays of dominance and for failing to emote more stereotypically feminine qualities such as warmth and passivity. Whereas men executives are rewarded for public displays of anger, women executives are often punished for similar displays; angry men are perceived as demanding and deserving, while angry women are viewed as hysterical, out of control or too "emotional" (Brescoll and Uhlmann 2008). So too with self-promoting behaviors, typical among narcissists: while men are rewarded for self-promotion, self-promoting women are evaluated negatively (Heckman et al. 2014; Livingston et al. 2012; Rudman 1998).

Social role expectations mean that women who ascend to top leadership roles tend to be those capable of successfully navigating this double bind. In-depth interviews with top executives suggest that women who go beyond the glass ceiling are those who successfully navigated masculine expectations of "good leadership" while adhering to feminine expectations of dress, appearance and interaction (Muhr 2011). A recent content analysis of CEO biographies finds that successful women leaders are those who are able to achieve a "successfully balanced organizational femininity" in which feminine behavior is balanced with appropriate displays of authority (Adamson 2017). Importantly, women are evaluated and scrutinized along the path to leadership based on their ability to achieve such a balance (Mavin and Grandy 2012), and women unable to achieve this balance, including those who display unacceptable levels of assertiveness, dominance and/or confidence, face penalties in the form of negative evaluations, downward or blocked mobility and a loss of status (Artz et al. 2016; Brescoll and Uhlmann 2008; Eagly et al. 1992). In fact, there is mounting evidence that women CEOs may be selected specifically for stereotypically feminine qualities. Research on the glass cliff reveals that women are significantly more likely than men to be appointed CEO during times of crisis (Cook and Glass 2015; Haslam and Ryan 2008; Ryan and Haslam 2005, 2007). At least part of the appeal is women's presumed emotional sensitivity, strong interpersonal skills and a collaborative leadership style—all qualities assumed to benefit organizations during times of crisis (Bruckmüller and Branscombe 2010).

Taken together this research suggests that men and women experience very different paths to leadership. While men are rewarded and promoted based on stereotypical masculine qualities such as dominance, assertiveness and confidence, women are penalized for these qualities because they are viewed as violations of appropriate norms of femininity. Unlike men, women who display narcissistic personality traits are weeded out, downgraded or otherwise penalized, while men who display the same traits are rewarded and promoted. Non-narcissistic women—i.e., women who perform leadership in more gender-appropriate ways—are viewed as more palatable by others and thus given more opportunities. In fact, narcissistic women may face more severe penalties than other women. Not only do these leaders fail to conform to gender stereotypes associated with femininity, but they also display undesirable personality traits associated with stereotypically masculine leadership roles (De Hoogh et al. 2015). Thus, women who exhibit narcissistic personality traits will demonstrate a higher level of gender role incongruity than their non-narcissistic peers and will be more likely to be the target of agency-related penalties, including penalties that limit their ability to ascend to top leadership roles. Therefore, we predict the following:

H1 Women CEOs will be less narcissistic than men CEOs.

Token Theory and Impacts of Narcissism on Organizations

While we predict that women CEOs will be less narcissistic than men CEOs, in this section we consider whether narcissistic women CEOs will have the same impact on their organizations as narcissistic men CEOs. Previous research on narcissism found that attention-seeking and self-serving behaviors of narcissistic CEOs influence strategic decision making (Chatterjee and Hambrick 2007). Because narcissistic CEOs see the organization as an extension of themselves (Hambrick and Mason 1984), they tend to seek out extreme and grandiose strategies that put their organizations at risk (Chatterjee and Hambrick 2007). Absent constraints on their behavior, therefore, narcissistic CEOs will be more likely to pursue risky or potentially damaging practices and behaviors. However, token theory suggests that women will face constraints that may limit their ability to drive organizational initiatives, particularly those that are risky, novel or potentially harmful to the organization. Thus, even when narcissistic women do reach the top of their organizations, their behavior will be more constrained and their ability to advance their strategic or personal goals more limited compared to their male counterparts. As a result of these constraints, we predict that narcissistic women CEOs—unlike their male counterparts—will be unable to pursue high risk or questionable business practices.

Token theory suggests that the numerical composition of a position determines an individual's status within the organization (Kanter 1977a). Numerical minorities (or "tokens") enjoy lower status, prestige and influence compared to members of the numerical majority. By virtue of their underrepresentation, tokens experience heightened visibility, exaggerated stereotypes, performance pressures and negative evaluation bias.

Such pressures are exacerbated when the numerical minority is comprised of a group with lower social status compared to the numerical majority (Chambliss and Uggen 2000; Yoder 1991). Thus, women's gender status—in addition to their status as numerical minorities in top executive roles—exacerbate token pressures because women tend to have lower status than men in society and in work organizations (Yoder 1991, 1994). As a result, women tokens experience greater pressures and reduced influence compared to men tokens due to the interaction between gender and numerical representation (e.g., Budig 2002; Williams 1992).

There are at least three ways in which narcissistic women CEO's token status will constrain their ability to advance high-risk strategies. First, token leaders often experience resistance from peers and subordinates that can limit their access to information, networks and resources necessary to lead effectively (Acker 2006; Eagly and Karau 2002; Glass and Cook 2016; Taylor 2010). Extant research on women leaders in male-dominated contexts finds that they often perceive of themselves as outsiders on the inside (Davies-Netzley 1998; Moore 1988), reporting lower levels of organizational support than men (Konrad et al. 2010). Women leaders also tend to be excluded from social and professional networks and thus denied many valuable sources of relevant information (Glass and Cook 2016). Women CEOs often lack access to financial authority as well, which can limit their ability to drive strategic change (Collins 1997; Smith 2005). Indeed, women CEOs are much less likely than their male peers to enjoy dual appointments (i.e., when CEO also serves as Chair of the Board) (Glass and Cook 2016). This means that women CEOs—irrespective of their personality—have less authority over strategic planning and are less influential over board decisions. As a result, evidence suggests that, compared to men CEOs, women CEOs are more prudent with organizational resources, more constrained in their strategic outlook and more reluctant to "rock the boat" by introducing novel or risky initiatives (Hermalin and Weisbach 1998; Wintoki et al. 2012).

In addition to resistance, women token CEOs are also more vulnerable than men CEOs to intense scrutiny and negative evaluation bias. A recent study of press coverage of women CEOs found that women leaders' personal and family lives receive much more intense media scrutiny than men leaders' (Rockafeller Foundation 2016). Compared to men CEOs, women are also more likely to be blamed when organizational performance suffers and less likely to be praised when performance is strong (Albanesi et al. 2015). A recent study based on in-depth interviews with top corporate leaders reveals that this level of scrutiny and negative evaluation impacts how women CEOs approach their roles (Glass and Cook 2016). Not only do women CEOs engage in hyper-self-monitoring of their dress and interaction style, they also bear a burden of perfection. They perceive that one misstep—one public display of a perceived failure—could derail their career (Glass and Cook 2016).

Finally, perhaps as a result of the intense level of scrutiny and negative evaluation bias, women CEOs tend to engage in a degree of self-monitoring that can limit their ability to drive organizational change. For example, in contrast to men, women in authority do not increase how much they contribute to discussions when they are in the minority. While men with authority tend to talk significantly more in meetings and discussions than men without authority, women in authority do not out of fear that they will experience backlash (Brescoll 2012). These concerns are well founded: women executives who speak more often than their peers are evaluated negatively (Brescoll 2012). A study of women lawmakers found that token women officials are less likely to advocate for their positions and are less effective advancing their initiatives (Karpowitz et al. 2012). Indeed, there is evidence that when women leaders are underrepresented within organizations, they withdraw from full engagement in decision making and may even underperform relative to their skills and abilities (Inzlicht and Ben-Zeev 2003; Edmonson 2002; Ely et al. 2012).

In combination, these pressures significantly reduce the power token leaders—particularly women—can exercise over an organization (Heilman et al. 2004; Kanter 1977a; Thompson and Sekaquaptewa 2002). As a result, token theory predicts that women leaders—irrespective of personality traits—will be less capable of initiating organizational change, more likely to maintain the status quo, and less influential over organizational outcomes (Eagly et al. 2003; Fiske 2002; Nesbitt 1997). Token theory predicts that narcissistic women CEOs will face significant constraints in terms of organizational resources and support from peers, superiors and subordinates as scrutiny and negative evaluation bias that results in self-limiting behaviors. These pressures increase the likelihood that narcissistic women CEOs may be limited in successfully advocating or advancing policies or practices that could put the firm at risk. Therefore, we predict the following:

H2 Gender will moderate the effect of narcissism on risk-taking such that narcissistic women CEOs will engage in less risk-taking than narcissistic men CEOs.

H3 Gender will moderate the effect of narcissism on questionable behaviors such that narcissistic women CEOs will engage in fewer questionable behaviors than narcissistic men CEOs.

Methods

Sample and Data

Our sample consists of the CEOs of companies within the Standard and Poor's 1500 index (S&P 1500). Both men and women CEOs were queried from the ExecuComp database, which is available through Wharton Research Data Services (WRDS). CEO data including gender, age, and compensation, and executive team's salary information were gathered from ExecuComp. This resulted in an initial sample of 1515 men CEOs and 161 women CEOs. Additional firm-level information, such as industry codes, abnormal accounting measures, and sales and expenditure data, was added to the dataset from the CompuStat database, also available from WRDS. We dropped all financial firms as these firms are commonly examined within industry due to significant differences in the composition and nature of their balance sheets and income statements. Company annual reports were accessed through the Mergent database or corporate websites.

We also faced data restrictions related to our key variable of interest, narcissism. Following Chatterjee and Hambrick's model (2007), the primary criteria for inclusion are that CEOs must have four or more years of tenure in their position with the given firm and all firms must have publicly available financial data. The 4-year tenure requirement allows for narcissistic personality tendencies to be measured in years two and three of CEO tenure. Year one of CEO tenure is omitted due to abnormalities that may arise through CEO succession. Since narcissism is a stable personality construct (Chatterjee and Hambrick 2007; Olsen et al. 2014) and temporally invariant, the components for the narcissism measure were averaged between years two and three of CEO tenure to construct the overall narcissism composite score. After imposing the various data restrictions, our sample includes 101 women CEOs and 1173 men CEOs. We constructed a panel dataset comprised of these CEOs with their tenure year four onward. We have a total of 5939 firm-year observations, of which 391 are from women CEOs and 5548 from men CEOs.[1] We note that our sample size does vary in each of our hypothesis tests depending on the data requirements for each test.

[1] By comparison, Chatterjee and Hambrick (2007) had a sample of 352 firm-year observations, Olsen et al. (2014) had 1118 firm-year observations, and Judd et al. (2017) had 3759 firm-year observations. Thus, our sample is large for this research stream.

Measures

Predictor Variable

We draw upon unobtrusive measures for narcissism utilized in previous studies in order to determine the level of narcissism among our sample (Chatterjee and Hambrick 2007, 2011; Olsen et al. 2014; Olsen and Stekelberg 2016; Rijsenbilt and Commandeur 2013). CEO narcissism is measured through a composite score based upon the prominence of the CEO photograph in the annual report, the CEO's relative cash pay to the next highest paid executive and the CEO's relative non-cash pay to the next highest paid executive. The CEO relative cash pay is calculated as the ratio of the CEO's salary and bonus to the second highest paid executive's salary and bonus. The relative non-cash pay is calculated as the ratio of the CEO's total compensation less his or her cash pay relative to the next highest paid executive's total compensation less cash pay. CEO pay has been found to be a reliable indicator for CEO narcissism within prior research, with CEOs higher in narcissism having higher compensation and greater disparity between the CEO pay and the rest of the executive team (O'Reilly et al. 2014).

Not all companies include a CEO photograph in their annual report, and when a CEO photograph is included the composition and prominence varies (Olsen et al. 2014). The CEO generally has strong opinions and high control over how they are portrayed in the company annual report (Chatterjee and Hambrick 2007). Therefore, we would expect a CEO high in narcissism to have high visibility within the annual report. The CEO photograph within the annual report is considered an appropriate measure for narcissistic personality tendencies due to the attention and recognition it bestows upon the CEO. The photograph prominence was coded from one to five according to the method used by Olsen et al. (2014) as follows: one point for no CEO photograph; two points for a photograph of the CEO pictured with other executives; 3 points if the CEO was photographed alone and the photograph occupied less than half the page; four points if the CEO was photographed alone and the photograph occupied more than half of the page, but not a full page; and 5 points if the CEO was photographed alone and the photograph occupied a full page in the annual report.

The CEO photographs from the annual reports were coded and reviewed by two separate raters with inter-rater reliability of 95%. The CEO photograph measure, the relative cash pay and the relative non-cash pay were averaged for years two and three of CEO tenure. Following prior research, we standardized these measures and used their factor loadings to create our narcissism measure.

Dependent Variables

Both of our dependent variables, risk-taking and questionable behavior, have been used in prior studies examining narcissistic CEO behavior (Chatterjee and Hambrick 2011; Olsen et al. 2014). We opted to examine the differences between narcissistic men and women CEOs using these established measures so as to provide a benchmark for our findings in relation to existing literature.

Risk-Taking Risk-taking was calculated as the natural logarithm of the sum of expenditures in research and development, capital expenditures and acquisitions. This measure has been validated as capturing the three main components of risk-taking spending through prior research (Beckman and Haunschild 2002; Chatterjee and Hambrick 2007; Zhu and Chen 2014).

Questionable Behavior Questionable behavior was measured by an index of abnormal accounting practices. Specifically, we collected abnormal cash flow and operations, abnormal production and abnormal discretionary expenditures. These three measures have been used in prior research, and we followed the suggested calculations (Cohen and Zarowin 2010; Roychowdhury 2006). Specifically, we use equations 3, 6 and 8 from Cohen and Zarowin (2010). Cohen and Zarowin (2010) initially generated the normal levels of cash flow and operations, production and discretionary expenditures using a model developed by DeChow et al. (1998). From the normal estimates, their equations 3, 6 and 8 modeled the actual level minus the normal level to determine the abnormal value. For example, equation 3 determines the abnormal cash flow and operation (CFO) for the organization by subtracting the normal CFO from the actual CFO. The models are estimated by industry-year using two-digit standard industrial classification (SIC) codes. Next, we multiplied the abnormal cash flow and operations and the abnormal discretionary expenditures by negative one so the higher number represented more questionable behaviors. To create the index measure of abnormal accounting practices, we standardized the three items to maintain equal weighting and then conducted a simple summation.

Control Variables

We include several control variables in our models based on prior research. The size of the firm was determined by the total number of employees of the firm, and firm performance was determined by return on assets (ROA) reported as the actual percentage for the firm. Controlling for the size of the firm is important given that larger firms are more visible and have a higher accountability to shareholders (Arthur and Cook 2009). Further, strong firm performance may enable the firm to provide higher

Table 1 Descriptive statistics

		1	2	3	4	5	6	7	8	9
Panel A: Correlations										
1	Narcissism									
2	Age	**0.04**								
3	CEO tenure	0.02	**0.29**							
4	ROA	− 0.01	0.00	**0.03**						
5	Firm size	**0.05**	**0.05**	− 0.01	**0.05**					
6	Leverage	0.01	0.01	0.02	0.00	0.00				
7	BTM	0.01	0.01	0.01	− 0.01	− 0.01	0.00			
8	QB Index	0.00	− 0.02	− 0.02	**− 0.05**	0.01	0.00	0.01		
9	Risk-taking	**0.13**	**0.09**	**− 0.03**	**0.12**	**0.34**	0.01	**− 0.03**	0.02	
10	Gender	**− 0.03**	**− 0.06**	0.01	**− 0.03**	− 0.02	0.00	0.01	**− 0.03**	**− 0.12**

Variable	Full sample			Female CEO sample			Male CEO sample		
	Obs	Mean	SD	Obs	Mean	SD	Obs	Mean	SD
Panel B: Descriptive statistics									
Narcissism	5939	0.01	1.31	391	− 0.14	1.87	5548	0.02	1.26
Age	5939	54.33	6.27	391	53.02	5.74	5548	54.42	6.29
CEO tenure	5939	7.03	3.29	391	7.12	7.52	5548	7.03	2.76
ROA	5939	0.05	0.10	391	0.04	0.11	5548	0.05	0.10
Firm size	5939	28.91	81.49	391	22.20	47.86	5548	29.38	83.33
Leverage	5938	1.76	36.62	391	1.52	5.32	5447	1.78	37.86
BTM	5811	0.43	3.76	370	0.57	0.71	5441	0.42	3.88
QB Index	5939	− 0.01	0.57	391	− 0.06	0.72	5548	0.00	0.55
Risk-taking	5901	5.35	1.80	390	4.53	2.00	5511	5.41	1.77
Gender	5939	0.07	0.25						

Correlations in bold are significant at $p < 0.05$

levels of resources and more discretion for decision making, which could affect the actions of the token or solo CEO (Cook and Glass 2011). Firm financial leverage, measured as a firm's debt to equity ratio, along with the firm' book-to-market ratio is important to control as they may be indicative of risky behaviors. We also controlled for executive age and tenure. Age and tenure length can cause a variation in the CEOs tendency to engage in risky initiatives and grandiose behavior (Chatterjee and Hambrick 2007). The models used to create our questionable behavior measure are estimated using industry-year. As such, industry controls do not need to be included as the effect of industry has already been taken into account. However, following prior research (Roychowdhury 2006; Olsen et al. 2014), we do include a control for manufacturing (SIC 20–39) due to their production intensity making them more susceptible to our abnormal production measure. We note that our inferences remained unchanged for our risk-taking and questionable behavior models using two-digit SIC industry dummies. For ease of exposition, we include only the manufacturing control variable in our tabulated results.

Analyses

Our first hypothesis is tested using ANOVA and Cohen's *D* to assess the difference in means from two unequal sample sizes. Given the unequal sample sizes, we also performed a matched-sample test of Hypothesis 1. To test Hypotheses 2 and 3, we employed generalized estimating equations and conducted a panel regression. We specified a Gaussian (normal) distribution with an identity link function. This same approach has been used in prior studies examining the effect of CEO narcissism (Olsen et al. 2014; Chatterjee and Hambrick 2007, 2011). We also used a random-effects model because like Chatterjee and Hambrick (2011) we have a large number of unique panels (CEOs) but a small number of years for which they are observed.

Table 2 Narcissism and gender comparison

	Female CEOs			Males CEOs			Difference in means	*p* value
	N	Mean	SD	*N*	Mean	SD		
Panel A: Full-sample comparison								
Narcissism	*101*	*– 0.356*	*1.108*	*1173*	*0.006*	*1.253*	*0.362*[a]	*0.002*
High/low narcissism	101	0.386	0.489	1173	0.502	0.500	0.116	0.024
Photograph size	101	2.277	1.011	1173	2.571	0.957	0.294	0.006
Relative cash pay	101	1.741	0.888	1173	1.884	0.881	0.143	0.123
Relative non-cash pay	101	2.216	1.684	1173	2.421	2.279	0.205	0.257
Panel B: Matched-sample comparison								
Sample size = 101 female CEOs, 101 male CEOS								
Propensity score factors: Firm size, industry, ROA, age								
Average treatment effect: 0.358; $p = 0.001$								

[a]Cohen's *d* comparison of means has a 95% confidence interval of – 0.497 to – 0.084, indicating a statistically significant difference at $p < 0.05$

Results

Descriptive statistics and correlations of the examined variables are presented in Table 1. Related to Hypothesis 1, findings suggest that narcissism is negatively related to gender (women coded as 1) in our univariate comparisons (refer to Panel A) and that women CEOs have a lower mean narcissism score than men CEOs (refer to Panel B). Results also illustrate significant correlations between gender and questionable behavior and risk-taking, and a significant correlation between narcissism and risk-taking. Panel B of Table 1 shows that the average value for these two measures is higher for men CEOs than for women CEOs. The correlations and descriptive statistics are informative, but do not directly test our interactive hypotheses and will be addressed below in multivariate analysis.

Hypothesis 1 predicts that women CEOs will be less narcissistic than men CEOs. Findings suggest support for this hypothesis. Specifically, in the mean comparison within the panel data, women CEOs scored substantially lower on the narcissism measure than men CEOs (– .356 vs. .006). In further analysis of these groups, using ANOVA with Welch's adjustment to help account for unequal sample sizes, results suggest that the two are statistically different ($p = 0.002$). The Cohen's *D* effect size test provides a 95% confidence interval of – 0.497 to – 0.084, suggesting statistical difference at $p < 0.05$. Furthermore, as an additional analysis, we conducted a matched-sample comparison. Panel B of Table 2 shows the results of a propensity scoring matched-sample analysis based on the following factors: firm size, 2-digit SIC industry classification, ROA and age. Findings were consistent across the matched-sample and full-sample analyses and suggest statistically significant differences. Combined, the full analysis and the matched-sample analysis support Hypothesis 1 and suggest that women CEOs are indeed less narcissistic than men CEOs.

Hypothesis 2 suggests that gender will moderate the effect of narcissism on risk-taking such that narcissistic women CEOs will engage in less risk-taking than narcissistic men CEOs. Table 3 presents results from our panel regression. The key variable of interest is the interaction term between gender and narcissism. In support of Hypothesis 2, results show that the interaction is negative and statistically significant with risk-taking ($p = 0.023$). This suggests that the effect of narcissism on risk-taking is attenuated by gender such that more narcissistic women CEOs engage in less risk-taking than more narcissistic men CEOs. Columns 2 and 3 of Table 3 present cross-sectional analyses by gender. These results confirm that narcissism has a positive and statistically significant effect on risk-taking in our men CEO sample, but not in our women CEO sample. This suggests that the interaction of gender and narcissism is being driven by more narcissistic men CEOs engaging in significantly more risk-taking.

And Hypothesis 3 suggests that gender will moderate the effect of narcissism on questionable behaviors such that narcissistic women CEOs will engage in fewer questionable behaviors than narcissistic men CEOs. Table 4 presents results from our panel regression where, again, the interaction term of gender and narcissism is the variable of interest. In support of Hypothesis 3, findings illustrate a negative and statistically significant effect of the interaction on questionable behaviors ($p = 0.022$). This result, similar to our risk-taking result, indicates that the effect of narcissism on questionable behaviors is attenuated by gender such that more narcissistic women CEOs engage in fewer questionable behaviors than narcissistic men CEOs. Column 2 and 3 of Table 4 present cross-sectional analyses by gender. In contrast to our risk-taking

Table 3 Risk-taking

Dependent variable: risk-taking						
Panel regression using general estimating equations						
Variable	Full sample		Female sample		Male sample	
	Coefficient	*p* value	Coefficient	*p* value	Coefficient	*p* value
CEO narcissism	0.139	0.000	*0.021*	*0.320*	*0.144*	*0.000*
Gender	− 0.571	0.001				
Gender × CEO narcissism	*− 0.115*	*0.023*				
Executive age	0.041	0.000	0.074	0.010	0.023	0.004
CEO tenure	0.014	0.095	− 0.075	0.006	0.025	0.004
Return on assets	0.382	0.001	0.890	0.000	0.347	0.004
Firm size	0.007	0.000	0.018	0.000	0.007	0.000
Financial leverage	0.000	0.613	− 0.006	0.181	0.000	0.615
Book-to-market	0.002	0.630	0.228	0.000	0.001	0.744
Manufacturing	0.209	0.028	0.621	0.089	0.144	0.143
Intercept	3.393	0.000	0.380	0.000	3.732	0.000
Firm-year observations	5789		369		5420	
CEOs	1094		85		1009	

Table 4 Questionable behavior

Dependent variable: questionable behavior						
Panel regression using general estimating equations						
Variable	Full sample		Female sample		Male sample	
	Coefficient	*p* value	Coefficient	*p* value	Coefficient	*p* value
CEO narcissism	− 0.002	0.694	*− 0.054*	*0.010*	*− 0.003*	*0.645*
Gender	− 0.081	0.007				
Gender × CEO narcissism	*− 0.039*	*0.022*				
Executive age	− 0.001	0.250	− 0.002	0.837	− 0.001	0.308
CEO tenure	− 0.002	0.476	0.008	0.239	− 0.005	0.102
Return on assets	− 0.274	0.000	0.107	0.755	− 0.301	0.000
Firm size	0.000	0.327	0.001	0.338	0.000	0.359
Financial leverage	0.000	0.800	0.007	0.305	0.000	0.809
Book-to-market	0.001	0.633	0.018	0.752	0.001	0.617
Manufacturing	− 0.018	0.233	− 0.066	0.376	− 0.015	0.313
Intercept	0.026	0.704	− 0.062	0.874	− 0.005	0.065
Firm-year observations	5810		370		5440	
CEOs	1094		85		1009	

result, however, findings show a negative and statistically significant effect on questionable behaviors in our women CEO sample, but not in our men CEO sample. This suggests that our interaction term is being driven by more narcissistic women CEOs engaging in significantly fewer questionable behaviors.

In sum, our results support Hypothesis 1, Hypothesis 2, and Hypothesis 3. Findings indeed demonstrate that women CEOs are less narcissistic than men CEOs. Additionally, our results suggest that gender moderates the effect of narcissism on risk-taking and questionable behaviors such that narcissistic women CEOs engage in less of these activities than narcissistic men CEOs.

Discussion

The current study seeks to advance scholarship on ethical leadership by incorporating gender into the growing body of work analyzing the effect of CEO personality on organizational practice. Scholars have become increasingly concerned with the individual, organizational and structural factors that facilitate organizational crises. One important stream of research concerns the impact of leader characteristics on organizational outcomes. Mounting evidence suggests that narcissism among top leaders is associated with unethical behavior leading to organizational practices that place companies at greater risk for crisis, scandal or fraud (Chatterjee and Hambrick 2011; De Hoogh et al. 2015; O'Reilly et al. 2014; Olsen et al. 2014; Rijsenbilt and Commandeur 2013). Despite these insights, little previous research has analyzed whether CEO gender increases or decreases the risks faced by organizations led by narcissists.

To fill this gap, the current study analyzed the rate of narcissism among women CEOs, as compared to men CEOs, and the moderating impact of gender on related firm outcomes. Congruent with the predictions of social role theory (Eagly and Carli 2007; Eagly and Karau 2002), we find that the rates of narcissism among men and women CEOs are statistically different. That is, women CEOs are less likely to be narcissistic than men CEOs. Thus, women CEOs are more similar to women in general in that they are less narcissistic than men. Although it may be reasonable to believe that top women leaders are more likely than other women to be narcissists given the status, prestige and power the leadership positions offer, findings suggest otherwise. Women CEOs instead are bound by societal gender expectations that limit the mobility of those espousing strongly narcissistic personality traits. Women leaders are expected to act according to the norms of femininity with warmth and compassion.

The remainder of our analysis focused on the moderating effect of gender on CEO narcissism in relation to organizational practices. Drawing on token theory (Kanter 1977a, b), we developed hypotheses that predicted gender would moderate the organizational impact of CEO narcissism in that women would be more limited than men in their discretion to engage in risky or questionable behaviors. Our analysis indeed supported our assertion that gender moderates the relationship between CEO narcissism and our outcome variables of risky behavior and questionable business practices; however, the exact relationship is a bit more nuanced. Specifically, the interaction between gender and narcissism on risk-taking is significant because men CEOs high in narcissism are substantially more risk-taking than women CEOs. And the interaction between gender and narcissism on questionable behaviors is significant because women CEOs high in narcissism are substantially less likely to engage in questionable business practices than men CEOs. Consistent with the predictions of token theory (Kanter 1977a, b), we find that gender indeed mitigates the negative effects of narcissism in regard to risk-taking and questionable business practices.

Overall our findings suggest important gender differences in the effect of leader personality on organizational outcomes. While previous research found that narcissism is associated with a greater range of questionable business practices, few previous studies considered gender differences at a top leadership level. Our study suggests that unlike men, narcissistic women CEOs do not place their firms at greater risk due to risky or questionable business practices. This finding is aligned with previous work that suggests that women have a greater ethical inclination than men (Albaum and Peterson 2006; Betz et al. 1989), are more compliant to rules and regulations than men (Baldry 1987) and are more committed to fairness and transparency than men (Glass et al. 2016). Importantly, when women CEOs display narcissistic personality traits, women are less likely to put their organizations at risk compared to men.

These findings have at least two implications for theory, research and practice. First, previous research contrasts the potential benefits of narcissism among leaders against the potential harmful effects of leader narcissism. For instance, Maccoby (2004) is cautious about efforts to eliminate narcissistic personality traits from corporate leaders because there are some narcissistic traits that may advance organizational goals. Scholars have pointed to innovation, strategic risk-taking and visionary leadership as potential benefits of narcissistic leaders (Hogan and Hogan 2001; Maccoby 2004). However, our analysis confirms previous findings regarding the significant constraints women CEOs face before and after their appointments. Not only are women much more likely than men to be appointed to organizations in crisis (Ryan et al. 2016; Cook and Glass 2014), but post-appointment they lack the support and authority to implement their strategic vision (Glass and Cook 2016).

The primary difference between narcissistic men and women CEOs is their token status and their accountability to entrenched cultural norms and stereotypes. Recent literature suggests that narcissistic leaders need for acclaim and domination compels them to pursue visibility and status among the media and the corporate elite (Chatterjee and Pollock 2017). Women's numerical minority status as corporate leaders, combined with the greater agency penalties narcissistic women are likely to face for violating gender role expectations, limits their ability to gain celebrity status or to impose their strategic vision on their organizations. The double bind placed upon narcissistic women leaders due to increased visibility from their token status and the negative evaluation bias within the firm may decrease the necessary organizational support and employee buy-in necessary to enact strategic change.

Our findings suggest that narcissistic women CEOs are unable to affect their organization's policies and practices to the same extent that narcissistic men CEOs are. Women's structural position limits the extent to which they can advance their self-interest through shifts in organizational strategy and practice and thereby put their companies at risk. While there are certainly benefits to the constraints on narcissistic CEOs, our findings provide further evidence that women CEOs lead organizations with fewer degrees of freedom than their male peers. Our findings also suggest that firms led by narcissistic women CEOs experience none of the risks but also likely benefit from none of rewards, including innovation, strategic risk-taking and visionary leadership.

Second, the silver lining of the constraints women leaders face is that narcissistic women CEOs are unable to place their organizations at risk to the same degree as narcissistic men. Several scholars, policy-makers and corporate observers have sought ways of limiting CEO power so as to limit the potential for scandal, fraud or other organizational crises. Our findings related to women CEOs suggest that scrutiny and accountability may serve as mechanisms to limit the ability of narcissistic CEOs to pursue unethical and detrimental business practices. While narcissism tends to encourage similar self-aggrandizing behaviors among women and men, women CEOs are less capable of imposing their will on the firm. As a result, their organizations face a lower risk of damage. As noted above, this likely reflects a range of constraints on the ability of women CEOs to implement organizational change. However, our findings suggest that a mechanism to limit narcissistic CEOs from damaging firm performance and/or firm reputation may include additional layers of scrutiny of CEO behavior. If equitably applied to both men and women CEOs, greater levels of scrutiny, transparency and accountability may limit the ability of narcissistic CEOs to place their organizations at risk. Of course such scrutiny would not be without trade-offs; by increasing scrutiny of CEO behavior, firms may also limit CEO's ability to single handedly pursue strategic risk-taking and visionary leadership, potential benefits of narcissistic leadership (Hogan and Hogan 2001; Maccoby 2004).

Finally, our findings extend upon recent research by Chatterjee and Pollock (forthcoming), which examines the social context in which CEO narcissism operates. We answer the call by the authors to look beyond the mere examination of whether CEO narcissism impacts the firm to examine the conditions under which CEO narcissism manifests within the firm, for better or worse.

Conclusion

While this study makes an important contribution to our understanding of the impact of CEO gender and personality on organizational practice, the current study suffers from limitations that can be addressed in future research. First, the current study is focused on large corporate firms. Less known are the impacts of leader narcissism on organizational practices in other firms, including nonprofit and governmental firms. For example, is narcissism as common in non-corporate settings, such as those in the political, military and educational realms? Are narcissistic leaders in those realms more or less capable of exerting their self-interest on their organizations? Finally, are there important differences in the impact of narcissistic women and men leaders in those arenas?

Our measures of narcissism include well-established measures used in previous research and as such these measures allow us to situate the organizational impact of narcissistic women CEOs within a larger body of research on narcissism, ethical leadership and organizations. However, these indicators are indirect and include publicly available indicators. Psychologists and other health professionals have developed more direct measures of narcissism that require interaction with individuals in an interview or survey format. More recent research has also identified historiometric measures of leader differences that may also be relevant to understanding gender differences in leader personality (e.g., Spangler et al. 2012). Future research may seek to pursue innovation in existing measures of narcissism. Doing so would enable empirical specification regarding various dimensions of narcissism and their impacts on organizational practice.

Finally, in addition to further specifying measures of narcissism, future research can also further probe the organizational mechanisms that shape the ways in which narcissism manifests (or does not manifest) within organizations. For example, previous research suggests that the integration of women within leadership ranks can reduce the salience of gender stereotypes, limit token pressures women face and enable women to successfully promote organizational change (e.g., Ely 1995; Ely and Thomas 2001). Future research can build on the current study by analyzing the influence of narcissistic women CEOs in organizations where women are well represented on the board of directors and/or among the top management team. An extension of our analysis along these lines would help specify the compositional mechanisms that limit or enable narcissistic women leaders to shape organizational outcomes. Additionally, expanding the analysis to include the potential positive side of highly narcissistic women CEOs could contribute to research in leader emergence and the corresponding organizational outcomes.

Compliance with Ethical Standards

Conflict of interest Each author declares that he/she has no conflict of interest.

Ethical Approval This article does not contain any studies with human participants performed by any of the authors.

References

Acker, J. (2006). Inequality regimes: Gender, class and race in organizations. *Gender and Society, 20,* 441–464.

Adamson, M. (2017). Postfeminism, neoliberalism and a 'successfully' balanced femininity in celebrity CEO autobiographies. *Gender, Work & Organization, 24*(3), 314–327.

Albanesi, S., Olivetti, C., & Prados, M. J. (2015). *Gender and dynamic agency: Theory and evidence on the compensation of top executives*. Federal Reserve Bank staff report. Available at: https://www.newyorkfed.org/medialibrary/media/research/staff_reports/sr718.pdf

Albaum, G., & Peterson, R. A. (2006). Ethical attitudes of future business leaders. *Business and Society, 45*(3), 300–321.

American Psychological Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: American Psychological Association.

Amernic, J. H., & Craig, R. J. (2010). Accounting as a facilitator of extreme narcissism. *Journal of Business Ethics, 96*(1), 79–93.

Arthur, M. M., & Cook, A. (2009). Shareholder returns for a catalyst award. *Group and Organization Management, 34*(4), 432–448.

Artz, B., Goodall, A., & Oswald, A. (2016). *Do women ask?* IZA discussion paper no. 10183. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2840107

Baldry, J. C. (1987). Income tax evasion and the tax schedule: Some experimental results. *Public Finance, 42*(3), 357–383.

Beckman, C. M., & Haunschild, P. R. (2002). Network learning: The effects of partners' heterogeneity of experience on corporate acquisitions. *Administrative Science Quarterly*, *47*(1), 92. https://doi.org/10.2307/3094892.

Betz, M., O'Connell, L., & Shepard, J. M. (1989). Gender differences in proclivity for unethical behavior. *Journal of Business Ethics, 8*(5), 321–324.

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

Brescoll, V. L. (2016). Leading with their hearts? How gender stereotypes of emotion lead to biased evaluations of female leaders. *The Leadership Quarterly, 27*(3), 415–428.

Brescoll, V. L., & Uhlmann, E. L. (2008). Can an angry woman get ahead? Status conferral, gender, and expression of emotion in the workplace. *Psychological Science, 19,* 268–275.

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

Brunell, A. B., Gentry, W. A., Campbell, W. K., Hoffman, B. J., Kuhnert, K. W., & DeMarree, K. G. (2008). Leader emergence: The case of the narcissistic leader. *Personality and Social Psychology Bulletin, 34*(12), 1663–1676.

Budig, M. (2002). Male advantage and the gender composition of jobs: Who rides the glass escalator? *Social Problems, 49*(2), 258–277.

Campbell, W. K., & Campbell, S. M. (2009). On the self-regulatory dynamics created by the peculiar benefits and costs of narcissism: A contextual reinforcement model and examination of leadership. *Self and Identity, 8*(2–3), 214–232.

Campbell, W. K., Hoffman, B. J., Campbell, S. M., & Marchisio, G. (2010). Narcissism in organizational contexts. *Human Resource Management Review, 21*(4), 268–284.

Chambliss, E., & Uggen, C. (2000). Men and women of elite law firms: Reevaluating Kanter's legacy. *Law and Social Inquiry, 25,* 41–68.

Chatterjee, A., & Hambrick, D. C. (2007). It's all about me: Narcissistic chief executive offices and their effects on company strategy and performance. *Administrative Science Quarterly, 52,* 351–386.

Chatterjee, A., & Hambrick, D. C. (2011). Executive personality, capability cues, and risk taking: How narcissistic CEOs react to their successes and stumbles. *Administrative Science Quarterly, 56*(2), 202–237.

Chatterjee, A., & Pollock, T. (2017). Master of puppets: How Narcissistic CEOs construct their professional worlds. *Academy of Management Review, 42*(4), 703–725. https://doi.org/10.5465/amr.2015.0224.

Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics, 50,* 2–19.

Collins, S. M. (1997). Black mobility in white corporations: Up the corporate ladder but out on a Limb. *Social Problems*, *44*(1), 55–67. https://doi.org/10.2307/3096873.

Cook, A., & Glass, C. (2011). Leadership change and shareholder value: How markets react to the appointments of women. *Human Resource Management, 50*(4), 501.

Cook, A., & Glass, C. (2014). Above the glass ceiling: When are women and racial/ethnic minorities promoted to CEO? *Strategic Management Journal, 35,* 1080–1089.

Cook, A., & Glass, C. (2015). Diversity begets diversity? The effects of board composition on the promotion and success of women CEOs. *Social Science Research, 53,* 137–247.

Cook, A., & Glass, C. (2016). Do women advance equity? The effect of gender leadership composition on LGBT-friendly policies in American firms. *Human Relations, 69*(7), 1431–1456.

Correll, S. J., & Ridgeway, C. L. (2006). Expectation states theory. In J. Delamater (Ed.), *Handbooks of Sociology and Social Research*. Boston, MA: Springer.

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

De Hoogh, A. H. B., Den Hartog, D. N., & Nevicka, B. (2015). Gender differences in the perceived effectiveness of narcissistic leaders. *Applied Psychology, 64*(3), 473–498.

DeChow, P. M., Kothari, S. P., & Watts, R. (1998). The relation between earnings and cash flows. *Journal of Accounting and Economics, 25,* 133–168.

Dezső, C. L., Ross, D. G., & Uribe, J. (2016). Is there an implicit quota on women in top management? A large-sample statistical analysis. *Strategic Management Journal, 37*(1), 98–115.

Duchon, D., & Drake, B. (2009). Organizational narcissism and virtuous behavior. *Journal of Business Ethics, 85*(3), 301–308.

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

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. https://doi.org/10.1037/0033-2909.129.4.569.

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*(3), 573–598.

Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. *Psychological Bulletin, 111,* 3–22.

Eagly, A. H., Wood, W., & Diekman, A. B. (2000). Social role theory of sex differences and similarities: A current appraisal. In T. Eckes, & H. M. Trautner (Eds.), *The developmental social psychology of gender*. Hove: Psychology Press. Retrieved from https://books.google.com/books?hl=en&lr=&id=MFMwjXonRaYC&pgis=1

Edmonson, A. (2002). The local and variegated nature of learning in organizations: A group-level perspective. *Organizational 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.

Ely, R. J., & Thomas, D. A. (2001). Cultural diversity at work: The effects of diversity perspectives on work group process and outcomes. *Administrative Science Quarterly, 46,* 229–273.

Fasan, M., Mio, C., & Ros, A. (2016). Owners' preferences for CEOs characteristics: Did the world change after the global financial crisis? *Corporate Governance: The International Journal of Business in Society, 16*(1), 116–134.

Fiske, S. (2002). What we know now about bias and intergroup conflict, the problem of the century. *Current Directions in Psychological Science, 11,* 123–128.

Foster, J. D., & Trimm, R. F. (2008). On being eager and uninhibited: Narcissism and approach-avoidance motivation. *Personality and Social Psychology Bulletin, 34*(7), 1004–1017.

Galvin, B. M., Lange, D., & Ashforth, B. E. (2015). Narcissistic organizational identification: Seeing oneself as central to the organization's identity. *Academy of Management Review, 40*(2), 163–181.

Glass, C., & Cook, A. (2016). Leading at the top: Understanding women's challenges above the glass ceiling. *The Leadership Quarterly, 27*(1), 51–63.

Glass, C., Cook, A., & Ingersoll, A. (2016). Do women leaders promote sustainability? Analyzing the effect of corporate governance composition on environmental performance. *Business Strategy and the Environment, 25,* 495–511.

Grijalva, E., Newman, D. A., Tay, L., Donnellan, M. B., & Robins, R. W. (2015). Gender differences in narcissism: A meta-analytic review. *Psychological Bulletin, 141*(2), 261–310.

Hambrick, D. C. (2007). Upper echelons theory: An update. *Academy of Management Review*, *32*(2), 334–343. https://doi.org/10.5465/AMR.2007.24345254.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *The Academy of Management Review, 9*(2), 193.

Haslam, S. A., & Ryan, M. K. (2008). The road to the glass cliff: Difference sin the perceived suitability of men and women for leadership position 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., Wallen, A. S., Fuchs, D., & Tamkins, M. M. (2004). Penalties for success: Reactions to women who succeed at male gender-typed tasks. *Journal of Applied Psychology, 89*(3), 416–427.

Hermalin, B., & Weisbach, M. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *The American Economic Review, 88*(1), 96–118.

Hogan, R., & Hogan, J. (2001). Assessing leadership: A view from the dark side. *International Journal of Selection and Assessment, 9*(1&2), 40–51.

Hoobler, J. M., Masterson, C. R., Nkomo, S. M., & Michel, E. J. (2016). The business case for women leaders: Meta-analysis, research critique, and path forward. *Journal of Management*. https://doi.org/10.1177/0149206316628643

Hornett, A., & Fredericks, S. (2005). An empirical and theoretical exploration of disconnections between leadership and ethics. *Journal of Business Ethics, 59*(3), 233–246.

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.

Johnson, E. N., Kuhn, J. R., Apostolou, B. A., & Hassell, J. M. (2013). Auditor perceptions of client narcissism as a fraud attitude risk factor. Auditing. *A Journal of Practice and Theory*, *32*(1), 203–219. https://doi.org/10.2308/ajpt-50329.

Jørstad, J. (1996). Narcissism and leadership: Some differences in male and female leaders. *Leadership & Organization Development Journal, 17*(6), 17–23.

Judd, J. S., Olsen, K. J., & Stekelberg, J. (2017). How do auditors respond to CEO narcissism? Evidence from external audit fees. *Accounting Horizons* **(forthcoming)**.

Kanter, R. M. (1977a). *Men and women of the corporation*. Basic Books. Retrieved from https://books.google.com/books?id=qCao-PYqnmoC&pgis=1.

Kanter, R. M. (1977b). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, *82*(5), 965–990.

Karpowitz, C., Mendelberg, T., & Shaker, L. (2012). Gender inequality in deliberative participation. *American Political Science Review, 106*(3), 533–547.

Kauflin, J. (2017). *The world's most ethical companies*. Forbes. Available at: https://www.forbes.com/sites/jeffkauflin/2017/03/14/the-worlds-most-ethical-companies-2017/#6985d3477bc3

Kets De Vries, M. F. R., & Miller, D. (1986). Personality, culture, and organization. *Academy of Management Review, 11*(2), 266–279.

Ko, V. (2013). In business, women value ethics more than men. CNN online (May 17).

Konrad, A. M., Cannings, K., & Goldberg, C. B. (2010). Asymmetrical demography effects on psychological climate for gender diversity: Differential effects of leader gender and work unit gender composition among Swedish doctors. *Human Relations, 63*(11), 1661–1685.

Krishnan, H. A., & Park, D. (2005). A few good women—On top management teams. *Journal of Business Research, 58*(12), 1712–1720.

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.

Maccoby, M. (2004). Narcissistic leaders: The incredible pros, the inevitable cons. *Harvard Business Review, 82*(1), 92–101.

Mavin, S., & Grandy, G. (2012). Doing gender well and differently in management. *Gender in Management: An International Journal, 27*(4), 218–231.

Moore, G. (1988). Women in elite positions: Insiders or outsiders? *Sociological Forum, 3,* 566–585.

Muhr, S. L. (2011). Caught in the gendered machine: On the masculine and feminine in cyborg leadership. *Gender, Work & Organization, 18*(3), 337–357.

Nesbitt, P. (1997). Gender, tokenism and the construction of elite clergy careers. *Review of Religious Research, 38,* 193–210.

Nevicka, B., De Hoogh, A. H. B., Van Vianen, A. E. M., Beersma, B., & McIlwain, D. (2011a). All I need is a stage to shine: Narcissists' leader emergence and performance. *The Leadership Quarterly, 22*(5), 910–925.

Nevicka, B., Ten Velden, F. S., De Hoogh, A. H. B., & Van Vianen, A. E. M. (2011b). Reality at odds with perceptions: Narcissistic leaders and group performance. *Psychological Science, 22*(10), 1259–1264.

O'Reilly, C. A., Doerr, B., Caldwell, D. F., & Chatman, J. A. (2014). Narcissistic CEOs and executive compensation. *The Leadership Quarterly, 25*(2), 218–231.

Olsen, K. J., Dworkis, K. K., & Young, S. M. (2014). CEO narcissism and accounting: A picture of profits. *Journal of Management Accounting Research, 26*(2), 243–267.

Olsen, K. J., & Stekelberg, J. M. (2016). CEO narcissism and corporate tax sheltering. *The Journal of the American Taxation Association, 38*(1), 1–22.

Perryman, A. A., Fernando, G. D., & Tripathy, A. (2016). Do gender differences persist? An examination of gender diversity on firm performance, risk, and executive compensation. *Journal of Business Research, 69*(2), 579–586.

Prügl, E. (2012). "If Lehman Brothers Had Been Lehman Sisters...": Gender and myth in the aftermath of the financial crisis. *International Political Sociology*, *6*(1), 21–35. https://doi.org/10.1111/j.1749-5687.2011.00149.x.

Pullen, A., & Rhodes, C. (2008). "It"s all about me!': Gendered narcissism and leaders' identity work. *Leadership, 4*(1), 5–25.

Resick, C. J., Whitman, D. S., Weingarden, S. M., & Hiller, N. J. (2009). The bright-side and the dark-side of CEO personality: Examining core self-evaluations, narcissism, transformational leadership, and strategic influence. *Journal of Applied Psychology, 94*(6), 1365.

Rijsenbilt, A., & Commandeur, H. (2013). Narcissus enters the courtroom: CEO narcissism and fraud. *Journal of Business Ethics, 117*(2), 413–429.

Roberts, J. (2001). Corporate governance and the ethics of Narcissus. *Business Ethics Quarterly, 11*(1), 109–127.

Roberts, A., & Soederberg, S. (2012). Gender equality as smart economics? A critique of the 2012 world development report. *Third World Quarterly*, *33*(5), 949–968. https://doi.org/10.1080/01436597.2012.677310.

Rockafeller Foundation. (2016). *Does the media influence how we perceive women in leadership?* Available at: https://assets.rockefellerfoundation.org/app/uploads/20161028122206/100x25_MediaLanguage_report1.pdf

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics, 42,* 335–370.

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.

Rudman, L. A., & Glick, P. (2001). Prescriptive gender stereotypes and backlash toward agentic women. *Journal of Social Issues, 57*(4), 743–762.

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.

Ryan, M. K., Haslam, S. A., Morgenroth, T., Rink, F., Stoker, J., & Peters, K. (2016). Getting on top of the glass cliff: Reviewing a decade of evidence, explanations, and impact. *The Leadership Quarterly., 27*(3), 446–455.

Schein, V. E. (1973). The relationship between sex role stereotypes and requisite management characteristics among female managers. *Journal of Applied Psychology, 57,* 95–105.

Schwartz, H. S. (1994). Narcissism project and corporate decay: The case of General Motors. In M. Hoffman & M. List (Eds.), *Psychoanalysis and management* (pp. 303–324). Heidelberg: Physica-Verlag.

Sherwin, B. (2014). Why women are more effective leaders than men. Business insider (Jan. 24).

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.

Soltani, B. (2014). The anatomy of corporate fraud: A comparative analysis of high profile American and European corporate scandals. *Journal of Business Ethics, 120,* 251–274.

Spangler, W. D., Gupta, A., Kim, D. H., & Nazarian, S. (2012). Developing and validating historiometric measures of leader individual differences by computerized content analysis of documents. *Leadership Quarterly, 23*(6), 1152–1172.

Taylor, C. (2010). Occupational sex composition and the gendered availability of workplace support. *Gender & Society, 24*(2), 189–212.

Thompson, M., & Sekaquaptewa, D. (2002). When being different is detrimental: Solo status and the performance of women and racial minorities. *Analyses of Social Issues and Public Policy, 2*(1), 183–203.

Watson, J., & McNaughton, M. (2007). Gender differences in risk aversion and expected retirement benefits. *Financial Analysts Journal, 63*(4), 52–62.

Williams, C. L. (1992). The glass escalator: Hidden advantages for men in the "female" professions. *Social Problems, 39*(3), 253–267.

Wintoki, M. B., Linck, J., & Netter, J. (2012). Endogeneity and the dynamics internal corporate governance. *Journal of Financial Economics, 105,* 581–606.

Yoder, J. (1991). Rethinking tokenism: Looking beyond numbers. *Gender & Society, 5*(2), 178–192.

Yoder, J. (1994). Looking beyond numbers: The effects of gender status, job prestige and occupational gender-typing on tokenism processes. *Social Psychology Quarterly, 57*(2), 150–159.

Zarya, V. (2016). *The percentage of female CEOs in the Fortune 500 drops to 4%*. Fortune. Available at: http://fortune.com/2016/06/06/women-ceos-fortune-500-2016/

Zhu, D. H., & Chen, G. (2014). Narcissism, director selection, and risk-taking spending. *Strategic Management Journal*. https://doi.org/10.1002/smj.2322.