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Women "Take Care," Men "Take Charge": Managers' Stereotypic Perceptions of Women and Men Leaders

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This study explored possible underpinnings of findings from earlier research in which women's overall leadership competence was less favorably evaluated than men's. The authors examined perceptions held by senior managers, 34% of whom were CEOs, of women's and men's effectiveness at 10 key leadership behaviors. Respondents generally perceived that women were more effective than men at caretaking leader behaviors; and that men were more effective than women at action-oriented, "take-charge" leader behaviors. Notably, male respondents perceived that the behavior at which men leaders most outperformed women was problem-solving. The authors propose that this perception could potentially undermine the influence of women leaders.

WOMEN "TAKE CARE," MEN "TAKE CHARGE:" MANAGERS' STEREOTYPIC PERCEPTIONS OF WOMEN AND MEN LEADERS

"There is nothing *essential*—that is universal and nonvarying—in the natures of men and women."

To many, Carol Tavris's (1992, p. 21) premise that women and men are *not* essentially different is just unfathomable. It defies what many take as an indisputable

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fact of life. Just as people believe that the sky is blue, they believe that women and men are vastly different (Hyde, 2005; Kimmel, 2000). And it is no wonder that people believe as they do. Assertions about extreme gender differences are inescapable in popular culture (Barnett & Rivers, 2006). They are a recurring theme in situation comedies, cartoons, commercial advertisements, and even children's books (Aubrey & Harrison, 2004; Ganahl, Prinsen & Netzley, 2003; Hanke, 1998). What's more, gender differences have apparently become the subject of choice in a slew of well-known self-help, pop-psychology books—the most notorious of which is John Gray's *Men Are from Mars, Women Are from Venus*. Since its release in 1992, this influential book has reportedly sold over seven million copies worldwide and spent an unprecedented 339 weeks on the New York Times Bestseller List (Zimmerman, Haddock, & McGeorge, 2001). And even now in its wake, books of similar ilk continue to come on the scene, gaining significant media and public interest. Without a doubt, the notoriety of these publications, as well as the presumed expertise of their authors, give many people added confidence in the belief that women and men are in fact worlds apart (Brescoll & LaFrance, 2004)—a belief that they are already predisposed to accept (Glick et al., 2000).

Because notions of vast gender difference are so prominent, we often hear systemic gender inequalities being glibly attributed to differences in the skills and traits of women and men. In the winter of 2005, former Harvard president Larry Summers provided an example of this reasoning in his much-publicized remarks, wherein he attributed the lack of premiere women scientists to women's lower scientific aptitude. Similar sorts of explanations are also routinely offered for women's under-representation in business leadership. Many dismiss the ubiquitous absence of women in business leadership as a natural fallout of gender differences in leadership skill and drive (Browne, 1999; Goldberg, 1993).

Such accounts of gender inequality are easy to make but much more difficult to support with empirical evidence. In fact, a number of studies find that women and men share many more similarities than differences, both in cognitive functioning (Spelke, 2005) and personality traits (Hyde, 2005). Importantly, the same can be said about the ways in which women and men lead. Meta-analytic research (Eagly et al., 2003; Eagly & Johnson, 1990) shows that the leadership styles of women and men are not markedly different. In fact, one of the most recent of these studies, which included an analysis of several leadership styles, such as transformational, transactional, and laissez faire leadership, clearly showed that there are indeed more similarities than differences between women and men leaders (Eagly et al., 2003). So striking was this pattern that the authors concluded that a person's sex was "not a reliable indicator of how that person would lead" (p. 586). Findings such as these cast serious doubt on whether the gender gap in leadership can be explained away by gender differences in talent.

But how then do we explain the fact that although women earn 58.8% of master's degrees (National Center for Education Statistics, 2005) and comprise more than 50% of the managerial and professional workforce, they hold only 16.4% of corporate officer and 2.0% of CEO positions in the Fortune 500 (Catalyst, 2007)? Ask women this question and many will tell you that gender stereotypes impede their career advancement (Catalyst, 2003, 2004; Catalyst & The Conference Board, 2002). Even though their preparation for leadership roles—education and meaningful work experiences— increasingly parallels that of men (Bureau of Labor Statistics, 2001, 2005; National Center for Education Statistics, 2005), women believe that *perceptions* or *stereotypes* of their leadership aptitude remain largely unchanged. Women in business claim that negative and misleading stereotypes about their leadership ability persist and commonly result in evaluative bias and discrimination (Catalyst 2003, 2004; Catalyst & The Conference Board, 2002).

Recognizing the apparent weaknesses of the popular "gender-difference" explanations for the gender gap in leadership, it is important to examine the validity of business women's claims. We attempt to do just this in the present study, adding to a body of research (Agar, 2004; Biernat & Kobrynowicz, 1997; Boldry, Wood, & Kashy, 2001; Eagly & Karau, 2002; Heilman et al., 2004; Schein, 2001) that increasingly supports these women's convictions. We contribute to this literature by identifying very specific stereotypic beliefs about women's and men's leadership performance in business. Previous studies (e.g., Boldry et al., 2001; Davison & Burke, 2000; Eagly, Makhijani, & Klonsky, 1992; Sczesny, 2003) have repeatedly documented evidence of generalized, global perceptions of difference between women and men leaders. Such global perceptions include the belief that the average woman possesses fewer leadership traits than the typical man (e.g., Boldry et al., 2001), and that women leaders are less task-oriented than leaders in general (e.g., Sczesny, 2003). However, in the present study we explore how women and men leaders are perceived with greater granularity, as they perform a number of varied yet essential leadership functions. We do this by examining perceptions of women's and men's effectiveness at 10 key leadership behaviors. With this approach, we aim to provide more precise insights about how women leaders are perceived on the job and the specific work situations where they may be most susceptible to stereotypic bias. Importantly, another distinguishing feature of this study is its respondent sample of very senior business leaders. Although this demographic group is not often represented in studies on stereotyping and leadership, it is one that has considerable control over women's access into corporate leadership. Relative to the student samples often tapped in previous studies (e.g., Biernat & Kobrynowicz, 1997; Heilman et al., 2004; Sczesny, 2003) our senior manager sample provides a more ecologically valid basis for drawing conclusions about the stereotypes that can influence succession decisions in the real world and impede women's advancement into top leadership.

GENDER STEREOTYPES AND THEIR EFFECTS ON WOMEN LEADERS

Why are women leaders so disadvantaged by gender stereotypes? Several decades of research (see Fullager et al., 2003; Schein, 2001; Schein et al., 1996) have shown that the qualities associated with effective leadership are often the very same qualities that gender stereotypes attribute to men. These studies find that if individuals are asked to list the qualities they associate with men (i.e., their stereotypes of men), or to list the qualities they associate with leaders (i.e., their stereotypes of leaders), they very often generate a similar list of attributes. The result of this match between stereotypically masculine qualities and idealized leadership qualities, researchers contend (Fullager et al. 2003; Schein, 2001; Schein et al., 1996), is that masculine stereotypes portray men as being naturally endowed with the prerequisite qualities for leadership.

However, evidence suggests that women are not so fortunate. Studies show that in many countries around the world, stereotypically feminine qualities are generally not the qualities that come to mind when people think of successful leaders (Fullager et al. 2003; Schein, 2001; Schein et al., 1996). The result, Schein and others maintain, is that feminine stereotypes can portray women as being relatively ill-suited to leadership.

But this isn't the only dilemma that women leaders face on account of gender stereotypes. In addition to *descriptive* stereotypes of the qualities that women and men possess, psychologists have observed that societies also have *prescriptive* stereotypes— beliefs about the roles that women and men should play (Eagly & Karau, 2002; Heilman, 2001; Heilman et al., 2004). In what Eagly and Karau (2002) call role incongruity theory, they argue that the roles prescriptive stereotypes assign to women are at odds with the role of leadership; however, the roles that prescriptive stereotypes assign to men are congruent with the role of leadership. Eagly and Karau propose that these patterns spell trouble for women leaders. Specifically, they contend that when women enter into leadership roles they will often be seen as having violated their stereotypically prescribed feminine roles. On the other hand, men in leadership roles will be seen as acting in accordance with stereotypically prescribed masculine roles.

What real significance do these findings have for women? Indeed, it is well established that stereotypic attitudes need not always lead to bias and discrimination (Kunda & Spencer, 2003; Nieva & Gutek, 1980; Sinclair & Kunda, 2000). However, several studies suggest (Biernat & Kobrynowicz, 1997; Boldry et al. 2001; Davison & Burke, 2000; Eagly & Karau, 2002; Eagly et al.,1992) that the dilemmas described above —derived from both the content of descriptive and prescriptive gender stereotypes—can have serious effects on women leaders. For example, a comprehensive meta-analytic study showed that after controlling for all other differences but sex, women leaders tended to be evaluated less favorably

than men (Eagly et al., 1992). In other words, individuals were found to make different judgments about identical leadership behaviors depending on whether those behaviors were attributed to men or women. Women exhibiting the same behaviors as men were judged less favorably than men. Both Eagly et al. (1992) and others (Boldry et al. 2001; Davison & Burke, 2000; Heilman et al., 2004) have found that women are particularly vulnerable to these evaluative biases when they work in male-dominated domains.

Further, Biernat and Kobrynowicz (1997) have shown that individuals often apply lower standards when evaluating the leadership ability of men compared to women. In a study where they asked participants to make promotion recommendations, participants required less evidence of leadership ability from men candidates than they did from women candidates. Heilman and colleagues (2004) also found that when women violated prescriptive feminine stereotypes by excelling in leadership roles, they suffered harsh penalties for their success. In a series of studies, they showed that a woman who displayed high levels of competence at a stereotypically masculine-typed leadership role (e.g., assistant vice president of an aircraft sales company) was considered more hostile by study participants, than a man with an equivalent position and level of leadership competence. Not only did participants make different judgments about the hostility of a man and woman leader who were identically described and highly competent, they also rewarded them differently. Participants' recommendations for compensating the woman leader were reliably lower than their recommendations for compensating her male counterpart. As predicted by research on gender stereotypes, as well as role incongruity theory, Heilman et al.'s (2004) studies suggest that women leaders are indeed at risk of experiencing bias and discrimination in the workplace.

THE PRESENT RESEARCH

As described above, a robust body of literature has documented both the incongruence of descriptive (Fullager et al., 2003; Schein 2001; Schein et al., 1996) and prescriptive (Eagly & Karau, 2002; Heilman, 2001) feminine stereotypes with leadership ideals, as well as the susceptibility of women leaders to unfair discrimination (Boldry et al., 2001; Davison & Burke, 2000; Heilman et al., 2004). To be sure, this literature begins to give credibility to what many women leaders (Catalyst 2004, 2003; Catalyst & The Conference Board, 2002) and researchers believe (Heilman, 2001; Schein, 2001): that gender-based stereotyping and discrimination are significant contributing factors to the gender gap in leadership. However, there are still gaps in our understanding of the ways in which stereotyping might impede women's advancement in corporate leadership. Recent research (Dasgupta, 2004) suggests that stereotypic bias likely manifests itself in a number of regularly occurring, but subtle slights, which over time can

amount to a significant disadvantage. To better pinpoint the real life work situations in which these slights might occur, researchers first need to understand with greater precision how women are perceived on the job as they perform the various behaviors that comprise leadership.

We know of few studies (such as Martell & DeSmet, 2001) which detail how women's relative performance at routine leadership behaviors is perceived. Furthermore, as noted earlier, we are also presently unaware of any research that has studied such perceptions among very senior corporate managers,[1] the very population that controls access to leadership positions. Recognizing that leadership is a complex and multifaceted enterprise, we attempt to identify the underlying stereotypic beliefs that might be contributing to the generalized negative impressions of women's leadership that have been previously documented (e.g., Boldry, 2001; Eagly & Karau, 2002; Eagly et al., 1992). By providing a more sophisticated assessment of how top managers perceive women leaders, we hope to offer deeper insights about the specific leadership contexts and tasks that may predispose women to encounter stereotypic bias in the top leadership ranks.

To this end, we examined managers' perceptions of women's and men's effectiveness at 10 leadership behaviors included in Martell & DeSmet's (2001) previous study on gender-based leadership stereotypes. We chose behaviors from Martell & DeSmet's list that represent core activities of senior managers and have been shown in previous research (Yukl, 2005) to be essential components of leadership responsibility, such as supporting others, problem-solving, and influencing superiors. Given the view that senior manager roles are largely composed of interpersonal and conceptual activities such as networking and strategic decision-making (Yukl, 2005), we were primarily interested in respondents' perceptions of managerial performance at similar kinds of behaviors; we were less interested in the technical activities on Martell & DeSmet's list, such as monitoring, that are thought to dominate the time and attention of lower level managers (Yukl, 2005). In our assessment, we examined respondents' perceptions of women's and men's performance at consulting, delegating, influencing upward, inspiring others, problem-solving, mentoring, networking, rewarding, supporting others, team-building—which together represent key behavior categories (e.g., change-oriented, relations-oriented, and task-oriented) in the leadership literature (see Yukl, 2005, Chapters 2,3,4, 6, 11; Yukl, 1999). We expected that broad gender stereotypes which assign caretaking, relationship-oriented traits (e.g., friendliness, kindness, sensitivity) to women and agentic, achievement-oriented traits (ambitiousness, assertiveness, self-confidence) to men (Eagly & Karau, 2002; Williams & Best, 1990) would inform managers' perceptions of women's and men's performance at each of the 10 leadership behaviors. Specifically,

[1]A majority of manager respondents in Martell and DeSmet's (2001) research were middle managers or lower.

we predicted that managers would judge women leaders to be more effective than men at leadership behaviors that they perceived to be reliant on the relationship-oriented, caretaker traits that are attributed to women by feminine stereotypes. Similarly, we predicted that managers would judge men leaders to be more effective than women at leadership behaviors that they perceived to require the agentic, take-charge traits that are attributed to men by masculine stereotypes.

To test these predictions we first used prior research to classify each of the leadership behaviors according to whether they would likely be perceived as requiring masculine or feminine stereotypic traits (Atwater, Brett & Waldman, 2004; Sczesny, 2003; Yukl, 1999). We judged that seven of the behaviors (supporting others, rewarding, team-building, consulting, mentoring, inspiring others, and networking) were relatively feminine in nature; and that three of the behaviors (delegating, problem-solving, and influencing upward) were relatively masculine.

Feminine Leadership Behaviors

We found a clear indication from previous research (Atwater et al., 2004; Yukl, 1999) that supporting others and rewarding subordinates would likely be linked in people's minds to stereotypically feminine traits and thus should be classified as feminine behaviors. For example, when asked to categorize supporting others as *more masculine* or *more feminine*, Atwater and colleagues (2004) found that both female and male undergraduates agreed that supporting others was a more feminine leadership behavior. Consistent with these findings, Yukl (1999) also showed, using factor analytic techniques, that corporate and government employees (nonmanagerial staff) saw behaviors such as providing encouragement and support, along with rewarding subordinates for effective performance, as part of a relationship-oriented dimension of leadership. Given the stereotypic attribution of relationship-oriented traits to women in general (Williams & Best, 1990), as well as to women leaders specifically (Eagly & Karau 2002), Yukl's (1999) prior findings confirmed that a feminine classification of supporting others and rewarding subordinates was appropriate.

Similarly, we classified team-building and consulting as examples of stereotypically feminine leadership behavior, because they were also very highly correlated with what Yukl (1999) described as a relationship-oriented factor of leadership.

Further, Yukl (1999, p. 44) showed that specific behaviors related to mentoring such as "provid[ing] advice and coaching to help [subordinates] develop new skills" and "explain[ing] what must be done . . . to get a promotion" were also strongly correlated with the relationship-oriented" factor. Therefore, we also added mentoring (defined in this study as facilitating the skill development and career advancement of subordinates) to the feminine category of leadership behavior.

We surmised that inspiring others and networking were also stereotypically feminine based on a number of previous studies (Atwater et al., 2004; Sczesny, 2003; Yukl, 1999). As shown in Table 1, we defined inspiring others as *motivating others towards greater enthusiasm and commitment to work, by appealing to emotion, values, and by personal example*. Based on this definition, we judged that "behaving in a manner that is consistent with one's ideals and values" (Yukl, 1999, p.44), which was solely and highly correlated with the relationship factor in Yukl's study, was a key component of inspiring others, suggesting that the latter behavior might be feminine in character. One other behavior described by Yukl (1999, p. 44), "talk[ing] with conviction about [one's] values/ideals," also seemed strongly related to inspiring others. This behavior loaded primarily on what Yukl identified as a change-oriented dimension of leadership and secondarily on the relationship-oriented factor. Considering the loading patterns of each of the inspiration-related behaviors—with one loading solely on the relationship dimension and the other with secondary loadings on this factor—we reasoned that inspiring

TABLE 1
Classification of Leadership Behaviors by Stereotypic Perceptions

Feminine behaviors—taking care	*Masculine behaviors—taking charge*
Supporting Encouraging, assisting and providing resources for others	**Problem-Solving** Identifying, analyzing, and acting decisively to remove impediments to work performance
Rewarding Providing praise, recognition, and financial remuneration when appropriate	**Influencing Upward** Affecting others in positions of higher rank
Mentoring Facilitating the skill development and career advancement of subordinates	**Delegating** Authorizing others to have substantial responsibility and discretion
Networking Developing and maintaining relationships with others who may provide information or support resources	
Consulting Checking with others before making plans or decisions that affect them	
Team-Building Encouraging positive identification with the organization unit, cooperation and constructive conflict resolution	
Inspiring Motivating others toward greater enthusiasm for and commitment to work objects by appealing to emotion, value or personal example	

others, as specifically defined in this study, was somewhat more related to the relationship dimension of leadership and was therefore also relatively feminine in character. This logic is also supported by Sczesny (2003) and Atwater et al. (2004) in particular, who found that motivating and inspiring was judged by a majority of undergraduates as more feminine than masculine in nature.

Finally, our definition of networking (defined as developing and maintaining relationships with others who may provide information and resources) led us to anticipate that this behavior would also be seen as being somewhat feminine. Again, given that women have been repeatedly shown to be associated with traits related to maintaining relationships, both in a broad sense (Eagly & Karau, 2002; Williams & Best, 1990), as well as in the context of leadership (Eagly & Johnson, 1990; Eagly & Karau, 2002), we reasoned that networking would be seen as relatively feminine in nature.

Masculine Leadership Behaviors

A similar analytical process led us to classify the remaining three leader behaviors—delegating, influencing upward, and problem-solving— as masculine in nature. Atwater et al. (2004) found that in the context of leadership, delegating and problem-solving were perceived by a large majority of respondents as being more masculine than feminine. Consistent with this characterization, research conducted by Sczesny (2003) suggests that proficiency at delegating and solving problems is seen as part of a task-oriented leadership style, one that is typically associated with men (Cann & Siegfried, 1990; Eagly & Johnson, 1990; Eagly & Karau, 2002; Eagly et al., 1992).

Finally, there were a number of indications that influencing upward would be seen as a masculine behavior. Not only is it plausibly linked to stereotypically masculine qualities such as assertiveness (Williams & Best, 1990), but importantly, there is evidence (e.g., Sczesny, 2003) that behaviors related to influencing (e.g., being effective at negotiating and being persuasive) may be seen as part of the broader task-oriented leadership repertoire that is stereotypically associated with men. Furthermore, the established tendency for people to associate a masculine gender with higher power and status (Lucas, 2003; Ridgeway, 2001) suggested that influencing superiors would be seen as a masculine leadership behavior.

Table 1 displays the entire classification scheme distinguishing the 10 leader behaviors into masculine and feminine types. Based on these categories we made the following predictions:

H1: Managers will perceive that significantly more women leaders than men are effective at feminine leadership behaviors.

H2: Managers will perceive that significantly more men leaders than women leaders are effective at masculine leadership behaviors.

METHOD

Participants

Participants were 296 managers who were part of a leader panel developed at the school of business at a large, midwestern university. Individuals were invited to join the panel if they were an alumnus of the school's executive development program or if they had attended other executive development training at the business school. Members of the leader panel expected to receive survey invitations every two months on topics related to leadership and/or other organizational development issues. The entire leader panel was invited to participate in the present study via an e-mail which included a Web link to the survey. In exchange for their participation, respondents expected to receive a summary report of the results. Thirty-four percent of respondents self-identified as CEOs, and 51% indicated that their current position was within two reporting levels of the CEO. Respondents were most commonly employed in the manufacturing (23%), consulting (13%), and information technology (12%) industries, and a majority of them (approximately 78%) were older than 44 years old. Of the respondents, 168 (57%) were women and 128 (43%) were men.

Procedure and Materials

Once participants accessed the Web-based survey, they were presented with information introducing the study purpose and providing instructions for completing the survey. Participants were informed that the purpose of the survey was to examine whether corporate leaders perceive differences between women's and men's leadership. They were not given any indication about the position of the research investigators on this issue.

In the body of the survey, which we adapted from Martell and DeSmet (2001), each participant was asked the following: *Based on your own experience, what percentage of female managers do you think effectively demonstrate*: consulting, delegating, influencing upward, inspiring others, mentoring, networking, problem-solving, rewarding, supporting others, and team-building? Definitions of each leader behavior were provided in the survey where they could be readily referenced by participants (see Table 1 for the definitions that were provided). For each behavior respondents were given 10 response options: 0–10%, 11–20%, 21–30%, 31–40%, 41–50%, 51–60%, 61–70%, 71–80%, 81–90%, and 91–100%. Thus, each participant made 20 estimates of leadership effectiveness: 10 for women and then later 10 for men. After respondents indicated their estimates about women, they completed several demographic items. These included: place of birth, country of residence, age, sex, years of work experience, years of managerial and/or supervisory experience, type of position (i.e., line or staff), number

of years in current position, employer industry, employer sector, employer revenue, number of reporting levels between current position and the CEO, number of direct reports, sex of immediate supervisor, sex composition of current work unit, primary language, and highest level of education. After completing these items, respondents were then given the same set of instructions and the list of leadership behaviors that had been given earlier in reference to women and were asked about their perceptions of men leaders. Notably, we did not ask participants to compare women and men managers outright. We reasoned that asking participants to make such direct comparisons could evoke self-presentational concerns about appearing sexist, which in turn could bias responses. Also to discourage direct comparisons, we administered the survey in such a way that while participants were answering items about men managers, they were not able to reference or change the earlier judgments they had submitted about women managers. After completing each set of leader items (related to women and related to men), participants were allowed an opportunity to provide open-ended comments about their evaluations.

ANALYSES

We coded respondents' estimates such that a response of 0–10%, 11–20% or 21–30% would correspond to a 1, 2, or 3 and so forth, resulting in 10 interval response options. To test our hypotheses, we submitted participants' mean estimates separately for each of the 10 leader behaviors to a 2 (sex of target: women leaders vs. men leaders) $\times$ 2 (participant sex: female vs. male) mixed model analysis of variance (ANOVA), in which target sex was the within-participant variable and participant sex was the between-participant variable. We used a Bonferroni adjusted significance criterion of .005 (.05/10) to correct for multiple tests.

RESULTS

Feminine Leadership Behaviors

Overall, results of ANOVA tests displayed in Table 2 provided partial support for our first prediction (Hypothesis 1) that managers would perceive that significantly more women leaders than men were effective at behaviors we classified as feminine. However, this pattern appeared to be more pronounced among female respondents. Table 3 displays means and standard deviations illustrating the main and interactive tests.

As predicted, respondents perceived that more women leaders than men leaders were effective at both supporting others and rewarding subordinates. As

TABLE 2
Results of 2 × 2 Analysis of Variance for Feminine Leader Behaviors

	df	*F*	*p*	η_p^2
Measure: supporting others				
Within subjects effects				
Target sex	1,279	226.47	<.005	.45
Target sex × participant sex	1,279	9.57	<.005	.03
Simple effects				
Target sex within participant sex (males)	1,279	63.15	<.005	.19
Target sex within participant sex (females)	1,279	189.53	<.005	.41
Measure: rewarding				
Within-subjects effects				
Target sex	1,281	86.27	<.005	.24
Target sex × participant sex	1,281	15.62	<.005	.05
Simple effects				
Target sex within participant sex (males)	1,281	12.21	<.005	.04
Target sex within participant sex (females)	1,281	105.11	<.005	.27
Measure: mentoring				
Within-subjects effects				
Target sex	1,285	51.96	<.005	.15
Target sex × participant sex	1,285	21.29	<.005	.07
Simple effects				
Target sex within participant sex (males)	1,285	2.93	ns	.01
Target sex within participant sex (females)	1,285	82.22	<.005	.22
Measure: teambuilding				
Within-subjects effects				
Target sex	1,282	55.70	<.005	.17
Target sex × participant sex	1,282	34.85	<.005	.11
Simple effects				
Target sex within participant sex (males)	1,282	1.05	ns	.00
Target sex within participant sex (females)	1,282	105.72	<.005	.27
Measure: consulting				
Within-subjects effects				
Target sex	1,280	24.33	<.005	.08
Target sex × participant sex	1,280	23.57	<.005	.08
Simple effects				
Target sex within participant sex(males)	1,280	.00	ns	.00
Target sex within participant sex (females)	1,280	55.36	<.005	.17
Measure: inspiring				
Within-subjects effects				
Target sex	1,280	.62	ns	.00
Target sex × participant sex	1,280	36.64	<.005	.12
Simple effects				
Target sex within participant sex (males)	1,280	12.28	<.005	.04
Target sex within participant sex (females)	1,280	26.84	<.005	.09

(*Continued*)

TABLE 2
(Continued)

	df	*F*	*p*	η_p^2
Measure: networking				
Within-subjects effects				
Target sex	1,280	1.68	ns	.01
Target sex X participant sex	1,280	8.63	<.005	.03
Simple effects				
Target sex within participant sex (males)	1,280	1.17	ns	.00
Target sex within participant sex (females)	1,280	10.53	<.005	.04

ns: not statistically significant.

TABLE 3
Means and Standard Deviations for Perceptions of Women and Men Leaders Feminine Behaviors

	All participants		*Female respondents**		*Male respondents***	
	Mean	*s.d.*	*Mean*	*s.d.*	*Mean*	*s.d.*
Perceptions of women leaders						
Supporting	7.74	(1.82)	7.98[a]	(1.79)	7.43[c]	(1.92)
Rewarding	7.46	(1.96)	7.75[a]	(1.83)	7.08[c]	(2.06)
Mentoring	7.04	(2.22)	7.36[a]	(2.02)	6.61	(2.16)
Team-building	7.37	(1.87)	7.76[a]	(1.65)	6.83	(2.03)
Consulting	7.24	(1.88)	7.61[a]	(1.70)	6.75	(1.20)
Inspiring	6.73	(2.02)	7.18[a]	(1.76)	6.13[c]	(2.18)
Networking	7.32	(1.89)	7.25[a]	(1.84)	7.39	(1.96)
Perceptions of men leaders						
Supporting	5.83	(1.77)	5.74[b]	(1.74)	5.95[d]	(1.80)
Rewarding	6.16	(1.85)	7.08[b]	(2.06)	6.37[d]	(1.82)
Mentoring	5.96	(1.87)	5.75[b]	(1.84)	6.25	(1.88)
Team-building	6.43	(1.74)	6.26[b]	(1.77)	6.66	(1.68)
Consulting	6.64	(1.73)	6.57[b]	(1.75)	6.74	(1.71)
Inspiring	6.55	(1.58)	6.42[b]	(1.59)	6.72[d]	(1.56)
Networking	7.55	(1.83)	7.84[b]	(1.82)	7.17	(1.78)

*Means with superscript "a" are significantly different from means with the superscript "b."
**Means with superscript "c" are significantly different from means with the superscript "d."

shown in Table 3, these main effects were qualified by a significant interaction between target sex and participant sex. Simple effects tests revealed that among male respondents, more women leaders than men leaders were perceived to be effective at supporting others and rewarding subordinates; the same patterns also held true among female respondents, but for them the effect of target sex was

larger. It is notable that in the case of both groups—male and female—the effects of target sex were consistent with the direction we predicted (see Hypothesis 1).

For most of the remaining feminine leadership behaviors we found that only the perceptions of female respondents were in line with our predictions. With respect to mentoring, consulting, and team-building, analyses revealed significant main effects of target sex in the predicted direction with estimates of higher effectiveness being attributed to women leaders than men leaders. However, these effects were qualified by a target sex × participant sex interaction. Simple effects test results revealed that female respondents perceived that women leaders generally outperformed men at mentoring, consulting, and team-building, but among male respondents there was no evidence that their attributions about any of these three behaviors were affected by target sex.

Results for female and male respondents also differed with respect to inspiring others. Female respondents perceived that women leaders were more effective than men at inspiring others, but male respondents held an opposing view. The latter group perceived that more men leaders than women were effective at inspiring others.

Finally, both the perceptions of male and female respondents were inconsistent with our predictions about networking. We found a significant target sex × respondent sex interaction. Female respondents perceived that more men than women leaders were effective at networking, but among male respondents, target sex had no effect on their perceptions of leader effectiveness at networking.

To summarize, we found partial support for our predictions—mostly among female respondents. With the exception of networking, female respondents perceived that more women than men leaders were effective at all of the behaviors we classified as feminine. However, supporting others and rewarding subordinates were the only feminine behaviors at which male respondents attributed significantly higher effectiveness to women than to men. There was no evidence that male respondents had different perceptions of women's and men's performance at the remaining feminine behaviors with the exception of inspiring others—a behavior they judged to be the forte of men leaders rather than women leaders.

Masculine Leader Behaviors

As results of the ANOVA tests displayed in Table 4 and the means in Table 5 illustrate, our prediction that men leaders would be judged more effective than women at the masculine leader behaviors was supported with the exception of one behavior: problem-solving. The significant main effect (in the predicted direction with higher effectiveness at problem-solving attributed to men than women) was qualified by an interaction between target and participant sex. Simple effects tests showed that this time only male respondents perceived that

TABLE 4
Results of 2 × 2 Analysis of Variance for Masculine Leader Behaviors

	df	*F*	*p*	η_p^2
Measure: problem-solving				
Within-subjects effects				
Target sex	1,281	11.54	<.005	.04
Target sex × participant sex	1,281	97.91	<.005	.26
Simple effects				
Target sex within participant sex (males)	1,281	78.14	<.005	.22
Target sex within participant sex (females)	1,281	24.28	<.005	.08
Measure: delegating				
Within-subjects effects				
Target sex	1,284	29.90	<.005	.10
Target sex × participant sex	1,284	.78	ns	.00
Measure: influencing upward				
Within-subjects effects				
Target sex	1,282	38.22	<.005	.12
Target sex × participant sex	1,282	1.45	ns	.01

ns: not statistically significant.

TABLE 5
Means and Standard Deviations for Perceptions of Women and Men Leaders Masculine Behaviors

	All participants		*Female respondents**		*Male respondents***	
	Mean	*s.d.*	*Mean*	*s.d.*	*Mean*	*s.d.*
Perceptions of women leaders						
Problem solving	7.55	(1.91)	8.21[a]	(1.42)	6.70[c]	(2.12)
Delegating	6.80	(1.85)	7.11[a]	(1.60)	6.40[c]	(2.07)
Influencing upward	6.71	(1.98)	6.91[a]	(1.86)	6.45[c]	(2.11)
Perceptions of men leaders						
Problem solving	7.76	(1.53)	7.57[b]	(1.58)	8.03[d]	(1.44)
Delegating	7.52	(1.67)	7.93[b]	(1.63)	6.98[d]	(1.57)
Influencing upward	7.52	(1.75)	7.85[b]	(1.80)	7.08[d]	(1.58)

*Means with superscript "a" are significantly different from means with the superscript "b."
**Means with superscript "c" are significantly different from means with the superscript "d."

men leaders were more effective problem-solvers than women. In contrast, female respondents perceived that their own sex was more effective compared to men at problem-solving.

Consistent with our predictions, for delegating and influencing upward, the main effect of target sex revealed that both male and female respondents

perceived that more men leaders than women were effective delegating and influencing superiors. No other significant effects emerged.

Overall, there was partial support for our predictions about the masculine leader behaviors, especially among male respondents, who perceived that more men leaders were effective at delegating, influencing upward and problem-solving. Women agreed with the exception of problem-solving, to which they attributed higher competence among women leaders.

DISCUSSION

Our hypotheses received partial support. Consistent with Hypothesis 1, analyses showed that female respondents judged the leadership performance of women more favorably than that of men on all but one of the seven leader feminine leadership behaviors: networking. And although male respondents did not judge that women were more effective than men leaders at all of the feminine leader behaviors, the two behaviors at which they perceived an advantage for women leaders were both behaviors that we had classified as feminine. There was also partial support for Hypothesis 2. Female respondents perceived that men outperformed women leaders at all but one of the three masculine leader behaviors: problem-solving. Unexpectedly, they attributed superior problem-solving performance to women leaders. However, as predicted, male respondents perceived that men leaders were more effective than women at all of the masculine leader behaviors. They also perceived that men were more effective than women at just one of the feminine-typed behaviors: inspiring others. Recall that our classification of the 10 behaviors into masculine and feminine types was based solely on previous evidence as to whether people were apt to judge them as being related to either masculine or feminine stereotypic traits, respectively. Therefore, our overall results suggest that among both the male and female managers we surveyed, perceptions of the relative performance of women and men leaders were to some extent related to whether the behavior being judged was connected to masculine or feminine stereotypic traits.

However, notably, we did not anticipate the extent to which perceptions of gender difference would be dependent on the sex of respondents. Female and male respondents did not always agree about where the differences lay— this was particularly true for many of the feminine-typed behaviors. Whereas female respondents perceived differences favoring women leaders at almost all of the feminine behaviors, there was no evidence that male respondents perceived that women leaders had any significant advantage at five of them— consulting, inspiring, mentoring, team-building and networking. Furthermore, even when there was agreement about the existence and direction of differences between women and men leaders, there was often disagreement about the extent of these differences.

Thus, while confirming many of our expectations, findings from our study also revealed several unanticipated results. We expected that male and female respondents would be equally likely to endorse the content of masculine and feminine trait stereotypes (Eagly & Mladinic, 1994; Langford & MacKinnon, 2000). And this premise led us to predict that all respondents, both male and female, would make similar judgments about how women's and men's leadership differed. Yet, we found in a number of cases that the judgments of male and female respondents were not at all similar. To gain insight into why these anomalies may have occurred we undertook a short post hoc study.

Post Hoc Study

The goal of the post hoc study was to examine what might underlie the differences in the perceptions of male and female respondents. In particular, we were interested to learn whether male and female respondents might have had different beliefs about the extent to which the leader behaviors were related to masculine and feminine stereotypic traits, and whether such differences might account for the patterns we observed in the first study where perceptions of difference between women and men leaders were so often dependent on the sex of the respondent.

Method

Using a "snowballing" technique, we invited members of employee network groups at several large corporations to participate in an online survey. Recipients of the invitations were encouraged to complete the survey themselves and to forward the survey link to other professional colleagues. The strategy yielded 178 participants (27% male and 73% female).

Procedure

When participants accessed the Web-based survey, they were asked to review a list of masculine stereotypic traits which included: *forceful, aggressive, dominant, self-confident, independent, strong, logical, inventive, ambitious, rude, unemotional, and adventurous*; and a list of stereotypic feminine traits which included: *affectionate, submissive, sensitive, fearful, dependent, superstitious, complaining, dreamy, charming, emotional, and soft-hearted* (from Williams & Best, 1990). Participants were then asked to give their opinions about the extent to which the 10 leader behaviors from the first study seemed related to masculine or feminine trait stereotypes. Respondents were instructed *not* to base their responses on whether they believed that the masculine and feminine stereotypes were true.

Results of Post Hoc Tests

We used omnibus chi-square and two-tailed binomial tests to examine whether respondents' ratings of the 10 leader behaviors as masculine, neutral, or feminine varied by sex.[2]

Findings revealed significant differences between male and female respondents' ratings with respect to inspiring, consulting, and rewarding subordinates. A majority of female respondents perceived that these behaviors were more related to feminine than to masculine stereotypic traits, consistent with the feminine classification we accorded them in the first study. However, this classification did not receive support from male respondents. Unlike their female counterparts, male respondents were noncommittal in their ratings, with nearly 50% designating each of these behaviors as neutral.

Consistent with our expectations for the four remaining behaviors we had classified as feminine in the first study, both male and female respondents judged that most of them (supporting others, mentoring, and team-building) were associated more with feminine than masculine stereotypic traits. Notably, these behaviors were also assigned neutral ratings by significantly fewer than 50% of respondents. However, respondents were more likely to consider networking to be a masculine behavior, and binomial tests suggested that networking elicited a neutral rating from about 50% of respondents. Rather than seeing networking as part of a feminine, relationship-oriented skill set, it is quite possible that respondents were defining this behavior in terms of the exclusive "good-old-boy" networks that are commonly thought to be part of a male strategy for advancement in business.

Ratings of the behaviors we had classified as masculine received partial support for this designation. Both female and male respondents perceived that all of the masculine-type behaviors (delegating, influencing upward, and problem-solving) were significantly more related to masculine than feminine traits. However, only in the case of influencing upward was the percentage of neutral ratings significantly less than 50%, giving evidence of a majority opinion corroborating our masculine classification of this behavior.

These results provided partial support for our classification of the leader behaviors in our first study, as well as our interpretation of the results from that study. In most cases, our expectations about which leadership behaviors would be connected in participants' minds to masculine or feminine stereotypes were supported. Still, points of conflict with our earlier findings were noticeable. For example, although all respondents perceived that problem-solving was more related to masculine than feminine stereotypic traits in the post hoc study, only

[2]Complete details about methodology, analyses techniques, and findings of the post hoc study are available from the authors.

male respondents in our first study attributed higher relative performance to men leaders. Likewise, although there was little consensus among male respondents in the post hoc study about whether inspiring others was neutral, masculine, or feminine, male respondents in the first study judged that more men leaders than women were effective at this behavior.

The failure of the post hoc study to provide greater insight on the effects of respondent sex in our first study may have been due to sampling differences between the two studies. For example, the respondents in our first study were more likely to be older and to be of higher managerial rank than participants in the post hoc study. As many as two-thirds of the respondents in our first study were over 44 years of age and were very senior business managers, whereas more than 50% of post hoc respondents were age 35 or younger, and only 13% were very senior managers. Previous research (von Hippel, Silver, & Lynch, 2000) suggests that the propensity to stereotype can vary with age, such that older individuals may be more prone to rely on stereotypes. Such findings indicate that age may be a particularly important point of nonequivalence between the two samples.

LIMITATIONS

A key strength of the main study was our ability to tap very senior managers for our sample. Paradoxically, this strength placed some limitations on the kinds of measurement techniques that we were able to use. Our ability to access the leader panel required that we use formats used in previous panel surveys and that panel members were able to easily relate the survey content to issues they were facing in their organizations. We were also constrained to keep the survey as brief as possible. These restrictions meant that it would have been difficult for us to use more indirect or implicit measures of managers' stereotypes, such as response latencies. As a result, our measurement technique may have been biased by self-presentational and self-enhancement concerns, rather than reflecting managers' automatic, uncensored beliefs about women's and men's leadership (Hofmann et al., 2005). Even though we avoided asking managers to compare women and men leaders directly to limit the effect of these concerns, it is still possible that they influenced participants' responses.

Furthermore, we cannot be sure that the stereotypic perceptions we uncovered in our first study are representative of what readily comes to mind when managers think of the performance of women and men leaders. Although we believe these leadership behaviors to be representative of the functions that leaders perform (Yukl, 2005), it is difficult to make the claim that they are exhaustive. And it is plausible that with another stereotype measurement technique, such as the extensive checklist technique used by other researchers (Williams & Best,

1990), we would find that stereotypic perceptions other than the ones reported here were more prominent in the workplace. Finally, differences in the sample demographics across the first study and the post hoc study make it difficult to confirm that manager's perceptions (in Study 1) were in fact based on their knowledge of broad gender stereotypic traits and the various connections they made between these traits and the leadership behaviors.

CONCLUSION

Our findings offer some important insights about the stereotypic perceptions that may disadvantage women leaders in the workplace. Importantly, the results of Study 1 corroborate the intuitions of business women that stereotypic perceptions of women's and men's leadership are alive and well—even among the most high-ranking managers in business. Further, our sample of very senior business leaders (Study 1) allows us a more solid basis for drawing conclusions about possible influences on the judgments of key decision-makers, which can ultimately impede women's advancement within the senior-most ranks of corporate leadership.

In our first study, both female and male respondents treated sex as if it were a reliable predictor of leadership effectiveness. And this tendency was even more marked among female respondents. These findings are particularly troubling given that recent meta-analytic research (Eagly et al., 2003) suggests that there is a significant degree of convergence in the ways in which women and men lead, and that leader sex is not a reliable indicator of leadership behavior. Compared to men, women do not more reliably engage in behaviors associated with higher leadership effectiveness and vice versa (Eagly, Karau, & Makhijani, 1995). Yet, in conflict with these empirical findings, our respondents reliably perceived differences in women's and men's leadership performance. Furthermore, even in those aspects of leadership where research (Eagly et al., 2003) finds differences in women's and men's leadership, they are certainly not of the magnitude that might be suggested by the significant degree of divergence we observed between respondents' estimates of women's and men's leadership effectiveness. For example, Eagly et. al. (2003) report a very small mean weighted Cohen's d effect size of .10 (Cohen, 1988; Murphy & Myors, 2004) for the effect sex on transformational leadership. Indeed, in our Study 1 the perceived effect of leader sex on performance at behaviors such as problem-solving (e.g., $\eta_p^2 = .22$ among male respondents) was much larger than the sex effects reported by Eagly et al. (2003) in their study of actual leadership behavior. Thus our findings suggest that even very senior managers may be prone to misjudge and/or overestimate the degree to which leader sex and leadership performance are related.

What, then, is the source of this attributional error? Our research provides some support for the notion that these attributions were at least in part due to gender stereotypes. Recall that we based our a priori classification of behaviors into masculine and feminine types solely on the content of broad gender stereotypes of women's and men's traits and whether these traits would be perceived as being relevant to the different leadership behaviors. With few exceptions, this classification system was consistent with the specific differences that respondents perceived. Except for problem-solving, all of the behaviors at which male and female respondents judged women leaders to be superior to men were feminine-typed behaviors—behaviors we predicted based on previous research would be connected in respondents' minds to feminine stereotypes. Similarly, with the exception of networking, all of the behaviors at which female respondents perceived an advantage on the part of men leaders were masculine-typed behaviors—behaviors we predicted based on previous research would be connected in respondents' minds to masculine stereotypic traits. And with the exception of inspiring others, male respondents perceived that men leaders were more effective than women at only the masculine behaviors. When we also consider the aforementioned evidence (Eagly et al., 2003) of very few differences in the actual leadership of women and men, the present findings support the notion that respondents' perceptions were at least partially based on the content of broad, gender stereotypes and do not reflect reliable and observable differences in the leadership performance of women and men.

IMPLICATIONS

Our findings have some important implications for organizations. Research conducted by Catalyst & The Conference Board (2002) suggests that relative to women, few men perceive that gender stereotypes are a barrier to women's advancement. The present research suggests that men's views may be overly optimistic. Male and female respondents perceived that leader sex was a reliable indicator of leadership performance, even though research on actual leadership behavior suggests that it is not (Eagly et al., 2003). Further, our findings suggest that although women hold many favorable stereotypes of women leaders, men hold far fewer. This is an important point given that in male-dominated domains such as corporate leadership, it is men's perceptions that are most likely to have an impact on women's career outcomes. On the basis of men's views, our findings suggest some specific on-the-job situations, in which women leaders may be particularly vulnerable to stereotypic bias, especially in male-dominated domains. Recall that pervasive among male respondents was the belief that problem-solving was the aspect of leadership where women leaders most fell short of men. This perception may create difficulties for women leaders, particularly

when their responsibilities require them to propose new innovations and solutions. Believing that women lack the expertise to navigate through business problems, the followers of women leaders—especially men—may be more likely to question their recommendations and doubt whether it is worth following their directions. By casting doubt on the problem-solving competence of women leaders, men's stereotypes can potentially make it more difficult for women leaders to gain buy-in from their followers and peers on their problem-solving proposals.

It is not uncommon to see that in many organizations, among the core criteria used to evaluate leadership performance are competencies such as "innovation in approaching problems," "executing with excellence," and "delivering results"—all performance criteria that relate to problem-solving expertise. Because problem-solving seems to be so often judged as a fundamental leadership performance criterion (Yukl, 2005), our findings suggest that this is a performance domain on which organizational focus needs to be placed in taking steps to lower women's risk of unfair stereotype-based evaluations in performance appraisal processes. Three such steps organizations can take include:

1. Improve the clarity and specificity about what behaviors or outcomes demonstrate problem-solving skill in performance evaluations. Explicitly state what behaviors or outcomes demonstrate problem-solving competence, rather than rely on generalities such as "innovation in approaching problems."
2. Develop "weighting" rules for criteria in performance evaluations. Because gender stereotypes may lead individuals to pay attention to different kinds of information depending on whether a man or a woman is being evaluated, specifying weightings for criteria can help increase the likelihood that women and men are judged by the same standards.
3. Create a system of checks and balances whereby performance ratings are challenged and monitored for gender disparities. Performance evaluations should not rest with single individuals. Instead, such decisions should be tested widely by engaging differing business or functional units in addition to Human Resources, and encouraging decision-makers throughout the process to challenge the ratings to ensure the validity of performance assessments.

Finally, our studies contradict popular claims that women leaders are increasingly seen as having the "right leadership stuff" (Eagly & Carli, 2003). These claims stem from popular management thinking that the command-and-control leadership styles typically associated with men are no longer effective in today's business, and that the more participative leadership styles which play into stereotypically feminine qualities are much more effective. Our findings suggest that

women may indeed endorse many positive stereotypes of women's leadership, especially for behaviors that might be associated with feminine stereotypic traits such as team-building and consulting. However, unlike women, men did not perceive that women leaders had an advantage at several aspects of the more stereotypically feminine, participative repertoire of leadership behaviors. These results suggest that changes in leadership ideals towards stereotypically feminine behaviors may not be enough—despite speculation to the contrary—to increase the acceptance of women leaders in the corporate leadership ranks.

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