## FAULTED WHEN FEMALE?

# GENDER-BIASED EVALUTIVE JUDGMENTS AND ATTRIBUTIONAL

## RATIONALIZATION IN RESPONSE TO LEADER FAILURE

by

Jillian L. Hmurovic

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#### ABSTRACT

# FAULTED WHEN FEMALE? GENDER-BIASED EVALUTIVE JUDGMENTS AND ATTRIBUTIONAL RATIONALIZATION IN RESPONSE TO LEADER FAILURE

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In this experimental study, the author examined gender-biased reactions to leader failure. The investigation explored how leader gender promotes biased attributional rationalization of the leader's performance failure, negatively affecting evaluations of women. It was predicted that causal attributions generated to explain a leader's failure are particularly unfavorable for failed female leaders, resulting in more severe consequences for women (i.e., more negative performance judgments, social judgments, and personnel decision recommendations), particularly in situations that accentuate the incongruence between the female gender role and leadership role (i.e., with male evaluators and in male gender-typed work contexts). Contrary to predictions, female leaders were not devalued relative to their male counterparts—the female leader's failure was not evaluated more negatively or ascribed more unfavorable causal attributions than the male leader's failure. Rather, results indicated that failure occurring in traditionally female-dominated work contexts has particularly detrimental consequences for male leaders, eliciting more negative performance evaluations and more punitive personnel decision recommendations. Together, findings suggest that leader gender does not diminish the favorability of women's evaluative judgments following a performance failure, instead suggesting the possible existence of a qualified male leader disadvantage. Implications of these results are discussed.

This work is dedicated to my loving parents.

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#### INTRODUCTION

Traditionally, leadership literature has concentrated on success. Scholars have diligently sought to identify factors contributing to leader success: what makes an effective leader, what personality traits are associated with greater leadership success, what leadership behaviors relate to success, which leadership styles are most effective, how to develop leaders to be more effective, what contexts or conditions support leader effectiveness, and how relationship quality and interpersonal social dynamics contribute to leadership success.

Despite insight gained from such investigations, less is known about leadership failure. "More precisely, there has been little investigation of leader errors...thereby implying that such actions are not noteworthy phenomena." (Hunter, Bedell-Avers, & Mumford, 2007; p. 438). This is a curious oversight, given that failure is seen as essential for leadership growth and development. Many times, people identify mistakes as developmental opportunities, as exemplified by the adage "failure sucks, but instructs" used by Robert Sutton at Stanford Business School. Interviews with successful Fortune 500 executives reveal that personal and professional hardships are identified as key learning experiences critical to their development (McCall, Lombardo, & Morrison, 1988). Furthermore, research investigating the benefits of after-event reviews demonstrates that mental models of failure events are more detailed than those of successful events (Ellis & Davidi, 2005), suggesting that failures trigger individuals to learn from mistakes and develop a more accurate knowledge structures (e.g., Heimbeck, Frese, Sonnentag, & Keith, 2003). Despite anecdotes and research attesting to the value of failure in promoting learning, problem solving, and creativity among leaders, organizations continue to overwhelmingly promote idyllic success (and failure avoidance). Top-level executive leaders are more concerned with achieving results than developing competencies (Hollenbeck & McCall,

1999), emphasizing the performance value of success over the learning value of failure. Likewise, organizational literature has historically emphasized leader success: failure is not the focus of empirical study or theory-building. As a result, studies of leadership are criticized for their traditional focus on positive leader behaviors, and scholars have called for more research on leader failure (Hunter et al., 2007).

The limited work that has examined failure, however, has largely focused on large-scale business failures or failures of ethics (e.g., Finkelstein, 2003; Sonnenfield & Ward, 2007). There is little literature involving a systematic investigation on responses to leader failure. Although some research has begun to explore the "dark side" of leadership (e.g., Conger, 1990; Hogan & Hogan 2001, Padilla, Hogan, & Kaiser, 2007) even these studies explicitly recognize that more work is needed in this area.

The lack of understanding of leader failure is unfortunate. Few leaders perform flawlessly and many will confront failure at some point throughout their career. In fact, estimates indicate that at least 50% of leaders fail to meet performance standards (Burke, 2006; Hogan & Hogan, 2001). Given the prevalence of leadership failure, examining failure in addition to success is critical for developing a comprehensive view of leadership. "Although positive leader actions clearly have an impact on organizational performance, it is also clear that mistakes can result in notable and important outcomes as well. Leaders are not infallible and must be viewed as imperfect for the full picture of leadership to be gained." (Hunter et al., 2007; p. 438)

Unfortunately, the dearth of research regarding leadership failure extends to investigations of gender bias. Examinations of gender-biased reactions to female leadership have almost exclusively focused on female leader success. For example, a series of studies by Heilman and colleagues (Heilman, Block, & Martell, 1995; Heilman, Block, Martell, & Simon, 1989;

Heilman & Okimoto, 2007; Heilman, Wallen, Fuchs, & Tamkins, 2004) demonstrate that successful female leaders are less socially desirable, being ascribed less favorable interpersonal characteristics (e.g., selfish, cold, manipulative) and less liked than identically successful male leaders. Potential gender-biased responses to female leadership failure, however, are not assessed. The minimal research that has investigated leader failure and gender bias has focused on the cognitive associations between leader gender and organizational performance failure, not a leader's individual performance failure (Haslam & Ryan, 2008; Ryan & Haslam, 2005; 2007; Ryan, Haslam, Herby, & Bongiorno, 2011). Thus, little is known about the presence of gender bias in response to leadership failure, which is unfortunate because gender-biased responses to leader failure may contribute to scarcity of women in leadership roles.

Although there have been advances in gender equality, women are still underrepresented in leadership roles. The past century has been marked by improvements in the plight of gender equality. In addition to landmark legislation making sex-based employment discrimination unlawful (Title VII of the 1964 Civil Rights Act), positive changes in female employment and education have been noted. As of 2010, women represented over 50% of mid-level managerial positions in the United States (U.S. Department of Labor, 2010a). Additionally, women in the labor force have a higher level of educational attainment than in previous decades, with approximately 36% of women earning college degrees (compared to 11% in 1970; U.S. Department of Labor, 2010b). Nevertheless, inequity persists. Despite accounting for 50% of labor force (U.S. Department of Labor, 2010b), women lag behind men in and top earning positions. The presence of women in powerful leadership positions remains relatively rare and atypical. For example, although women comprise 25% of all Chief Executive Officers (CEOs) in the US (U.S. Department of Labor, 2010b) only 7.6% of the highest paid positions and 2.6% of

the CEOs in Fortune 500 companies are occupied by females (Catalyst, 2011). This leadership gender disparity and barriers to women's attainment of leadership has been characterized as indicative of a "glass ceiling", whereby an inevitable, impenetrable, invisible barrier of prejudice and discrimination prevents women's advancement into the upper echelons of management (Hymowitz & Schellhardt, 1986; Morrison, White, & Van Velsor, 1987). The glass ceiling metaphor, although pervasive and recognizable, is now outdated as some women have obtained such positions (albeit a rarity), suggesting that there is not an invisible and absolute barrier to leadership. Rather, barriers to women's advancement into leadership can be characterized as a labyrinth, marked by ambiguity, challenge, and complexity (Eagly & Carli, 2007). Leadership is no longer unattainable for women; a viable path exists, although it is indirect and riddled with expected and unexpected barriers.

One reason for the sparse representation of women in leadership roles may be the existence of gender-biased evaluations of leader performance. Research demonstrates that evaluations are vulnerable to non-performance influences (e.g., Carroll & Schneier, 1982; Cascio, 1987; Cooper, 1981; Feldman, 1981; Landy & Farr, 1983; Latham & Wexley, 1981). Furthermore, considerable evidence indicates that criteria used to evaluate an individual's promotability and performance becomes increasing subjective in nature, and therefore relatively easy to distort, as one advances in an organization (Agars, 2004; Gupta, Jenkins, & Beehr, 1983; Heilman, 2001; Stumpf & London, 1981). This suggests that criteria for evaluating leaders are likely susceptible to cognitive biases, such as gender bias. Indeed, gender stereotypes and unconscious biases have been shown to influence appraisal of successful female leaders. Female leader performance is devalued (e.g., Eagly, Makhijani, & Klonsky, 1992; Lyness & Heilman, 2006), and female leaders are perceived as ill-suited for leadership (e.g., Dipboye, Fromkin, &

Wiback, 1975; Heilman & Haynes, 2005), interpersonally derogated (e.g., Heilman & Okimoto, 2007; Heilman & Wallen, 2010), and denied credit for success (e.g., Heilman & Haynes, 2005).

Little is known, however, about gender biases associated with the appraisal of leader failure, and existing leadership literature is limited in providing insight into this issue. First, as previously noted, although prior research has advanced our understanding of gender bias and leadership, both empirical and theoretical work regarding gender bias and leadership has primarily focused on leadership success, not failure. Thus, it is unclear whether gender-biased evaluative judgments occur in response to female leader failure. Second, the majority of research has aimed to demonstrate existence of biased appraisals, rather than test how bias occurs. Focusing on mean differences between males and females, explanatory mechanisms are not readily articulated or explored. "Although the notion of stereotyping is frequently invoked to explain why differential evaluations occur...the precise nature of how stereotypes operate and produce these different evaluations is not well specified" (Arvey, 1979; p. 743). As a result, there is much less research investigating the explanatory mechanisms involved in this phenomenon. Third, there is limited consideration of context and conditions under which gender-biased leader evaluations occur. Main effect differences between males and females on particular outcomes do not account for contextual features that shape the emergence of gender biases. Illustrating this point, Rudolph and Baltes (2008) describe how taking into account conditions that may enhance gender discrimination allows one to "understand how specific instances of discrimination can occur even when main effect differences are not observed" (p. 416). As such, gender-biased leader evaluations may be exclusive to particular circumstances. Extant research, however, has been primarily concerned with demonstrating main effects. Consequently, there is less understanding of circumstances that promote gender-biased leader evaluations.

The current study sought to address these weaknesses in literature by examining gender-biased evaluations of leadership failures, identifying conditions that support this gender bias, and investigating an explanatory mechanism by which this gender bias occurs. To accomplish this, the current study tests whether differential attributional rationalizations of male and female leader failure result in more severe consequences for women (i.e., more negative performance judgments, social judgments, and personnel decision recommendations), particularly in conditions that accentuate the incongruence between the female gender role and leadership role (i.e., with male evaluators and in male gender-typed work contexts).

In doing so, this paper contributes to research on gender bias in leadership in a number of ways. First, this study emphasizes the value of examining leader failure as distinct from success. Negative stimuli have been shown to demonstrate a pattern of effects that is asymmetrical from positive and neutral events. Negative stimuli have a disproportionately greater effect on physiological, affective, cognitive, and behavioral activity than positive stimuli (see Taylor, 1991 for review). For example, studies indicate that negative information is assigned greater importance than positive information (see Fiske & Taylor, 1984 for review; Kahneman & Tversky, 1984; see Peeters & Czapinski, 1990 for review). Negative events impact life satisfaction, mood, stress, and illness more than positive events (e.g., Finch, Okun, Barrera, Zautra, & Reich, 1989; Hirsch & Rapkin, 1986; Rook, 1984, 1990). Additionally, negative events elicit more attributional responses than positive events (Peelers & Czapinski, 1990). Despite the asymmetrical effect of negative stimuli, the leadership literature has overwhelmingly focused on positive leader outcomes (i.e., success). Because most empirical and theoretical work has emphasized leadership success, it is unclear whether the same theories and findings apply to leader failure. Given the asymmetrical impact of negative versus positive stimuli, it is possible

that responses to leader failure may not demonstrate an equal, yet opposite, reaction. In focusing directly on leader failure, this paper explicitly recognizes the value in examining the commonly overlooked, yet prevalent event of leader failure.

A second contribution is this study proposes causal attributions as a mechanism to explain occurrence of biased leader evaluations. Much research has aimed to demonstrate the existence of gender bias in leadership, but less attention has been given to understanding the process of gender bias within context of leadership. Attribution theory, however, provides a useful perspective from which to address this issue. Following a performance event or action, there is a tendency to ascribe causal explanations (i.e., attributions) for why an event occurred (Heider, 1958). According to attribution theory (Weiner, 1985), causes ascribed for the performance influence subsequent judgments and behaviors in response to an achievement event. This implies that the interpretation of performance influences evaluative judgments of the performer. As such, causal attributions for leader performance offer insight into understanding how biased evaluations may result from leader gender.

Attribution theory has expanded beyond its original content domain of achievement (Weiner, 2004), being applied to a diverse set of organizational phenomena including interview and selection processes (e.g., Anderson, 1992; Ployhart, McFarland, & Ryan, 2002), applicant reactions (e.g., Ployhart & Harold, 2004), team helping behavior (e.g., LePine & Van Dyne, 2001), trust repair (e.g., Kim, Dirks, Cooper, & Ferrin, 2006; Tomlinson & Mayer, 2009), employee burnout, (e.g., Campbell & Martinko, 1998), and workplace aggression (Douglas, Kiewitz, Martinko, Harvey, Kim, & Chun, 2008). Researchers, however, have also begun to investigate the role of attributions in understanding leadership processes (Martinko, Harvey, & Douglas, 2007). Green and Mitchell (1979) were the first to adopt an attributional perspective as

the primary framework for developing leadership theory, specifically a model of leadersubordinate interactions. Green and Mitchell (1979) contend that attributions are useful for explaining a leader's behavior in response to subordinate performance. This theoretical model proposes that after an employee's performance, causal attributions are made to understand the performance event which, in turn, influences a leader's behavioral responses to the employee's performance. The Green and Mitchell (1979) model of leader attributions stimulated much research testing its propositions. Consistent with Weiner's attribution theory (1985), results demonstrate that responses to failure are influenced by attributional processing of the failure (e.g., Ashkanasy, 1995; 2002; Green & Linden, 1980; Mitchell & Kalb, 1981; 1982). Many scholars have noted that the effect of attributions on leader evaluations and interactions with members is robust across many samples and methodologies (e.g., Ashkanasy 2002; Martinko et al., 2007). Attribution theory, therefore, represents a useful theoretical perspective to examine how leader gender influences evaluative judgments of leader failure. Specifically, the causal explanations for leader failure may differ for male and female leaders, resulting in evaluations favoring male leaders. "There is almost unequivocal support for the notion of attributional biases. However the majority of the studies simply confirm that leaders and subordinates have these biases but fail to explore their consequences" (Martinko et al., 2007; p. 578). The current paper differs from prior research, therefore, by testing the impact of gender-based attributional biases for men's and women's leader failure on leader evaluations.

The third contribution is that this study empirically examines circumstances in which leaders may be more susceptible to biased appraisals of failure. Research indicates that gender bias is not limited to main effects, but can be influenced by specific conditions under which the leader evaluation occurs. For example, Heilman et al. (2004) found that women's success was

socially devalued, but only in male-typed jobs; there was no evidence of social disapproval in response to female success in female-typed jobs. A meta-analysis comparing effectiveness of male and female leaders found that female leaders were rated less effective in military organizations (i.e., a particularly masculine context) and more effective in education and social service domains (i.e., particularly feminine contexts) (Eagly, Karau, & Makhijani, 1995). Additional meta-analytic evidence indicates that the devaluation of women in leadership positions, relative to men, is greater in male-dominated leadership positions and when men served as evaluators (Eagly et al., 1992). Research examining reactions to compensation negotiations also found that evaluator gender influenced gender-biased responding. Compared to female evaluators, male evaluators are more likely to penalize women (than men) for initiating salary negotiations (Bowles, Babcock, & Lai, 2007). Additional research suggests that the relative representation of women in a specific context can influence the emergence of genderbiased judgments. Sackett, DuBois, and Noe (1991) report that when the proportion of women in a workgroup is small, women's performance is rated significantly lower men's performance; and this effect is not symmetrical in that men's performance is not lower than women's when men constitute a minority of a workgroup. Pazy and Oron (2001) found that officers in Israeli Defense Forces rated women's competence and performance lower, relative to men's, in units with lower proportions of women and rated women's competence and performance equal to men when women were well represented. Cumulatively, this research suggests that there are evaluative conditions that can affect gender-biased responding. This study tests whether gender-biased leader evaluations are impacted by, or exclusive to, particular circumstances.

As a final contribution, this study reinvigorates research on of barriers to women's access, advancement, and enactment of leadership. Although research on gender issues has not

fallen out of favor, there has been limited interest within the organizational psychology literature on the impact of gender stereotypes and evaluations (see Agars, 2004 for review). Prior research reporting small effect sizes has contributed to the decline of such investigations. Swim, Borgida, Maruyama, and Meyers' (1989) meta-analysis of studies modeled after Goldberg's (1968) experiment, which found that despite identical work male authors were evaluated more favorably than female authors, indicated that women are consistently evaluated less favorably than men, although the size of the effect was extremely small according to current accepted standards (d = -.07; Cohen, 1977). Consequently, the negative influence of gender stereotypes on evaluative judgments have been largely dismissed as marginal and inconsequential. Using a computer simulation, however, Martell, Lane and Emrich (1996) have demonstrated how seemingly small evaluative differences, occurring at each evaluation opportunity, have a cumulative effect on the outcomes of evaluations. Martell et al. (1996) had an equal number of hypothetical male and female employees progress through a series of evaluations and personnel decision events in which the small effect of gender stereotypes on performance evaluations (.07) was modeled at each evaluation stage. After a series of decision cycles, females comprised only 35% of top leadership positions, indicating that small gender-biased evaluations can contribute to decreased representation of women in leadership roles. Seemingly small effects, when considered cumulatively, can have significant consequences. For this reason, investigating the affect of gender stereotypes on evaluations of leader failure expands existing knowledge on factors that contribute to the paucity of women in leadership. As such, this study helps to reinvigorate waning empirical enthusiasm on barriers to women's access, advancement, and enactment of leadership, positing that gender-biased responses to leader failure contribute to women's underrepresentation in leadership positions. Although gender bias has been previously discussed

as a factor impacting women's organizational advancement (e.g., Heilman, 2001), no research has yet explored whether bias occurs in the context of leader failure. As a result, this study extends previous gender bias research by arguing that women in leadership roles are not only subject to biased evaluations of success, but also to biased evaluations of failure.

Below is a conceptual model of this study, presented as an overview to guide the remainder of this paper. Given their centrality to this study, the definitions of leader and failure used throughout this paper are explicitly clarified following the presentation of this model.

Discussions of hypothesis development begin by describing gender stereotypes. Following this, the hypothesized impact of leader gender on performance judgments, social perceptions, and personnel decision-making recommendation is presented. The paper continues, predicting that the gender of the leader impacts leader evaluations by influencing the attributional causes generated to explain the leader's performance failure. Lastly, the moderating effects of decision-maker gender and the gendered work context are discussed, suggesting that each moderates the indirect effect of leader gender on responses to leader failure through their influence on causal attributions for leader failure.

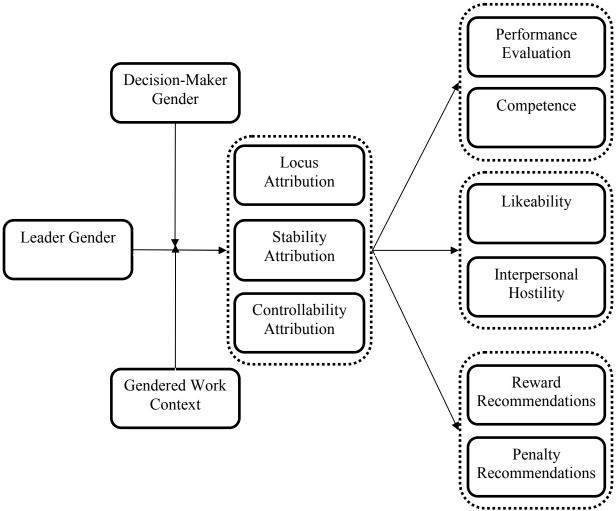


Figure 1. Conceptual model

## **Conceptual Clarifications**

## **Defining Leader**

Within the leadership literature, there exist multiple definitions for the construct of leadership, thereby creating ambiguity when attempting to define "leader." The abundance of conceptualizations of leadership reflects the variety of perspectives by which scholars investigate this concept. Many researchers define leadership in ways that highlight their own individual viewpoints or interests. As a result, "there are almost as many definitions of leadership as there are persons who have attempted to define the concept" (Stogdill, 1974, p. 259). Leaders have

been defined in terms of individual attributes, behaviors, as well as influence which echo the respective trait, behavior, and power-influence approaches to studying leadership (Yukl, 1989; 2001). Given the profusion of descriptions, the definition of leader used in this paper necessitates clarification. Leader denotes an individual who influences others in ways that direct follower behavior towards goal achievement. Specific to this study, leaders are distinct from managers and hold independent, vertical leadership roles that are formally designated by the organization. This description is consistent with broad definitions previously adopted in the literature in that most characterizations assume leadership to a) involving influence, b) occurring among other individuals, and c) involving goal attainment (Northouse, 2001; Yukl, 1989; 2001).

Relevant to the current study, leaders are conceptually distinct from managers. Barker (1997) argues that leaders and managers serve different functions stating that "the function of leadership is to create change while the function of management is to create stability" (p. 349). Along these lines, Kotter (1990) distinguishes between behaviors associated with leaders (e.g., communicating a vision, motivating employees to achieve) and those associated with managers (e.g., maintaining order, organizing, staffing). Additionally, Bennis and Nanus (1985) claim that "managers are people to do things right and leaders are people to do the right thing" (p.221). Moreover, Zaleznik (1977) proposed that each relies on unique skills and characteristics such that leadership and management are essentially independent, rarely coexisting within the same worker. Whereas managers focus on how to get things done and completed, Zaleznik (1977) describes leaders as focusing on what those things mean to others. In reviewing arguments supporting a distinction between leaders and managers, Yukl (1989) concludes that leadership appears to largely involve influencing employee commitment whereas management primarily involves fulfilling responsibilities and exercising authority. Although leading and managing may

involve distinct processes, proponents of a more complementary perspective argue that leaders and managers are not necessarily mutually exclusive. For example, Bass (1985) notes how management is essential for successful leadership, but leadership goes beyond management. Although scholars debate the level of dissimilarity between leadership and management, few scholars would argue that leading and managing are synonymous (Yukl, 1989). For the purposes of this study, therefore, leaders and managers are treated as qualitatively distinct constructs.

Further clarifying the definition of leader, as used throughout this paper, leaders are characterized as occupying independent positions, whereby leadership is not shared among multiple individuals. Additionally, the leader role described in this paper represents a formally designated position within the organizational hierarchy.

## Defining Failure

In this paper, failure is conceptualized as a discrete event in which the leader does not meet expected or aspired performance standards. In essence, failure is an event of omission (not performing to the level expected) rather than commission (performing something incorrectly). Failure is generally perceived as the opposite of success, such that failure and success typically reside on separate ends of the same continuum. In this way, failure has been commonly operationalized to reflect low or below average performance (e.g., Pence, Pendleton, Dobbins, & Sgro, 1982; Snyder, Lassegard, Ford, 1986). Consistent with traditional definitions of failure, leader failure in this study is defined as not reaching effective performance standards (whereas success would be achieving or superseding the performance goal). Previous studies have similarly defined failure. For example, Giessner and van Kippenberg (2008) characterize leader failure as the non-achievement of a performance goal when investigating the role of leader prototypicality on consequences of leader failure on team members' perceptions of trust and

leader effectiveness. Additionally, failure is defined as poor performance in studying the impact of self-esteem on persistence in the face of failure. Specifically, Di Paula and Campbell (2002) manipulated failure such that participants were told they performed in the bottom third of participants. Furthermore, defining failure as non-achievement of performance standard is not limited to research on individuals. Failure has been similarly conceptualized as poor performance within the context of teams (Naquin & Tynan, 2003). Following from traditional definitions of failure used in prior research, failure is similarly characterized as poor performance in this paper.

The current conceptualization is deliberately limited to a job performance failure, recognizing that failure may be defined beyond the performance context (e.g., ethical failure, interpersonal failure). Although additional failures are interesting to consider, they are beyond the scope of this particular study. Because performance is a commonly used metric of individual success and failure within organizations, failure was limited to the performance domain throughout this paper. Employee performance is frequently subject to formal and informal scrutiny, thereby influencing a variety of outcomes for the incumbent, such as subordinate endorsement (Giessner & van Kippenberg, 2008) and promotion (e.g., Lyness & Heilman, 2006). As a significant factor in determining employee effectiveness, therefore, performance is an appropriate domain in which to define failure. Given that this study focuses on responses to leader failure, this construct is specifically described in reference to the individual leader's performance, not organizational performance failure.

In addition to focusing on performance, failure is also characterized as a discrete event. The failure is a performance incident, rather than a global evaluation (i.e., "I failed at this task" versus "I am a failure"). Defining leader failure as an event is consistent with Affective Events Theory (AET; Weiss & Cropanzano, 1996) which describes how organizational events, like

those shaped by a leader (e.g., providing feedback, distributing workload), impact employee affective and behavioral reactions. This suggests that other leader actions, such as the leader's performance success or failure, can also be viewed as specific response-provoking instances. Indeed, drawing from AET, leader behaviors have been described as a source of affective events (Dasborough, 2006). Moreover, subordinate reactions to leader failure have been previously examined after the manipulation of a single performance episode. For example, Gadis, Connelly, and Mumford (2004) conceptualized failure as an event, finding that quality of group performance was negatively influenced by the nature of the leader's failure feedback.

Additionally, Giessner and van Kippenberg (2008) also treated leader failure specific, episodic incident, demonstrating that prototypical leaders are evaluated more favorably than non prototypical leaders after failing to reach a specific performance goal. Thus, research suggests that failure can be characterized as a discrete event, and this conceptualization is used in the current study.

## Gender Stereotypes

Gender stereotypes are general beliefs individuals hold regarding men and women and consist of two distinct components: *descriptive gender stereotypes* and *prescriptive gender stereotypes*. Descriptive gender stereotypes are beliefs about attributes and behaviors that characterize each gender (Burgess & Borgida, 1999). Generally, men are thought to be more assertive, instrumental, controlling, and strong, and women are generally believed to be kind, expressive, nurturing, and helpful (Bakan, 1966). Whereas men are typically believed to be *agentic*, possessing achievement-related attributes, women are seen as *communal*, possessing interpersonal-related attributes (e.g., Bakan, 1966; Eagly, 1987; Williams & Best, 1990). The

distinction between agentic and communal qualities illustrates the stereotypic characteristics believed to describe men and women, respectively.

Compared to descriptive gender stereotypes, which concern beliefs regarding attributes each gender does possess, prescriptive gender stereotypes concern beliefs regarding attributes that men and women "should" possess (Burgess & Borgida, 1999; Eagly, 1987; Fiske & Stevens, 1993). By reflecting beliefs about how men and women "ought" to be, prescriptive gender stereotypes evoke behavioral standards to which each gender is expected to conform (Burgess & Borgida, 1999). For example, whereas believing that women *are* warm and caring represents a descriptive gender stereotypic belief, believing that women *should be* warm and caring represents a prescriptive gender stereotypic belief. Prescriptive stereotypes establish expectations regarding attributes and behaviors suitable for each gender. Women are expected to enact communal characteristics and actions (e.g., be caring and interdependent, help others), and men are expected to enact agentic characteristics and actions (e.g., be ambitious and self-reliant, command others).

Gender stereotypes are tenacious. The descriptive and prescriptive content of gender stereotypes is typically automatically activated and applied without the awareness of the perceiver. Stereotyping can occur in milliseconds (Banaji & Hardin, 1996; Devine, 1989; Dovidio, Evans, & Tyler, 1986), often outside of the perceivers' conscious awareness of the use of stereotypes in judgment (Banaji & Hardin, 1996; Blair & Banaji, 1996; Devine, 1989; Macrae, Milne, & Bodenhausen, 1994). Stereotypes function as energy-saving or resource-preserving mental devices that serve to simplify perception, judgment, and action (Allport, 1954) and to economize cognition by conserving attentional resource capacity (Macrae et al., 1994). This functional utility makes gender stereotypes are resistant to change. Studies have shown that

automatic stereotyping occurs despite perceivers' attempt to ignore stereotype activation primes and independently of perceivers' explicit gender beliefs (Banaji & Hardin, 1996). Gender schemas are resistant to change, even in the face of disconfirming evidence (Labianca, Gray, & Brass, 2000). Even when motivated to respond in non-stereotypical ways, suppressing stereotype responses can actually encourage stereotype application. Suppressing the expression of stereotypes causes the cognitive hyperaccessibility of stereotypes, resulting in a rebound effect of increased stereotype activation and application (Galinski & Moskowitz, 2000; 2007; Macrae, Milne, & Bodenhausen, 1994, Wyer, Sherman, & Stroessner, 2000).

By describing how men and women are and how they should be, gender stereotypes generate behavioral expectations of men and women. In turn, stereotype-based expectations influence what information is noticed and attended to (see Fiske, 1998 for a review). For example, we tend to direct attention towards expectation-consistent information and away from expectation-inconsistent information (Johnson & Judd, 1983; Srull & Wyer, 1980). Selective information searches allow individuals to preserve stereotypes by limiting inconsistent information (Fiske & Neuberg, 1990). Stereotype-based expectations also influence what information interpreted and recalled. There is a tendency to interpret information in a way that corresponds to our expectations (see Olson, Roese, & Zanna, 1996, for a review). Information that deviates from expectations may be explained away or subtyped as not representative of the stereotype to preserve existing categories (e.g., Kunda & Oleson, 1995; Weber & Crocker, 1983). Individuals apply different standards for inferring attributes based on expectations. According to the shifting standards model, standards of evaluation shift in the direction consisted with the stereotyped expectation (Biernat, 2003; Biernat, Manis, & Nelson, 1991). Additionally, information consistent with expectations tends to be remembered with greater ease. Expectationconsistent information is more accessible in memory (Feldman & Lynch, 1988). Meta-analytic findings indicate that perceivers are significantly more to recall information consistent with expectations (Stangor & McMillan, 1992). By impacting what information is noticed, attended to, interpreted, and recalled, gender stereotype-based expectations can results in biased processing of men's and women's behavior.

Although the content of descriptive and prescriptive stereotypes may overlap, the process by which descriptive and prescriptive gender stereotypes are argued to impact gender bias and discrimination is theoretically distinct (Burgess & Borgida, 1999). The descriptive gender stereotype is expected to lead to gender bias and discrimination when individuals are perceived in terms gender stereotypes and those perceptions are incompatible with attributes believed to be required for performing certain tasks or roles (Fiske & Taylor, 1991). When the descriptive stereotype does not match the requisite characteristics of a gender-stereotyped occupational role, individuals are perceived to lack "fit" with the role. Gender-stereotyped evaluation criteria discriminate against whichever gender is less likely to be viewed as possessing the necessary gendered attributes. For example, evaluations are expected to be biased against women, who are less likely to be perceived as possessing masculine attributes, in roles that are traditionally maledominated because the role is believed to require masculine qualifications that do not match stereotypic female gender characteristics.

In contrast, the prescriptive gender stereotype is expected to lead to gender bias and discrimination when individuals are perceived to have violated, or behaved in a manner counter to, gender role expectations (Burgess & Borgida, 1999). Violations of prescribed gender expectations induce punitive responses and sanctions. For example, evaluations are expected to be biased against women who engage in masculine behaviors because their behavior defies

gender role expectations and is counter-communal. Thus, whereas descriptive gender stereotypes are expected to contribute to bias against individuals who lack necessary attributes for an occupational role, prescriptive gender stereotypes are expected to contribute to bias against individuals who violate gendered expectations (Burgess & Borgida, 1999).

## The Masculine Construal of Leadership

The leadership role is predominantly characterized as masculine. Cognitive associations link leadership more strongly to males than females. Seminal work by Schein (1973) reveals that characteristics describing managers are similar to characteristics ascribed to men, but not to characteristics attributed to women. Schein paradigm focuses on the extent to which men and women are viewed as leader-like by examining the relationship between gender stereotypes and management perceptions. Using a broad list of adjectives, Schein assessed the extent to which men and women are believed to possess the requisite characteristics for leadership roles. When asked to characterize women, men, and successful managers, participants associate managers with more masculine qualities (e.g., aggressive, competitive), suggesting that impressions of successful middle managers are more similar to men than to women (Schein, 1973; 1975).

The masculine construal of leadership, also termed the "think manager-think male" effect, is relatively robust. Subsequent research has replicated Schein's findings in non-student samples of managers (Brenner, Tomkiewicz, & Schein, 1989; Schein, 1975) as well as internationally in countries such as Japan, China, the United Kingdom, Singapore, and Germany (Schein, 2001; Schein & Muller, 1992; Schein, Mueller, Lituchy, & Liu, 1996).

Various replications in the United States support and extend Schein's original findings (e.g., Brenner et al., 1989; Heilman et al., 1989; Heilman et al., 1995). For example, Heilman et al. (1989) replicated previously employed target groups (i.e., males, females, and successful

middle managers) and additionally compared successful managers to male and female managers as well as to successful male and female managers. Results replicated that of Schein (1973, 1975), finding perceptions of similarity among males and successful male managers. Correspondence between successful managers and women dramatically increased when the women are portrayed as managers and further increased when portrayed as successful managers. Even so, there remains significantly greater congruence between successful managers and men than between successful managers and women. Approximately a decade after Heilman et al.'s (1989) replication, Deal and Stevenson (1998) examined perceptions of female managers, male managers, and prototypical managers (no sex specified), finding that prototypical managers were more similar to male managers than female managers.

Research using designs other than the Schein paradigm similarly demonstrate a masculine construal of leadership. Atwater, Brett, Waldman, DiMare, and Hayden (2004) investigated the extent to which Yukl's (1989) 14 leadership behaviors are gender-typed. Student respondents believed allocating resources, delegating, disciplining, strategic decision-making, problem solving, and punishing were clearly more masculine than feminine; however planning and organizing, developing and mentoring, recognizing and rewarding, communicating and informing, and supporting were clearly more feminine than masculine. It appears that "task-oriented" leadership behaviors are associated with men, whereas "relationship-oriented" leader behaviors are associated with women. Using the Bem Sex Role Inventory, Powell and Butterfield (1979; 1989) also demonstrate the masculine content of leadership, finding that a "good manager" was described in traditionally masculine terms by both male and female evaluators.

As women slowly occupy more leadership positions in organizations, however, it is possible that gender-based perceptions of leadership have changed and women may be perceived as leader-like. According to social role theory (Eagly, 1987), men and women are differentially conferred agentic and communal qualities because of their unequal distribution in occupations and social roles. As the gender distribution of social roles shift, therefore, characteristics attributed to men and women are also expected to change. Evidence suggests this may be occurring. Diekman and Eagly (2002) found that female stereotypes, although predominately communal, include more agentic characteristics than before. Additionally, Twenge's (1997) meta-analysis found that women's self-reported degree of masculinity has risen over time.

Studies investigating potential changes in the gender-typing of leadership since Schein's (1973) findings suggest that gender-stereotyped leader perceptions may have changed for females, but not males. Males perceived male targets as similar to characteristics of successful managers and female targets as dissimilar from successful managers, whereas females tend to perceive both male and female targets as similar to successful managers (e.g., Brenner et al., 1989; Dodge, Gilroy, & Fenzel, 1995; Norris & Wylie, 1995; Schein, Mueller, & Jacobson, 1989). Compared to men, women generally view leadership as more androgynous, requiring both communal and agentic qualities. Replicating the original Schein studies among a sample of managers, Brenner et al. (1989) found no evidence among male managers that stereotypes of female had changed. Female managers, however, did demonstrate changing female stereotypes, rating men and women as similar to the successful manager. Using Bem Sex Role Inventory, Powell, Butterfield, and Parent (2002) report that although less emphasis is placed on the masculine characteristics of managers before, a good manager continues to be perceived as possessing primarily masculine attributes. Research by Duehr and Bono (2006) conducted 30

years since Schein's original study compliments findings that report changing stereotypes of women. Results from students and managers indicate that women are rated more similar to successful managers than 15 and 30 years earlier. Additionally, men perceive women as less submissive and more confident and assertive than before. Despite these more positive perceptions, men continued to view women in general and women managers as having fewer attributes characteristic of successful managers. Surprisingly, male students in particular continue hold gender stereotypic beliefs quite similar to male managers 15 years ago.

"In the United States many people believed that as women moved into management, managerial sex typing would diminish. And it did, among women. But men have continued to see women in ways that are not complimentary vis-à-vis succeeding in positions of authority and influence" (p. 684, Schein, 2001). In spite of research suggesting stereotypes about women are changing to include more masculine characteristics and are now being rated more similarly to successful leaders (e.g., Diekman & Eagly, 2000; Twenge, 1997), a disparity still remains.

Women continue to be perceived as possessing fewer attributes associated with leaders than men (Duehr & Bono, 2006), demonstrating the continued masculine construal of leadership.

## Leader Gender and Performance Appraisals

## Performance Judgments

The leader role is incompatible with the female gender role. In addition to describing women as communal and not agentic (Bakan, 1966), the female gender stereotype also prescribes that women "should be" communal and "should not be" agentic (Burgess & Borgida, 1999; Eagly, 1987; Fiske & Stevens, 1993). The belief and expectation that women are kind, helpful, and nurturing (and are not assertive, decisive, and strong) is contrary to the masculine construal of leadership. The leader role is predominantly typified by agentic characteristics and

behaviors (Brenner et al., 1989; Duehr & Bono, 2006; Heilman et al., 1989; Schein, 1973; 1975). The qualities expected of women are unlike those expected and desired of leaders.

Tension between leader role and female gender role lowers women's evaluation as an actual and potential leader. Role congruity theory posits that the lack of correspondence between the female gender role and the leader role produces a tendency to evaluate females less favorably than males as leaders (Eagly & Karau, 2002). "This incongruity arises because social perceivers typically construe leadership roles in masculine terms, whereas they expect and prefer that women exhibit communal characteristics" (Eagly & Karau, 2002; p. 578). Women are placed in a bind whereby conforming to the female gender role results in a failure to fulfill requirements of the leader role, and conforming to the leader role results in a failure to fulfill requirements of the female gender role. In turn, women appear to lack requisite qualities of the leader role and are perceived less positively when occupying leadership positions. The perceived incongruity between the female gender role and the leadership role produces less favorable evaluation of women's leadership ability and of women's actual leadership behaviors (Eagly & Karau, 2002).

Consistent with the ideas of role congruity theory, Heilman (1983) also argued that gender stereotypes influence perceptions of an individual's attributes. Heilman (1983) proposed that there is a perceived lack of fit to the extent that attributes ascribed to an individual (e.g., gender) are inconsistent with those of a workplace role (e.g., leader role), resulting in decreased performance expectations, decreased expectations of success, and increased expectations of failure. Given that the leader role is perceived as requiring stereotypical masculine attributes, women occupying a leadership position don't appear to "fit" the role of a leader (and are expected to fail as leaders). Role congruity theory further adds that this lack of fit, or incongruity, contributes to women's less favorable evaluations.

Propositions similar to those of role congruity theory can be found in literature on leadership categorization theory. Categorization theory proposes that perceivers rely on cognitive knowledge structures, termed prototypes, to make sense of their surroundings (Rosch, 1978). According to leadership categorization theory developed by Lord and colleagues (Lord, 1985; Lord, Foti, & Phillips, 1982; Lord & Maher, 1991), evaluators compare a target individual to preexisting leadership prototypes, which represent the typical or average characteristics of leadership in a particular context. The process of comparing target individuals to a leadership prototype, termed a recognition-based process (Lord & Maher, 1991), leads to the perception of a match or mismatch between the target's characteristics and characteristics typical of the evaluator's leadership prototype. The comparison influences the evaluator's perceptions of the target. The individual is either categorized as a leader (match) or not categorized as a leader (mismatch), depending on the degree to which the target individual is regarded as similar to the prototypical leader. Furthermore, those deviating from the prototype and the norms it constitutes are excluded or devalued, whereas those fulfilling the prototype are conferred status and social influence (Eidelman, Silvia, & Biernat, 2006; Hogg, 2001, 2005). Even positive deviants (i.e., highly successful "overachievers" or "tall poppies") are devalued (e.g., Feather, 1994; Feather & Sherman, 2002), suggesting that failure to match the prototype (e.g., by deviating positively or negatively from group norms) elicits negative evaluations.

Applying this approach to gender, leadership categorization theory would suggest that perceivers compare women to gender-based leadership prototypes. Although leadership prototypes can vary among individuals (Lord, Brown, Harvey, & Hall, 2001) and be impacted by group membership (e.g., Dickson, Resick, & Hanges, 2006; Hains, Hogg, & Duck, 1997; Hogg & Reed, 2006), certain features of leader prototypes are consistent across most individuals.

Congruent with previous findings by Offermann, Kennedy, and Wirtz (1994), Epitropaki and Martin (2004) found masculinity to be prototypical of leaders. Although Epitropaki and Martin (2004) used the term "anti-prototypical" to describe this trait, this is an exaggerated interpretation of results. Responses indicate that masculinity was indeed deemed characteristic of leadership, although lower in prototypically than the other five traits investigated. When compared to the masculine leader prototype, women fail to match the typical characteristics of the leader prototype, provoking unfavorable evaluations. Leadership categorization theory, therefore, would suggest that women are devalued for not matching the masculine leader prototype, given that individuals are recognized and evaluated as leaders in accordance with their fit to the prototype. In a similar manner, role congruity asserts that individuals are evaluated in accordance with their gender-based correspondence with the leader role. Specifically, the incongruity between the female gender role and the leader role lowers women's evaluation as a leader.

The evaluative consequences predicted by role congruity theory are the result of gender-stereotypical inferences made about women in leader roles. Occupying a leadership position signals the enactment of agentic behaviors and a lack of communality. Occupying a leadership position, therefore, implies that women are not acting as they "should." Women's agency and deviation from prescribed communality results negative evaluations of performance.

Evidence to support this contention comes from research demonstrating that agentic female behavior is typically devalued. Studies investigating responses to women's agentic behavior indicates that, compared to men, women are evaluated less favorably when enacting stereotypical male behaviors such as leading in an autocratic or directive style (Butler & Gies, 1990; Eagly et al., 1992), engaging in self-promotion (Rudman, 1998), communicating

nonverbally in a task-oriented style (Carli, LaFleur, & Loeber, 1995), succeeding in leadership positions (Eagly & Johnson, 1990; Heilman et al., 1989; Heilman et al., 1995; Heilman et al., 2004), and initiating negotiations (Bowles et al., 2007). Even when women possess agentic qualities, such as dominance, that are consistent with the leader role, women are less likely than men to emerge as leaders (Ritter & Yoder, 2004). Women's contributions in group settings are undercut by perceptions that female team members are less influential and less apt to play leadership roles than male team members (Heilman & Haynes, 2005). Despite possessing expert knowledge, women's attempts to influence group strategy are less influential than men's (Thomas-Hunt & Phillips, 2004). Female agency may not only provoke unfavorable evaluation but also incite a backlash of social penalties, whereby agentic females are regarded as socially unattractive, less liked, and socially unskilled (Rudman, 1998; Rudman & Glick, 1999).

In addition to evidencing that agentic behavior is differentially valued for men and women, research also supports the assertion that women's perceived deficiency in communality is sanctioned. Women, who are expected to prescribe to feminine communality (e.g., niceness), violate stereotype-based gender role expectations when failing to act communally, "as women should". Because women's, but not men's, gender stereotype prescriptions include communal behaviors, women are exclusively penalized for acting in ways that imply a lack of communality. For example, whereas women are expected to be altruistic, fitting the communal stereotype, men are not. Withholding work-related help provokes unfavorable performance evaluations for women but has little effect on evaluations of men (Heilman & Chen, 2005). Women were rebuked for failing to engage in altruistic citizenship behavior, which violates women's prescriptive communal stereotype. Additional research indicates that women's supposed deviation from prescribed communality provokes unfavorable evaluations. Arguing that negative

reactions to females in masculine domains like leadership are the consequence of perceived female stereotype-based gender norm violations and the assumption that they lack feminine attributes, Heilman and Okimoto (2007) demonstrated that negative assessment of successful females was ameliorated with particular types of information evidencing communality. This finding suggests that penalties for success are in response to women failing to enact prescriptive feminine "should" behavior (i.e., women not being communal). Furthermore, Johnson, Murphy, Zewdie, and Reichard (2008) found that negative leader perceptions arose when genderstereotyped prescribed behavior was not demonstrated. When female leaders were not sensitive (and male leaders were not strong), they were perceived as less effective and less likeable.

Different gender role prescriptions exist for men and women that determine different behavioral expectations, such that consequences of men's and women's identical behavior will differ based on distinct gender prescriptions. As a result of the masculine construal of leadership, occupying a leader role implies the enactment of agentic behavior and a lack of communality. For women, however, agency is devalued and lack of communality is penalized. Despite identical leader behavior, therefore, women violate gender prescriptive stereotypes, resulting in less favorable leadership evaluations compared to men. Meta-analytic evidence supports the idea that male leaders are evaluated more favorably that female leaders. Seeking to review and resolve inconsistencies in research on the evaluation of male and female leaders, Eagly et al.'s (1992) meta-analysis demonstrated an overall tendency to favor male leaders relative to female leaders. The favoring of male leaders is even more pronounced when the masculine construal of leadership was emphasized, such as when leaders used a masculine style of leadership (d=.15), when leader roles were occupied primarily by men (d=.09), and when the leadership role was in a business context (d=.04). Furthermore, extensive meta-analytic results of studies using

resumes and applications also find that women are evaluated less favorably and receive lower selection ratings than men for male sex-typed positions (Davison & Burke, 2000). Given that the leadership role is sex-typed as masculine, this meta-analytic research supports the notion that males are favored for leadership positions.

In the same way that evaluations of identical leader behaviors favor men, it can be expected that identical leader performance will be evaluated less favorably for female leaders. Using organizational archival performance and promotion data, Lyness and Heilman (2006) found that women in male-typed line management positions received lower performance ratings than women in staff positions and men in either type of position, supporting the idea that the actual performance of women in leader roles is devalued relative to men. In a meta-analysis of studies comparing effectiveness of male and female leaders (many in organizational settings), Eagly et al. (1995) found that women were deemed less effective as leaders to the extent that leader roles were masculine construed and male dominated. Additional studies indicate that employees and managers doubt the effectiveness of women leaders (Sczesny, 2003) and differentially perceive the effectiveness of male and female leader behavior (Prime, Jonsen, Carter, & Maznevski, 2008).

The friction between leader role and female gender role results in evaluative consequences for women in leadership positions. Regardless of performance in the leader role, occupying a leader role denotes more agency than communality. When succeeding or failing as a leader, women in a leader role are not acting as "women should" and deviate from female gender stereotype prescriptions. The violation of prescriptive gender stereotypes results in less favorable evaluative responses, indicating that women in leader roles are subject to evaluative penalties for violating female prescriptions of communality. It is expected, therefore, that women who fail in

leader roles likely receive more negative performance evaluations than equivalent men.

Irrespective of the woman's performance as a leader, she violates the female prescriptive stereotype by occupying a leadership position, thereby provoking a more negative evaluative judgment of her performance relative to a similarly performing male.

Beyond judgments of leader performance, the less favorable evaluation of women in leader roles extends to perceptions of male and female leaders' competence. According to role congruity theory (Eagly & Karau, 2002), the perceived incongruity between the female gender role and the leadership role not only results in less favorable evaluation of women's actual leadership behaviors but also results in less favorable evaluation of women's leadership ability and capacity to perform in the leader role. Women are less likely to be ascribed leadership competence due to the perceived incongruity between the (communal) content of the female gender role and the (agentic) content of leadership roles (Eagly & Karau, 2002). As a result, women are regarded as less qualified for and less competent in leadership positions. For example, Heilman et al. (2004: Study 1) found that in the absence of explicit performance information, female leaders were rated as less competent than male leaders. In addition, females are perceived to be less competent, less influential, and less apt to play a leadership role than males in contributing to success, unless specific information prevents the attribution of responsibility for the success to the male (Heilman & Haynes, 2005).

Even when recognized, female competence is typically undermined or devalued. For example, when investigating intervention techniques aimed to change gendered performance expectations, women were still rated as less influential in groups despite being told that women and men are of equal competence (Pugh & Wahrman, 1983). Additionally, Phelan, Moss-Racusin, and Rudman (2008) found that despite recognizing agentic female applicants as equally

competent as agentic male applicants, evaluators shift hiring criteria to exclusively disadvantage females seeking leadership positions. Evaluators emphasized social skills as a more important factor than competence for determining the hireability of females, who suffered from lower social skills ratings than their male counterparts. Evaluators used perceived competence and social skills equally, however, in determining hiring decisions for males. Phelan et al. (2008) demonstrated that the women's competence was undercut and devalued as a hiring criterion for leadership (in favor of their lower perceived interpersonal skills).

Role congruity theory predicts that women are less likely to be perceived as capable in a leadership position. The conflict between the leader role and the female gender role contributes to women appearing less qualified than men for leadership because women appear to lack requisite leader skills, knowledge, and abilities. When occupying a leader role, therefore, it is expected that women are deemed less competent than their male counterparts. Failing in a leadership position reinforces beliefs regarding females' incompetence. Although it could be argued that both male and female leaders may be rated as less competent when failing than when succeeding, it is likely that upon failing female leaders will be rated particularly less competent than failing male leaders. Evidence suggests that, in general, women are regarded as less competent than men. Investigations of stereotype content by Fiske, Cuddy, Glick, and Xu (2002) confirm that men and women fall into distinct clusters of stereotyped groups, whereby the cluster of stereotypes that include men was consistently rated higher in competence than the cluster of stereotypes that include women. The female leader's failure, therefore, may substantiate her perceived incompetence, resulting in more negative competence evaluations of women's than men's leader failure.

Additionally, women leaders may receive less favorable competence ratings because men are held to different performance standards and given more leniency to fail. Men and women are subject to double standards, a subtle and often unconscious exclusionary practice whereby different criteria are applied to individuals of different status to infer a specified level of an attribute (Foschi, 2000). Research indicates that men and women are evaluated relative to different standards on a range of phenomena such as men and women's a) sexual behaviors (whereby men are allowed a greater frequency and variety of sexual experience; e.g., Hynie & Lydon, 1995; Oliver & Sedikides, 1992; Sprecher, McKinney, & Orbuch, 1987), b) attractiveness and aging (whereby middle-aged women are judged less attractive than middleaged men; e.g., Berman et al., 1981), c) parenting behaviors (whereby women are expected to perform more childcare than men to be deemed a good parent; Kobrynowicz & Biernat, 1997), and d) mental health (different definition for men and women; Maslin & Davis, 1975). Additional experimental research finds that participants set higher ability standards for women on a task in which men are (fictitiously) described as outperforming women (Foschi, 1996: Experiment 1). Other research in which standards were not directly assessed but revealed through recommendation decisions also evidences double standards for men and women. When making reward allocations, men were rated as more competent and suitable applicants than females for a professional position despite identical performance (Foschi, Sigerson, & Lembesis, 1995). When participants were asked to make hiring recommendations for fictional professional engineering applicants, male evaluators considered the male candidate more competent and more suitable for the position than an equally qualified female candidate (Foschi, Lai, & Sigerson, 1994).

Literature on double standards suggests that is more permissible for men than women to fail as leaders. The successful performance of low status individuals (e.g., women) is scrutinized and assessed by stricter standards than equal success by high status individuals (e.g., men; Foschi, 1989). When high-status individuals fail, however, they are given more lenient standards than low status individuals, which ensures that more ability and competence is ascribed to the high status individual than the low status individual (Foschi, 1989). Thus, men are given more leniency when failing, resulting in perceptions of men's higher competence. This suggests that in order to infer lack of competence higher status individuals must display more incompetence than lower status individuals (Foschi, 1989). This implies that men must demonstrate more failure than women to be deemed incompetent. Given identical performance failure, therefore, women are likely to be rated as less competent than men.

Further evidence supporting this idea comes from literature on the shifting standards model. Biernat et al. (1991) suggest that the application of different judgment standards based on gender stereotypes may impact evaluations by evoking different standards of comparison for men and women. According to the shifting standards model, attributes believed to be stereotypical of a group (or counter-stereotypical of a contrasting group) invoke different evidentiary standards for members of those groups. Biernat and Kobrynowicz (1997) propose that decisions are made independently for low and high status group when inferring minimum ability. Standards of low and high status groups reflect stereotyped expectations. Low status group members (i.e., women), therefore, have a lower standard of performance to suspect ability. To conclusively demonstrate ability, however, the standard is higher for low status groups. Experimental studies of applicant evaluations support distinct standards of evaluation for men and women. Participants required fewer job-relevant skills of women than men to feel they

"meet the minimum standard" to be successful in the position. Conversely, participants required more job-relevant skills of women than men to feel they "have the ability" to perform the job (Biernat & Kobrynowicz, 1997). Examining how minimum and confirmatory standards influence hiring decisions, Biernat and Fuegen (2001) had participants evaluate identical resume of a male or female and determine what level of performance on standardized tests and letters of recommendation are required for the applicant to be placed on the short list (minimum standard) or be hired (confirmatory standard). Consistent with predictions of the shifting standards model, female applicants were more likely to make the short list but were subsequently less likely to be hired than male applicants. In both experiments, participants set lower performance standards for placing a woman on the short list and set higher performance standards for hiring a female.

Women were held to lower standards than men to suspect competence (minimal standards) but were held to higher standards than men when evaluators made definitive inferences about competence (confirmatory standards).

Applied to perceptions of leader competence, shifting standards model would predict that although minimum standards for suspecting competence would be lower, confirmatory standards for evidencing competence would be higher for female leaders than male leaders. This means that at lower levels of performance relative to men individuals may begin to contemplate whether a woman is competent, although it take higher levels of performance relative to men for individuals to be convinced or assured of a woman's competence. Essentially, female leaders are required to outperform male leaders to be regarded as genuinely competent, suggesting that female leaders would be evaluated as less competent than similarly performing male leaders.

Furthermore, Biernat and colleagues have also suggested that minimum and confirmatory standards influence decisions relevant to identifying a *lack of* competence (Biernat et al., 1991).

For men, relative to women, there are likely lower minimum and higher confirmatory standards for indicating incompetence. Although men may be more likely than women to be suspected of incompetence at lower levels of performance, men are less likely than women to be definitively identified as incompetent. This implies that men need to demonstrate more performance failure than women to be confirmed as similarly incompetent, which suggests that men are given greater evaluative leniency in failure. It would be expected, therefore, that at the same level of failure a female leader will be deemed less competent that a male leader.

Evidence from literature on double standards and shifting standards indicate that men and women are evaluated relative to different standards. As a result, men are afforded more leniency when failing in leadership roles, allowing for more favorable evaluations of men's competence. Further, role congruity theory predicts that the perceived incongruity between the female gender role and the leadership role provokes less favorable evaluation of women's competence in a leadership position. Given that women's competence as a leader is devalued and failure reinforces negative perceptions of her competences, it is expected that female leaders will be regarded as less competent than male leaders.

Hypothesis 1: Female leaders who fail will receive lower a) performance evaluations and b) ratings of leader competency than male leaders who fail.

# **Social Perceptions**

The conflict between the leader role and the female gender role arises because the masculine construal of leadership roles is incongruent with the expectation of feminine communality (Eagly & Karau, 2002). The leader role is characterized by agentic attributes and behaviors (Brenner et al., 1989; Duehr & Bono, 2006; Heilman et al., 1989; Schein, 1973; 1975). Occupying a leadership role signals the performance of agenticism, not communality. As such, a

woman occupying a leadership role implies the enactment of agenticism and a failure to enact communality. This violates the prescriptive female gender stereotype dictating that women "should" be communal and "should not" be agentic (Burgess & Borgida, 1999; Eagly, 1987; Fiske & Stevens, 1993). Whereas men fulfill male stereotype prescriptions of agenticism by holding a leadership role, women violate stereotype-based prescriptions, thereby resulting in less favorable evaluations for female leaders.

Prescriptive stereotypes establish expectations regarding attributes and behaviors suitable for each gender. There are behavioral prescriptions stipulating that women should be communal and not be agentic, whereas men should be agentic and not be communal. Women violate gender role prescriptions, therefore, not only when behaving "like men" but also when failing to behave "like women should" (Heilman & Chen, 2005). Individuals violating gender norms are not only considered to have engaged in counter-normative behavior, but also believed to be deficient in stereotype-based attributes normative for their gender (Heilman & Wallen, 2010), suggesting that women who are perceived to act masculine are believed to lack communality. In response, women are penalized for being agentic and for not being communal. Specifically, penalties for women's prescription violation take the form of social censure. Penalties express disapproval of gender-norm violation, and take the form that is opposite to how men and women "should be" (Heilman & Wallen, 2010). Whereas women's penalties reflect negative reactions to the communality expected of them, men's penalties reflect negative reactions to the agency expected of them. Women's prescriptive penalties, therefore, are social in nature (e.g., dislike), emphasizing female communal traits. The nature of men's prescriptive penalties, however, is more achievement-related (e.g., disrespect), emphasizing prescribed agentic traits. Results confirm that women exclusively incur social penalties for violating gender prescriptions. In

response to violations of the male gender role, men are seen as ineffectual and undeserving of respect because they are perceived as lacking agency and engaging in communal behaviors, but do not incur social penalties (Heilman & Wallen, 2010). Men's violation of agentic prescriptive behavior provokes achievement penalties which reflect disapproval of men's devation from agenticism. Women's violation of communal prescriptive behavior, therefore, provokes social penalties which reflect disapproval of behaviors implying a deviation from expected communality. Thus, female leaders who fail are expected to incur social reprisal for violating gender stereotype-based prescriptions.

Research on the backlash of female agency supports this assertion. Females encounter a backlash effect whereby women demonstrating agency are perceived as socially deficient (Rudman, 1998). Research on self-promotion suggests that women face an impression management double bind. Although women must match men on agency to counter perceptions that they are incapable or unqualified for high-status positions, this results in social repercussions for women (Rudman, 1998; Rudman & Glick, 1999). "It is incumbent on women to present themselves as competent and ambitious; yet when they do so, they risk social and economic penalties" (Phelan et al., 2008; p. 410). Studies using simulated job interview protocols indicate that self-promoting women are perceived as less socially attractive (i.e., likable, friendly) than a self-promoting man (Rudman, 1998). Women's self-promotion enhanced perceptions of competence, but women incurred social reprisals for violating gender prescription of modesty (Rudman, 1998). Additional research has replicated these findings. Rudman and Glick (1999) as well as Phelan et al. (2008) similarly demonstrated that agentic females were viewed as competent, but less socially skilled compared to agentic males. In another set of studies by Bowles et al. (2007), participants evaluated job candidate interviews in which the candidate

attempted to negotiate for higher compensation and benefits. Findings indicate that women encounter more resistance than men when negotiating for higher compensation because such behavior signals a status violation, eliciting negative social perceptions (i.e., seen as less nice, more demanding). Research on female backlash, therefore, suggests that female agency is socially rebuked. A similar type of social backlash, therefore, can be expected for female leaders who are assumed to enact agentic characteristics and behaviors.

Investigations by Heilman and colleagues on penalties for success provide additional evidence that female leaders likely incur social sanctions in response to gender norm violations. When leadership success was undisputable, female leaders were rated as less likeable and more interpersonally hostile than male leaders (Heilman et al. 2004). Heilman et al. (2004) demonstrated that women's leadership was socially devalued when considered inconsistent with appropriate gender behavior for women, suggesting that social disapproval is a response to women's failure to act in accordance with gender-stereotypic norms. Indeed, empirical research has shown that successful female leaders are perceived as more socially unpleasant than their male counterparts (e.g., Heilman et al., 1995; Heilman, et al., 2004). These women have been regarded as cold, selfish, bitter, and quarrelsome (Heilman et al., 1995; Porter & Geis, 1981; Schein, 1973), making them undesirable as group members (Hagan & Kahn, 1975) and less preferred as bosses (Heilman et al., 2004). Replicating previous findings, Heilman and Okimoto (2007) found that women successful in leadership positions were more disliked, interpersonally hostile, and less desirable as a boss than identical male leaders. Operating on the idea that social disapproval is elicited by women's perceived gender norm violations and the assumption of a lack of feminine attributes, Heilman and Okimoto (2007) tested whether information indicating a woman's communality would counteract her social derogation. Negative social assessments of

female leaders were ameliorated with particular types of information evidencing communality. Specifically, this occurred only when the information a) explicitly demonstrated her communal qualities (Study 1), b) was attributed to the female herself (Study 2), and c) could be conveyed by role information (Study 3), such as motherhood. Findings suggest, therefore, that social penalties are in response to women failing to enact prescriptive communal behavior (Heilman & Okimoto, 2007). Women in leadership positions are assumed to lack communal attributes and to have engaged in agentic behavior. As such, women failing in leader roles would be expected to experience social reprisal.

It could be argued that women may incur fewer social penalties when failing because failing is consistent with performance expectations of female leaders and suggests the female does not have adequate levels of agency requisite for successful leadership. Although failing fulfills expectations of women's lower performance relative to men, the female holds a leadership position. Occupation of the leader role implies enactment of agentic behaviors and a lack of communality, thereby indicating a violation of the female prescriptive stereotype and eliciting social censure. Similarly, although the failing female leader may be perceived as not meeting agency requirements to be a successful leader, she still occupies a leader role which signals the sufficient enactment of requisite agency to obtain the position. Despite failing, therefore, a woman in a leader role implies the violation of gender-stereotypic norms and subsequently provokes social sanctions.

Women behaving counternormatively violate prescriptive gender stereotypes and risk social censure (Deaux & Major, 1987; Eagly, 1987; Huston & Ashmore, 1986; Rudman, 1998; Rudman & Glick, 1999). Given that engaging in leadership behaviors is traditionally viewed as stereotypically masculine (e.g., Atwater et al., 2004; Powell et al., 2002; Schein, 1973; 1975)

which is inconsistent with the female gender role (Eagly & Karau, 2002), female leadership violates prescriptive gender stereotypes, suggesting that female leaders will elicit social disapproval for behaving in ways that flout the prescriptive expectations of the female gender (e.g., Heilman & Chen, 2005; Heilman & Okimoto, 2007).

Hypothesis 2: Female leaders who fail will be perceived as a) more interpersonally hostile and b) less likeable than male leaders who fail.

# Personnel Decision-Making Recommendations

Personnel decisions regarding organizational reward and penalty recommendations include personnel actions such as pay increase, recognition, termination, and demotion. Such decisions are instrumental for an individual's career success and advancement. Whereas greater reward recommendations may aid in career progression through unique opportunities or achievements, greater penalty recommendations may thwart career development and diminish job prospects. Personnel decision-making recommendations, however, have historically disadvantaged women. Women have consistently received fewer pay raises and salary increases (e.g., Cannings & Montmarquette, 1991; Gupta et al., 1983; Heilman et al., 2004), fewer job opportunities (e.g., Cash, Gillen, Burns, 1977; Heilman et al., 2004; Rudman & Glick, 1999), fewer promotion opportunities (e.g., Lyness & Heilman, 2006), and more severe organizational punishment (e.g., Dobbins, Pence, Orban, & Sgro, 1983) than men. Relative to men, therefore, women are typically allocated fewer organizational rewards and more organizational penalties.

It is expected that female leaders are similarly disadvantaged in personnel decisions. A lack of correspondence between the female gender role and the leader role, according to role congruity theory (Eagly & Karau, 2002), produces a tendency to evaluate female leaders less favorably than male leaders. Female leaders, therefore, would be expected to receive less

favorable personnel decision recommendations than their male counterparts. Compared to male leaders, female leaders are perceived as less congruent with the requisite masculine qualities of the leader role. Furthermore, women violate prescriptive gender stereotypes in a leadership position. Women leaders are inferred to enact agency and lack communality simply by occupying the leader role, thereby provoking negative evaluative judgments. Thus, female leaders are less likely to be rewarded and more likely to be penalized due to the conflict between female gender role and leader role.

Evidence suggests that relative to male leaders, female leaders are indeed disadvantaged in personnel decision-making recommendations. Research indicates that women are seen as less suitable for leadership positions than men (Dipoye et al., 1975; Marlowe, Schneider, & Nelson, 1996) and are less likely to receive hiring recommendations for male sex-typed jobs, such as leadership (Cash et al. 1977; Glick, Zion, & Nelson, 1988; Phelan et al., 2008; Rudman & Glick, 1999). Managers reviewing fictional, filmed interviews and applications for a leadership position rated female candidates, relative to male candidates, lower in hiring favorability ratings and recommended females for lower salaries despite equivalent job experience and education as male candidates (Hitt & Barr, 1989). Even when in a in a leadership position, women are less likely than men to be promoted (Lyness & Judiesch, 1999). Heilman and Chen (2005) forward that reward recommendations are influenced by the degree of behavioral consistency with prescriptive gender stereotypes, finding that failing to engage in altruistic citizenship behavior violates women's (but not men's) prescriptive stereotype, resulting in women's fewer reward recommendations relative to men. These results suggest that women who violate female gender prescriptions by occupying a leader role will receive fewer reward recommendations than men. Additional research indicates that female employees who fail receive more severe corrective

actions than male employees who failed despite identical poor performance (Dobbins et al., 1983), which suggests that female leader failure will be punished more harshly than male leader failure. Overall, disparate personnel decision-making judgments of identical men and women suggests that female leaders are less likely to receive reward recommendations and more likely to receive penalty recommendations following performance failure.

In addition to the incongruity between the leader role and the female gender role, genderbased double standards may also contribute to the female leader's unfavorable personnel decision-making recommendations. Different evaluative criteria are applied for men and women. Women are assessed by stricter standards for success, and men are assessed by more lenient standards for failure (Foschi, 1989; 2000). Evidence suggests that double standards also exist for personnel decision recommendations. Compared to men, more is required for women to be rewarded. Despite identical performance and qualifications, women are less likely to be awarded hiring opportunities for professional positions than men (Foschi et al., 1994; Foschi et al., 1995). Rather, women must do more to obtain the same reward afforded to men. Using archival organizational data, Lyness and Heilman (2006) showed that female leaders who were promoted had more favorable performance evaluations than males, suggesting that women were held to a different performance standard for promotion. It is expected, therefore, that women in leadership positions are less likely to be rewarded than identically performing male leaders. With respect to penalty recommendations, men are given leniency in failure and punishment (Foschi, 1989; 2000). In general, females receive more severe corrective actions, such as verbal reprimand, loss of pay, and admonishment, and are responded to more intensely than identical poorly performing males (Dobbins et al., 1983). Personnel managers are less likely to punish men in male sex-typed occupations, like leadership (Larwood, Rand, & Der Hovanessian, 1979).

Given fictional labor arbitration scenarios, participants punished female employees more severely than male employees (Hartman, Fok, Crow, & Payne, 1994) and recommended more lenient penalties for male employees in response to theft and drug test violations (Bisking, Ree, Green, & Odom, 2003). This research evidences the application of double standards for men's and women's reward and penalty allocation, suggesting that following failure female leaders are more likely to receive negative personnel decision-making recommendations than male leaders.

Although female leaders are expected to receive fewer reward recommendations and more penalty recommendations following performance failure, it is possible that male leaders may, in fact, receive more unfavorable personnel decision-making recommendations. Failure is consistent with expectation of female leader performance and, therefore, may not elicit severe negative personnel recommendations for women. Men, however, are not expected to fail in leadership roles and may be rewarded less and punished more for violating this performance expectation. According to expectancy-violation theory (Jussim, 1986; Jussim et al., 1987), violations of stereotype-based expectancies are evaluated more extremely in the direction of the violation, suggesting that males may be subject to more unfavorable personnel decision recommendations than women. Women, however, are also violating stereotype-based expectations by occupying a leader role. Specifically, women in leadership violate gender norm prescriptions because occupation of the leader role implies enactment of agentic behaviors and a lack of communality. Men's failure to meet performance expectations could also be conceptualized as a prescriptive gender violation (i.e., not fulfilling expected gender behavior). Conceptualized in this way, both male and female leaders are violating gender prescriptions. The range of acceptable behaviors, however, is often narrower for women than men (Rudman & Glick, 1999), suggesting that women's communality may be more prescriptive than men's

agency. This implies that women's prescriptive stereotype violation would provoke more severe negative responses than men's violation following performance failure.

Hypothesis 3: Female leaders who fail will be recommended for a) fewer rewards and b) more penalties than male leaders who fail.

# Attributional Processing of Leader Failure

## Causal Attribution Dimensions

Following a performance event or action, there is a tendency to engage in a causal search process to understand why the phenomenon occurred (particularly when the outcome is negative, important, or unexpected). This inherent desire for understanding another's behavior prompts individuals to generate causal explanations to identify reasons why an event occurred (Heider, 1958). The causes ascribed to explain an individual's performance are termed attributions.

Within the attribution literature, there are two primary approaches to understanding attributions —one focusing on the antecedents of attributions, and the other focusing on consequences of attributions. The first framework is based on the work of Kelley (1967; 1973) and concentrates on the informational antecedents that influence the causal attributions generated. Kelley's covariation model (1967) proposes that causal attributions for behavior are based on three dimensions of information: distinctiveness, consensus, and consistency. Distinctiveness information refers to the uniqueness of the behavior, consensus information refers to the degree to which others behave similarly in a given situation, and consistency information refers to the stability of an individual's behavior in the same situation. The causal attribution for behavior is determined by the combination of these three categories of information. For example, a coworker's ingratiation behavior is proposed to be attributed to elements of the context if distinctiveness is high (the behavior is only performed during annual

performance reviews), consensus is high (all employees behave like this during performance reviews), and consistency is high (this employee always behaves in this manner during annual performance reviews). According to Kelley, the causal attributions ascribed to an individual's performance are affected by informational components involved in the formation of attributions.

The second framework that predominates the attribution literature is based on Weiner's work (Weiner, 1979; 1985; Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1972) and concentrates on identifying the characteristics of attributions that impact the consequences of causal explanations. Weiner's attribution theory (1985) describes the process by which individuals infer causes of a performance event and details how these causal explanations impact subsequent evaluations and decisions. Weiner's attribution theory is specific to the achievement domain, emphasizing the causal attributions elicited in response to the achievement outcomes of success and failure rather than for achievement events (i.e., why an employee was promoted versus why an employee accepted a particular job offer; Weiner, 2008). In response to achievement success or failure, causal search is initiated. According to Weiner, the attributional dimensions of causes ascribed for the performance influence subsequent judgments and behaviors in response to the achievement event.

In contrast to Kelley's approach focusing on the informational dimensions that affect the type of attributions generated, Weiner and colleagues concentrate on the dimensions of attributions suggested to impact outcomes of achievement-related performance explanations. The current study aims to examine the role of attributions in influencing the evaluative outcomes of leader failure. Given Weiner's focus is on attributional dimensions' influence on outcomes, Weiner's attributional framework was adopted for the current study.

According to Weiner (Weiner, 1985; Weiner et al., 1972), causal attributions generated by performance events share three distinct properties: locus, stability, and controllability. Causal attributions for success and failure are predominantly identified along the dimension *locus*, which describes whether the cause of performance is perceived to be due to internal factors (i.e., aspects of the individual) or to external factors (i.e., aspects of the environment). The internalexternal locus dimension is the most fundamental causal distinction with respect to attributions (Heider, 1958; Weiner, 1985; Weiner et al. 1972) and has been the focus of most empirical attribution research. The locus dimension, however, does not address the consistency of the cause. For example, whereas particular internal causal factors appear to remain relatively constant (e.g., general aptitude), other internal causal factors seem to fluctuate more frequently (e.g., emotion). For this reason, a second dimension of causality, stability, was identified (Weiner et al., 1972). Stability describes whether the cause is perceived to be invariant or changeable over time. The reasoning for the addition of this causal property is that within the locus attribution the cause can additionally be perceived as stable or unstable. For example, internal failure attributions can include stable (e.g. low ability) or unstable (e.g., low effort) causes. It was later recognized, however, that this two-dimension classification system was limited in that it did not account for volitional control (Weiner, 1979; 1985). The taxonomy was expanded to include the causal property *controllability*, which refers to the degree to which the individual is accountable for the outcome (Weiner, 1979; 1985). Attributions of controllability are made when the actor is viewed as capable of influencing the cause of the performance. For example, degree of effort exerted can be viewed as an attributional cause of performance that is under the control of the actor, whereas the difficulty of the task may be perceived as uncontrollable.

Prior to integrating controllability into the causal structure of attributions, the dimensions of locus of causality and stability were used by Weiner et al. (1971) to develop a classification of four specific causal explanations thought to be most prevalent in the achievement domain. Based on a 2 (internal-external) x 2 (stable-unstable) categorization scheme that crossed the locus of causality and stability dimensions, Weiner et al. (1971) identified four specific causal explanations: ability, effort, luck, and task difficulty (see Table 1). With respect to the locus dimension of attributions, luck and task difficulty are perceived to be external explanations of performance, whereas ability and effort are viewed as internal explanations of performance. With respect to the stability dimension of attributions, ability and task difficulty are perceived as more enduring and stable explanations for performance, whereas effort and luck are viewed as more variable and temporary explanations for performance.

There are weaknesses, however, in using this 2 x 2 causal dimension model. First, ability, effort, luck, and task difficulty do not represent clearly defined levels of locus and stability dimensions. Rather, these specific explanations may represent different levels on a dimension depending on the individual interpretation by the subject. Although ability is believed to denote high stability (Weiner et al., 1971), ability may be viewed as unstable when the perceiver interprets ability as skill or knowledge rather than aptitude (Weiner, 1983). The perceiver, expecting to increase skill or knowledge over time, may perceive ability as changeable rather than invariant. Additionally, despite being characterized as unstable in the taxonomy (Weiner et al., 1971), effort has also been argued to have stable properties (Weiner, 1974). Interpreting effort in terms of personal tendencies (e.g., lazy, industrious), one may perceive effort as stable rather than changeable. These examples illustrate that ability, effort, luck, and task difficulty may be misclassified based on the categorization proposed by Weiner et al. (1971), creating confusion

and inappropriate conclusions from research using this taxonomy. Second, the 2 x 2 taxonomy is restrictive. This categorization considers only four specific explanations of performance of a virtually endless number of causal explanations possible. Additional causal explanations for performance success or failure are not captured in this narrow set of specific explanations. Third, the 2 x 2 causal dimension model does not include the controllability dimensions of causal attributions. Although there is criticism surrounding the deductive way in which attribution theorists developed the causal structure, empirical evidence supports the three dimension organization which includes controllability (McAuley, Duncan, & Russell, 1992; Weiner, 1985). The four specific attribution explanations, however, exclude controllability, indicating that the Weiner et al. (1971) 2 x 2 taxonomy is incomplete.

Although unaware of these shortcomings as the time, problems with the 2 x 2 categorization are now recognized by attribution theorists who endorse capturing causal dimensions directly to avoid phenomenological confusion (Weiner, 1983). The value of applying a taxonomy of more global causal dimensions of attributions is that the structure underlying specific causal attributions can identify common properties along which comparisons can be made among the potentially infinite number of performance explanations (Weiner, 1985). Unfortunately, despite the known limitations of using ability, effort, luck, and task difficulty as representing clearly defined levels of the locus and stability dimensions, these hyper-specific causal explanations continue to be frequently used in attribution research. In doing so, extant understanding of the influence of attributions on behavior is limited and, perhaps, inaccurate. For this reason, the current study focuses directly on all three dimensions of attributions identified by Weiner (i.e., locus, stability, controllability), which concentrates on the common underlying properties of explanations for performance failure.

## Attributional Bias

Attribution researchers argue that stereotypes influence causal attributions by creating expectations regarding and individual's behavior (e.g., Deaux, 1976; Jones & McGillis, 1976). The consistency of an individual's performance with the evaluative standards set by the stereotype impact what causal attributions are chosen (e.g., Jackson, Sullivan, Hodge, 1993; Nieva & Gutek, 1980).

Jackson et al. (1993) proposed that behavior judged to be consistent with the stereotype will be attributed to internal causes, whereas behavior judged to be inconsistent with the stereotype will be attributed to external causes or internal, unstable causes. Supporting this prediction, Jackson et al. (1993) found that participants evaluating the college credentials of fictitious White and Black applicants attributed stereotype-inconsistent academic performance more than stereotype-consistent performance to external causes or to internal, unstable causes. In addition to evidence on race, research findings linking gender stereotypes and attributions generally support the notion that stereotype-consistent and stereotype inconsistent behavior are attributed to different sets of causal attributions.

Replicating seminal findings of Deaux and Emswiller (1974), Cash et al. (1977) found that success in male-typed tasks is attributed to ability more for males than females. It has been shown that whereas men's successes are attributed to ability, women's successes are typically attributed to increased effort, good luck, or task ease (Cash et al., 1977; Deaux & Emswiller, 1974; Feldman-Summers & Kiesler, 1974; Taynor & Deaux, 1975). Indeed, the performance of highly successful female leaders was less likely to be attributed to ability than that of successful male leaders (Greenhaus & Parasuraman, 1993). Meta-analytic results support these findings, demonstrating that success at male-typed tasks, like leadership, is associated with high effort (d=

|.17|) for females and high ability (d= |.08|) for males (Swim & Sanna, 1996). These results suggest that female success in male-typed tasks, which is inconsistent with stereotyped expectations, is likely to be perceived as the result of something external to her, which will likely change in the future, and that is not under her direct control. One might expect, therefore, that female failure in male-typed tasks, which is consistent with stereotyped expectations, is likely to be perceived as the result of something internal to her, which will likely continue unchanged into the future, and that is under her direct control. Indeed, empirical evidence suggests that causal attributions are also distinct for male and female failure. Whereas men's failures are attributed to bad luck, task difficulty, or lack of effort, women's failures are attributed to lack of ability (Cash et al., 1977; Etaugh & Brown, 1975; Feather & Simon, 1975). Additional meta-analytic research supports these findings, indicating that failure at male-typed tasks, like leadership, is associated with low effort (d= |.16|) and bad luck (d= |.13|) more for males than for females (Swim & Sanna, 1996). Overall, prior research suggests that men and women's performance is causally attributed in accordance with the consistency of the performance outcome with stereotype-based expectancies. Specifically, performance consistent with stereotype-based standards is likely attributed to internal, stable, and controllable causes.

The leadership role is gender-stereotyped, characterized as predominantly masculine. As discussed earlier, leaders are typically described in masculine ways (Atwater et al., 2004; Powell & Butterfield, 1979; 1989; Schein, 1973; 1975) and evidence continues to demonstrate greater congruence between successful managers and men than between successful managers and women (e.g., Brenner et al., 1989; Duehr & Bono, 2006; Heilman et al., 1989). Performance expectations of male and female leaders follow from the stereotyped, masculine construal of the leader role. Typified by agentic qualities, the characteristics of the leader role are unlike those

expected and desired of women. Consequently, males, who are perceived as more congruent with the leader role, would be expected to succeed in leadership roles. Females, who are perceived as incongruent with the leader role would be expected to fail in leadership roles. Male leader failure, therefore, is inconsistent with the stereotype-based performance standard, suggesting he is unlikely to be seen as responsible for the failure and causes for failure would be expected to be attributed to less internal, stable, and controllable causes. Female leader failure, however, is consistent with the stereotype-based performance standard, suggesting her performance failure would likely be attributed to internal, stable, and controllable causes.

Considered in light of previous research on the effects of stereotypes on attributions, it is expected that locus, stability, and controllability attributions for leader behavior will be influenced by gender stereotypes. Female leader failure is expected to be perceived as the result of something about the person, invariant over time, and controllable more than male leader failure.

Hypothesis 4: Causes of performance failure will be attributed to a) more internal, b) more stabile, and c) more controllable causes when the leader is female compared to male.

# Mediating Role of Attributions

Each of the three attribution dimensions is argued to influence evaluative judgments following a performance event. In response to success or failure, causal search is initiated, particularly when the outcome is negative, important, or unexpected (Weiner, 1985). The degree to which a cause is perceived to be internal, stable, and controllable elicits a psychological reaction that affects subsequent judgments and behaviors.

More specifically, Weiner's attribution theory of social motivation and social conduct (Weiner 1993; 1995b) describes how the causes inferred for a performance event vary along the attribution dimensions of locus and controllability, which produce judgments of responsibility. The responsibility inferences give rise to emotions that ultimately influence decisions and behavioral responses. To the extent that the cause of a person's performance is perceived as resulting from something internal to the person and controllable, that person will be viewed as more responsible for the performance outcome. Following this logic, a leader who fails would be regarded as more responsible when the cause for failure is the result of something about the leader and over which they had control. Following this, responsibility inferences elicit affective responses of sympathy, which drives helping behavior and positive responses, and of anger, which drives punitive behavior and negative responses. Individuals judged as responsible for failure engender less sympathy and more anger from others, thereby triggering less prosocial and more negative, punitive responses. A leader judged to be responsible for their failure, therefore, would receive less sympathy and more anger from others, resulting in less positive evaluative judgments.

Generally, prior research supports this idea finding that compared to failure due to a lack of ability (i.e., an internal, uncontrollable cause), failure due to a lack of effort (i.e., an internal, controllable cause) is more deserving of punishment (Lanzetta & Hannah, 1969; Leventhal & Michaels, 1971; Weiner & Kukla, 1970). Research also demonstrates a strong relationship between internal attributions and leader's evaluative judgments of reward/punishment responses and need for close supervision in the future (Ashkanasy, 1989; Ashkanasy & Gallois, 1994). Internal attributions for a subordinate's poor performance have been found to result in more severe negative evaluations and punitive disciplinary actions (e.g., Green & Liden, 1980;

Mitchell & Wood, 1980). For example, examining how attributions for a poorly performing employee influence specific personnel decisions, Struthers, Weiner, and Allred (1998) found that employees are perceived as responsible for their poor performance to the extent that the cause of the poor performance is attributed to something about the employee, over which they had control. In turn, judgments of responsibility were positively related to the decision to reprimand the poorly performing employee.

In addition to locus of causality and controllability, causes inferred for a performance event are also differentiated along the stability dimension. The stability of the causes attributed influences expectation of future success and failure (Weiner 1993; 1995). To the extent that the cause of a person's performance is seen as stable, that person will be expected to demonstrate a similar pattern of performance in the future. Expectation of success results in more positive evaluations and behaviors, whereas expectation of failure results in more negative evaluations and behaviors. For example, the decision to demote or fire a poorly performing employee is positively related to expectations of future employee poor performance (Struthers & Weiner, 1998). It follows, therefore, that leaders who fail will be expected to continue to fail in the future when the cause for the failure is the result of something that does not vary over time which, in turn, results in more negative and less positive responses to the leader's failure. There is evidence to suggest that this may be due, in part, to feelings of hopelessness that are elicited by stable attributions for a negative performance outcome (Weiner et al., 1978; 1979).

In sum, attribution theory proposes patterns of responses following leader failure.

Individuals will receive more negative evaluative judgments when the failure is seen as resulting from something internal or controllable because they are deemed more responsible for the performance failure. Individuals will also receive negative evaluative judgments when the failure

is attributed to stable causes because there is an expectation that the person will fail again in the future

Recall, however, that gender can bias attributions made for failure. Female leader failure is consistent with the stereotyped expectations of women's performance in a leadership role and, therefore, likely to be attributed to causes that indicate her responsibility and future expectation of leader failure. For example, whereas men's failures are typically attributed to bad luck, task difficulty, or lack of effort; women's failures are typically attributed to lack of ability (Cash et al., 1977; Etaugh & Brown, 1975; Feather & Simon, 1975). This suggests that gender influences causal attributions which, in turn, impact evaluative judgments. When a female leader succeeds, others can discount her performance by attributing it to causes that minimize her responsibility for the success, thereby resulting in less positive evaluative judgments than warranted.

Conversely, when a female leader fails, others may readily acknowledge her poor performance by attributing it to causes that emphasize her responsibility for failure, thereby contributing to more negative judgments than warranted. It is expected, therefore, that leader gender indirectly impacts evaluative judgments through its influence on causal attributions.

Attributions are sense-making mechanisms used to understand why a performance outcome occurred. By functioning as sense-making mechanisms, however, attributions can operate to maintain stereotypes by enabling individuals the opportunity to cognitively resolve stereotype inconsistencies and justify prejudiced responses. Attributions can serve to maintain stereotypes by allowing the evaluator to resolve any inconsistencies between the target's expected behavior, as determined by the gender stereotype, and the target's actual behavior. There is a tendency for individuals to provide explanations for outcomes inconsistent with our expectations (Weiner, 1985). This explanatory bias predisposes individuals to attend to and

rationalize the inconsistency. This would suggest that male leader failure, as a result of being inconsistent with gender-based stereotype expectations, would be subject to greater explanation and rationalization than female leader failure. Consequently, male leader failure is likely to be discounted and explained away. Attributions can also serve to maintain stereotypes by justifying the expression of prejudiced responses. The Justification-Suppression Model (Crandall & Eshleman, 2003) conceptualizes attributions as justifications that "release" prejudice. Attributions, which support judgments of responsibility, thereby provide adequate justification for discriminatory evaluations.

In sum, attribution theory forwards that the consequences of a performance event are determined, in part, by the causes ascribed to the success or failure (Weiner, 1985). Causal attributions, however, are subject to bias and have been shown to be influenced by gender stereotypes (Cash et al., 1977; Deaux & Emswiller, 1974; Etaugh & Brown, 1975; Feather & Simon, 1975; Feldman-Summers & Kiesler, 1974; Garland & Price, 1977). Therefore, the gender of the leader can impact leader evaluations by influencing the attributional causes generated to explain the leader's performance failure. As such, leader gender is proposed to indirectly affect evaluative judgments of the leader by influencing the causes attributed to the leader's failure. In this way, attributions can operate to maintain stereotypes by providing the opportunity to cognitively resolve stereotype inconsistencies and justify prejudiced responses.

Given that attributional processing of behavior functions as a sense-making mechanism, attributions likely facilitate the cognitive maintenance of gender stereotypes and, consequently, discriminatory evaluations. When a female leader succeeds, others can discount her performance by attributing it to causes that minimize her responsibility for the success, thereby resulting in less positive evaluative judgments than warranted. Conversely, when a female leader fails, others

may readily acknowledge her poor performance by attributing it to causes that emphasize her responsibility for failure, thereby contributing to more negative judgments than warranted. Thus, the three attribution dimensions of locus, stability, and controllability represent three features through which individuals can cognitively distort and rationalize explanations for leader failure.

As noted earlier, the first causal dimension of attributions is locus of causality, which describes whether the cause of performance is due to factors internal to the performer or external to the performer (Weiner, 1985; Weiner et al. 1972). Leader gender is expected to indirectly impact leader evaluations by influencing the degree to which the leader's failure is attributed to internal causes. Upon failing, the female leader's performance is likely attributed to internal causes, given that female leader failure is consistent with the stereotyped expectations of women's performance in a leadership role. According to attribution theory, internal locus attributions are associated with greater levels of responsibility for failure, which elicits anger, little sympathy, and results in more negative and less positive evaluative responses (Weiner, 1993; 1995). This suggests that women who have failed in a leadership role will be perceived as more responsible for the performance failure, contributing to unfavorable negative performance judgments, social perceptions, and personnel decision recommendations.

Hypothesis 5: Internal attributions for failure will mediate the relationship between leader gender and a) performance evaluations and b) ratings of leader competency.

Hypothesis 6: Internal attributions for failure will mediate the relationship between leader gender and a) interpersonal hostility and b) likeability.

Hypothesis 7: Internal attributions for failure will mediate the relationship between leader gender and personnel a) reward recommendations and b) penalty recommendations.

The second causal attribution is stability, which describes whether the cause is perceived to be changeable over time (Weiner et al., 1972). Leader gender is expected to indirectly impact leader evaluations by influencing the degree to which the leader's failure is attributed to stable causes. Female leader failure is likely attributed to stable causes, given that female leader failure is consistent with the stereotyped expectations of women's performance in a leadership role. Stable attributions for failure are associated with greater expectations of future failure and lower expectations of future success, contributing to more negative and less positive evaluative judgments (Weiner 1993; 1995). This suggests that women leaders who have failed will be expected to continue to fail as leaders in the future, thereby resulting in unfavorable negative performance judgments, social perceptions, and personnel decision recommendations.

Hypothesis 8: Stable attributions for failure will mediate the relationship between leader gender and a) performance evaluations and b) ratings of leader competency.

Hypothesis 9: Stable attributions for failure will mediate the relationship between leader gender and a) interpersonal hostility and b) likeability.

Hypothesis 10: Stable attributions for failure will mediate the relationship between leader gender and personnel a) reward recommendations and b) penalty recommendations.

The third causal attribution dimension is controllability, which refers to the degree to which the individual is accountable for the outcome (Weiner, 1979; 1985). Leader gender is expected to indirectly impact leader evaluations by influencing the degree to which the leader's failure is attributed to controllable causes. Given that female leader failure is consistent with the stereotyped expectations of women's performance in a leadership role, the failure of a female leader is likely attributed to controllable causes. Indeed, research suggests that expected outcomes that confirm pre-existing beliefs (e.g., women are ineffective leaders, women will fail

at leadership tasks) are typically attributed to stable, internal causal attributions (e.g., Pyszczynski & Greenberg, 1981; Swim & Sanna, 1996; Weiner et al., 1972). Controllable attributions are associated with greater levels of responsibility for failure, which elicits more negative and less positive evaluative responses (Weiner, 1993; 1995). This suggests that women who have failed in a leadership role will be perceived as more responsible for the performance failure, contributing to unfavorable negative performance judgments, social perceptions, and personnel decision recommendations.

Hypothesis 11: Controllable attributions for failure will mediate the relationship between leader gender and a) performance evaluations and b) ratings of leader competency.

Hypothesis 12: Controllable attributions for failure will mediate the relationship between leader gender and a) interpersonal hostility and b) likeability.

Hypothesis 13: Controllable attributions for failure will mediate the relationship between leader gender and personnel a) reward recommendations and b) penalty recommendations.

Decision-Maker Gender and Gendered Work Context

#### Decision-Maker Gender

The gender of the decision-maker who is evaluating leader failure is expected to moderate the leader gender-causal attribution relationship. Specifically, less favorable causal attributions for the failure of a female leader is expected to be exacerbated when the decision-maker is male.

Prior research indicates that men hold more gender biases. In addition to demonstrating a greater approval of the traditional female gender role (Glick & Fiske, 1996), men endorse a more masculine construal of leadership than women. Compared to women, men are less likely to associate women with successful leadership (Duehr & Bono, 2006; Schein, 1973; 1975).

Generally, females are more likely to see the leadership behaviors as feminine and males are more likely to see the behaviors as masculine (Atwater et al., 2004). Studies investigating potential changes in the gender-typing of leadership have consistently demonstrated that males perceived male targets as similar to characteristics of successful leaders and female targets as dissimilar from successful leaders, whereas females tend to perceive both male and female targets as similar to successful leaders (e.g., Brenner et al., 1989; Deal & Stevenson, 1998; Schein, Mueller, & Jacobson, 1989). Despite evidence suggesting that female gender stereotypes are changing and are now more similar to characterizations of successful leaders (e.g., Diekman & Eagly, 2000; Duehr & Bono, 2006; Twenge, 1997), men continue rate women as having fewer attributes characteristic of successful leaders (Duehr & Bono, 2006). Thus, although women may no longer gender-type leadership, men continue to endorse a masculine construal of leadership.

As a result of men's stronger endorsement of the masculine construal of leadership and traditional gender stereotypes, men may make causal attributions that disproportionately favor male leaders over female leaders. Indeed, prior research demonstrates that men evaluate women particularly negatively. When participants were asked to make hiring recommendations for fictional professional engineering applicants, male evaluators considered the male candidate more competent and more suitable for the position than an equally qualified female candidate, whereas female evaluators did not differ in their recommendations of male and female candidates (Foschi et al., 1994). In assessing the similarity of perceptions of female managers, male managers, and prototypical managers, Deal and Stevenson (1998) found that male participants, relative to female participants, were more likely to describe female leaders as bitter, quarrelsome, and deceitful and less likely to describe female leaders as competent, intelligent,

ambitious. Men were also found to evaluate women more negatively than men when job candidates attempted to negotiate for higher compensation and benefits (Bowles et al., 2007).

Likewise, with respect to attributions, males tend to confer more unfavorable causal attributions for women. For example, studies assessing self-serving attributions indicate that males are generally more likely than females to attribute their performance to internal causes. Males report higher levels of internal attributions for success solving an anagrams task compared to females (Feather, 1969). Compared to mixed-sex dyads, males made greater external attributions for poor performance and rated male partners as less responsible for missing deadline (Dobbins et al., 1983). Furthermore, research has shown that when evaluating the performance of fictional individuals succeeding in academic and job-related contexts, male evaluators are more likely to attribute male success to ability and female success to effort (Feldman-Summers & Kiesler, 1974). These studies suggest that decision-maker gender may indeed impact performance attributions.

This prediction is consistent with the notion of in-group bias, whereby preferential treatment is afforded to members of one's own social group. According to social identity theory (Tajfel & Turner, 1979), one's social group provides a feeling of belonging that is a source of pride and self-esteem. To protect and enhance one's self-image, in-group members will discriminate against out-group members and favor in-group members. Furthermore, individuals tend to favor in-group members when there are status differences between the in-group and out-group (Fiske & Taylor, 1984). Men, therefore, would be expected to favor men (and disfavor women) in evaluative judgments to protect one's positive social identity. Research supports same-sex biases in evaluation. For example, Feldman-Summers et al. (1974) found that male perceivers attribute male success, more than female success, to ability. Likewise, research

studying punitive responses to employee failure found that, generally, male evaluators preferred to work with and encourage poorly performing employees of the same sex. (Pence et al, 1982). As such, men, favoring their own in-group, may evaluate female leader failure more severely than male leader failure, particularly with the desire to protect men's more dominant and valued societal status.

It is possible, however, for one to evaluate their in-group more severely. The "black sheep effect" describes the phenomenon in which a target is evaluated more negatively when they are an in-group member than when they are an out-group member. Unfavorable in-group members are derogated and subject to harsher evaluations to maintain positive in-group perceptions by excluding the deviant by evaluation (for a review see Marques & Paex, 1994). "Threatened by an association with a similar but unfavorable other, individuals try to create distance between themselves and this threat" (Eidelman & Biernat, 2003; p. 607). This would suggest that males may evaluate male leaders more severely, attenuating the relationship between female leader and unfavorable causal attributions. Alternatively, females may evaluate female leaders more severely, amplifying the relationship between female leader and unfavorable causal attributions.

Although such effects are possible, existing theory specific to issues of gender and leadership supports the hypothesized relationship. According to role congruity theory (Eagly & Karau, 2002), unfavorable evaluations of female leaders due to incongruence between the female gender role and the leader role is exacerbated by factors that impact how gender roles and leadership roles are characterized. Eagly and Karau (2002) contend that the sex of the perceiver is one such factor. A women's perceived deviation from female gender role is likely affected by the evaluator's endorsement of traditional gender stereotypes and of the masculine

characterization of leadership (Eagly & Karau, 2002). Therefore, men, who tend to hold stronger gender-biased beliefs and have a more masculine view of leadership, likely perceive women leaders as deviating from the prescribed female gender role to a greater extent. Meta-analytic evidence supports this prediction, finding that the devaluation of women in leadership positions, relative to men, was greater in when men served as evaluators (Eagly et al., 1992). As a result, male decision-makers are expected to similarly devalue women in leadership positions by ascribing the performance failure of a female leader to more unfavorable causal attributions, relative to an identically performing male leader.

Hypothesis 14: Decision-maker gender will moderate the relationship between leader gender and a) internal, b) stabile, and c) controllable attributions of failure, such that the difference in attributions of failure between male leaders and females will be amplified when the decision-maker is male.

#### Gendered Work Context

In addition to the gender of the decision-maker, the degree to which the leader role is in a work industry traditionally dominated by males is also expected to moderate causal attributions for leader failure.

Eagly and Karau (2002) contend that contexts that heighten role incongruity between the female gender role and the leader role promote increased gender bias. In masculine work context, the leader role is likely characterized in more masculine, agentic terms. The degree to which the leader role is defined in predominately masculine terms, the less congruity there is between the female gender role and the leader role, resulting in more gender-biased evaluations of female leaders (Eagly & Karau, 2002). "The more agentically a leader role is defined or the more completely women fulfill its agentic requirements, the more likely such women are to elicit

unfavorable evaluation because their behavior deviates from injunctive norms of the female gender role" (Eagly & Karau, 2002; p. 576). As a result, there is greater perceived deviation from the female gender role in male-typed work contexts, resulting in more negative evaluations of the female leader. In female-typed work contexts, however, where the leader role is characterized in more feminine and communal terms, women would be perceived as less deviant from the female gender role, resulting in more positive evaluations of the female leader.

Leader categorization theory suggests a similar prediction regarding the contextual domain. Leader categorization theory maintains that the degree to which a leader matches an individual's prototype of a successful leader, the leader will be perceived more favorably (Lord et al., 1982; Lord & Maher, 1991). Research regarding leader prototypes suggests that individuals tend to "think manager-think male" and are more likely to associate men with the leader prototype (Schein, 1973). Therefore, in a masculine domain women are likely viewed as less prototypic of a leader because the domain amplifies the contrast between the masculine leader prototype and feminine characteristics of the woman, resulting in less favorable evaluations of the female leader.

Prior research largely supports the prediction that male-typed contexts are more detrimental for female leaders. Meta-analytic findings demonstrate increased likelihood of female leader devaluation in more masculine-typed leadership roles. Eagly et al.'s (1992) meta-analysis found that the devaluation of women in leadership positions, relative to men, was greater in leader roles predominantly occupied by men. The is further substantiated by additional meta-analytic findings demonstrating that women were deemed less effective as leaders to the extent that leader roles were masculine defined (Eagly et al., 1995). Female leaders were rated less effective in military organizations (i.e., a particularly masculine context) and rated more

effective in education and social service organizations (i.e., particularly feminine contexts). Moreover, a meta-analysis of Goldberg paradigm experiment reveals that men are evaluated more favorably in male-typed positions than are females (Davison & Burke, 2000). Additionally, research suggests that negative reactions to female leader success occur only in male-typed work. Negative social reactions to female leader success occurred only in male-typed jobs (Heilman et al., 2004). Cumulatively, this research suggests attributions for female leader failure may be particularly unfavorable in masculine work contexts.

Investigations specifically examining causal attributions also demonstrate the existence of more gender-biased attributions (favoring males) in male-typed contexts. Using a sample of personnel directors evaluating fictional applicants for potential jobs, Cash et al. (1977) found that in masculine jobs, success was attributed to good look more for females than males. Also, failure in male-typed jobs was attributed to bad luck more for males than females. Additionally, meta-analytic results also offer support that gender-typed work context as a moderator of causal attributions, finding that gender-biased attributions are stronger for masculine tasks than feminine tasks (Swim & Sanna, 1996). Specifically, the more masculine the task, the more likely attributions of lack of effort and bad luck is attributed to males and the more likely lack of ability is attributed to females (Swim & Sanna, 1996). In sum, empirical evidence suggests that the gendered-nature of work context can have a differential impact on causal attributions for performance. Specifically, male-dominated work domains heighten role incongruity between the female gender role and the leader role, thereby promoting increased gender-biased causal attributions for female leader failure.

Hypothesis 15: Gendered work context will moderate the relationship between leader gender and a) internal, b) stabile, and c) controllable attributions of failure, such that the

difference in attributions of failure between male leaders and females will be amplified when the gendered work context is masculine.

#### Mediated Moderation

Previous hypotheses (see Table 2), taken together, combine to form a mediated moderation model regarding responses to leader failure (see Figure 1). The model predicts a moderation of the mediator's effect on the responses to leader failure, suggesting that decision-maker gender and the gendered work context each moderate the indirect effect of leader gender on responses to leader failure through their influence on causal attributions for leader failure.

Leader gender is hypothesized to influence performance judgments, social perceptions, and personnel decision recommendations by affecting the causal attributions generated to explain leader failure. Following failure, evaluative judgments of female leaders are predicted to be less favorable than identically performing male leaders. It is posited that leader gender influences causes attributed to the leader's failure which, in turn, affect the favorability of responses to the leader's failure. Female leaders, receiving more internal, stable, and controllable attributions for their failure relative to male leaders, are judged to be more responsible for their failure and more likely to fail again in the future, eliciting negative leader evaluations.

Attributions Mediating the Interactive Effect of Decision-Maker Gender

Decision-maker gender is hypothesized to interact with leader gender to influence the causes ascribed to men's and women's leader failure that ultimately affect performance judgments, social perceptions, and personnel decision recommendations of the failed leader.

These relationships are depicted in Figure 1 and can be formally stated in terms of the following integrative hypotheses:

Hypothesis 16: Attributions to internal causes of leader failure will mediate the interactive effect of leader gender and decision-maker gender on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Hypothesis 17: Attributions to stable causes of leader failure will mediate the interactive effect of leader gender and decision-maker gender on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Hypothesis 18: Attributions to controllable causes of leader failure will mediate the interactive effect of leader gender and decision-maker gender on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Attributions Mediating the Interactive Effect of Gendered Work Context

In a similar fashion, the gender typicality of the occupational industry is hypothesized to interact with leader gender to influence the causes ascribed to men's and women's leader failure that ultimately affect performance judgments, social perceptions, and personnel decision recommendations of the failed leader. These relationships are depicted in Figure 1 and can be formally stated in terms of the following integrative hypotheses:

Hypothesis 19: Attributions to internal causes of leader failure will mediate the interactive effect of leader gender and gendered work context on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Hypothesis 20: Attributions to stable causes of leader failure will mediate the interactive effect of leader gender and gendered work context on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Hypothesis 21: Attributions to controllable causes of leader failure will mediate the interactive effect of leader gender and gendered work context on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

#### **METHOD**

## Participants and Design

Participants were recruited from introductory psychology courses at a large Midwestern University and received partial course credit for their participation. The sample consisted of 299 participants, but 12 were eliminated from analyses for not clearly identifying leader gender in accordance with gender manipulation, resulting in a final sample of 287 participants (204 females; 83 males). The participants' average age was 21 years old (SD=3.00) and the majority of participants self-identified as being White (American Indian/Alaska Native, n=0; Asian, Black or African American, n=15; Native Hawaiian and Other Pacific Islander, n=15; White, n=246; American Indian/Alaska Native and White, n=3; Asian and White, n=3; Black or African American and White, n=3; American Indian/Alaska Native and Black or African American, n=0).

#### Procedure

Prior to the experiment, participants were asked to complete an online questionnaire assessing personal and demographic characteristics. Given that study materials include descriptions and items that may increase the salience of gender, asking participants to indicate personal beliefs and demographic characteristics after completing the experiment may unwittingly motivate socially desirable responses. For this reason, questions associated with personal attitudes and demographic attributes were temporally distinct from the experimental portion of the study and measured online prior to attending the experiment.

Upon arriving to the lab session, participants sat at a computer station of their choosing.

The experimenter began by explaining the nature of the online task, indicating that the purpose

of the study is to understand how individuals in organizations combine information to make decisions. Participants were then directed to begin the online experiment.

To access the study, participants entered a personalized identification number that served to link data obtained prior to the experiment with responses obtained in the laboratory session. An online informed consent was presented emphasizing the voluntary and confidential nature of the study. Upon receiving informed consent, detailed instructions were revealed to participants. Participants were told that they will be taking on the role of an executive-level supervisor within a large organization. In describing the responsibilities of this organizational role, participants were told that they will be responsible for managing approximately 20 leaders (who all hold the same organizational position). As detailed in the instructions, participants were asked to read about a sample of these leaders and subsequently complete a questionnaire. The participants were told that the number of leaders they will be asked to evaluate will be randomly chosen by the computer.

After reading the instructions and being reminded of the confidentiality of their responses, participants were presented with stimulus materials. First, participants received information concerning the position all the leaders hold as well as information regarding the organization. Then, participants were given information on a specific leader and asked to complete a questionnaire about that target leader. This sequence of information (job position, company information, specific leader information) was repeated twice such that each participant evaluated two leaders. The participants were told, however, that the number of leaders they will be asked to evaluate is randomly selected by the computer. This is done to enhance the realism and psychological fidelity of the study by evaluating more than one leader. After the completion

of the questionnaires, participants were debriefed regarding the manipulations used in the experiment.

Two variables were experimentally manipulated in this study (i.e., leader gender, gendered work context), resulting in four distinct conditions. Prior to the experiment, a random number generator was used to create a list that randomly varied the order of these four conditions. As each individual registered for the study, participants' identification numbers were sequentially matched with the series of conditions produced by the random generator. In this way, participants were randomly assigned to a condition. Thus, when accessing the online questionnaire using an identification number, the participant received the stimulus material associated with their assigned condition.

Participation in the laboratory portion of the study took approximately one hour. Similar paradigms, in which the leader's gender is manipulated and then evaluator judgments are measured, have been used by Heilman and colleagues (Heilman & Chen, 2005; Heilman et al., 2004; Heilman & Okimoto, 2007) to experimentally investigate the consequences of female success. Given that such experimental control maximizes internal validity and the causal conclusions that can be made, Heilman and colleagues' paradigm has been adapted to study consequences of female leader failure.

#### Stimulus Material

Job Description. The stimulus material consists of three major sections. The first concerns the job description of the leadership position. The job is described as a high-level leadership position (i.e., Assistant Vice President) in retail sales. The sales industry was chosen because the general domain of sales is relatively gender neutral. Across all industries, sales occupations consist of a relatively equal number of men and women. In 2008, for example, the

US Bureau of Labor reported that women held 50% of sales occupations (U.S. Department of Labor, 2008). Pilot testing was conducted and results suggest that, indeed, a sales position is considered gender neutral. Participants were asked to indicate whether a male is more likely to hold this position, a female is more likely to hold this position, or a male and female are equally likely to hold this position. Results suggested that the majority of participants (68%) believed that men and women are equally likely to hold a sales position. Thus, the job itself does not introduce additional gender connotations that confound the gender manipulation of the work

Another reason for using this particular job is that participants in this study are likely familiar with sales positions. It is common for undergraduate university students such as those in this sample have seasonal or part-time sales-related work or volunteer experience.

Approximately 23% of individuals age 16-24 were employed in sales positions in 2008 (U.S. Department of Labor, 2008). This familiarity suggests that study participants are relatively knowledgeable concerning the role, tasks, and requirements of a sales position. Thus, this occupational domain is suitable for investigating leader failure. Using information gathered from the Occupational Information Network (O\*NET) job analysis data, job descriptions were created to realistically reflect the job tasks and responsibilities of a leadership position in retail sails (see Appendix A for detailed job description).

Company Information. The second major section of the stimulus material involves information about a fictional organization. This organization (i.e., SGT) produces merchandise that is sold to retailers and is described as being innovative within the industry. Global, quality, and creative are characteristics describing the core of the company. Additionally, the features of innovation, service, and integrity are depicted as the values of the organization. These

characteristics and values are reinforced in the mission statement emphasizing commitment to quality and innovation and illustrated in the brief account of the company's history.

Comprehensively, the company information stimulus material is similar the fundamental content on a company's website and briefly addresses basic questions one would ask about a company (e.g., what they do, who they are, what they value, where they started). Providing information on the organization enhances the psychological realism of the experiment by providing a context in the leaders' job functions (see Appendix B for company information).

Leader Information. The final stimulus material section concerns the individual leader to be evaluated. Although the name of leader is manipulated to indicate a male or female leader, the content of the biographical information is held constant across conditions. The leader's information is first presented in a narrative format (see Appendix C). This portion contains the individual's name, a self-written biography that previously appeared in a company newsletter, an employee description filed by the Human Resources Department, and a sample of anonymous subordinate comments from prior performance reviews. Generally, the self-written biography and the Human Resources employee description include the leader's job position, work history, educational background, and personal interests.

A unique feature of the Human Resources Department description is the addition of the leader's current performance status based on a recent performance evaluation in the last financial quarter. Similar performance outcomes have been used as performance indicators of performance success (e.g., Heilman et al., 2004). Given the focus of this study, the leader is presented as failing. Consistent with this study's conceptualization of failure, the leader is described as not meeting a performance goal. Specifically, the failure narrative states that "(Katherine/Kenneth)'s most recent performance status (i.e., last financial quarter sales data)

shows that (she/he) did not meet (her/his) sales goal. The sales data indicates that (Katherine/Kenneth) met 30% of (her/his) performance goal and performed in the bottom third of employees who held the same position at SGT in the last 3 month period." Pilot test data indicates that this performance description was perceived as a clear indication of failure. The pilot test consisted of a separate set of 90 participants (72 females; 17 males; 1 unidentified) not included in the final study sample. On a 7-point responses scale (1= Strongly Disagree, 7= Strongly Agree), pilot test participants agreed that meeting 30% of performance goal is seen as a failure (M= 5.51, SD=1.16) and also agreed that performing in the bottom 30% of individuals in the same position is seen as a failure (M= 5.29, SD= 1.06). In both cases, there is no indication of floor effects that may overwhelm evaluations of the leader. Rather, there is agreement that the performance is indicative of failure but variation in perceptions of its severity.

After the narrative presentation about the leader, the leader's information was then presented in a concise fact-sheet format. This leader information portion contained the same content as the narrative section (i.e., organizational history, education, personal interests, current performance status), but the description of the leader was more basic and brief (see Appendix D). This leader fact-sheet summarized information described in the narrative, thereby reinforcing critical features of interest for this study (i.e., gender of leader, performance failure). Additionally, the brevity and formatting of the fact-sheet contributes to the psychological fidelity of the experiment by presenting information in a way that is uncomplicated and practical and is similar to basic details included in job applicant resumes.

To enhance the realism of the study and reduce participant suspicion concerning the purpose of the experiment, information about a second leader was presented after the participant evaluates this first leader. The second leader's information (Daniel) is different from the first

leader presented (Katherine/Kenneth) and was held constant across all conditions (see Appendix E for Leader 2 employee information). The second leader, however, is not of interest in this current study. Thus, evaluations of the second leader are not analyzed. Instead, the presentation of information about the second leader aids in maintaining the study's cover story. Experimental Manipulations

Leader Gender. All participants evaluated two leaders. The gender of the first leader was manipulated by the presentation of either a male or female name (as well as gender-appropriate pronouns) in the stimulus materials. Following the recommendations of Kasof (1993), the male and female leader names were matched to reduce the potential bias that can occur as a result of differing perceptions regarding a name's attributes, such as intelligence and age. The male ("Kenneth Michael Anderson") and female ("Katherine Marie Anderson") leader names have been used in previous personnel decision research (e.g., Biernat & Fuegan, 2001) as studies suggest that these names do not covey different levels of intelligence nor a specific age (Kasof, 1993; Mehrabian, 1990). Leader gender was coded as "0" for a female leader and as "1" for a male leader.

As noted above, all participants were presented with information about a second leader, and subsequently evaluated the leader, to maintain the experiment's cover story and enhance the psychological realism of the experiment. The gender of the second leader was held constant. For all participants, the second leader had a male name ("Daniel Alexander Thompson").

Work Context. The gendered work context was manipulated by indicating that the organization operates in either a masculine industry (i.e., automotive) or feminine industry (i.e., fashion). Pilot tests demonstrated that the automotive industry is perceived to be more masculine and the fashion industry is perceived to be more feminine. When asked which gender is more

likely to work in organizations in various industries (1= A male is more likely to work in this organization, 2= A male and a female are equally likely to work in this organization, 3= A female is more likely to work in this organization), 84.4% of pilot study participants responded that males are more likely to work in an automotive industry (*M*=1.14, *SD*=.35) and 83.3% responded that females are more likely to work in a fashion industry (*M*=2.83, *SD*=.41).

Manipulations of identical work contexts have been effectively used in previous research paradigms investigating gender bias in response to male and female performance (Heilman et al., 2004). All fundamental information regarding the company (i.e., SGT) and the job position (i.e., Assistant Vice President of Sales) was held constant across conditions. Only the work context was manipulated by changing the industry in which the company operates (i.e., fashion merchandise or automotive merchandise). Thus, participants examined and evaluated an Assistant Vice President of Sales for an organization that produces either a) fashion merchandise (feminine context) or b) automotive merchandise (masculine context). The gendered work context was coded "0" for feminine context and "1" for masculine context.

Decision-Maker Gender. Participant gender was coded "0" for female and "1" for male.

Control Variables

Benevolent Sexism. Glick and Fiske (1996; 1997) describe how sexist attitudes include not only hostility, but also benevolence. Reflecting the "typical" conceptualization of sexism, hostile sexism refers to the more antagonistic, negative attitudes toward women that accompany traditional beliefs about women's roles. In contrast, benevolent sexism encompasses positive attitudes toward women associated with traditional beliefs about women's roles. Despite appearing favorable, these positive attitudes reflect underlying sexist attitudes that are expressed through the endorsement and admiration of traditional women's roles in which women are

portrayed as weak, incompetent, and reliant on men. As social acceptability of explicit gender discrimination has declined, the overt endorsement of hostile sexism beliefs has likely similarly declined. Benevolent sexism, appearing more positive, represents a more subtle form of sexism that may be more likely to be endorsed in contemporary workplaces. Benevolent sexism, however, supports existing system of gender inequality and serves to legitimize the subordination of women (Glick & Fiske, 1996; 2000). To control for the influence of sexist attitudes, this study measured participants' level of benevolent sexism.

Participants indicated the degree to which they agree or disagree (1=Strongly Disagree, 7=Strongly Agree) with the following 11 statements concerning men and women and their relationships in contemporary society: "No matter how accomplished be is, a man is not truly complete as a person unless he has the love of a woman," "In a disaster, women ought not necessarily to be rescued before men," "People are often truly happy in life without being romantically involved with a member of the other sex," "Many women have a quality of purity that few men possess," "Women should be cherished and protected by men," "Every man ought to have a woman whom he adores," "Men are complete without women," "A good woman should be set on a pedestal by her man," "Women, compared to men, tend to have a superior moral sensibility," "Men should be willing to sacrifice their own well being in order to provide financially for the women in their lives," and "Women, as compared to men, tend to have a more refined sense of culture and good taste" (α= .77).

Social Dominance Orientation. Social dominance orientation is the degree to which an individual desires hierarchical intergroup relationships among their in-group and various outgroups (Pratto, Sidanius, Stallworth, & Malle, 1994). Individuals higher in social dominance orientation prefer group-based inequality and favor practices that preserve a group's dominance.

Because social dominance is associated with bias and favoritism for high-status groups (Pratto, Sidanius, & Levin, 2006), this study controls for the possible influence of participants' social dominance orientation.

The social dominance orientation measure used in this study was developed by Pratto et al. (1994) and has previously been shown to be unidimensional and internally reliable.

Instructions ask, "Which of the following objects or statements do you have a positive or negative feeling towards?" On a 7-point scale (1= very negative, 7= very positive), participants indicated the degree of their positive or negative feeling to the following fourteen statements: "Some groups of people are simply not the equals of others," "Some people are just more worthy than others," "This country would be better off if we cared less about how equal all people were," "Some people are just more deserving than others," "It is not a problem if some people have more of a chance in life than others," "Some people are just inferior to others," "To get ahead in life, it is sometimes necessary to step on others," "Increased economic equality," "Increased social equality," "Equality," "If people were treated more equally we would have fewer problems in this country," "In an ideal world, all nations would be equal," "We should try to treat one another as equals as much as possible," and "It is important that we treat other countries as equals" ( $\alpha$ = .79).

#### Measures

Performance Evaluation. In this study, the definition of performance follows the more traditional conceptualization of in-role behaviors such that performance consists of activities that are identified as job requirements and that are formally recognized and rewarded by the organization (Katz, 1964; Williams & Anderson, 1991). As such, the leader's performance was measured with a focus on the fulfillment of responsibilities.

A composite scale of four items was used to assess the leader's performance. Participants first responded to one item assessing their overall evaluation of the leader's performance.

Participants rated the leader's performance on a 7-point scale ranging from 1 (*very poor*) to 7 (*very good*) in response to the item "Overall, how would you rate this leader's performance?"

Similar global performance assessment items have been used in prior research to investigate individuals' appraisal of female leader performance (e.g., Heilman & Chen, 2005).

The next three performance evaluation items were adapted from a measure focusing on in-role performance behaviors (Williams & Anderson, 1991). Consistent with this study's definition of performance, Williams and Anderson's (1991) measure captures the formal job activities required of a position and rewarded by the organization. The original measure consists of seven items with a reported Cronbach's alpha of .91. Four of the items, however, are not directly applicable to the current study as they reference aspects of performance behaviors that can not be clearly identified given the study's stimulus material. Thus, the remaining three items of Williams and Anderson's (1991) in-role performance measure were adapted to unambiguously refer to the target leader. On a 7-point scale (1= strongly disagree, 7= strongly agree) participants responded to the following items: "This leader is performing adequately" "This leader meets performance requirements of the job," "This leader is fulfilling responsibilities specified in job description." The Cronbach's alpha for this composite measure was .85

Leader Competence. Viewing leadership from an individualistic perspective, leadership competence is described as the characteristics and capabilities of an individual associated with effectively performing in a leadership role (Yukl, 1989). Five items were used to assess the leader's level of competence. Using a 7-point scale (1= strongly disagree, 7= strongly agree),

participants indicated their level of agreement with the following statements: "This individual possesses the qualities needed to be a leader," "This individual has leadership ability," "This individual is an effective leader," "This individual demonstrates the ability to lead," and "This individual is a competent leader."

Interpersonal Hostility. The measure of interpersonal hostility was adapted from prior empirical examinations of biased responses to female leadership. Heilman and Okimoto (2007) assessed interpersonal hostility using a composite measure of five 9-point bipolar adjective scales compiled from previous research (*abrasive–not abrasive, pushy–not pushy, untrustworthy–trustworthy, manipulative–not manipulative,* and *selfish–not selfish*). Participants indicated the degree to which one adjective (of the pair) better described the target leader ( $\alpha$ = .70, study 1;  $\alpha$ = .71, study 2; Heilman & Okimoto, 2007).

For the purposes of the current study, the response format was altered to correspond with the primary response scale used throughout the questionnaire. The 9-point bipolar adjective scales were converted to 7-point agreement scales (1= strongly disagree, 7= strongly agree), such that the measure of interpersonal hostility assessed the extent to which the participant agrees that the leader is *abrasive*, *manipulative*, *untrustworthy*, *selfish*, and *pushy* ( $\alpha$ = .82).

Likeability. The leader's likeability is assessed using a composite of three items. On a 7-point scale ( $1 = strongly\ disagree$ ,  $7 = strongly\ agree$ ), participants indicated the extent to which they agreed with the following two statements: "I like this leader" and "This leader is likeable." The third item measured likeability using a 7-point bipolar adjective scale (*not likeable-likeable*). Similar composite measures of likeability have been used in empirical research to investigate responses to female leadership success (e.g., Heilman et al., 2004; Heilman & Okimoto, 2007) and separate dimensions of ambivalent stereotype content (e.g., Fiske et al., 1999) ( $\alpha = .87$ ).

Reward Recommendations. A measure of reward recommendations developed by Allen and Rush (1999;  $\alpha$  = .90) was adapted for use in the present study. Participants rated the extent to which they would recommend the leader for five organizational rewards (*salary increase*, *promotion*, *high-profile assignment*, *public recognition [organizational award]*, and *opportunities for professional development*). A sixth reward option (*bonus pay*) was included in this measure as it is also a common organizational reward that, unlike a salary increase which is relatively enduring, is a more temporally discrete financial reward. The response scale was changed from a 5-point scale used by Allen and Rush (1999) to a 7-point scale (1= *would strongly not recommend*, 7= *would strongly recommend*) to maintain relative consistency with the primary response scale used throughout the questionnaire. ( $\alpha$  = .84).

Penalty Recommendations. Five items were used to measure penalty recommendations. On a 7-point scale (1= would strongly not recommend, 7= would strongly recommend), participants rated the extent to which they would recommend the leader for the following organizational punishments: pay reduction, increase supervision, termination, verbal reprimand, and a transfer. These specific choices were selected because they represent common behavioral decision responses available in the applied organizational setting and studied in personnel decision research (e.g., need for close supervision, immediate pay reduction/increase, Ashkanasay, 1991; termination, monitor future performance, reprimand, re-training, adding more staff, Mitchell & Wood, 1980; transfer, reprimand, demotion, termination, console, Struthers et al., 1998). ( $\alpha = .73$ ).

Causal Attributions. Causal attributions were measured using the Causal Dimension Scale II (CDSII; McAuley, Duncan, & Russell, 1992). The CDSII assesses how individuals perceive the causes of performance along the three dimensions of attributions (locus of causality,

stability, and controllability; Weiner, 1985). The CDII is comprised of four subscales: locus of control, stability, personal control, and external control. Compared to the original Causal Dimension Scale (CDS; Russell, 1982), the control subscale in the CDSII is separated to represent a) controllability by the target person and b) controllability by other, external people. Highlighting its low internal reliability and problematic wording, researchers expressed concern about the structure of the controllability dimension, prompting the revision of the controllability subscale (McAuley et al., 1992). The resulting CDII demonstrated a factor structure of four empirically distinct subscales, each containing three semantic differential items and having a coefficient alpha ranging from .60 to .92 (McAuley et al., 1992).

All three causal attributions (locus of causality, stability, and controllability) are measured using three CDSII subscales. For each subscale item, participants used a 7-point scale semantic differential response scale. Items were adapted from the CDSII to pertain specifically to the leader's performance rather than to an individual's personal performance.

Locus of causality was measured using the CDSII *locus of control* subscale. Participants responded to three items indicating the extent to which they believed the causes of the leader's performance failure (is): "Reflects an aspect of the leader–Reflects an aspect of the situation," "Inside of the leader–outside of the leader," and "Something about the leader–Something about others" ( $\alpha = .66$ ).

Stability was measured using the CDSII *stability* subscale. Participants responded to three items indicating the extent to which they believed the causes of the leader's performance failure (is): "Permanent–Temporary," "Stable over time–Variable over time," "Unchangeable– Changeable" ( $\alpha = .66$ ).

Controllability was measured using the CDSII *personal control* subscale. Given that the current study focuses specifically on causal attributions with respect to the leader, the CDII dimension of external control was not assessed. Measuring whether the participant perceived the cause of the leader's performance as controllable by the leader is consistent with the hypotheses proposed. Testing whether the performance was seen as due to causes controllable by others does not clearly correspond with the goals of this paper and, therefore, is not measured.

Participants responded to three items indicating the extent to which they believed the causes of the leader's performance failure (is): "Manageable by the leader—Not manageable by the leader," "Can be regulated by the leader—Can not be regulated by the leader," "Over which the leader has the power—Over which the leader has no power" ( $\alpha = .66$ ).

# Manipulation Checks

Leader Gender. At the end of the experiment, participants were asked to report each leader's gender. Specifically, the subjects were asked, "What was the gender of Leader #1 (employee Anderson)?" and then, "What was the gender of Leader #2 (employee Thompson)?" Participants chose from three response options (0=Female, 1=Male, 3=I don't know), thereby avoiding a forced choice situation for participants who are uncertain of a leader's gender.

Work Context. Participants also indicated the extent to which they agree that the leader's position is likely to be performed by each gender. On a 7-point scale (1= strongly disagree, 7= strongly agree), participants rated their agreement with the statements "Leader #1's (employee Anderson) job is likely to be performed by a man" and "Leader #1's (employee Anderson) job is likely to be performed by a woman." The same items were presented for the second leader (employee Thompson).

Performance Failure. Additionally, participants indicated the performance of each leader. First, participants were asked to choose the percentage of the performance goal each leader obtained. From a list of 10 percentages ranging from 10% to 100% (presented in intervals of 10%), participants reported the degree to which each leader met their performance goal.

#### RESULTS

A summary of the study's hypotheses are depicted in Table 2. Bivariate correlations and descriptive statistics are displayed in Table 3. Hypotheses 1-3 predicted that male and female leaders would differ on performance judgments, social judgments, and personnel recommendations. To test predictions of Hypotheses 1-3, a multivariate analysis of variance (MANOVA) was conducted on leader performance, leader competency, likeability, interpersonal hostility, reward recommendations, and penalty recommendations. Results indicated no significant effects of leader gender (F(6, 280)= .47, ns). Despite nonsignificant results, univariate analyses of variance were conducted to comprehensively and directly test hypotheses.

Specifically, Hypothesis 1 predicted that female leaders who fail will receive lower a) performance evaluations and b) ratings of leader competency compared to male leaders who fail. Looking at Table 4, results from an independent samples t-test indicate that there was no difference between male and female leaders on performance evaluations (t(285)=.28, ns) or ratings of leader competency (t(285)=-.81, ns). For leaders who commit performance failure, findings suggest that there are no gender differences in judgments of the leader's performance and competency. Thus, Hypothesis 1 was not supported.

Hypothesis 2 predicted that female leaders who fail will be rated as a) less likeable and b) more interpersonally hostile than their male counterparts. Table 4 presents results of the independent samples t-test. Male and female leaders were similarly likeable and interpersonally hostile, as no significant gender differences were found for either likeability (t(285)= -.33, ns) or interpersonal hostility (t(285)= -.07, ns). These results indicate that male and female leaders who fail incur similar social judgments and, therefore do not support the predictions made in Hypothesis 2.

In Hypothesis 3, it was expected that female leaders who fail will be recommended for a) fewer rewards and b) more penalties than male leaders who fail. As seen in Table 4, the female leaders who failed did not receive fewer reward recommendations (t(285)=.65, ns) or more penalty recommendation (t(285)=-.47, ns) than their male counterparts. This suggests that in response to a performance failure male and female leaders do not differ in the degree of recommendations they receive for personnel rewards and penalties. Instead, male and female leaders received similar personnel recommendations after a failure. As such, Hypothesis 3 was not supported.

Whereas Hypotheses 1-3 examined differences in performance judgments, social judgments, and personnel decision recommendations when evaluating a male or female leader's failure, Hypothesis 4 investigates whether causes attributed to the leader's failure are different for male and female leaders. Hypothesis 4 predicted that performance failure will be attributed to a) more internal, b) more stabile, and c) more controllable causes when the leader is female compared to male. The causes attributed to a female leader's failure were not significant different from those of a male leader's failure with respect to the locus (t(285)=-.76, ns), stability (t(278)=-.51, ns), or controllability (t(285)=.38, ns) properties of attributions. The causes ascribed are similarly internal, stable, and controllable for each gender's leadership failure. Thus, Hypothesis 4 was not supported.

## Mediation Analysis

The next set of hypotheses made predictions regarding the mediating effect of locus (Hypotheses 5-7), stability (Hypotheses 8-10), and controllability (Hypotheses 11-13) attributions for a leader's performance failure. Testing for mediation followed procedures outlined by Baron and Kenny (1986). A series of regression models were conducted to fulfill the

conditions needed to demonstrate mediation. The first model tested for a significant relationship between the independent variable (leader gender) and the dependent variable (performance evaluation, leader competency, likeability, interpersonal hostility, reward recommendations, or penalty recommendations) to establish that there is an effect to be mediated. The second model tested for a significant relationship between the independent variable and the mediator. The third model tested for the unique effect of the mediator on the dependent variable, by controlling for leader gender in the regression equation. If the direct relationship between leader gender and the dependent variable is weakened with the addition of the mediator in model 3, a direct test of this reduction was performed to establish a significant mediation effect of the attribution.

In this study, three independent properties of attributions are examined as mediators (locus, stability, and controllability). Leader gender is proposed to indirectly affect every dependent variable through each attribution for failure. Thus, three separate sets of regression analyses were performed, corresponding to the three causal attributions, and each set tested the mediating effect on performance evaluations, leader competency, likeability, interpersonal hostility, personnel reward recommendations, and personnel penalty recommendations. Recall that first condition of mediation is testing the direct effect of the leader's gender on each dependent variable (Baron & Kenny, 1986). Therefore, the first step in testing for mediation is the same for each set of hypotheses. As such, these relationships are only tested once but apply to the hypotheses of all three mediators.

In testing the first condition of mediation, each criterion variable was individually regressed onto the control variables and leader gender. Looking at the regression results (model 1; Tables 5, 8, and 11), leader gender was not a significant predictor of performance evaluations  $(\beta = .00, ns, R^2 = .012)$  or leader competency  $(\beta = .05, ns, R^2 = .004)$ . This suggests that there is

no direct effect of leader gender on performance judgments when the leader has failed. Additionally, leader gender did not significantly predict a leader's likeability ( $\beta = .02$ , ns,  $R^2 =$ .001) or interpersonal hostility ( $\beta = .00$ , ns,  $R^2 = .053$ ) after a performance failure (model 1; Tables 6, 9, and 12), suggesting that the leader's gender does not directly affect social judgments of the failed leader. Looking at Tables 7, 10, and 13 (model 1), personnel recommendations for rewards ( $\beta = -.01$ , ns,  $R^2 = .040$ ) and recommendations for penalties ( $\beta = .03$ , ns,  $R^2 = .003$ ) were not predicted by the gender of the leader who experienced a performance failure. When evaluating a leader's failure, it appears that there is no direct influence of the leader's gender on personnel decision recommendations. Inspection of Table 3 supports the above results, indicating that leader gender was not significantly correlated with performance evaluation (r=-.02, ns), leader competency (r=.05, ns), likeability (r=.02, ns), interpersonal hostility (r=.00, ns), reward recommendations (r=-.04, ns), or penalty recommendations (r=.03, ns). In sum, these findings suggest there is no direct effect among leader gender and performance judgments, social judgments, and personnel decisions (respectively) to mediate.

By not satisfying this first precondition of mediation, results suggest that the mediational hypotheses are not supported. There is debate, however, whether a significant relationship between the independent and the dependent variable is needed to evidence mediation. Many scholars argue that fulfilling this condition is not required, given that the concept of mediation forwards that there is an indirect relationship between the independent and dependent variable such that the association is fully mediated by another variable. The second requirement of mediation in which the independent variable is related to the mediator, however, is regarded as essential. Therefore, although no direct relationship was found between leader gender and any of

the outcomes of the leader's failure, it is possible that there still may be a mediating effect. The relationship may be indirect and the variables linked by causes attributed to the leader's failure. Thus, analysis tested for the second requirement of mediation, a significant relationship between the independent variable and each individual mediator: locus, stability and controllability attributions for leader failure.

Locus. Hypotheses 5-7 tested the mediating effect of locus attributions for leader failure. To test for an association between the independent variable and the mediator, the causal attribution locus was regressed onto leader gender. In model 2 of Tables 5 and 7, leader gender was not a significant predictor of the attribution of locus ( $\beta = .03$ , ns,  $R^2 = .014$ ) for the leader's performance failure. Additionally, inspection of Table 3 demonstrates that leader gender was not significantly related to locus attributions (r = .05, ns). These results indicate that the leader's gender does not influence the causal attribution of locus ascribed to the leader's failure. Given that there is no significant relationship between leader gender and locus, the regression analyses conducted in model 2 (Tables 5, 6 and 7) do not satisfy the second condition needed to establish mediation. Therefore, there is no empirical evidence of the mediating effect of the locus attribution for leader failure, and Hypotheses 5-7 are not supported.

Although previous regression results suggest there is no mediating effect of locus attributions, findings from the final regression model testing for mediation were examined for evidence demonstrating the unique effect of locus when controlling for leader gender in the regression equation. Each dependent measure was regressed onto both leader gender and locus. In Hypotheses 5, locus was proposed to mediate the relationship between leader gender and the performance judgments of a) performance evaluation and b) leader competency. Performance evaluation was regressed on leader gender and locus attributions for failure in model 3 (Table 5),

but neither predictor was significantly related to performance evaluations (leader gender:  $\beta$  = .00, ns,  $R^2$  = .03; locus:  $\beta$  = -.09, ns,  $R^2$  = .03). When leader competency was regressed onto leader gender and locus, leader gender was not significant ( $\beta$  = .06, ns,  $R^2$  = .018) and locus attributions ( $\beta$  = -.20, p< .05,  $R^2$  = .054) was significantly related to leader competency. This finding suggests that internal attributions of the leader's failure are associated with lower perceptions of the leader's competency.

In Hypotheses 6, locus was predicted to mediate the relationship between leader gender and both a) likeability as well as b) interpersonal hostility. When leader likeability was regressed onto leader gender and locus, leader gender ( $\beta$  = .03, ns,  $R^2$  = .033) was not significant, however, locus attribution for failure ( $\beta$  = -.18, p< .05,  $R^2$  = .033) was significantly associated with perceptions of the leader's likeability following a performance failure. This suggests that attributing leader failure to internal causes is associated with decreased perceptions of leader likeability. When interpersonal hostility was the criterion, neither leader gender ( $\beta$  = .02, ns,  $R^2$  = .061) nor locus attributions for failure ( $\beta$  = .09, ns,  $R^2$  = .061) were significantly related to interpersonal hostility.

Hypotheses 7 predicted that locus would mediate the relationship between leader gender and a) personnel reward recommendations and b) personnel penalty recommendations. Looking at Table 7 (model 3) in which reward recommendations was regressed onto leader gender and locus attributions, leader gender ( $\beta = -.01$ , ns,  $R^2 = .052$ ) was not significant and locus attributions ( $\beta = -.11$ , p < .05,  $R^2 = .052$ ) was significantly related to personnel reward

recommendations. This finding indicates that attributing leader failure to internal causes is associated with decreases in reward recommendations for the leader. When regressing penalty recommendations on both leader gender and locus attributions, leader gender ( $\beta = .03$ , ns,  $R^2 = .025$ ) was not significant. Locus, however, was significantly related to penalty recommendations for the leader ( $\beta = .15$ , p < .05,  $R^2 = .025$ ), suggesting that attributing leader failure to internal causes is associated with increases in penalty recommendations for the leader.

Stability. Hypotheses 8-10 tested the mediating effect of stability attributions for leader failure. Using the stability attribution as the criterion and leader gender as the predictor, regression was used to examine the second condition of mediation. Results indicated that leader gender was not a significant predictor of the attribution of stability ( $\beta$  = .05, ns,  $R^2$  = .047) for the leader's performance failure (model 2; Tables 8, 9 and 10). Additionally, inspection of Table 3 demonstrates that leader gender was not significantly related to stability attributions (r= .03, ns). In sum, these findings suggest that the leader's gender does not influence the stability of the cause attributed to the leader's failure, thereby failing to satisfy the second condition needed to establish mediation. Thus, there is no mediating effect of stability attributions and Hypotheses 8-10 are not supported.

Although previous regression results suggest there is no mediating effect of stability attributions, findings from the final regression model testing for mediation were examined for evidence demonstrating the unique effect of stability when controlling for leader gender. In Hypotheses 8 stability was proposed to mediate the relationship between leader gender and a) performance evaluation and b) leader competency. When regressing performance evaluation onto leader gender and stability attributions, leader gender ( $\beta = -.02$ , ns,  $R^2 = .114$ ) was not

significant. However, stability ( $\beta$  = .31, p< .001,  $R^2$  = .114) was significantly related to leader performance evaluation, suggesting that attributing leader failure to stable causes is related to more positive evaluations of the leader's performance. A similar pattern of results was found for ratings of leader competency. When leader competency was regressed onto leader gender and stability, leader gender was not significant ( $\beta$  = .05, ns,  $R^2$  = .027) and stability ( $\beta$  = .12, p< .05,  $R^2$  = .027) was significantly related to leader competency, thereby suggesting that attributing leader failure to stable causes is associated with more favorable evaluations of the leader's competency.

Hypotheses 9 proposed that stability would mediate the relationship between leader gender and a) likeability and b) interpersonal hostility. Likeability was regressed on leader gender and stability attributions for failure in model 3 (Table 9), but neither leader gender ( $\beta$  = .02, ns,  $R^2$  = .002) nor stability attributions ( $\beta$  = .04, ns,  $R^2$  = .002) was significantly related to the leader's likeability. When regressing interpersonal hostility on leader gender and stability, leader gender ( $\beta$  = .02, ns,  $R^2$  = .055) and stability attributions for failure ( $\beta$  = .04, ns,  $R^2$  = .055) were not significantly related to the leader's interpersonal hostility. These results suggest that social judgments of leader (i.e., likeability and interpersonal hostility) are unrelated to whether the cause of a leader's failure is seen as variable or persistent.

In Hypotheses 10 stability was proposed to mediate the relationship between leader gender and a) personnel reward recommendations and b) personnel penalty recommendations. When regressing reward recommendations on both leader gender and stability attributions for failure, leader gender ( $\beta = -.03$ , ns,  $R^2 = .156$ ) was not significant, but stability ( $\beta = .35$ , p < .001,

 $R^2$  = .156) was significantly related to reward recommendations for the leader. This suggests that attributing leader failure to more stable causes is linked to increased recommendations of personnel rewards for the leader. When regressing penalty recommendations on leader gender and stability, leader gender ( $\beta$  = .05, ns,  $R^2$  = .057) was not significant. However, stability was significantly related to penalty recommendations ( $\beta$  = -.24, p< .001,  $R^2$  = .057), suggesting that attributing leader failure to more stable causes is associated with decreases in penalty recommendations for the leader.

Controllability. Hypotheses 11-13 proposed a mediating effect of controllability attributions for leader failure. As model 2 of Tables 11, 12 and 13 demonstrates, leader gender was not a significant predictor of the attribution of controllability ( $\beta$  = -.04, ns,  $R^2$  = .018) for the leader's performance failure. Additionally, inspection of Table 3 demonstrates that leader gender was not significantly related to controllability attributions (r= -.02, ns). These results indicate that the leader's gender does not impact the controllability of the attributions for the leader's failure. This nonsignificant relationship does not fulfill the second condition needed to establish mediation, suggesting that there is no mediating effect of controllability attributions. Thus, Hypotheses 11-13 are not supported.

Although previous results suggest controllability is not a significant mediator, findings from the final regression model testing mediation were examined for evidence demonstrating the effect of controllability attributions after when controlling for leader gender in the regression equation. Hypotheses 11 proposed that controllability would mediate the relationship between leader gender and a) performance evaluation and b) leader competency. Performance evaluation was regressed onto leader gender and controllability attributions for failure in model 3 (Table

11). Neither leader gender ( $\beta$  = .00, ns,  $R^2$  = .024) nor controllability ( $\beta$  = -.04, ns,  $R^2$  = .024) was significantly related to performance evaluations. When leader competency was regressed onto leader gender and controllability, both leader gender ( $\beta$  = .05, ns,  $R^2$  = .020) and controllability attributions ( $\beta$  = -.08, ns,  $R^2$  = .020) were not significantly related to leader competency. Results suggest that the perceived controllability of the causes for the leader's failure is unrelated to evaluations of the leader's performance or competency.

In Hypotheses 12 controllability was predicted to mediate the relationship between leader gender and a) likeability as well as b) interpersonal hostility. When leader likeability was regressed onto leader gender and controllability, neither leader gender ( $\beta = .02$ , ns,  $R^2 = .004$ ) nor controllability attributions ( $\beta = -.06$ , ns,  $R^2 = .004$ ) was significantly related to the leader's likeability. When regressing interpersonal hostility on leader gender and controllability, both leader gender ( $\beta = .02$ , ns,  $R^2 = .061$ ) and controllability ( $\beta = .09$ , ns,  $R^2 = .061$ ) were not significantly related to the leader's interpersonal hostility.

In Hypotheses 13 controllability was proposed to mediate the relationship between leader gender and a) personnel reward recommendations and b) personnel penalty recommendations. When regressing reward recommendations on both leader gender and controllability attributions for failure, both leader gender ( $\beta = -.05$ , ns,  $R^2 = .043$ ) and controllability ( $\beta = -.05$ , ns,  $R^2 = .043$ ) were not significantly related to reward recommendations. When regressing penalty recommendations on leader gender and controllability, leader gender ( $\beta = .04$ , ns,  $R^2 = .009$ ) and controllability ( $\beta = .08$ , ns,  $R^2 = .009$ ) were not significantly related to penalty recommendations.

### **Moderation Analysis**

Regression analyses were also used to examine the interactive effect of each moderator. First, the control variables were regressed onto the causal attribution in step 1. Following this, leader gender was added to the regression equation in step 2 and the moderator variable (gendered work context or rater gender) was added to the model in step 3. The final addition to the regression model was the interaction between leader gender and the moderator. Results from this set of analyses are presented in Tables 14-19 (refer to models 1-4 in each table).

Decision-Maker Gender. Hypothesis 14 proposed that decision-maker gender will moderate the relationship between leader gender and a) internal, b) stabile, and c) controllable attributions of failure, such that the difference in attributions of failure between male leaders and females will be amplified when the decision-maker is male. For each causal attribution, decisionmaker gender was entered in step 3 (see model 3), and the interactive effect of leader gender and decision-maker gender was entered in step 4 (see model 4). Looking at Tables 14, 15, and 16, the gender of the decision-maker was not a significant moderator of the influence of leader gender on locus ( $\beta = .02$ , ns,  $\Delta R^2 = .000$ ), stability ( $\beta = .01$ , ns,  $\Delta R^2 = .000$ ), or control ( $\beta = -.00$ , ns,  $\Delta R^2$ = .000) attributions. Thus, Hypothesis 14 is not supported. Although the interaction between leader gender and decision-maker gender was not significant, there was a significant relationship between decision-maker gender and locus attributions ( $\beta = -.19$ , p < .01,  $\Delta R^2 = .036$ ) as well as the controllability attributions ( $\beta = -.13$ , p < .05,  $\Delta R^2 = .016$ ) for leader failure. The results suggest that male decision-makers attributed leader failure to external and uncontrollable causes more than female decision-makers, who attributed leader failure more to internal and controllable causes.

Gendered Work Context. Examining the second proposed moderator, gendered work context, Hypothesis 15 predicted that gendered work context will moderate the relationship between leader gender and a) internal, b) stabile, and c) controllable attributions of failure, such that the difference in attributions of failure between male and female leaders will be amplified when the gendered work context is masculine. Results of the hierarchical regression analyses are presented in model 4 of Tables 17 (locus), 18 (stability), and 19 (controllability). Causal attributions made for a leader's failure were not significantly impacted by the interactive effect of leader gender and gendered work context. The addition of the interaction term to the regression equation in step 4 was not significant in predicting attributions of locus ( $\beta = -.13$ , ns,  $\Delta R^2 = .006$ ), stability ( $\beta = -.05$ , ns,  $\Delta R^2 = .001$ ), and control ( $\beta = -.09$ , ns,  $\Delta R^2 = .002$ ) for a leader's performance failure. These results suggest that the influence of leader gender on internal, stable, and controllable causes attributed to leader failure are not differently impacted by the gendered context of the organization. Thus, Hypothesis 15 is not supported.

Mediated Moderation Analysis

Previous hypotheses, taken together, combine to form a mediated moderation model regarding responses to leader failure (Figure 1). The model predicts a moderation of the mediator's effect on the responses to leader failure, suggesting that decision-maker gender and the gendered work context each moderate the indirect effect of leader gender on responses to leader failure through their influence on causal attributions for leader failure. This is consistent with Muller, Judd, and Yzerbyt's (2005) contention that mediated moderation is evidenced when the moderator impacts the magnitude of the mediator's partial effect on the dependent variable.

Testing of mediated moderation involves a series of hierarchical multiple regression analyses, as suggested by Muller et al. (2005). Although Baron and Kenny (1986) originally

conceptualized mediated moderation, Muller et al. (2005) specified three specific linear regression equations to operationally test for mediated moderation. To demonstrate a mediated moderation effect, the following three requirements must be satisfied. First, regression results need to demonstrate there is an overall moderation effect of the predictor to the outcome. Second, the moderator's impact on the link between the predictor and the mediator must be significant. Third, findings must determine whether the mediating mechanism accounts for the interactive effect of the moderator on the outcome. Specifically, results suggest a mediated moderation if in conjunction with a mediating effect in the final model, the interactive effect of the moderator on the outcome is significantly reduced compared to the overall moderation demonstrated in the first model (refer to Figure 2).

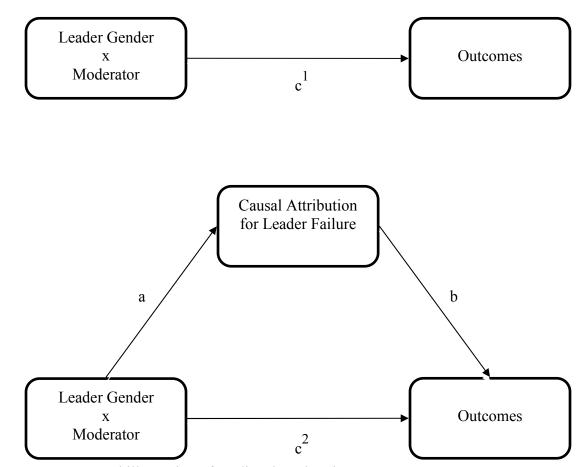


Figure 2. Conceptual illustration of mediated moderation.

Figure 2 (cont'd). Outcomes for this study include the dependent variables of leader performance, leader competency, likeability, interpersonal hostility, reward recommendations, and penalty recommendations. There is evidence of mediated moderation if  $c^1$  is significant, a is significant, and  $c^1 > c^2$  when a is also significant.

Mediating the Differential Impact of Decision-Maker Gender. In Hypotheses 16-21 two sets of mediated moderation models were formally proposed. One set predicted locus (Hypothesis 16), stability (Hypothesis 17), and controllability (Hypothesis 18) attributions for leader failure to mediate the moderating effect of decision-maker gender on each outcome of leader failure: a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations. To satisfy the first requirement of mediated moderation, the first set of analyses examined the first precondition of mediated moderation, establishing an overall moderating effect of decision-maker gender on the leader gender-outcome relationship.

After regressing the control variables (model 1) and leader gender (model 2) on each dependent variable, decision-maker gender was added to the model (model 3). In model 4 the interaction between leader gender and decision-maker gender was entered in the regression equation. The first step in testing for mediated moderation does not include the mediators. Rather, only overall moderation effects are examined. Thus, the analysis to establish the first requirement of mediated moderation is identical for Hypotheses 16-18 in that regression is used to test whether decision-maker gender moderates performance evaluations, leader competency, likeability, interpersonal hostility, personnel reward recommendations, and personnel penalty recommendations. As a result, tests of the moderation effect for each dependent variable are conducted once but are used in evaluating evidence of mediated moderation for multiple hypotheses.

First, the moderating effect of decision-maker gender on performance judgments was tested. As seen in Table 20 (model 4), this interaction did not significantly impact evaluations of the leader's performance ( $\beta$  = -.09, ns,  $\Delta R^2$  = .003). Additionally, decision-maker gender did not moderate the link between leader gender and leader competence ( $\beta$  = .03, ns,  $\Delta R^2$  = .000) after a performance failure (model 4, Table 21). These results suggest that in the wake of a performance failure the relationship between leader gender and judgments of performance and competency does not depend on the evaluator's gender.

Next, the moderating effect of decision-maker gender on social judgments was tested. The addition of interactive effect of decision-maker gender to the regression model was not significant for either likeability ( $\beta = .05$ , ns,  $\Delta R^2 = .001$ ; model 4, Table 22) or interpersonal hostility ( $\beta = .04$ , ns,  $\Delta R^2 = .001$ ; model 4, Table 23). Thus, the effect of leader gender on likeability and interpersonal hostility of the failed leader does not appear to depend on the gender of the decision-maker.

Finally, the moderating effect of decision-maker gender on personnel recommendations was tested. Tables 24 and 25 (model 4) shows that decision-maker gender did not have a significant interactive effect on personnel reward recommendations ( $\beta = -.16$ , ns,  $\Delta R^2 = .009$ ) or penalty recommendations ( $\beta = -.04$ , ns,  $\Delta R^2 = .001$ ). This non-significant effect suggests that recommendations for rewarding and punitive personnel actions are not differentially impacted by the decision-maker's gender.

In sum, results demonstrate that the effects of leader gender on performance judgments, social judgments, and personnel recommendations are not differentially influenced by decision-

maker gender. The first requirement of mediated moderation, however, is establishing a significant interactive effect of the moderator. To fulfill this condition, decision-maker gender needs to moderate the relationship between leader gender and each outcome variable. Results, however, do not meet this requisite condition of mediated moderation. Thus, Hypotheses 16, 17, and 18 are not supported.

Results testing the second condition of mediated moderation further suggest the Hypotheses 16-17 are not supported. The second requirement describes a moderating effect on the relationship between the independent variable and the mediator, which would mean that the effect of leader gender on attributions for leader failure depends on decision-maker gender. Recall that Hypothesis 14 proposed that decision-maker gender would moderate the relationship between leader gender and locus, stability, and controllability attributions. Results revealed that the moderating effect of decision-maker gender on locus, stability, or controllability attributions for leader failure (Tables 14-16) was not significant, indicating that that this prerequisite for mediated moderation was not fulfilled. Thus, these findings offer additional evidence that the mediated moderation models proposed in Hypotheses 16, 17, and 18 are not supported.

Findings from testing the final condition of mediated moderation also indicate that there is no decision-maker gender moderation of the attributional effects on the outcomes. The final requirement of mediated moderation is demonstrating that mediator accounts for the interactive effect of the moderator on the outcome. This is evidenced in the final regression model when, in addition to a significant mediating effect, the effect of the moderator on the outcome is significantly reduced compared to the overall moderation effect indicated in the first model. Thus, if results in final model indicate a significant mediating effect of attributions coupled with a reduction in the magnitude of the moderation effect, then there is evidence of a significant

mediated moderation model. Hypotheses 16, 17 and 18 proposed models of mediated moderation for the attributional mediators of locus, stability, and controllability, respectively.

Hypothesis 16 predicted that locus would mediate the moderating effect of decisionmaker gender on a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations. As seen in model 5a of Tables 21,22, 24 and 25 (respectively), when controlling for the leader gender by decision-maker interaction, meditational tests for locus attributions for failure were significant for leader competency ( $\beta = -.22$ , p < .001,  $\Delta R^2 = .046$ ), likeability ( $\beta = -.19$ , p < .015,  $\Delta R^2 = .034$ ), reward recommendations ( $\beta = -.12$ , p < .05,  $\Delta R^2 = .034$ ) .014), and penalty recommendations ( $\beta = .15$ , p < .05,  $\Delta R^2 = .022$ ). This suggests that attributing leader failure to internal attributions is incrementally predictive of lower judgments of leader competency and likeability, decreased reward recommendations, and increased penalty recommendations. When accounting for the mediating effect of locus there must also exist a decrease in the impact of the interaction of leader gender and decision-maker gender on the outcomes compared to when the mediating effect was not included in the regression model. For all outcomes, however, decision-maker gender was not a significant moderator, such that there is no interaction effect to decrease. These findings further suggest that decision-maker gender does not moderate the mediating effect of locus attributions for leader failure on responses to leader failure, indicating that Hypothesis 16 is not supported.

Hypothesis 17 predicted that stability would mediate the moderating effect of decision-maker gender on a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty

recommendations. When controlling for the leader gender by decision-maker interaction (model 5b; Tables 20, 21, 24, and 25), meditational tests for stability attributions for failure were significant for performance evaluation ( $\beta = .31$ , p < .001,  $\Delta R^2 = .093$ ), competency ( $\beta = .12$ , p < .001) .05,  $\Delta R^2 = .013$ ), reward recommendations ( $\beta = .35$ , p < .001,  $\Delta R^2 = .117$ ), and penalty recommendations ( $\beta = -.24$ , p < .001,  $\Delta R^2 = .053$ ). These findings indicate that stability attributions for leader failure predict more positive performance evaluations and competency judgments, increased reward recommendations, and decreased penalty recommendations. To demonstrate mediated moderation, however, additionally requires a decrease in the impact of the interaction of leader gender and decision-maker gender on the outcomes when accounting for the mediating effect of stability. Decision-maker gender was not a significant moderator of the relationship between leader gender and any outcomes in response to leader failure. With no overall moderation, there is no interactive effect that can weaken, thereby indicating that decision-maker gender does not moderate the mediating effect of locus attributions for leader failure on responses to leader failure. Therefore, examination of this final mediated moderation condition further suggests that Hypothesis 17 is not supported.

Hypothesis 18 predicted that controllability would mediate the moderating effect of decision-maker gender on a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations. Looking at Tables 20-25 (model 5c), controllability did not have a significant mediational effect for any outcome in response to leader failure when controlling for the leader gender by decision-maker interaction, indicating that controllability attributions are not predictive of any outcomes in response to leader failure when controlling for any interactive

effect of decision-maker gender. In addition to not significantly mediating this interaction, results also failed to demonstrate a decrease in the impact of the interaction of leader gender and decision-maker gender on the outcomes (compared to when the mediating effect was not included in the regression model), given that there is no overall moderating effect of decision-maker gender. By not meeting this final condition of mediated moderation, these findings add additional evidence that decision-maker gender does not moderate the mediating effect of controllability attributions on responses to leader failure. Thus, there is added evidence indicating Hypothesis 18 is not supported.

Mediating the Differential Impact of Gendered Work Context. A second set of hypotheses involving mediated moderation set predicted locus (Hypothesis 19), stability (Hypothesis 20), and controllability (Hypothesis 21) attributions for leader failure to mediate the moderating effect of gendered work context on each outcome of leader failure: a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations.

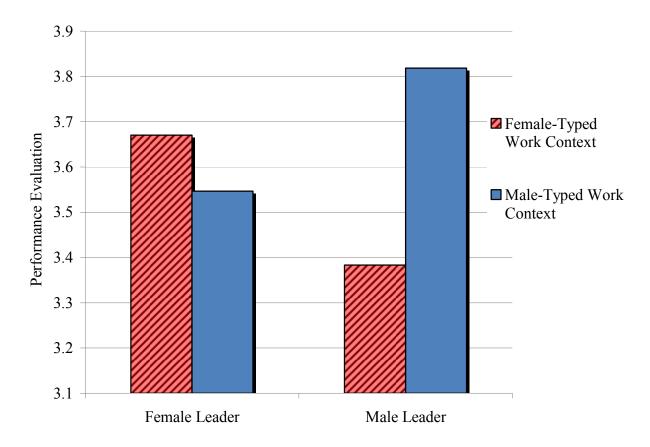
Recall that to fulfill the first requirement of mediated moderation involves establishing an overall moderating effect. Hierarchical regression analyses were conducted to test the interactive effect of gendered work context on the leader gender-outcome relationship. Control variables were first regressed onto each dependent variable (model 1), followed by leader gender (model 2). After the moderator, gendered work context, was added in model 3, the interaction between leader gender and gendered work context was added to the regression equation (model 4). Given that only overall moderating effects are examined in analyses testing the first requirement of mediated moderation, no mediators are included in this set of analyses. Therefore, analyses testing the first condition of mediated moderation are the same for Hypotheses 19, 20 and 21

because the first set of analyses for each hypothesis examines the overall moderating effects of gendered work context. Although testing whether the relationship between leader gender and each outcome in response to leader failure depends on the gendered work context identical for each hypothesis, this analysis is conducted once and applies to evaluating the predictions of multiple hypotheses.

First, analyses investigated the moderating effect of gendered work context on performance judgments. Looking at Table 26 (model 4), gendered work context significantly moderated the relationship between leader gender and performance evaluations ( $\beta = .20$ , p < .05,  $\Delta R^2 = .014$ ). Results seen in Figure 3 suggest that performance evaluations are more negative for men failing in the gender-inconsistent (i.e., female) context than the gender-consistent (i.e., male) context, especially for male leaders. Simple slopes tests indicate a significant interaction such that male leaders receive lower performance ratings when failing in a female work context than when failing in a masculine work context. Female leader failure, however, is rated similarly negative, regardless of the work context. This finding is consistent with arguments of expectancy-violation theory (Jussim, 1986; Jussim et al., 1987) in which violations of stereotypebased expectancies are evaluated more extremely in the direction of the violation. Male leaders who fail in a female work domain violate the stereotyped expectation that men will succeed in female domains. Female leaders, however, are expected to fail in the male work context. Although both male and female leaders fail in gender-inconsistent domains, it is the male that is violating the stereotyped expectation. Thus, according to expectancy-violation theory, the male leaders will be evaluated more negatively than female leaders when failing in genderinconsistent work contexts. The results demonstrating the interactive effect is consistent with expectancy-violation theory. Moreover, a significant overall moderation effect of gendered work

context on performance evaluations fulfills the first condition of establishing mediated moderation.

With respect to leader competency, results presented in Table 27 (model 4) demonstrate a non-significant moderating effect of gendered work context ( $\beta$  = -.05, ns,  $\Delta R^2$  = .001). Thus, the relationship between leader gender and judgments of leader competency after a performance failure do not depend on whether the work context is masculine or feminine.



*Figure 3.* Moderating effect of gendered work context on leader gender-performance evaluation relationship. For interpretation of the reference to color in this and all other figures, the reader is referred to the electronic version of this thesis.

The next set of analyses tested the moderating effect of gendered work context on social judgments. As seen in Tables 28 and 29 (model 4), likeability ( $\beta = .11$ , ns,  $\Delta R^2 = .004$ ) and

interpersonal hostility ( $\beta$  = -.05, ns,  $\Delta R^2$  = .001) were not moderated by gendered work context. Thus, gendered work context does not impact the relationship between leader gender and subsequent social judgments of interpersonal hostility and likeability in response to leader failure.

Finally, analyses tested the moderating effect of gendered work context on personnel recommendations. Tables 30 (model 4) indicate that the gendered work context did not have a significant interactive effect on reward recommendations ( $\beta = .15$ , ns,  $\Delta R^2 = .008$ ). This suggests that the personnel reward recommendations received after a performance failure for male and female leaders does not depend on the gendered work context. Findings in Table 31 (model 4), however, demonstrate that the relationship between leader gender and personnel penalty recommendations was significantly impacted by the moderating effect of the gendered work context ( $\beta = -.21$ , p < .05,  $\Delta R^2 = .015$ ). Looking at Figure 4, results suggest that punitive personnel actions are endorsed to a greater degree when the male leader fails in a genderinconsistent context. Simple slopes tests indicate that when failing in female-dominated work context, male leaders are recommended for more punitive personnel decisions than female leaders. When failing in a predominantly male-dominated work domain, however, male leaders and female leaders are similarly recommended for punitive personnel decisions. These results suggest that female leaders are given more leniency when failing in a female context. This is inconsistent with theories suggesting that there are different standards of performance for each gender that favor males (Biernat et al., 1991; Foshi, 1992). Rather, results suggest that male leaders appear to be punished more severely for failing in a gender-inconsistent work context than female leaders. Moreover, a significant overall moderation effect of gendered work context on penalty recommendations fulfills the first condition of establishing mediated moderation.

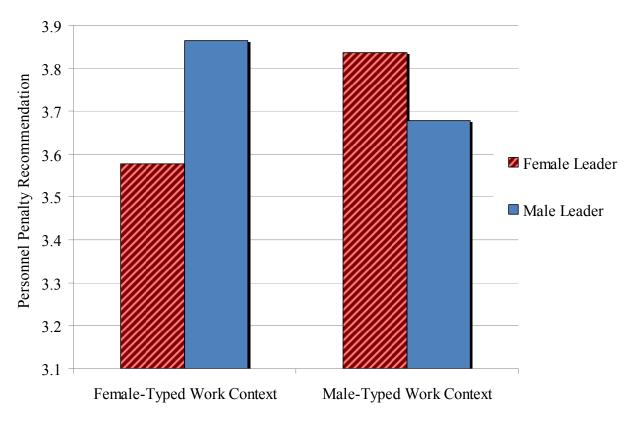


Figure 4. Moderating effect of gendered work context on leader gender-penalty recommendation relationship.

To summarize, this first set of analyses examined the first requirement of mediated moderation, in which gendered work context needed to moderate the relationship between leader gender and each outcome variable. Results indicate that after a performance failure the gendered work context significantly moderates the effect of leader gender on performance evaluations and penalty recommendations. Having shown that performance evaluations and penalty recommendations are significantly impacted by the leader gender-gendered work context interaction, the first condition of mediated moderation is satisfied for these two outcome variables. All other proposed interactions for gendered work context, however, were not significant, thereby failing to meet a requisite characteristic of mediated moderation.

Additional analyses tested the second condition of mediated moderation. To fulfill this requirement, the impact of leader gender on the mediator would depend on the gendered work context. Hypothesis 15 predicted this moderating relationship such that gendered work context would moderate the relationship between leader gender and locus, stability, and controllability attributions. As seen in Tables 17-19, gendered work context did not have a significant moderating effect on locus, stability, and controllability attributions. These findings do not satisfy the second requirement of establishing mediated moderation. As a result, Hypotheses 19, 20, and 21 are not supported.

Results testing the final requisite condition of mediated moderation further indicate that Hypotheses 19, 20, and 21 are not supported. To satisfy this requirement, results must show that the mediator accounts for the interactive effect of the moderator on the outcome and the effect of the moderator on the outcome is significantly reduced relative to the overall moderation effect. Therefore, results must indicate a significant mediating effect of attributions as well as a decrease in the magnitude of the interactive effect of gendered work context to fulfill the final condition of a mediated moderation model.

Hypothesis 19 predicted locus attributions for leader failure would mediate the moderating effect of gendered work context on a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations. As seen in model 5a of Tables 27, 28, and 31 (respectively), when controlling for the leader gender by gendered work context interaction, meditational tests for locus attributions for failure were significant for leader competency ( $\beta$  = -.21, p<.001,  $\Delta R^2$  = .041), likeability ( $\beta$  = -.18, p<.01,  $\Delta R^2$  = .031), and penalty recommendations ( $\beta$  = .14, p<.05,  $\Delta R^2$  = .019). These results suggest that attributing leader

failure to internal causes is incrementally predictive of decreased evaluations of leader competency and likeability as well as increased penalty recommendations. In addition to finding a mediating effect of locus, however, to demonstrate mediated moderation the impact of the interaction of leader gender and gendered work context (model 5a) must weaken compared to the magnitude of the overall interaction when the mediator is not included in the regression model (model 4). Of the outcomes significantly mediated by locus attributions, recommendation for penalties is the only outcome for which the overall interactive effect of leader gender-gendered work context was significant. As can be seen in Table 31, the effect of the leader gendergendered work context interaction decreased to non-significance for penalty recommendations when locus was added to the regression model (model 5a). This finding suggests that locus fully mediates the influence of leader gender on penalty recommendations after a leader's failure, thereby fulfilling the last requirement of mediated moderation. Recall, however, that the second requirement of establishing mediated moderation was not satisfied, as gendered work context did not have a significant moderating effect on locus attributions. Thus, Hypotheses 19f was not supported.

The last requirement of mediated moderation was not met for all other outcomes.

Mediational tests of locus attributions for leader failure were not significant for performance evaluations, interpersonal hostility, and reward recommendations when controlling for the leader gender by gendered work context interaction. As a result, the last condition of mediated moderation was not satisfied for performance evaluations, interpersonal hostility, and reward recommendations, given that there was no mediating effect of locus. Although locus significantly mediated the influence of leader gender on leader competency and likeability when controlling for the moderating effect of gendered work context, there was no evidence of a reduction in the

magnitude of the interactive effect because there is no overall interaction effect that could decrease in magnitude. In sum, these findings corroborate earlier conclusions that Hypotheses 19a-e are not supported.

Hypothesis 20 predicted that stability attributions for leader failure would mediate the moderating effect of gendered work context on a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations. When controlling for the leader gender by gendered work context interaction, meditational tests for stability attributions for failure were significant for performance evaluations ( $\beta = .31$ , p < .001,  $\Delta R^2 = .092$ ) leader competency ( $\beta = .12$ , p < .001,  $\Delta R^2$ = .041), reward recommendations ( $\beta$  = .35, p< .001,  $\Delta R^2$  = .118), and penalty recommendations  $(\beta = -.24, p < .001, \Delta R^2 = .056)$ . These findings indicate that stability attributions for leader failure incrementally predict more positive performance evaluations, increased competency judgments, increased reward recommendations, and decreased penalty recommendations. To demonstrate mediated moderation of these outcomes, however, there must also be a decrease in the impact of the interactive effect of leader gender-gendered work context when accounting for the effect of locus attributions. Earlier analyses showed that gendered work context significantly moderates the impact of leader gender on performance evaluations (Table 26; model 4) and penalty recommendations (Tables 31, model 4). Looking at Tables 26 and 31 (model 5a), the leader gender-gendered work context effect did not decrease for performance evaluation or penalty recommendations. Rather, the magnitude increased for both outcomes. Therefore, results suggest that stability does not mediate the impact of leader gender on performance evaluations or penalty recommendations, demonstrating that the final mediated moderation condition is not satisfied for either outcome. Thus, Hypothesis 20a and 20f are not supported.

When controlling for the leader gender by gendered work context interaction, meditational tests for stability attributions were non-significant for likeability and interpersonal hostility. With no significant mediating effect of stability attributions, the last condition of mediated moderation is not satisfied for likeability and interpersonal hostility, nor is it satisfied for competency and reward recommendations. Although stability attributions also significantly mediated the influence of leader gender on leader competency and reward recommendations, gendered work context did not moderate the influence of leader gender on these outcomes. Therefore, there is no moderating effect to reduce in magnitude, thereby failing to fulfill the final criteria for mediated moderation. The above findings offer additional evidence that Hypothesis 20b-e is not supported.

Hypothesis 21 predicted that controllability attributions for leader failure would mediate the moderating effect of gendered work context on a) performance evaluations, b) leader competency, c) likeability, d) interpersonal hostility, e) personnel reward recommendations, and f) personnel penalty recommendations. As seen in Tables 26-31 (model 5c), controllability did not have a significant mediational effect on any outcome when controlling for the leader gender by gendered work context interaction. These results suggest that controllability does not mediate the interactive effect of leader gender-gendered work context, thereby neglecting to fulfill the last condition of demonstrating mediated moderation. As such, these findings are consistent with earlier conclusions suggesting that Hypothesis 21 is not supported.

## DISCUSSION

The primary aims of the current study were to examine whether there would be gender-biased evaluations of leadership failures and, in the presence of gender bias, what psychological mechanisms may explain and support this bias. It was predicted that differential attributional rationalizations of male and female leader failure would result in more severe consequences for women, particularly in situations that accentuate the incongruence between the female gender role and leadership role. Leader gender was proposed to indirectly impact performance judgments, social judgments, and personnel decision-making recommendations of the leader by influencing the causes attributed to the leader's failure. Contrary to predictions, female leader failure is generally not evaluated more negatively or ascribed different causes than male leader failure. Rather, results suggest that failure in traditionally female-dominated work domains has particularly detrimental consequences for male leaders.

Female leaders who failed were expected to receive less favorable evaluations compared to male leaders who had failed. Following failure, the performance judgments, social judgments, and personnel recommendations of male and female leaders were not significantly different. Contrary to expectations, male and female leaders received similar ratings of performance and competence and were judged to be equally likeable and interpersonally hostile. Moreover, personnel decisions regarding the failed leader were similar for men and women. Failed male and female leaders were recommended for similar levels of reward and punitive personnel decisions. This suggests that, generally, women occupying leadership positions are not disproportionately penalized for failing.

These results are inconsistent with the predictions of role congruity theory (Eagly & Karau, 2002). According to role congruity theory, the female gender role is incongruent with the

qualities of leadership such that females are not seen as "fitting" the leadership role. The lack of correspondence between the female gender role and the leader role produces a tendency to evaluate females less favorably than males as leaders (Eagly & Karau, 2002). Occupying a leadership position signals the enactment of agentic behaviors and a lack of communality. By enacting leadership behavior, female leaders violate prescriptive gender stereotypes, thereby resulting in more negative evaluations. This study, however, does not support the claims of role congruity theory. Rather, women in leader roles receive performance penalties, social penalties, and personnel decision recommendations similar to men after a performance failure.

One explanation for this is that the gender bias does not exist. Gender-biased evaluations of leader performance may not apply to assessment of failure. Hypotheses in this study proposing gender differences were based on theory and research that is less contemporary and more focused on bias against female success (e.g., Eagly et al., 1992; 1995; Eagly & Johnson, 1990; Heilman et al., 1989; Rudman, 1998). The female disadvantage discussed in prior research may be limited to leadership contexts observed over a decade ago and to evaluations of performance success. In contrast with prior research, contemporary leadership assessment may not be subject to similar gender-biased evaluations.

Another explanation is that women failing in a leadership role do not violate gender stereotype prescriptions. The female gender role prescribes that women act communally and not act agentically. Given that the leadership role is construed as masculine and typified by agentic attributes, female leader failure may signal the unsuccessful fulfillment of the leadership role and the ineffective performance of agentic behaviors. The lack of agency is in accordance with female gender prescriptions. As such, failed female leaders may not appear to deviate from the

prescriptive female stereotype, thereby avoiding evaluative consequences of prescription violation.

Alternatively, the similarity of evaluative judgments may be due to the male leader's prescription violation. Male leaders typically receive more positive evaluations than female leaders, in part, because the agentic characteristics of males are a better "fit" with the leader role, such that he is seen as possessing more leadership qualities. When failing, however, the male leader may be perceived as lacking the agentic characteristics associated with successful leadership. The lack of agency inferred violates male prescriptive stereotype. Consequently, male leaders are negatively evaluated. Heilman and Wallen (2010) support this contention, arguing that individuals violating gender norms are believed to be deficient in stereotype-based attributes typical for their gender. These authors found that men were penalized for success, being characterized as ineffectual and undeserving of respect, when success implied a lack of agentic traits expected of them. In this study, male failure may elicit a perceived lack of agency which violates male gender prescriptions, thereby eliciting unfavorable evaluations. Female leaders, however, also receive less favorable evaluations due to the perceived incongruity between the female gender role and the leadership role. Thus, upon failing both male and female leaders are seen as similarly incongruent with the leadership role and, therefore, incur similarly negative evaluations.

It is also possible that the failure event described in this study was too severe, resulting in limited variability in responses to leader failure. A failure that is seen as exceedingly poor would likely result in a floor effect in which evaluative responses are negative, regardless of gender. Pre-study piloting, however, demonstrated that the performance failure was not viewed as extremely negative. Although the performance event was seen as a failure, there was variability

in perceptions of the magnitude of failure. This suggests that the leader failure was not perceived as exceptionally terrible, as there was disagreement regarding its severity. It is unlikely, therefore, that the similar evaluative judgments of male and female leaders are the result of a failure manipulation whereby the severity of failure was too strong.

Another possible explanation results do not support direct relationships between leader gender and performance judgments, social judgments, and personnel recommendations is that these relationships may be more complex than hypothesized. The inconsistent results may suggest there are additional elements involved in these associations. Failure to find evidence of a direct effect does not prove that there is no influence of leader gender. Rather, the influence may be indirect, occurring under specific conditions.

Addressing this possibility, the current study also investigated causal attributions as a possible mechanism by which gender influences responses to leader failure. The gender of the leader was proposed to impact leader evaluations by influencing the attributional causes generated to explain the leader's performance failure. Findings in this study, however, indicate gender does not indirectly affect evaluative judgments of the leader by influencing causal attributions for failure. The causes used to explain the failure event do not differ for male and female leaders. For men and women, leader failure is due to causes that are similarly internal, stable, and controllable. This deviates from previous research demonstrating gender-biased attributions suggesting women's success tends to be seen as resulting from something external to her, which will likely change in the future, and that is not under her direct control (e.g., Cash et al., 1977; Deaux & Emswiller, 1974; Feldman-Summers & Kiesler, 1974; Swim & Sanna, 1996; Taynor & Deaux, 1975). Rather, results suggest ratings are not influenced by gender-biased attributional rationalization of leader failure.

Perhaps there are parallel processes that operate in the response to leader failure that result in similar causal attributions, but for different reasons. It could be that the social cognitive processing of leader failure may be distinct for men and women. Failed female leaders may be ascribed causes in response to a violation of a gender stereotype role, whereas failed male leaders may be ascribed causes in response to a violation of a gender stereotype behavior. Women may be judged as more responsible for failure and perceived as having more internal, stable, and controllable causes of failure because occupying a leadership position is more consistent with the male gender stereotype and violates the prescribed female gender role. Men may be judged as more responsible for failure and perceived as having more internal, stable, and controllable causes of failure because failing is a behavior more consistent with the female gender stereotype and violates prescribed male stereotype behavior. Men and women receive similar failure attributions, therefore, as a consequence of the distinct processing of each gender's stereotype violation

Results may not have supported expected effects because of the measurement of attributions. First, the internal consistency reliability of locus, stability, and controllability attribution scales in this study was somewhat weak. Although this may have contributed to null findings, the internal consistency of each causal attribution is within acceptable range, according to Nunnally (1978), and is comparable to that found in other studies employing the same measure (e.g., McAuley et al., 1992). Second, much of the evidence supporting an attributional gender bias derives from investigations that directly manipulate attributions or assess specific causal reasons. Rather than measuring the degree of locus, stability, and controllability of the causes generated to explain a person's performance, many empirical studies intentionally provide causal explanations for performance (e.g., "succeeded due to ability"). For example, Struthers et

al., (2001) manipulated ability and effort attributions in scenarios describing an employee's recent poor performance, assessing participants' prosocial and antisocial responses. A similar paradigm was used by Pence et al. (1982), whereby participants rated the appropriateness of various actions in response to an employee failure described as due either to lack of effort, to lack of ability, to task ease, or to bad luck. In this study, however, the dimensions of self-generated attributions were assessed. Perhaps this methodological difference accounts for dissimilar results. Other empirical work that has utilized an identical causal attribution measurement methodology, however, has found results that support current predictions of gender differences in causal attributions (e.g., Jackson et al., 1993)

It could also be that gender differences in failure attributions were not evidenced because of the level of leadership studied. A high-level leadership position (i.e., Vice President) was described in stimulus materials. Compared to lower-level leadership positions, high-level leadership roles can evoke different patterns of gender effects. Rosette and Tost (2010) found that a female leadership advantage emerges as higher levels of the organizational hierarchy, whereby successful women are evaluated more favorably than successful men in top leader positions. The authors suggest that gender biases found at middle and lower organizational levels may not generalize to top leadership roles. Indeed, much of the research supporting the existence of gender differences in performance attributions has taken place at lower levels of the organization (e.g., Greenhaus & Parasuraman, 1993; Pence et al., 1982; Struthers et al., 1998; Struthers et al., 2001).

Although findings do not support a mediating effect of attributions, results do indicate that locus and stability failure attributions influence subsequent evaluative judgments. Consistent with Weiner's (1995) attribution theory of social conduct, the causal attributions made for leader

failure impacted punishing behavior. Specifically, a leader whose failure is attributed to internal causes is seen as less competent, viewed as less likeable, and is recommended for fewer organizational rewards and more punitive personnel actions. This study replicates previous empirical evidence demonstrating relationships among internal attributions and performance-related outcomes and personnel decision-making recommendations (Struthers et al., 1998; Struthers et al., 2001).

Stability attributions also impacted evaluative judgments of the leader, although not in the expected direction. Attributing leader failure to stable causes predicts a more positive performance evaluation of the leader, higher perceptions of leader competency, increased reward recommendations, and decreased penalty recommendations. This suggests the leader is likely to receive positive evaluative responses when failure is ascribed to stable causes. This is inconsistent with predictions derived from attribution theory. According to attribution theory (Weiner, 1985), stability attributions influence the expectancy of future behavior. Thus, attribution theory would predict that stable causes of leader failure generate expectations of future failure, resulting in more negative responses not more favorable responses.

The current study does not test reasons for this unexpected result. It could be that men and women don't hold biases regarding the stability of a leader's failure, explaining why expected results were not found. Additionally, perhaps the direction of results may indicate that the causal configuration of leader failure attributions consists of more than one causal dimension. Stable causes of leader failure generate expectations that the leader will fail again in the future. Causes attributed to failure that are stable, yet external to the leader, would imply that the leader will although the failure is likely to occur again in the future the leader is less responsible for the failure. In this case, it is possible that evaluations of the leader would be positive, despite a stable

attribution, as responsibility for failure has shifted away from the leader. The current investigation did not test for interactive effects among attributions and cannot inform explanations for results and additional research in which causal dimension interactions are explored would enrich our understanding of the attributional rationalization for performance.

Gender of the evaluator and gender typicality of the work domain were expected to influence the causal explanations made for males and females who failed. Although male raters, to a greater degree than female raters, were expected to attribute females more causal responsibility for failure than males, male and female decision-makers made similar attributions for male and female leader failure. These findings are not consistent with predictions of social identity theory, whereby evaluators favor in-group targets more than out-group targets. One explanation is that males and females may hold similar gender biases, thereby resulting in similar attributions of failure responsibility. Another explanation is that when ascribing causal attributions for failure evaluator gender may only matter under particular circumstances. Mixed support in the literature for the moderating effect of the gender of the evaluator may indicate that there are unidentified conditions in which evaluator gender differentially impacts outcomes. It is also possible that participants may have suspected that leader gender was the focus of the study and were motivated to appear unbiased in evaluations and sought to avoid prejudicial responding by rating leaders as responsible for failure.

Arguing that the lack of congruity between leader role and female gender role would be amplified in a masculine context, female leaders, compared to male leaders, were expected to be ascribed more causal responsibility in male gender-typed work contexts than female gender-typed work contexts. Gender typicality of the work domain, however, did not impact relationship between leader gender and attributions of failure. Rather, male and female leaders received

similar attributions for failure in both traditionally male-dominated and female-dominated work domains.

Although not formally predicted, gendered work context was found to moderate the relationship between leader gender and evaluative judgments. Additional results identify particular conditions whereby gender-biased evaluations of leader failure occur. Depending on whether the work context is typically occupied by females or males, the failures of male and female leaders result in differential evaluations of performance and disparate personnel penalty recommendations. Despite failing, male and female leaders are judged to be equally competent, socially desirable, and deserving of rewards, regardless whether failure occurred in a male-typed or female-typed work context. Performance ratings and punitive personnel decision recommendations of failed male and female leaders, however, are influenced by the gender typicality of the work domain. Specifically, failure in traditionally female domains has particularly detrimental consequences for male leaders.

First, the performance of male leaders is evaluated more negatively in a female domain compared to a male domain. Male leaders failing in a work context is typically occupied by males are seen as performing better than male leaders failing in a work context is typically occupied by females. Failing female leaders, however, are seen as performing similarly poorly in male-dominated and female-dominated typed work contexts. Female leader failure, therefore, is rated as similarly negative, regardless of the work context. Male leader failure, however, is rated more positively when the work context is gender-consistent (i.e., male) and more negatively when the work context is gender-inconsistent (i.e., female).

Second, personnel decision making penalties are recommended more for male leaders who fail in a female work context than female leaders. When failing in a predominantly male-

dominated work domain, male leaders are recommended for punitive personnel decisions to the same degree as female leaders. When failing in a traditionally female-dominated work domain, however, evaluators recommend punishing male leaders to a greater degree than female leaders.

One could speculate that a misfit between leader gender and gender typicality of occupation is worse for males. It could be that there are double standards for male and female gender-typed work domains, such that there are lower standards for success female-dominated industries and higher standards for success male-dominated industries. Traditionally, success in female industries in devalued (e.g., Davison & Burke, 2000; Eagly et al., 1995). If men, who are historically perceived as more capable leaders than women, fail in the (devalued) female work context they could seen as exceptionally poor leaders. Failure in lower performance-standard work domain is more problematic for men, for whom there are higher performance standards. Violating this stricter performance expectation may result in more severe penalties.

Another possible explanation for this finding is that there is a status characteristic conflict, whereby the higher status gender (man) is failing in the lower status work context (female-dominated industry). According to stereotype content model, men's higher status elicits respect that results in perceptions of high competence. Failing in a lower status and devalued work industry is in conflict with perceptions that males are the higher status, more competent sex. Such violation may, therefore, may elicit more severe penalties than women, whose lower-status is not in conflict with the lower-status feminine domain.

Alternatively, it may be the implied agency and communality of the leader that results in penalty recommendations that are greater for failed male leaders than female leaders in female-typed jobs. The masculine construal of leadership means that leader roles are believed to require agentic characteristics to succeed. The gender typicality of the work industry suggests that

female-dominated jobs are likely believed to require communal characteristics and male-dominated jobs are believed to require agentic characteristics to succeed. Failure may signal something about the leader's level of agentic and communal characteristics. When failing, a leader might be seen as lack requisite agentic attributes for leadership. If failing in a male-typed job, however, the leader may be conferred some agency given that leader holds a position in a masculine domain. If failing in a female-typed job, which requires communality, agency will not be conferred to the leader. Gender stereotypes prescribe that men enact agency. Whereas men's failure in a male-typed job may offset lowered perceptions of agency, this does not occur in a female-typed job. As a result, men violate gender prescriptive stereotype when failing in a female-typed work context by failing to demonstrate agency, thereby eliciting severe penalty recommendations.

## **Implications**

This research informs research on gender bias in leadership, the application of attribution theory to organizational sciences, and conceptualization of barriers to female leadership. First, this study provides theoretical contributions to understanding research on gender bias in leadership. Despite this speculation that men's occupational misfit is particularly detrimental, the original hypotheses were not supported and the results found were contrary to those expected, suggesting that we need to revisit original theory and research and critically reexamine literature on the existence and occurrence of gender biases. For example, results highlight the importance of considering contextual elements when investigating the existence of gender bias in leadership. Evidence of gender bias is not limited to main effects. Rather, there are circumstances in which gender biases emerge. Supporting research demonstrating the contextually dependent nature of gender bias, results of this study indicate that biased evaluations of leader failure depend on the

gender-typed work domain of the leadership position. Gender-biased performance evaluations and penalty recommendations of leaders can occur when considering whether failure occurred in a gender-congruent or gender-incongruent industry. Despite a nonsignificant main effect for leader gender, there is evidence of gender bias. The occurrence of this gender bias, however, is contingent on the gendered work context. Additional research stresses the need to understand the circumstances in which gender bias emerges. For example, Heilman et al. (2004) found gender-biased evaluations of female success, but only in male-typed jobs; there was no evidence of social disapproval in response to female success in female-typed jobs. The current investigation provides additional evidence that gender-biased leader evaluations can be exclusive to particular circumstances.

This study also contributes to research on gender bias in leadership by emphasizing the unique nature of leader failure. Results suggest gender biases that occur in response to female leader success may not generalize to female leader failure. Rather, there is a distinctive pattern of bias that emerges in response to leader failure. Women's success elicits negative social reactions when success occurs in a domain inconsistent with the female stereotype (Heilman et al, 2004). In male gender-typed jobs, successful women are less liked and seen as more interpersonally hostile compared to men. With success in stereotype-inconsistent domains, females face social consequences deriving from the disapproval of violating prescriptive gender stereotypes. Additionally, these successful females encounter economic consequences that uniquely hinder women's career advancement, receiving more negative evaluations and personnel recommendations than successful males (Heilman et al, 2004). Leader failure, however, does not produce a comparable pattern of gender-biased results. Women's leadership failure in a stereotype-inconsistent domain does not elicit more negative social judgments. Male and female

leaders are viewed as similarly likeable and interpersonally hostile when failing in a male-typed domain. Furthermore, when failing in a gender-inconsistent (male) domain, female leaders receive similar performance evaluations and similar personnel recommendations of penalty actions as male leaders. The performance of male leaders, however, is evaluated more negatively in a female domain compared to a male domain; and personnel decision making penalties are recommended more for male leaders who fail in a female work context than female leader. This suggests an asymmetry of gender bias in leadership. Whereas women are penalized for success, men are penalized for failure. It appears that the predictions of role congruity theory apply to female leader success, but not to female leader failure. Rather a unique pattern of bias that emerges in response to leader failure.

This study reinforces the importance of looking at failure as distinct from success. Prior research indicates that negative stimuli have a disproportionately greater effect on physiological, affective, cognitive, and behavioral activity than positive stimuli (see Taylor, 1991 for review). Failure triggers increases in sense-making processes (e.g., Weiner, 1985); has a motivational advantage for initiating learning (Hastie, 1984; Lau & Russell, 1980; Maheswaran & Chaiken, 1991; Pyszczynski & Greenberg, 1981; Sitkin, 1992; Wong & Weiner, 1981); negatively impacts self efficacy (Eden & Aviram, 1993; Gist & Mitchell, 1992); arouses a distinct set of emotions such as shame, anger, guilt, humiliation, and embarrassment (Nummenmaa, L., & Niemi, P. (2004; Weiner 1985); and elicits greater attention and more cognitive processing than positive events (Rozin & Royzman, 2001). Findings from this study indicate that this differentiation is valuable in examining leadership biases. Evidence of gender bias in response to leader failure follows a pattern dissimilar to leader success. The same theoretical rationale explaining biases in response to female leader success is incomplete in accounting for responses to leader failure,

warranting further exploration. Understanding of gender-biased evaluations in leadership is ultimately limited if failure is overlooked. To fully comprehend how women are regarded as leaders, understanding of the effects of both success and failure is needed. This investigation begins to do so by expanding knowledge of how failure influences leader perceptions.

Additionally, these findings have theoretical implications for research on bias against male leaders. Results highlight the need to consider consequences of male leaders' gender norm violation. Much of the empirical and theoretical work on gender norm violation has focused on females' violations, largely because of their potential to explain disproportionate gender ratios in leadership positions. Research, in addition to the current findings, demonstrates men are not immune to gender-biased responses to gender norm violations. There is disagreement, however, as to whether men receive favorable or unfavorable reactions to violations of gender-stereotype prescriptions. Some research suggests that men are afforded fair and even preferential treatment in female-dominated occupations, riding a "glass escalator" to leadership positions (Williams, 1992). For example, studies have demonstrated that in female-dominated fields men are disproportionately favored with respect to organizational support (e.g., Blau & Tatum, 2000), desirable work assignments (e.g., Blau & Tatum, 2000), and promotion to top-level leadership positions (e.g., Cognard-Black, 2004). Additionally, empirical support for the failure-as-an-asset effect suggests that men's performance failure in a female domain conveys a man's in-group prototypicality, thereby evoking positive evaluations (Reinhard et al., 2008). Other research, however, suggests that men are disadvantaged when violating gender norms. Results from the current study support this claim, finding that performance ratings and recommendations for personnel decision penalties are particularly unfavorable for men failing in a female work domain. Research by Heilman and Wallen (2010) shows that men, as well as women, are

penalized for gender norm violations. Men succeeding in a gender-inconsistent, female work domain are disliked, disrespected, and perceived as ineffective. According to role congruity theory, women in leadership roles are penalized and devalued for violating gender-prescriptive norm of communality. The principal argument, that gender-norm violations are penalized, does not exclude male norm violations. The "role incongruity principle allows for prejudice against male leaders, to the extent that there exist leader roles whose descriptive and injunctive content is predominantly feminine." (Eagly & Karau, 2002; p. 576). Male leaders in stereotypically feminine professions, therefore, can be subject to similar biases encountered by females. Findings of this study support claims that males are disadvantaged when violating gender norms and lend additional insight to the debate on whether men receive favorable or unfavorable reactions to violations of gender-stereotype prescriptions. As such, the current paper contributes to a limited literature on consequences of male gender norm violations. Research on gender discrimination against men is far outweighed by research focusing on discrimination against women, despite evidence of equally harmful consequences (e.g., Stockdale, Visio, & Batra, 1999). Organizational scholars have commented on the need to further examine reactions to men's gender stereotypic norm violation (e.g., Heilman et al., 2004), although most have excluded the examination or analysis of male norm violators (e.g., Heilman & Hayes, 2005; Ritter & Yoder, 2004; see Heilman & Wallen, 2010 for notable exception). Results of this study further illuminate the need for additional investigations on men's workplace discrimination.

This study also makes a theoretical contribution regarding the application of attribution theory to organizational sciences. Although much research has aimed to demonstrate the existence of gender bias in leadership, less attention has been given to understanding the process of gender bias within context of leadership. In this paper, causal attributions were proposed as a

mechanism for gender bias, arguing that the interpretation of leader failure is a source of bias. Research on success suggests that female success likely to be perceived as the result of something external to her, which will likely change in the future, and that is not under her direct control (e.g., Cash et al., 1977; Deaux & Emswiller, 1974; Feldman-Summers & Kiesler, 1974; Swim & Sanna, 1996; Taynor & Deaux, 1975). Despite findings indicating unfavorable causal attributions for female success, there was no prior evidence of causal attribution mediation for leader failure. Current findings suggest that although explanations for leader success may be different for men and women, explanations for leader failure are similar for men and women. This study questions whether we should expect attributions to differ for male and female leaders and empirically informs extant knowledge on the process by which evaluative bias occurs.

In doing so, the current paper underscores the potential for attribution theory in leadership. Although not significant mediator in this study, findings demonstrate that causal attributions for leader failure do impact evaluative judgments of leader, consistent with propositions of attribution theory. Although underutilized in organizational behavior research, scholars have touted the potential widespread application of attribution processes in the domain of leadership. "Existing perspectives of leader behavior and leadership processes...might expand their explanatory power using the logic of attribution theory" (Martinko et al., 2007; p. 579). Current findings support the application of attribution theory to the context of leadership, particularly with respect to leader evaluation.

Unfortunately, the limited number of studies that do apply attribution theory to leader evaluations have methodological weaknesses. Specifically, in the majority of these studies there is experimental manipulation of causal attribution for performance. The experimenter provides participants with a causal attribution. This is inconsistent with the fundamental tenet of

attribution theory, whereby individuals personally infer causes for others' success or failure (Pence et al, 1982). The causal attributions provided by experimenter can be dissimilar from causal attributions generated by participants. In one instance Pence et al. (1982) reported that in 25% of cases the participant disagreed with the experimenter-provided causal attribution for performance. As a result of the experimental manipulation of attributions, few studies explicitly measure attributions generates by participants, assuming correspondence with experimenter. Additionally, most studies assess specific reasons (i.e., ability, effort, luck, task difficulty), rather than underlying causal dimensions. Unfortunately, including only ability, effort, luck, and task difficulty is problematic in that these four explanations for failure do not reflect clearly defined levels of the locus and stability dimensions (Weiner, 1983), represent only four narrow possible explanations of a virtually endless number of causal explanations, and do not account for the controllability dimensions of causal attributions. Consequently, our understanding of the influence of attributions on behavior is incomplete. The current investigation, therefore, addresses empirical weaknesses of prior studies through the explicit measurement of causal attribution properties of participant-generated explanations for failure. In doing so, this study contributes to the understanding of attribution theory applied to organizational sciences.

The findings of this study also contribute to the ongoing investigation of barriers to women's access, advancement, and enactment of leadership. Investigating the affect of gender stereotypes on evaluations of leader failure expands existing knowledge on factors contributing to the scarcity of women in leadership. It was proposed that women in leadership roles are not only subject to biased evaluations of success, but also to biased evaluations of failure. In this way, a more comprehensive understanding of women's leadership issues is explored.

Interestingly, results indicate that men and women leaders receive similar performance, social,

and personnel decision evaluations following performance failure. In female-typed work domains, however, men receive less favorable performance ratings and reward recommendations. This unexpected, significant interactive effect suggests that under certain conditions there may exist gender-biased evaluations that favor female leaders. Additionally, the interactive effect highlights how gender biases can emerge in particular circumstances, consistent with the subtle nature of contemporary discrimination. Future research, however, should explore the parameters by which this effect occurs and the extent to which this effect, compounded over multiple decisions, accounts for the unequal gender distribution in leadership positions.

Nevertheless, a focus on gender-biased evaluations of leader failure helps to reinvigorate fading interest in barriers to women's access, advancement, and enactment of leadership.

## Limitations

When interpreting the results of this study, a number of limitations should be noted. First, fictional leaders were used. Methodology incorporating "paper people" can lack the richness of information that may be available to individuals embedded within organizations. Providing limited individuating information may magnify the use of stereotypes in evaluating a hypothetical leader. There is the conclusion in the stereotyping literature that the addition of judgment-relevant information deters stereotyping, given findings that individuating information can weaken effects of stereotypes (see Kunda & Thagard, 1996 for review). Murphy, Herr, Lockhart, and Maguire's (1986) meta-analytic comparison of paper people and behavioral observation studies demonstrates larger effect sizes for studies using paper-people methodology. Additional meta-analytic evidence indicates that information tends to reduce the effect of gender biases in evaluations (Swim et al., 1989). Likewise, Sackett and Dubois (1991) found that for

studies investigating the impact of demographic characteristics on performance appraisal ratings, laboratory studies reported larger effects than field studies.

Although the addition of individuating information can reduce gender-bias in evaluations, it does not eliminate bias. In their review, Kunda and Thagard (1996) note that even in the presence of individuating and counter-stereotypic information, stereotypes continue to influence a variety of evaluative outcomes. For example, when investigating intervention techniques aimed to change gendered performance expectations, women were still rated as less influential in groups despite being told that women and men are of equal competence (Pugh & Wahrman, 1983). Although individuating information provided on fictional resumes reduced gender-biased personality inferences, gender discrimination was not eliminated (Glick et al., 1988). Similarly, Heilman and Haynes (2008) caution that "information, by itself, does not protect against bias in performance evaluations" (p. 136). To impact the influence on expectations, information must be highly job-relevant, diagnostic of performance (Heilman & Haynes, 2005), and impervious to cognitive distortion (Heilman, Martell, & Simon, 1988). Additionally, using an applicant selection paradigm, Gill (2004) revealed that individuating information undercut only participants' descriptive stereotypes, not prescriptive stereotypes. These studies demonstrate that stereotyping is tenacious and undeterred by information. Hence, stereotyping can persist despite the availability of individuating information, suggesting that the use of fictional leaders may not amplify stereotyped responding. Moreover, the addition of individuating information in this study, although alleviating issues presented by limited descriptions of fictional persons, may also be an alternative explanation for finding null results.

The use of fictitious leaders and scenarios also raises questions about the generalizability of these findings to an organizational setting. Although the "surface similarity" (Shadish, Cook,

& Campbell, 2002) between the fictitious leader evaluation scenario and leader evaluations in an organizational setting may limit generalizability, such methodology is valuable for generalizing causal inferences of the study. A laboratory setting utilizing fictitious leaders has a distinct advantage in that it allows for a more controlled investigation of stereotype phenomena. Random assignment of participants to conditions that are identical, except for the leader's gender, reducing the potential influence of confounding variables. In an applied setting, male and female leaders are not naturally equivalent with respect to personal history, tenure, position, performance, reputation, etc. Each difference represents an alternative explanation for results that must be identified and controlled to make conclusions about the presence of stereotype phenomena. "Organizational studies and other field studies that do not equalize the behavior of the sexes can offer advantages of external validity, but such studies are vulnerable to the criticism that actual sex differences might account for apparently prejudicial reactions" (Eagly & Karau, 2002; p. 579). Laboratory research paradigms increase understanding of basic theoretical principles and constraints underlying gender discrimination. In turn, this knowledge dictates the appropriate generalization to organizational work settings. Although the laboratory setting may elicit generalizability concerns, if affords systematic control that heightens understanding of discrimination phenomena that can occur in organizational contexts. Despite the benefits of controlled laboratory research, replication is needed in actual work settings. Field settings are more intricate; coworker and leader information is more readily available, social interdependences and relationships exist, and failure has real consequences. Participation in this study lacked the richness of organizational settings, and study predictions need to be explored further in actual work settings.

A study second limitation is that the sample consisted of university students. Student samples can potentially limit the generalizability of results to additional contexts. Student participants may lack the organizational experience to accurately represent responses of employees with more extensive work experience embedded within organizations. These young adults, however, frequently have experiences with leaders in a variety of contexts and are preparing for full-time organizational positions through educational training. Furthermore, recent studies involving leader evaluation indicate that many student samples have previous work experience (e.g., 93% of sample in study 2; Rosette & Tost, 2010) or managerial experience (e.g., 25% of males, 15% of females; Duehr & Bono, 2006). Moreover, the perceptions and attitudes of university student participants, typically parallel those of organizational members employed full-time. For example, the ratings of agentic and communal characteristics for successful leaders have been shown to be similar across undergraduate student and managerial samples (Duehr & Bono, 2006). Meta-analytic results on effective leader traits demonstrate that investigations conducted in student settings generalize to the business setting findings regarding traits associated with effective leaders (Judge, Bono, Ilies, & Gerhardt, 2005). Heilman and Chen (2005) found that performing altruistic citizenship behavior enhanced men's, but not women's, performance evaluations and reward recommendations when rated by undergraduate students and a sample of full-time employees. Although the experience of full-time employees may weaken study effects, the overall tendency of gender-biased evaluations is still present (e.g., Eagly et al., 1992; Marlowe et al., 1996). Hence, it is likely that the results of the present study would generalize to non-student populations in organizational settings. Nevertheless, future research should test the hypotheses posed in this study using samples of employees in a variety of organizations and industries.

A third limitation of this study is that features of gender stereotypes were not directly measured. Although used in rationale for hypotheses, participant perceptions of prescriptive gender stereotypes, leader agency, and leader communality were not directly assessed. It was proposed that by occupying a leadership position a woman violates the female prescriptive stereotype of communality, thereby provoking more negative evaluative judgments relative to an identically performing male leader. Given that communality and agency were not measured, it is unclear whether female leaders indeed violated prescriptive gender norms. Perhaps the stereotype content of male and female leaders was not dissimilar and females were not viewed as incongruent with leader role, as predicted by role congruity theory (Eagly & Karau, 2002), such that there was no prescriptive gender-stereotype violation to elicit unfavorable female leader evaluations. For example, recent research by Rosette and Trost (2010) suggests that at top levels of the organizational hierarchy female agency and communality may not be incompatible but instead contribute to a more favorable evaluation of women in executive leadership. Subsequent investigations of gender-biased leader evaluations must measure the content of gender stereotypes to support the theoretical rationale for hypothesis development.

## **Future Directions**

Remaining mindful of these limitations, the current study illuminates areas for future research. Future research should seek to replicate results, with improved methodological rigor. This includes testing hypotheses in combined laboratory and field investigations, with student and non-student samples, and with direct measurement of gender stereotype content. This study raises additional questions that are not directly addressed. Specifically, additional research should be conducted to explore reasons for the unexpected results of this study. Why do male leaders receive better performance ratings when failing in masculine compared to feminine

domains? Why do male leaders receive more severe penalties than females when failing in feminine domains? Although potential explanations are offered, systematic empirical investigation is needed.

To further test the ideas presented in this paper it would be useful to conduct a series of studies that expand upon the current methodology and hypotheses. One set of studies could investigate how evaluative judgments change given multiple points of failure. In this paper, one single instance of leader performance failure was described. Perhaps the differential responses to leader failure proposed in this study emerge given several failure instances. As more failure occurs, more information about the leader accrues; and reactions to men's and women's leadership failures may diverge only upon greater 'thresholds' of performance failure information. With one instance of failure, perhaps both male and female leaders are given the benefit of the doubt and receive similar causal attributions. With additional instances of failure, however, perhaps only men continue to receive attributional leeway. Women's failure may be attributed to internal, stable, and controllable causes to a greater degree than men's failure with repeated occurrences. Men's failure, however, may continue to be attributionally rationalized as a way to reconcile inconsistency between performance expectations and outcomes. Given the prevalence of failure, it is sensible to consider multiple points of failure and gender-biased responding to multiple failures.

Future research would also benefit from the inclusion of leader success in concert with leader failure. One goal of this study was to explore whether the same gender-biased responses to female leader success occur when female leaders fail. Findings indicate a different pattern of results than those studies examining female success. Although the specific stimulus materials used in this current study were adapted from prior investigations of female leader success, the

fictional scenarios used differ from previous studies. Given that leader failure was the exclusive focus of this paper, additional research should use the identical scenarios of this study, modified to reflect leader success. Using identical stimulus material under identical testing conditions, evaluative judgments of leader failure can be directly compared to judgments of leader success.

Another informative extension of the current work involves consideration of the leader's response to failure. The present study has focused on others' reactions to leader performance failure. According to attribution theory, the leader would make a self-attribution for their failure (that could differ from others' causal attributions). As such, a leader may attempt to explain to others why they failed. This may be with goal of avoiding damage to one's self esteem, to prevent others from becoming angry, or to influence other's expectations of future failure (Weiner, Figueroa-Munioz, & Kakihara, 1991). Research could test the impact of different types of social accounts (e.g., denial, excuse, apology, and justification; Cody & McLaughlin, 1990) provided by the leader following failure. Perhaps others' evaluative judgments for and causes attributed to men's and women's leader failure are different when the leader provides their own failure explanation. Moreover, perhaps gender-biased evaluations emerge depending on the account male and female leaders offer. The social acceptability of explanations provided by the leader may depend on the gender of the leader. If there are stereotype-based expectations dictating how men and women should account for failure, it is conceivable that violation of such prescriptions would be received unfavorably. For example, given women's descriptive and prescriptive stereotype of communality, it is possible that there is a preference for women to apologize for failure. Apologies are admissions of responsibility accompanied by expressions of remorse (Tedeschi & Norman, 1985). The remorseful feature of apologies could be considered more aligned with the sympathetic, nurturing stereotype of women. Alternatively, there may be a preference for men to deny culpability and blame others for failure, because denial asserts that the male leader's abilities are intact, thereby protecting the dominant, assertive, and decisive stereotype of men. An interaction between leader gender and leader explanation would be expected to emerge, whereby gender differences in evaluations occur when particular explanations are offered by females and others are offered by males. In the example described, women leaders who deny failure would be rated less favorably than women leaders who apologize for failure, because of the communal stereotype violation. Additionally, women leaders who deny failure would be rated less favorably than men leaders who deny failure, because only the woman would violate her prescriptive gender stereotype. It is conceivable that most leaders would attempt to explain their performance failure to others, especially in a performance appraisal context. It would be useful, therefore, for research to assess the impact of such explanations on evaluators' own causal attributions for the failure and on evaluations ultimately made about the leader. As depicted in the previous example, the leader's own explanation for failure may contribute to gender-biased evaluative judgments. Future research investigating this scenario, therefore, could inform practical advice to women leaders regarding how to respond to failure and minimize potential bias following failure.

Finally, the interplay between leadership and social networks is only beginning to be studied in the organizational sciences. More work is needed in this area, as reviews of social network literature frequently note that "little empirical work has been done on leadership and social networks" (Brass, Galaskiewicz, Greve, & Tsai, 2004; p. 800). The importance of social relations in leadership is increasingly acknowledged, as reflected in recent theoretical developments such as leader–member exchange theory and a greater focus on the management of social relations (e.g., Graen & Uhl-Bien, 1995; Sparrowe & Linden, 1997). Likewise, the

underlying principles of social network theories and hypotheses similarly emphasize the importance of social relationships in addition to the social utility of connections, an individual's embeddedness in the social landscape, and the structural patterning of social life (Kilduff, Tsai, & Hanke, 2005). Leaders do not function in isolation, but are connected to subordinates, peers, and supervisors. As such, it would be interesting to consider how these social network connections influence and are influenced by failure events. How would existing network ties impact evaluations of the leader's failure? Could leader failure change the patterning of ties, such that interpersonal links are dropped or added in response to the leader's performance? For example, might a failed leader lose social capital, becoming more peripheral in the social network? Is this one possible manifestation of gender bias? Although performance evaluations of male and female leaders may not differ following failure, the social connections may differentially change for men and women in response to failure. This would be consistent with speculations of token theory, whereby members of minority groups can experience social isolation (Kanter, 1977). Additionally, might attitudes in response to leader failure spread throughout the social network, changing the social climate for the leader? Negative attitudes about the leader may cascade throughout the network. Diffusion of unfavorable leader perceptions can occur through the social comparison process initiated by structurally equivalent actors (Burt, 1987) that indirectly facilitates sensemaking (Hartman & Johnson, 1989) and contributes to a convergence of attitudes and behaviors throughout the network. Additionally, attitude diffusion can occur through cohesion and direct communication, which contributes to the development of a shared normative understanding between individuals (Burt, 1987) about the leader's failure. How would attributions for failure change as negative attitudes about the leader spread through network diffusion? How might social conformity pressures, generated by ties

among actors, further influence the attributional rationalization of leader failure and contribute to continued gender discrimination? Answering such questions will enrich current understanding of the interdependent, interconnected social fabric of organizations. Moreover, studying leader failure from a social network perspective represents a novel approach to elucidating alternative ways in which gender bias may manifest in evaluative contexts (i.e., via patterns of connections in complex social systems).

#### CONCLUSION

Although the findings of previous research suggest that women in leadership roles may experience a disadvantage relative to men when succeeding, the current study found that female leaders are not disproportionately penalized for failing. Specifically, when women fail in leadership positions, they were likely to be seen as performing similarly poorly, judged to be equally competent, perceived as similarly likeable and interpersonally hostile, and recommended for analogous rewarding and punitive personnel decisions as male leaders who fail. Failed female leaders, compared to failed male leaders, were not evaluated more negatively or ascribed more unfavorable causal attributions. Unexpectedly, failure occurring in traditionally female-dominated work contexts was shown to have particularly detrimental consequences for male leaders, eliciting more negative performance evaluations and more punitive personnel decision recommendations. These findings suggest that leader gender does not diminish the favorability of women's evaluative judgments following a performance failure, instead indicating the possibility of a qualified male leader disadvantage.

APPENDICES

## APPENDIX A

Job Information

#### Job Title

#### **Assistant Vice President of Sales**

### **Job Description**

### **Role of this Position**

General areas of responsibility include selling merchandise, maintating standards of customer service, managing personnel, and setting price schedules. This includes responsibilities such as resolving customer complaints, projecting future sales, conducting customer needs assessments, utiliting sales techniques, peruading customers to purchase merchandise, developing positive working relationships, determining sales and discounts, and generating a sales strategy. The essential function of this position is to generate sales, direct and motivate employee performance, and sustain high-quality customer service.

## Knowledge, Skills, and Abilities

An assistant vice president of sales is expected to have knowledge concerning sales methods and systems, management theories and priciples, as well as coordination of financial and personal resources. Additionally, an inidividual in this position is expected to possess critical thinking, persuasion, and oral communication skills. The ability ot recognize potential problems and orally express ideas clearly and articulately are also expected of an assistant vice president of sales. At a minimum, a bachelor's degree from an accredited four-year institution is required.

## Responsibilities

Job Responsibilities

- Generate Sales
- Increase Revenue
- Address Customer Complaints
- Direct and Motivated Employee Performance
- Allocate Resources
- Develop Effective Sales/Marketing Approaches
- Set Pricing Schedules for Merchansise
- Provide High-Quality Customer Service
- Attract New Customers
- Monitor and Develop Employees

HumanResources@SGT.com phone: 414.502.1212 • fax: 414.772.0359

## APPENDIX B

Company Information

#### WHAT WE DO

SGT is an innovative organization that produces a variety of automotive items that are sold to auto retailers worldwide. We strive to provide exceptional products that drive industry trends. As an automotive leader, SGT designs and creates original auto merchandise that exemplifies innovation and quality.

#### WHO WE ARE

"Simply put—SGT *is* innovation. This organization rightfully deserves a place on the 2009 list of Most Admired Companies for its continued production of exceptional ingenuity in the automotive industry." - *Fortune* Magazine

**Global**. SGT works globally to accommodate individual talent, research global industry trends, and provide worldwide sales service. We currently operate in three nations (United States, France, and India) and have made sales to companies in over 31 countries. This global network allows SGT to continue developing innovative merchandise.

**Quality**. We embody high-quality service and merchandise. SGT is uniquely identifiable in this competitive industry as maintaining remarkable excellence and commitment to quality. **Creative**. We are creative. SGT is an organization with an innovative soul. Constant research, product development, and employee development characterize SGT. We are passionate and

imaginative—dedicated to cultivating novel ideas that materialize into innovative products.

#### WHAT WE VALUE

**Innovation.** SGT celebrates ingenuity and creativity at all levels of the organization. With a foundation rooted in innovation, SGT cultivates a progressive atmosphere in which innovation can be confidently expressed, continually developed, and continually celebrated.

**Service**. We value spectacular service, as evidenced by the quality of our products and well as customer satisfaction. SGT was not only founded on principles of innovation, but also with the foresight to develop an exemplary experience with our company. As such, we value the quality of care that of our products, our employees, and our customers.

**Integrity**. SGT values integrity. We continue to make the commitment to fair and equitable treatment of everyone impacted by our company. We employ people who demonstrate strong personal character. SGT manufactures products in safe and comfortable environments, refusing to engage in illegal or unethical practices that operate under inadequate working conditions. We confidently stand by our products, because each step of their development is accompanied by respectable individuals and practices.

**Our Mission:** "SGT relentlessly pursues its original vision: automotive merchandise that is defined by unrivaled innovation and extraordinary quality."

#### WHERE WE STARTED

SGT was founded by S.G. Truior in 1973 with the vision of progressive creativity. Wanting to focus on superior quality and innovation, Truior began SGT. As novel products developed, SGT gained industry attention and global notoriety. Currently, SGT is recognized as an automotive industry leader.

## APPENDIX C

First Leader Information Narrative

#### Leader Name:

Katherine Marie Anderson

## Self-Written Bio (taken from a previous newsletter):

Katherine Anderson is an assistant vice president of sales in the Chicago, Illinois office. With SGT for over five years, Katherine was promoted to AVP in 2007. Originally from Chicago, Katherine earned her degree at the University of Michigan, returning to the "windy city" for five years to work as a sales manager with Garta International. During that experience, she collaborated with a team at SGT on a project that led to a job opportunity at SGT. In addition to her position here at SGT, Katherine enjoys international travel and is an avid runner. In fact, Katherine recently competed in her third marathon and is hoping to participate in the Chicago marathon in 3 months.

### **SGT Human Resources Department brief employee bio:**

Katherine Anderson currently holds the position of Assistance Vice President of Sales. She has worked with SGT for a total of 5 years and has been in her current position for 2 years. Katherine is responsible for the performance of approximately 20 employees at the Chicago, IL location.

In terms of her academic history, Katherine graduated from the University of Michigan in 1999 with a Bachelor's Degree in Sales Management (GPA 3.6 of 4.0). Katherine's prior work experience includes a summer internship with Garta International in 1998 and was employed as a sales manager at Garta International for five years before joining SGT.

Records indicate that Katherine is 32 years old and was raised in Chicago, IL. She has noted that her personal interests and hobbies include exercise (running), travel, and family.

Katherine's most recent performance status (i.e., last financial quarter sales data) shows that she did not meet her sales goal. The sales data indicates that Katherine met 30% of her performance goal and performed in the bottom third of employees who held the same position at SGT in the last 3 month period.

#### **Subordinate Feedback:**

In the 2008 annual performance review, employees had the opportunity to make anonymous comments related to all aspects of their job, including their supervisor. The following are those comments:

<sup>&</sup>quot;My boss (Katherine Anderson) expects a lot out of us"

<sup>&</sup>quot;I'm okay with how she does things."

<sup>&</sup>quot;I'm not sure if my supervisor recognizes my full potential. I want to be promoted, but not sure she sees me as a candidate"

<sup>&</sup>quot;My supervisor is professional and respectful. I've never had an issue with her."

<sup>&</sup>quot;As long as our team performs well, I'm happy."

<sup>&</sup>quot;Are you planning on replacing her soon?"

<sup>&</sup>quot;I didn't get the budget allocation I expected. I asked for her to reconsider and she didn't. It was frustrating because then I couldn't do all that I wanted to this year and my performance suffered."

<sup>&</sup>quot;Fine. I get the freedom I want."

<sup>&</sup>quot;Overall, no major problems. As a suggestion, however, we all might benefit from having shorter meetings."

## APPENDIX D

First Leader Fact Sheet

#### Leader Information

#### Katherine Marie Anderson

**Organizational History:** 

Length of tenure in this organization: 5 yrs Length of tenure in this position: 2 yrs

Number of employees currently supervise: 20 employees

**Education:** 

Education level: Bachelor's degree
Educational Institution: University of Michigan

Cumulative grade point average: 3.6/4.0

**Personal Information** 

Birthplace: Chicago, Illinois

Age: 32 yrs old

Stated personal interests: running, travel, spending time with friends & family

#### **Current Performance Status:**

A recent performance evaluation was conducted that describes how Katherine performed in the last financial quarter. Katherine did not meet the performance goal set for her for this financial quarter. Katherine met 30% of her performance goal. Performance data shows the she is performing in the bottom third of all the leaders holding the same position within the organization.

## APPENDIX E

Second Leader Information Narrative

#### Leader Name:

Daniel Alexander Thompson

### Self-Written Bio (taken from a previous newsletter):

An assistant vice president of sales for three years in the Indianapolis, Indiana office, Daniel Thompson has been with SGT since 2002. Daniel is a University of Notre Dame alumnus, working at Whalton, Inc. before joining SGT. Beyond SGT, Daniel enjoys photography and international travel. Currently, he planning a holiday trip to Ireland.

## SGT Human Resources Department brief employee bio:

Daniel Thompson currently holds the position of Assistance Vice President of Sales. He has worked with SGT for a total of 7 years and has been in his current position for 3 years. Daniel is responsible for the performance of 23 employees at the Indianapolis, IN location.

Daniel graduated from the University of Notre Dame in 1997 with a Bachelor's Degree in Sales Management (GPA 3.7 of 4.0). Prior to joining SGT, Daniel held a summer internship with Whalton, Inc. in 1996 and was employed as a sales manager there for five years before joining SGT.

Records indicate that Daniel is 34 years old and is originally from Indianapolis, IN. He has noted that his hobbies include photography, international travel, and family.

Daniel's most recent performance status (i.e., last financial quarter sales data) shows that he succeeded in meeting his performance goal for this financial quarter. Compared to all other assistant vice presidents in the organization, his performance is in the top 30%.

### **Subordinate Feedback:**

In the 2008 annual performance review, employees had the opportunity to make anonymous comments related to all aspects of their job, including their supervisor. The following are those comments:

- "I've learned a lot by working for Daniel"
- "I would prefer a different management style."
- "Sometimes I think my supervisor doesn't see my leadership potential"
- "Overall, Daniel has been a good boss"
- "Is the organization going to replace him?"
- "I think my boss has always been respectful to us."
- "He sees that we all work differently—which I find helpful"
- "Daniel recommended another employee in our department for a promotion. I don't know why he didn't recommend me as well, as I am similarly qualified. The situation made me think he favors certain employees."
- "Never had any issues with by supervisor, but I think all employees would work better with longer lunches."

## APPENDIX F

Second Leader Information Fact Sheet

#### Leader Information

### Daniel Alexander Thompson

**Organizational History:** 

Length of tenure in the organization: 7 yrs Length of tenure in this position: 3 yrs

Number of employees currently supervise: 23 employees

**Education:** 

Education level: Bachelor's degree

Educational Institution: University of Notre Dame

Cumulative grade point average: 3.7/4.0

**Personal Information** 

Birthplace: Indianapolis, Indiana

Age: 34 yrs old

Stated personal interests: traveling, photography, exercise

#### **Current Performance Status:**

A recent performance evaluation was conducted that describes how Daniel performed in the last financial quarter. Daniel succeeded in meeting his performance goal for this financial quarter. Compared to all other assistant vice presidents in the SGT organization, his performance is in the top 30%.

# APPENDIX G

Tables and Figures

Table 1. Weiner's (1985) Attributional Explanations Categorized by Attribution Dimension

	Locus	of Control
	Internal	External
Stable	Ability	Task Difficulty
Unstable	Effort	Luck

### IV-DV

- Hypothesis 1 Female leaders who fail will receive lower a) performance evaluations and b) ratings of leader competency than male leaders who fail
- Hypothesis 2 Female leaders who fail will be perceived as a) more interpersonally hostile and b) less likeable than male leaders who fail
- Hypothesis 3 Female leaders who fail will be recommended for a) fewer rewards and b) more penalties than male leaders who fail.

#### **IV-Mediator**

Hypothesis 4 Causes of performance failure will be attributed to a) more internal, b) more stabile, and c) more controllable causes when the leader is female compared to male.

#### IV-Mediator-DV

## Locus of Control Attributions

- Hypothesis 5 Internal attributions for failure will mediate the relationship between leader gender and a) performance evaluations and b) ratings of leader competency.
- Hypothesis 6 Internal attributions for failure will mediate the relationship between leader gender and a) interpersonal hostility and b) likeability.
- Hypothesis 7 Internal attributions for failure will mediate the relationship between leader gender and personnel a) reward recommendations and b) penalty recommendations.

#### Stability Attributions

- Hypothesis 8 Stable attributions for failure will mediate the relationship between leader gender and a) performance evaluations and b) ratings of leader competency.
- Hypothesis 9 Stable attributions for failure will mediate the relationship between leader gender and a) interpersonal hostility and b) likeability.
- Hypothesis 10 Stable attributions for failure will mediate the relationship between leader gender and personnel a) reward recommendations and b) penalty recommendations.

## Controllability Attributions

- Hypothesis 11 Controllable attributions for failure will mediate the relationship between leader gender and a) performance evaluations and b) ratings of leader competency.
- Hypothesis 12 Controllable attributions for failure will mediate the relationship between leader gender and a) interpersonal hostility and b) likeability.
- Hypothesis 13 Controllable attributions for failure will mediate the relationship between leader gender and personnel a) reward recommendations and b) penalty recommendations.

#### IV-Moderator-Mediator

- Hypothesis 14 Decision-maker gender will moderate the relationship between leader gender and a) internal, b) stabile, and c) controllable attributions of failure, such that the difference in attributions of failure between male leaders and females will be amplified when the decision-maker is male.
- Hypothesis 15 Gendered work context will moderate the relationship between leader gender and a) internal, b) stabile, and c) controllable attributions of failure, such that the difference in attributions of failure between male leaders and females will be amplified when the gendered work context is masculine.

#### Mediated Moderation

Moderator: Decision-Maker Gender

- Hypothesis 16 Attributions to internal causes of leader failure will mediate the interactive effect of leader gender and decision-maker gender on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.
- Hypothesis 17 Attributions to stable causes of leader failure will mediate the interactive effect of leader gender and decision-maker gender on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.
- Hypothesis 18 Attributions to controllable causes of leader failure will mediate the interactive effect of leader gender and decision-maker gender on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Moderator: Gendered Work Context

- Hypothesis 19 Attributions to internal causes of leader failure will mediate the interactive effect of leader gender and gendered work context on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.
- Hypothesis 20 Attributions to stable causes of leader failure will mediate the interactive effect of leader gender and gendered work context on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.
- Hypothesis 21 Attributions to controllable causes of leader failure will mediate the interactive effect of leader gender and gendered work context on a) performance evaluations, b) ratings of leader competency, c) interpersonal hostility, d) likeability, e) reward recommendations, and f) penalty recommendations.

Table 3. Means, Standard Deviations, Correlations, and Reliabilities of Study Variables <sup>a</sup>

Variable	M	SD	1	2	3	4	5	6	7	8
1. Benevolent Sexism	3.05	.47	(.77)							
2. Social Dominance Orientation	2.91	.86	.22**	(.79)						
3. Leader Gender b	.50	.50	.03	12*	_					
4. Rater Gender b	.29	.45	.11	.13*	.06					
5. Gendered Work Context c	.50	.50	.09	.03	01	06				
6. Attribution (locus)	4.74	.89	.01	11	.05	20**	02	(.66)		
7. Attribution (stability)	3.16	.95	.07	.21**	.03	.08	.05	.10	(.66)	
8. Attribution (control)	5.13	.89	.03	11	02	14*	05	.59**	06	(.66)
9. Performance Evaluation	3.60	1.19	.08	.14*	02	01	.07	10	.33**	05
10. Leader Competency	4.29	1.05	.10	.07	.05	04	06	20**	.13*	08
11. Likeability	3.25	.95	.00	.01	.02	.00	.04	18**	05	06
12. Interpersonal Hostility	4.23	1.00	.17**	.19**	.00	06	03	.08	09	.07
13. Reward Recommendations	2.84	.93	02	.19**	04	01	.02	13*	.37*	.07
14. Penalty Recommendations	3.74	.90	03	.03	.03	.00	.02	.14*	22**	.07

a n= 287 b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed.

Table 3 (cont'd)

Variable	M	SD	9	10	11	12	13	14
1. Benevolent Sexism	3.05	.47						
2. Social Dominance Orientation	2.91	.86						
3. Leader Gender b	.50	.50						
4. Rater Gender b	.29	.45						
5. Gendered Work Context <sup>c</sup>	.50	.50						
6. Attribution (locus)	4.74	.89						
7. Attribution (stability)	3.16	.95						
8. Attribution (control)	5.13	.89						
9. Performance Evaluation	3.60	1.19	(.85)					
10. Leader Competency	4.29	1.05	.57**	(.90)				
11. Likeability	3.25	.95	.54**	.64**	(.87)			
12. Interpersonal Hostility	4.23	1.00	13*	16 <sup>**</sup>	32**	(.82)		
13. Reward Recommendations	2.84	.93	.69**	.55**	.52**	08	(.84)	
14. Penalty Recommendations	3.74	.90	60**	53**	47**	.26**	54**	(.73)

a n=287b coded 0= "female," 1= "male"
c coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed.

Table 4. T-tests<sup>a</sup>

	Female	Leader	Male	Leader		
	M	SD	M	SD	t	df
Performance Evaluation	3.62	1.18	3.58	1.21	0.28	285
Leader Competency	4.24	1.09	4.34	1.02	-0.81	285
Likeability	4.21	0.98	4.24	1.02	-0.33	285
Interpersonal Hostility	3.25	0.95	3.26	0.94	-0.07	285
Reward Recommendation	2.88	0.97	2.80	0.90	0.65	285
Penalty Recommendation	3.71	0.94	3.77	0.86	-0.47	285
Locus	4.70	0.89	4.78	0.90	-0.76	285
Stability b	3.13	1.02	3.19	0.87	-0.51	278
Controllability	5.15	0.90	5.11	0.89	0.38	285

 $<sup>\</sup>frac{a}{n}$  = 144 for female leader; n=143 for male leader b Equal variances not assumed

Table 5. Mediating Effects of Locus Attributions on Performance Evaluations and Competency<sup>a</sup>

						Depende	nt Variab	le				
		del 1: rmance		odel 2: ocus		odel 3:		del 1: petency		odel 2: ocus		odel 3:
Variables	β	t	β	t	β	t	$\beta$	t	β	t	β	t
Controls Benevolent Sexism	.05	.81	.04	.61	.05	.86	.08	1.32	.04	.61	.09	1.47
Social Dominance Orientation	.13	2.13*	11	-1.80 <sup>†</sup>	.12	1.96*	.06	.98	11	-1.80 <sup>†</sup>	.04	.63
Independent Leader Gender b	.00	05	.03	.52	.00	00	.05	.89	.03	.52	.06	1.01
Mediator Attribution (locus)					09	-1.50					20	-3.44*
$\Delta R^2$	.0	00		001	.0	30 <sup>†</sup>	.0	03	_(	001	.(	054
$R^2$	.0	22		014	.(	)30	.0	14		014	.0.	54 <sup>**</sup>
F	2.1	12 <sup>†</sup>	1	.29	2.	16 <sup>†</sup>	1.	38	1	.29	4.	04**

a n=287b coded 0= "female," 1= "male" \* p < .05, two-tailed. \* p < .01, two-tailed. † p < .10, two-tailed.

Table 6. Mediating Effects of Locus Attributions on Likeability and Interpersonal Hostility<sup>a</sup>

						Depende	nt Variab	le				
	Mod	del 1:	Mo	del 2:	Mo	del 3:	Mo	del 1:	Mo	del 2:	Mo	odel 3:
	Like	ability	Le	ocus	Like	eability	-	personal stility	L	ocus		personal ostility
Variables	β	t	β	t	β	t	β	t	β	t	β	t
Controls Benevolent Sexism	.00	.02	.04	.61	.01	.13	.13	2.20*	.04	.61	.13	2.15*
Social Dominance Orientation	.01	.20	11	-1.80 <sup>†</sup>	01	13	.16	2.72**	11	-1.80 <sup>†</sup>	.17	2.88*
<i>Independent</i> Leader Gender b	.02	.35	.03	.52	.03	.45	.02	.34	.03	.52	.02	.29
Mediator Attribution (locus)					18	-3.09*					.09	1.56
$\Delta R^2$	.00	00		001	.(	)33	).	000	.(	001		061
$R^2$	.00	01		014	.0	33*	).	)53	.(	014	.0	61 <sup>**</sup>
F	.0	)5	1	.29	2.	42 <sup>*</sup>	5.2	27**	1	.29	4.	58 <sup>**</sup>

a n=287b coded 0= "female," 1= "male" \* p < .05, two-tailed. \* p < .01, two-tailed. † p < .10, two-tailed.

Table 7. Mediating Effects of Locus Attributions on Reward and Penalty Recommendations<sup>a</sup>

						Depende	nt Variabl	e				
	Mode			del 2:		odel 3:		del 1:		del 2:		odel 3:
	Rewa	ard	Lo	ocus	R	eward	Pe	nalty	L	ocus	Pe	enalty
Variables	β	t	β	t	β	t	β	t	$\beta$	t	β	t
Controls												
Benevolent Sexism	07	09	.04	.61	06	-1.02	04	67	.04	.61	05	.45
Social Dominance Orientation	.20 3	.36**	11	-1.80 <sup>†</sup>	.19	3.15**	.04	.70	11	-1.80 <sup>†</sup>	.05	.33
<i>Independent</i> Leader Gender b	01	21	.03	.52	01	15	.03	.57	.03	.52	.03	.62
Mediator Attribution (locus)					11	-1.91*					.15	2.48*
$\Delta R^2$	.000	)	.(	001		052	.(	001	.(	001	.(	)25
$R^2$	.040	)	.(	)14	.0	52 <sup>**</sup>	.0	003	_(	014	.(	)25
F	3.94	**	1	.29		** 89		33	1	.29	1	.79

n=287b coded 0= "female," 1= "male" p < .05, two-tailed. \*\* p < .01, two-tailed. † p < .10, two-tailed.

Table 8. Mediating Effects of Stability Attributions on Performance Evaluations and Competency<sup>a</sup>

						Depender	nt Varial	ole				
		del 1:		odel 2:		del 3:	Mod	del 1:		odel 2:	Mo	odel 3:
	Perfo	rmance	St	ability	Perfo	ormance	Comp	etency	St	tability	Com	petency
Variables	β	t	β	t	β	t	β	t	β	t	$\beta$	t
Controls												
Benevolent Sexism	.05	.81	.02	.32	.04	.74	.08	1.32	.02	.32	.08	1.29
Social Dominance Orientation	.13	2.13*	.21	3.53***	.06	1.08	.06	.98	.21	3.53***	.04	.57
Independent Leader Gender	.00	05	.05	.93	02	35	.05	.89	.05	.93	.05	.44
Leader Gender		.00	.00	.,,			.00	.0)		.,,		
Mediator											.12	1.93*
Attribution (stability)					.31	5.41***						
$\Delta R^2$	.0	00		.003	.1	114	.0	03		.003	.(	027
$R^2$	.0	22		.047	.11		.0	14		.047	.0	27 <sup>†</sup>
F	2.1	12 <sup>†</sup>	4	.69**	9.0	***	1	38	4	.69 <sup>**</sup>	1.	.97 <sup>†</sup>

n = 287

b coded 0= "female," 1= "male" p < .05, two-tailed. \*\*\* p < .01, two-tailed. \*p < .01, two-tailed. †p < .01, two-tailed.

Table 9. Mediating Effects of Stability Attributions on Likeability and Interpersonal Hostility <sup>a</sup>

						Dep	endent V	Variable				
	Mod	del 1:	Me	odel 2:	M	odel 3:	Mo	del 1:	M	odel 2:	Mo	odel 3:
	Like	ability	St	ability	Lik	eability		oersonal stility	St	ability	-	personal ostility
Variables	β	t	β	t	β	t	$\beta$	t	β	t	β	t
Controls Benevolent Sexism	.00	.02	.02	.32	.00	.00	.13	2.20*	.02	.32	.13	2.18*
Social Dominance Orientation	.01	.20	.21	3.53***	.00	.05	.16	2.72**	.21	3.53***	.15	2.51*
<i>Independent</i> Leader Gender b	.02	.35	.05	.93	.02	.31	.02	.34	.05	.93	.02	.30
Mediator Attribution (stability)					.04	.73					.04	.71
$\Delta R^2$	.0	00		.003		002	.0.	000		.003	.(	055
$R^2$	.0	01		.047		002	.0	053		.047	.0:	55 <sup>**</sup>
F	.0	)5	4	.69**		.17	5.2	27**	4	69 <sup>**</sup>	4.0	08**

n = 287

b coded 0= "female," 1= "male"

\*\* p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .001, two-tailed.

Table 10. Mediating Effects of Stability Attributions on Reward and Penalty Recommendations<sup>a</sup>

						Depender	nt Variab	le				
		del 1: ward		odel 2: ability		odel 3: eward		del 1: nalty		odel 2: ability		odel 3: enalty
Variables	β	t	β	t	β	t	$\beta$	t	β	t	β	t
Controls Benevolent Sexism	07	09	.02	.32	07	-1.28	04	67	.02	.32	04	61
Social Dominance Orientation	.20	3.36**	.21	3.53***	.13	2.22*	.04	.70	.21	3.53***	.09	1.52
<i>Independent</i> Leader Gender b	01	21	.05	.93	03	57	.03	.57	.05	.93	.05	.42
Mediator Attribution (stability)					.35	6.23***					24	-4.00***
$\Delta R^2$	.0	00		.003		156	.0	01		.003		057
$R^2$	.0	40		.047	.1:	56***	.0	03		.047	.0	57**
F	3.9	4**	4	.69**	13.	.06***	.3	33	4	69**	4.	25**

a n=287 b coded 0= "female," 1= "male" p < .05, two-tailed. p < .01, two-tailed. p < .001, two-tailed.

Table 11. Mediating Effects of Controllability Attributions on Performance Evaluations and Competency<sup>a</sup>

						Depender	nt Variable	;				
		del 1: rmance		odel 2: ollability		odel 3: ormance		del 1: petency		del 2: ollability		del 3: petency
Variables	β	t	β	t	β	t	β	t	β	t	β	t
Controls Benevolent Sexism	.05	.81	.07	1.08	.05	.85	.08	1.32	.07	1.08	.09	1.41
Social Dominance Orientation	.13	2.13*	13	-2.18*	.12	2.03*	.06	.98	13	-2.18*	.05	.81
<i>Independent</i> Leader Gender b	.00	05	04	67	00	08	.05	.89	04	67	.05	.83
Mediator Attribution (Controllability)					04	67					08	-1.30
$\Delta R^2$	.0	000	_	002	.0	024	.0	003	.(	002	.0	)20
$R^2$	.0	22		018		024	.0	14	.(	018	.0	)20
F	2.	12 <sup>†</sup>	1	.75	1	.70	1.	.38	1	.75	1.	.46

n = 287

b coded 0= "female," 1= "male" \* p < .05, two-tailed. \* p < .01, two-tailed.

Table 12. Mediating Effects of Controllability Attributions on Likeability and Interpersonal Hostility<sup>a</sup>

						Depend	lent Varia	ble				
	Mod	del 1:	Mo	del 2:	Mo	del 3:	Mo	odel 1:	Mo	del 2:	Mo	odel 3:
	Likea	ability	Contro	ollability	Like	ability	-	personal estility	Contro	ollability		personal ostility
Variables	$\beta$	t	β	t	β	t	β	t	β	t	β	t
Controls Benevolent Sexism	.00	.02	.07	1.08	.01	.07	.13	2.20*	.07	1.08	.13	2.10*
Social Dominance Orientation	.01	.20	13	-2.18*	.01	.08	.16	2.72**	13	-2.18*	.18	2.90**
<i>Independent</i> Leader Gender b	.02	.35	04	67	.02	.31	.02	.34	04	67	.02	.40
Mediator Attribution (Controllability)					06	95					.09	1.51
$\Delta R^2$	.00	00	).	002	.0	004	.(	000	.(	002	_	061
$R^2$	.00	)1	.(	018	.0	004	.(	053	).	018	.0	61**
F	.0	5	1	.75	•	27	5.3	27**	1	.75	4.	.54**

n = 287

b coded 0= "female," 1= "male" \* p < .05, two-tailed. \* p < .01, two-tailed.

Table 13. Mediating Effects of Controllability Attributions on Reward and Penalty Recommendations<sup>a</sup>

	Dependent Variable							
	Model 1: Reward	Model 2: Controllability	Model 3: Reward	Model 1: Penalty	Model 2: Controllability	Model 3: Penalty		
Variables	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t		
Controls Benevolent Sexism	0709	.07 1.08	06 -1.0	0467	.07 1.08	0575		
Social Dominance Orientation	.20 3.36	13 -2.18*	.20 3.22**	.04 .70	13 -2.18*	.05 .86		
<i>Independent</i> Leader Gender b	0121	0467	0125	.03 .57	0467	.04 .62		
Mediator Attribution (Controllability)			0585			.08 1.29		
$\Delta R^2$	.000	.002	.043	.001	.002	.009		
$R^2$	.040	.018	.043*	.003	.018	.009		
F	3.94**	1.75	3.13*	.33	1.75	.66		

a n=287b coded 0= "female," 1= "male" \* p < .05, two-tailed. \*\* p < .01, two-tailed.

Table 14. Moderating Effect of Rater Gender on the Relationship between Leader Gender and Attributions of Failure (Locus) <sup>a</sup>

	Attribution (locus)							
	Model 1:		Model 2:		Model 3:		Model 4:	
Variables	$\beta$	t	β	t	β	t	$\beta$	t
Control								
Benevolent Sexism	.04	.64	.04	.61	.05	.87	.05	.83
Social Dominance Orientation	11	-1.89 <sup>†</sup>	11	-1.80 <sup>†</sup>	09	-1.42	09	-1.41
<i>Independent</i> Leader Gender b			.03	.52	.04	.75	.04	.54
Moderator Rater Gender b					19	-3.26**	20	-2.39*
Interactive Effect Leader Gender x Rater Gender							.02	.18
$\Delta R^2$	.(	)13	.001		.036**		.0	000
$R^2$	.(	)13	.014		.049		.050	
F	1	.81	1.29		3.67**		2.93*	

n = 287

b coded 0= "female," 1= "male" \* p < .05, two-tailed. \*\* p < .01, two-tailed. † p < .10, two-tailed.

Table 15. Moderating Effect of Rater Gender on the Relationship between Leader Gender and Attributions of Failure (Stability) <sup>a</sup>

	Attribution (stability)							
	Model 1:	Model 2:	Model 3:	Model 4:				
Variables	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t				
Control								
Benevolent Sexism	.02 .38	.02 .32	.02 .26	.02 .27				
Social Dominance Orientation	.21 3.44**	.21 3.53***	.21 3.41**	.21 3.40**				
Independent								
Leader Gender b		.05 .93	.05 .88	.05 .78				
Moderator b								
Rater Gender			.04 .75	.05 .56				
Interactive Effect								
Leader Gender x				.01 .06				
Rater Gender				.01 .00				
$\Delta R^2$	.044**	.003	.002	.000				
$R^2$	.044	.047	.049	.049				
F	6.60	4.69**	3.65	2.91*				

b coded 0= "female," 1= "male" \*p<.05, two-tailed. \*p<.01, two-tailed. \*p<.001, two-tailed.

Table 16. Moderating Effect of Rater Gender on the Relationship between Leader Gender and Attributions of Failure (Controllability) <sup>a</sup>

	Attribution (Controllability)						
	Model 1:	Model 2:	Model 3:	Model 4:			
Variables	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t			
Control Benevolent Sexism Social Dominance Orientation	.06 1.04 13 -2.12*	.07 1.08 13 -2.18*	.07 1.24 12 -1.92 <sup>†</sup>	.08 1.23 12 -1.91 <sup>†</sup>			
<i>Independent</i> Leader Gender b		0467	0353	0343			
Moderator Rater Gender			13 -2.14*	12 -1.45			
Interactive Effect Leader Gender x Rater Gender				0004			
$\Delta R^2$	.017 <sup>†</sup>	.002	.016*	.000			
$R^2$	.017	.018	.034	.034			
F	2.41 <sup>†</sup>	1.75	2.48*	1.98 <sup>†</sup>			

a = 287

b coded 0= "female," 1= "male" \* p< .05, two-tailed. † p<.10, two-tailed.

Table 17. Moderating Effect of Work Context on the Relationship between Leader Gender and Attributions of Failure (Locus) <sup>a</sup>

	Attribution (locus)							
	Model 1:		Model 2:		Model 3:		Model 4:	
Variables	$\beta$	t	β	t	β	t	β	t
Control								
Benevolent Sexism	.04	.64	.04	.61	.04	.63	.04	.63
Social Dominance Orientation	11	-1.88 <sup>†</sup>	11	-1.80 <sup>†</sup>	11	-1.80 <sup>†</sup>	11	-1.73 <sup>†</sup>
<i>Independent</i> Leader Gender b			.03	.52	.03	.52	.11	1.29
Moderator Work Context <sup>c</sup>					01	25	.06	.74
Interactive Effect Leader Gender x Work Context							13	-1.31
$\Delta R^2$	.(	013	.001		.000		).	006
$R^2$		013	.014		.014		.020	
F	1	.81	1	.29	-	98	1	.13

a n= 287
b coded 0= "female," 1= "male"
c coded 0= "feminine context," 1= "masculine context"

 $<sup>^{\</sup>dagger}$  *p*<.10, two-tailed.

Table 18. Moderating Effect of Work Context on the Relationship between Leader Gender and Attributions of Failure (Stability) a

		Attributio	on (stability)	
	Model 1:	Model 2:	Model 3:	Model 4:
Variables	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t
Control				
Benevolent Sexism	.02 .38	.02 .32	.02 .25	.02 .25
Social Dominance Orientation	.21 3.44**	.21 3.53***	.21 3.52**	.21 3.53***
Independent				
Leader Gender b		.05 .93	.06 .94	.08 1.01
Moderator				
Work Context c			.04 .75	.07 .87
Interactive Effect				
Leader Gender x Work Context				0549
$\Delta R^2$	.044**	.003	.002	.001
$R^2$	.044	.047	.049	.050
F	6.60**	4.69**	3.651**	2.96*

a = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .001, two-tailed.

Table 19. Moderating Effect of Work Context on the Relationship between Leader Gender and Attributions of Failure (Controllability) a

			Att	ribution (c	controllab	oility)		
	Mod	del 1:	Mo	del 2:	Mo	del 3:	Mo	del 4:
Variables	β	t	β	t	β	t	β	t
Control Benevolent Sexism	.06	1.04	.07	1.08	.07	1.15	.07	1.14
Social Dominance Orientation	13	-2.12*	13	-2.18*	13	-2.17*	13	-2.13*
Independent Leader Gender b			04	67	04	68	.01	.11
Moderator Work Context c					05	88	00	03
Interactive Effect Leader Gender x Work Context							09	84
$\Delta R^2$	.0.	17 <sup>†</sup>	.(	002	.(	003	).	002
$R^2$	.0	17	).	)18	).	)21	).	)23
F	2.4	41*	1	1.75		.51	1	.35

n = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. † p < .10, two-tailed.

Table 20. Hierarchical Regression Analysis Testing the Moderating Role of Decision-Maker Gender and the Mediating Role of Causal Attributions on Leader Performance <sup>a</sup>

	Mo	odel 1:	Mo	odel 2:	Mo	del 3:	Mo	odel 4:	Mo	del 5a:	Mo	del 5b:		odel 5c:
Variables	$\beta$	t	$\beta$	t	β	t	β	t	β	t	β	t	$\beta$	t
Controls Benevolent Sexism Social Dominance	.05	.81	.05	.81	.05	.84	.06	.97	.07	1.05	.06	.93	.06	1.02
Orientation	.13	2.16	.13	2.13*	.13	2.18*	.13	2.13*	.12	1.99*	.07	1.11	.13	2.03
Independent Leader Gender b			00	05	00	01	.03	.49	.04	.54	.02	.26	.03	.47
Moderator Rater Gender b					03	54	.03	.30	.01	.07	.01	.13	.02	.23
Interactive Effect Leader gender x Rater gender							09	94	09	92	09	96	09	94
Mediator Attribution (locus)									10	-1.62				
Attribution (stability)											.31	5.43***		
Attribution (control)													04	74

Table 20 (cont'd)

$\Delta R^2$	.022*	.000	.001	.003	.009	.093	.002
$R^2$	.022	.022	.023	.026	.035	.119	.028
F	3.19*	$2.12^{\dagger}$	1.66	1.51	1.70	6.29***	1.34

n = 287

b coded 0= "female," 1= "male" p < .05, two-tailed. \*\*\* p < .01, two-tailed. \*\*p < .001, two-tailed. † p < .10, two-tailed.

Table 21. Hierarchical Regression Analysis Testing the Moderating Role of Decision-Maker Gender and the Mediating Role of Causal Attributions on Leader Competence <sup>a</sup>

	Mo	del 1:	Mo	odel 2:	Mc	del 3:	Mo	del 4:	Mo	del 5a:	Mo	del 5b:	Mo	del 5c:
Variables	β	t	β	t	β	t	β	t	$oldsymbol{eta}$	t	β	t	β	t
Controls Benevolent Sexism	.08	1.38	.08	1.32	.09	1.40	.08	1.33	.09	1.54	.08	1.30	.09	1.43
Social Dominance Orientation	.05	.88	.06	.98	.07	1.10	.07	1.11	.05	.82	.04	.71	.06	.95
<i>Independent</i> Leader Gender b			.05	.89	.06	.95	.04	.62	.05	.75	.04	.53	.04	.58
<i>Moderator</i> Rater Gender <sup>b</sup>					06	-1.02	09	96	127	-1.49	09	-1.03	09	-1.08
Interactive Effect Leader gender x Rater gender							.03	.35	.04	.40	.03	.36	.03	.35
Mediator Attribution (locus)									22	-3.72***				
Attribution (stability)											.12	1.97*		
Attribution (control)													09	-1.43

Table 21 (cont'd)

$\Delta R^2$	.012	.003	.004	.000	.046	.013*	.007
$R^2$	.012	.014	.018	.018	.065	.032	.026
F	1.68	1.38	1.30	1.06	3.23	1.54	1.23

Table 22. Hierarchical Regression Analysis Testing the Moderating Role of Decision-Maker Gender and the Mediating Role of Causal Attributions on Leader Likeability<sup>a</sup>

	Mod	del 1:	Mod	del 2:	Mo	del 3:	Мс	del 4:	Mo	del 5a:	Mod	del 5b:	Mod	del 5c:
Variables	β	t	β	t	β	t	β	t	β	t	β	t	β	t
Controls  Benevolent Sexism Social Dominance Orientation	.00	.03	.00	.02	.00	.02	.00	05 .23	.01	.10	.00	.02	.00	.02
Independent Leader Gender b			.02	.35	.02	.35	.00	.05	.01	.16	.01	.08	.00	.03
<i>Moderator</i> Rater Gender b					.00	05	03	37	07	82	03	39	04	45
Interactive Effect Leader gender x Rater gender							.05	.46	.05	.50	.05	.46	.04	.46
Mediator Attribution (locus)									19	-3.15**				
Attribution (stability)											.05	.73		
Attribution (control)													06	96

Table 22 (cont'd)

$\Delta R^2$	.000	.000	.000	.001	.034**	.002	.003
$R^2$	.000	.001	.001	.001	.035	.003	.005
F	.02	.05	.04	.07	.22	.15	.216

Table 23. Hierarchical Regression Analysis Testing the Moderating Role of Decision-Maker Gender and the Mediating Role of Causal Attributions on Leader Interpersonal Hostility<sup>a</sup>

	Model 1:	Model 2:	Model 3:	Model 4:	Model 5a:	Model 5b:	Model 5c:
Variables	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t	$\beta$ t
Controls Benevolent Sexism	.13 2.23	.13 2.20*	.14 2.33*	.14 2.37*	.14 2.31*	.14 2.35*	.14 2.27*
Social Dominance Orientation	.16 2.71**	.16 2.72**	.18 2.93**	.17 2.90**	.18 3.00**	.17 2.68**	.18 3.03**
<i>Independent</i> Leader Gender b		.02 .34	.03 .46	.04 .62	.04 .58	.04 .58	.05 .65
<i>Moderator</i> Rater Gender <sup>b</sup>			10 -1.74 <sup>†</sup>	0890	0671	0892	0778
Interactive Effect Leader gender x Rater gender				0443	0445	0443	0443
Mediator Attribution (locus)					.07 1.26		
Attribution (stability)						.05 .81	
Attribution (control)							.08 1.30

Table 23 (cont'd)

$\Delta R^2$	.052***	.000	.010 <sup>†</sup>	.001	.005	.002	.006
$R^2$	.052	.053	.063	.064	.069	.066	.069
F	7.87***	5.27**	4.74	3.82**	3.45**	3.29**	3.47**

a n=287 b coded 0= "female," 1= "male" p<.05, two-tailed. \*\*\* p<.01, two-tailed. \*\*p<.10, two-tailed.

Table 24. Hierarchical Regression Analysis Testing the Moderating Role of Decision-Maker Gender and the Mediating Role of Causal Attributions on Reward Recommendations <sup>a</sup>

	Mo	del 1:	M	odel 2:	Mod	del 3:	Mo	odel 4:	Mo	del 5a:	Mo	del 5b:	Mo	del 5c:
Variables	β	t	β	t	β	t	β	t	β	t	β	t	β	t
Controls  Benevolent Sexism Social Dominance Orientation	07 .20	-1.10 3.42**	07 .20	09 3.36**	06 .21 3	-1.05 3.39**		79 3.31**		70 3.15	05 .13	95 2.21*	04 .19	72 3.19 <sup>**</sup>
<i>Independent</i> Leader Gender b			01	21	01	12	.05	.72	.06	.79	.03	.48	.05	.70
<i>Moderator</i> Rater Gender b					03	48	.07	.85	.05	.56	.06	.70	.07	.77
Interactive Effect Leader gender x Rater gender							16	-1.65 <sup>†</sup>	15	-1.63 <sup>†</sup>	15	-1.73 <sup>†</sup>	16	-1.65 <sup>†</sup>
Mediator Attribution (locus)									12	-2.03*				
Attribution (stability)											.35	6.27***		
Attribution (control)													06	92

Table 24 (cont'd)

$\Delta R^2$	.04	.000	.001	.009	.014*	.117	.003
$R^2$	.040	.040	.041	.050	.064	.167	.053
F	5.90**	3.94**	3.00*	2.96*	3.18	9.36***	2.61*

n = 287

b coded 0= "female," 1= "male" p < .05, two-tailed. \*\*\* p < .01, two-tailed. \*\*p < .001, two-tailed. † p < .10, two-tailed.

Table 25. Hierarchical Regression Analysis Testing the Moderating Role of Decision-Maker Gender and the Mediating Role of Causal Attributions on Penalty Recommendations <sup>a</sup>

	Mod	lel 1:	Mo	del 2:	Mo	del 3:	Mo	del 4:	Mo	del 5a:	Mo	odel 5b:	Mod	del 5c:
Variables	β	t	β	t	β	t	β	t	β	t	β	t	β	t
Controls Benevolent Sexism	04	64	04	67	04	66	04	59	04	71	03	54	04	68
Social Dominance Orientation	.04	.63	.04	.70	.04	.70	.04	.68	.06	.89	.09	1.47	.05	.82
<i>Independent</i> Leader Gender b			.03	.57	.03	.57	.05	.72	.05	.65	.06	.93	.05	.76
Moderator Rater Gender <sup>b</sup>					.00	06	.03	.29	.06	.64	.04	.43	.03	.40
Interactive Effect Leader gender x Rater gender							04	45	05	48	05	48	04	45
Mediator Attribution (locus)									.15	2.52*				
Attribution (stability)											24	-3.99***		
Attribution (control)													.08	1.29

Table 25 (cont'd)

$\Delta R^2$	.002	.001	.000	.001	.022*	.053	.006
$R^2$	.002	.003	.003	.004	.026	.058	.010
F	.33	.33	.25	.24	1.26	2.86*	.47

a n=287b coded 0= "female," 1= "male" \* p < .05, two-tailed. \*\*\* p < .01, two-tailed. \*\*\* p < .001, two-tailed.

<u>Table 26. Hierarchical Regression Analysis for Interactive Effects on Leader Performance</u> <sup>a</sup>

	Mo	del 1:	Mo	del 2:	Mo	odel 3:	Mo	del 4:	Mo	del 5a:	Mo	del 5b:	Mod	del 5c:
Variables	β	t	β	t	β	t	β	t	β	t	β	t	β	t
Controls  Denovalent Soviem	0.5	01	0.5	01	0.4	71	0.4	71	05	77	0.4	67	05	75
Benevolent Sexism Social Dominance Orientation	.05	.81 2.16*	.05	.81 2.13		.71 2.12*		.71 2.03	.05	.77 1.89 <sup>†</sup>	.04	.67 .96	.05	.75 1.95
<i>Independent</i> Leader Gender b			.00	05	.00	04	12	-1.44	11	-1.34	15	-1.84 <sup>†</sup>	12	-1.44
<i>Moderator</i> Work Context <sup>c</sup>					.07	1.10	05	63	05	57	07	94	05	63
Interactive Effect Leader gender x Work Context							.20	2.01*	.19	1.90 <sup>†</sup>	.22	2.26*	.20	1.97*
Mediator Attribution (locus)									08	-1.34				
Attribution (stability)											.31	5.46***		
Attribution (control)													03	51

Table 26 (cont'd)

$\Delta R^2$	.022*	.000	.004	.014*	.006	.092***	.001
$R^2$	.022	.022	.026	.040	.046	.132	.041
F	3.19*	2.12 <sup>†</sup>	1.90	3.34*	2.25*	7.12***	1.97 <sup>†</sup>

a = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .01, two-tailed. † p < .01, two-tailed.

<u>Table 27. Hierarchical Regression Analysis for Interactive Effects on Leader Competence</u> <sup>a</sup>

	Mod	del 1:	Mo	del 2:	Mo	del 3:	Mo	del 4:	Mo	del 5a:	Mo	del 5b:	Mo	del 5c:
Variables	β	t	β	t	β	t	β	t	β	t	β	t	β	t
Controls Benevolent Sexism	.08	1.38	.08	1.32	.09	1.43	00	1.42	.09	1.58	.09	1.40	.09	1.52
Social Dominance Orientation	.05	.88	.06	.98	.06	1.43		1.02	.04	.67	.04	.59	.05	.84
<i>Independent</i> Leader Gender b			.05	.89	.05	.87	.08	.97	.10	1.26	.07	.86	.08	.98
<i>Moderator</i> Work Context <sup>c</sup>					07	-1.23	04	52	03	37	05	62	04	52
Interactive Effect Leader gender x Work Context							05	51	08	79	05	45	06	58
Mediator Attribution (locus)									21	-3.51***				
Attribution (stability)											.12	1.97*		
Attribution (control)													08	-1.39

Table 27 (cont'd)

$\Delta R^2$	.012	.003	.005	.001	.041	.013*	.007
$R^2$	.012	.014	.020	.021	.062	.034	.027
F	1.68	1.38	1.41	1.18	3.09**	1.64	1.31

n=287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .001, two-tailed.

Table 28. Hierarchical Regression Analysis for Interactive Effects on Leader Likeability <sup>a</sup>

	Mod	lel 1:	Mod	del 2:	Mo	del 3:	Mod	el 4:	Mod	lel 5a:	Mod	el 5b:	Mode	el 5c:
Variables	β	t	β	t	β	t	β	t	β	t	β	t	$oldsymbol{eta}$	t
Controls Benevolent Sexism	.00	.03	.00	.02	.00	05	.00	04	.00	.07	.00	06	.00	.01
Social Dominance Orientation	.01	.16	.01	.20	.01	.20	.01	.14	01	16	.00	01	.00	.03
<i>Independent</i> Leader Gender <sup>b</sup>			.02	.35	.02	.36	04	52	03	23	05	56	04	51
<i>Moderator</i> Work Context <sup>c</sup>					.04	.69	02	28	01	15	03	32	02	28
Interactive Effect Leader gender x Work Context							.11	1.09	.09	.87	.11	1.11	.11	1.05
Mediator Attribution (locus)									18	-2.99**				
Attribution (stability)											.04	.73		
Attribution (control)													05	86

Table 28 (cont'd)

$\Delta R^2$	.000	.000	.002	.004	.031**	.002	.003
$R^2$	.000	.001	.002	.006	.037	.008	.009
F	.02	.05	.16	.36	1.81 <sup>†</sup>	.39	.43

n = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .01, two-tailed. † p < .01, two-tailed.

Table 29. Hierarchical Regression Analysis for Interactive Effects on Leader Interpersonal Hostility <sup>a</sup>

	Mod	del 1:	Mo	odel 2:	Mo	odel 3:	Mo	odel 4:	Mo	del 5a:	Mod	del 5b:	Mod	del 5c:
Variables	β	t	$\beta$	t	β	t	β	t	$\beta$	t	β	t	β	t
Controls Benevolent Sexism	.13	2.23*	.13	2.20*	.14	2.26*	.14	2.26*	.13	2.21*	.13	2.24*	.13	2.16*
Social Dominance Orientation	.16	2.71**		2.72**		2.73**		2.75**	.17	2.90**	.16	2.53*	.18	2.91**
<i>Independent</i> Leader Gender b			.02	.34	.02	.33	.05	.60	.04	.48	.05	.55	.05	.59
<i>Moderator</i> Work Context <sup>c</sup>					05	84	02	23	02	29	02	27	02	23
Interactive Effect Leader gender x Work Context							05	52	04	40	05	50	04	45
Mediator Attribution (locus)									.09	1.51				
Attribution (stability)											.04	.76		
Attribution (control)													.08	1.44

Table 29 (cont'd)

$\Delta R^2$	.052***	.000	.002	.001	.008	.002	.007
$R^2$	.052	.053	.055	.056	.064	.058	.063
F	7.87***	5.27**	4.12**	3.43**	3.18**	2.88*	3.14**

n = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .001, two-tailed.

Table 30. Hierarchical Regression Analysis for Interactive Effects on Personnel Reward Recommendations <sup>a</sup>

	Mo	del 1:	Mo	odel 2:	Mo	odel 3:	Mo	del 4:	Mod	del 5a:	Mod	del 5b:	Mod	lel 5c:
Variables	β	t	$\beta$	t	β	t	β	t	β	t	β	t	$\beta$	t
Controls Benevolent Sexism	07	-1.10	07	09	07	-1.12	07	-1.12	06	-1.05	07	-1.28	06	-1.06
Social Dominance Orientation	.20	3.42**	.20	3.36**	.20	3.35***	.20	3.28**	.19	3.09**	.12	2.12*	.19	3.16*
<i>Independent</i> Leader Gender b			01	21	01	21	10	-1.23	09	-1.09	13	-1.68	10	-1.22
<i>Moderator</i> Work Context <sup>c</sup>					.02	.39	07	80	06	72	09	-1.18	07	80
Interactive Effect Leader gender x Work Context							.15	1.53	.14	1.39	.17	1.81 <sup>†</sup>	.15	1.49
Mediator Attribution (locus)									10	-1.79 <sup>†</sup>				
Attribution (stability)											.35	6.28***		
Attribution (control)													04	75

Table 30 (cont'd)

$\Delta R^2$	.040	.000	.001	.008	.011 <sup>†</sup>	.118	.002
$R^2$	.040	.040	.041	.048	.059	.166	.050
F	5.90	3.94	2.98	2.86	2.94	9.30	2.48

n = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .01, two-tailed. † p < .01, two-tailed.

Table 31. Hierarchical Regression Analysis for Interactive Effects on Personnel Penalty Recommendations <sup>a</sup>

	Model 1:		Model 2:		Model 3:		Model 4:		Model 5a:		Model 5b:		Model 5c:	
Variables	β	t	β	 t	β	t	β	t	β	t	β	t	β	t
Controls  Benevolent Sexism Social Dominance Orientation	04 .04	64 .63		67 .70		69 .70	04 .05	70 .80	05 .06	79 1.04	04 .10	66 1.65 <sup>†</sup>	05 .06	78 .94
<i>Independent</i> Leader Gender <sup>b</sup>			.03	.57	.03	.57	.16	1.89 <sup>†</sup>	.14	1.72 <sup>†</sup>	.18	2.1*	.16	1.88 <sup>†</sup>
<i>Moderator</i> Work Context <sup>c</sup>					.02	.34	.14	1.71 <sup>†</sup>	.13	1.62	.16	1.97*	.14	1.72 <sup>†</sup>
Interactive Effect Leader gender x Work Context							21	-2.09*	19	-1.92 <sup>†</sup>	23	-2.27*	21	2.03*
Mediator Attribution (locus)									.14	2.34*				
Attribution (stability)											24	-4.10***		
Attribution (control)													.07	1.21

Table 31 (cont'd)

$\Delta R^2$	.002	.001	.000	.015*	.019*	.056	.005
$R^2$	.002	.003	.004	.019	.038	.075	.024
F	.33	.33	.27	1.10	1.84 <sup>†</sup>	3.77**	1.16

n = 287

b coded 0= "female," 1= "male"

coded 0= "feminine context," 1= "masculine context" p < .05, two-tailed. \*\* p < .01, two-tailed. \*\* p < .01, two-tailed. † p < .01, two-tailed.

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