

Agentic Women and Communal Leadership: How Role Prescriptions Confer Advantage to Top Women Leaders

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The authors contribute to the ongoing debate about the existence of a female leadership advantage by specifying contextual factors that moderate the likelihood of the emergence of such an advantage. The investigation considered whether the perceived role incongruence between the female gender role and the leader role led to a female leader disadvantage (as predicted by role congruity theory) or whether instead a female leader advantage would emerge (as predicted by double standards and stereotype content research). In Study 1, it was only when success was internally attributed that women top leaders were evaluated as more agentic and more communal than men top leaders. Study 2 showed that the favorable ratings were unique to top-level positions and further showed that the effect on agentic traits was mediated by perceptions of double standards, while the effect on communal traits was mediated by expectations of feminized management skills. Finally, Study 2 showed that top women leaders were evaluated most favorably on overall leader effectiveness, and this effect was mediated by both mediators. Our results support the existence of a qualified female leadership advantage.

Keywords: gender and leadership, role congruity, agentic and communal traits, female leader advantage, stereotype content

Research in recent years has been targeted toward a better, more thorough understanding of the tensions that exist between the female gender role and the leader role. Much of the research that has contrasted these two roles has shown that women leaders are disadvantaged because of the perceived mismatch between the agentic traits ascribed to the prototypical leader and the communal traits associated with the female gender (Eagly & Karau, 1991, 2002; Eagly, Karau & Makhijani, 1995; Eagly, Makhijani & Klonsky, 1992; Heilman, 2001). Because of this perceived inconsistency, the two roles are typically viewed as incongruous, and research based on role congruity theory has shown that this perception of role incompatibility has detrimental effects for women with respect to leadership effectiveness (Eagly et al., 1995), leader emergence (Eagly & Karau, 1991), evaluations of leadership abilities (Eagly et al., 1992), and perceptions of leadership styles (Eagly & Johannesen-Schmidt, 2001; Eagly, Johannesen-Schmidt, & van Engen, 2003; Eagly & Johnson, 1990). Further, role congruity theory posits that when women do exhibit agentic behaviors

they are evaluated as less communal because they are perceived to have violated their gender role expectations (Eagly & Karau, 2002; Rudman & Glick, 1999, 2001).

At the same time, a lively debate has emerged over the potential existence of a female leadership advantage (Eagly, 2007; Eagly & Carli, 2003a, 2003b; Vecchio, 2002, 2003). Specifically, proponents of the existence of a female leadership advantage have argued that women may be more inclined to lead in ways that are particularly effective in contemporary organizations (see Eagly & Carli, 2003a). Others have argued, however, that gender differences in leadership styles are minimal and that researchers interested in the gender-based dynamics of leadership should focus their efforts on a “fine-grained” approach to understanding the circumstances that may moderate the nature and strength of any existing gender differences (Vecchio, 2002). We contribute to this ongoing debate and to research on role congruity theory by specifying two important contextual factors that may impact the nature of individuals’ perceptions of gender differences among leaders. Specifically, two important considerations have received little attention in this previous research: the variance in the level of agency associated with leadership roles at different levels of the organization and the increasing perception that communal characteristics may be largely beneficial in producing effective leadership. The consideration of these two additional factors suggests that the perceived incompatibility between agentic and communal characteristics may be mitigated or even reversed at the top levels of organizational hierarchy, leading to the existence of a female leadership advantage under certain circumstances.

First, the level of agency associated with the leader role varies by the level of the job position within the organization, with higher levels of leadership traditionally associated with greater levels of agentic characteristics (Huddy & Terkildsen, 1993; Martell, Park-

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ers, Emrich, & Crawford, 1998). On this basis, role congruity theory (Eagly, 1987; Eagly & Karau, 2002) would predict that at executive levels in organizations, the contrast between the agentic traits ascribed to the leader and the communal traits associated with the female gender role would be so stark that women who occupy top leader roles would be extremely disadvantaged when compared with their male colleagues. However, research on double standards of competence (Foschi, 1996, 2000) provides reason to expect that a woman's presence in a top leadership role, a highly masculine role, provides information about her abilities: specifically, that she must be exceptionally competent to have attained success in a role that requires such agentic traits. Thus, research on double standards of competence (Foschi, 1996, 2000) leads to a different prediction: that women in these top positions may be evaluated as more competent than men in these roles because of the perception that they must have had to meet or exceed exceptionally high standards to become successful in such positions.

Second, although agentic and masculine characteristics have traditionally defined the leader role, communal traits and behaviors are increasingly becoming valued leadership characteristics. For example, research in the area of transformational leadership has repeatedly shown the benefits of using a communal approach to leading (Bass & Avolio, 1994; DeZso & Ross, 2008; Lowe & Kroeck, 1996). Specifically, communal leadership behaviors and approaches, such as individualized consideration and inspirational motivation, are increasingly associated with effective leadership (Eagly & Johannesen-Schmidt, 2001; Eagly & Johnson, 1990; Eagly et al., 2003). In addition, research performed with the stereotype content model suggests that there are circumstances under which individuals may be perceived as simultaneously agentic and communal (Eckes, 2002; Fiske, Cuddy, Glick, & Xu, 2002). Thus, while role congruity theory would predict that female top leaders may be particularly susceptible to negative communal evaluations because they may be perceived as violating the prescriptive norms of their communal gender roles, it is possible that, instead, women top leaders would receive high ratings on their communal abilities because a feminized approach to managing others is increasingly viewed as a strength.

Therefore, although previous research on the role incongruity between the female gender role and the leader role has indicated that incompatibility between these roles puts female leaders at a disadvantage (Eagly & Karau, 1991, 2002; Eagly et al., 1992, 1995; Heilman, 2001), research on double standards of competence (Foschi, 1996, 2000), feminized approaches to management (Eagly & Carli, 2003a, 2003b; Eagly et al., 2003; Manning, 2002), and the stereotype content model (Eckes, 2002; Fiske, Cuddy, Glick, & Xu, 2002) suggests that top-level women leaders may receive favorable as opposed to unfavorable evaluations of their leadership abilities. These contradictory predictions raise important questions about the challenges and potential benefits that accrue to women who occupy top positions in organizations. Therefore, in these studies, we sought to explore the circumstances under which women leaders may be rated favorably, rather than unfavorably, in comparison to their male peers, and thereby we hoped to contribute to the ongoing debate about the existence of a female leader advantage (Eagly, 2007; Eagly & Carli, 2003a, 2003b; Vecchio, 2002, 2003).

Role Congruence

Gender roles specify assumptions and expectations about the attributes and behavior of women and men in social settings (Boldry, Wood, & Kashy, 2001; Eagly & Karau, 2002; Heilman, 2001; Heilman, Block, Martell, & Simon, 1989; Rudman & Glick, 2001; Schein, 1973) and thus correspond to stereotypes of women and men. In Western societies, gender stereotypes describe women as relationship-oriented and thus as kind, helpful, concerned, and sympathetic to others' needs (Abele, 2003; Bakan, 1966; Fiske & Stevens, 1993). These characteristics are labeled *communal*. Men, on the other hand, are expected to be more achievement oriented and thus are viewed as competent, aggressive, independent, decisive, and forceful (Abele, 2003; Bakan, 1966; Fiske & Stevens, 1993). These characteristics are labeled *agentic*.

The stereotypes for men are quite similar to traditional expectations of leadership behaviors, but the stereotypes for women diverge from traditional expectations of leadership behaviors (Eagly & Karau, 2002). Empirical studies that have shown the masculine nature of leader role expectations are robust and have been found with different methodologies (i.e., open-ended questions; Willemsen, 2002) in an array of industries, including insurance (Schein, 1973), manufacturing (Brenner, Tomkiewicz, & Schein, 1989), and service (Brenner et al., 1989); with different sample populations (Dodge, Gilroy, & Fenzel, 1995; Schein, Mueller, & Jacobson, 1989); and across different nationalities (Schein, 2001). Further, the lack of fit between the leader role and the female gender role has been shown to prevent women from even being categorized as leaders (Nye & Forsyth, 1991; Scott & Brown, 2006). Role congruity theory therefore posits that this incongruence produces a tendency to view women less favorably than men as leaders (Eagly & Johannesen-Schmidt, 2001; Eagly & Karau, 2002; Eagly et al., 1992; Heilman, 2001).

In addition, role congruity theory would predict that the negative evaluations attributed to female leaders relative to men may be even further compounded at top levels in organizations. Specifically, Eagly and Karau (2002) argued that "the incongruity between the female gender role and the leader roles is likely to be the most extreme at the highest levels of leadership" (p. 577). They argued that this extreme contrast occurs because at the top levels in organizations, leader roles are defined in particularly masculine terms (Huddy & Terkildsen, 1993; Martell et al., 1998), and there is, consequently, a greater incongruity between these top-level leadership roles and the female gender role. They suggested that this greater incongruity leads to even greater levels of disadvantage for women leaders. There are, however, reasons to expect that women at the top actually experience some advantages due to the differences between prototypes of top leadership roles and the female gender role.

Double Standards of Competence

Arguments derived from the existence of double standards for the evaluation of men and women (Foschi, 2000) provide support and rationale for the assertion that women in top positions may be evaluated more favorably relative to men under certain conditions. The conceptualization of a double standard of competence for men and women derives from status characteristics and expectation states theory (Berger, Cohen, & Zelditch, 1972; Berger & Fisek,

2006). A double standard exists when stricter requirements are applied to members of subordinate groups (Foschi, 2000). For example, if evaluators require more convincing evidence from female managers than male managers to infer high ability, a double standard exists, and women's potential for advancement is hindered. It is important to stress that the use of a double standard is distinct from biased evaluations that are used to describe gender differences in the context of role congruity theory. Biased evaluations mostly take place in the context of negligible or no objective evaluation of performance (Davison & Burke, 2000) and minimal individuating information (Kunda & Spencer, 2003), and thus the lower standing of the target (here, women relative to men) is the evaluative measure of difference (Foschi, 2000). Specifically, gender bias against women in accordance with role congruity theory principally occurs when gender stereotypes remain undisputed by performance evidence and are thus allowed to define the work-relevant attributes of the leader. Alternatively, double standards exist when performance evaluations have taken place and are deemed to be objective. Hence, double standards represent a process by which bias can affect the assessment of ability that is inferred from performance.

Thus, when performance evaluations are considered and women top leaders demonstrate successful performance in top leader positions, they are likely to be perceived as showing compelling evidence of leadership capability in particularly challenging situations (Lyness & Heilman, 2006; Sheridan, 2002). That is, while double standards can produce barriers to women's career advancement (Lyness & Thompson, 2000; Ragins, Townsend, & Mattis, 1998), there is also reason to believe that these double standards can actually provide a basis for an advantage for women leaders who successfully perform in these top positions. When positive feedback regarding an individual's skills or abilities (e.g., success) can be viewed as occurring *in spite of* some disadvantage, the individual is likely to be perceived as possessing a high level of skill, ability, and deservingness (Crocker & Major, 1989). Therefore, women who succeed at the top may be evaluated favorably relative to men because they have demonstrated that they have overcome double standards both to arrive in their top position and further to excel in that top position that is dominated by men and perceived to be particularly masculine.

We therefore posit that a positive evaluation of women relative to men will occur at top levels of the organization (as opposed to at mid levels) because perceptions of double standards of competence will be higher for women top leaders than for women at lower levels in the organization. That is, as an individual moves up the organizational hierarchy, the position requirements become more consistent with masculine traits of leadership (Eagly & Karau, 2002), exacerbating the potential existence of double standards for women. At the same time, given the increasing number of women in middle management positions (U.S. Department of Labor, 2008), the perception that women are a subordinate group is likely to be lessened at that level (Diekmann & Eagly, 1999), leading to lower perceptions of double standards at these mid-level positions. As a consequence, women at top organizational levels who occupy more masculinely defined positions are likely to be perceived as facing greater levels of double standards than women at other organizational levels.

The results presented by Heilman, Martell, and Simon (1988) support this rationale. Their study involved evaluations of women

who applied for the highly masculine position of football photographer relative to a moderately masculine position of tennis photographer. When information of high performance in the moderately masculine role was provided, men and women were evaluated comparably. However, when evidence of high performance in the highly masculine role was provided, women were evaluated more favorably relative to men. Thus, this finding supports the notion that in highly masculine positions of top-level organizational leadership, women leaders may be evaluated more favorably than men.

However, Heilman and her colleagues (1988) further argued that for the positive bias to occur toward women, the performance attributions must be "clearly predictive of successful job performance" (p. 101). That is, evidence of success in masculinely defined positions must be clear and unambiguous. When evidence of success is equivocal, perceptions of women's accomplishments can be distorted by stereotype-based expectations of lower performance due to the role incongruity between the leader role and the female gender role (Kunda & Spencer, 2003). Specifically, when a social perceiver observes a target, there are multiple cues as to how the target can be perceived (see, e.g., Macrae, Bodenhausen, & Milne, 1995; Smith & DeCoster, 1998). While a woman's occupation of a top leadership position would, according to research on double standards of competence, provide evidence of particularly high agentic ability, other information that perceivers may possess (such as information regarding the woman's failures, suggestions from others that her success can be attributed to factors other than her ability, or simply general information that emerges from gender stereotypes as suggested by role congruity theory) may imply lower levels of competence. We suggest that internal attributions crediting women with success in top positions minimize these types of ambiguities, leading perceivers to focus on evidence of strong abilities. When, however, these internal attributions for success are lacking, the conflicting cues that perceivers possess can minimize the potential for an advantage to emerge; in these ambiguous instances, the positive and negative information counterbalance one another, leading women to be viewed equivalently to men.

Previous research supports this contention. Specifically, while role congruity theory predicts gender differences in leader perceptions, numerous empirical studies based in organizational contexts in which multiple cues about ability are likely to be available have found no such gender differences (see Vecchio, 2002, for a review). Thus, perceivers may infer exceptional agentic abilities in highly masculine positions for women top leaders, but this is only likely to occur when the multiple cues regarding ability are aligned in support of this inference, such as when the organization experiences success and others agree that the leader deserves credit. Hence, we expected to find that top-level women leaders in an organizational context would be rated as more agentic than their male peers but only when they received credit for success.

Top Women Leaders as Both Agentic and Communal

Previous role congruity research has indicated that women who violate gender role expectations by exhibiting agentic traits risk being judged as insufficiently communal (Eagly & Karau, 2002; Ridgeway, 2001; Rudman & Glick, 2001). This type of "backlash" against agentic women who hold masculinely defined positions

derives from the prescriptive norms of gender roles (Rudman & Glick, 1999, 2001). The prescriptive component of gender roles delineates beliefs about how women ought to behave, and these beliefs have been shown to be especially prevalent at lower levels in the organization (e.g., Rudman & Glick, 2001). Because both role congruity theory and the corresponding backlash effect focus on prescriptive characteristics associated with generalized versions of both the female gender role and the leadership role, these perspectives would predict that the same prescriptively based effect that has been shown at lower levels in the organization may be observed at higher levels in the organization as well, such that women at top leadership levels who are viewed as high in agentic abilities would also be viewed as particularly low in communal abilities.

However, recent research in which the stereotype content model (Eckes, 2002; Fiske et al., 2002) has been used provides reasons to doubt this argument. Consistent with role congruity theory and the backlash effect research, the stereotype content model suggests that business women are frequently perceived to be competent but not very warm and communal. However, the stereotype content model also acknowledges that broad categorizations, such as the category "business women," may be divided into subgroups that may differ from the overarching category on relevant dimensions. For example, Fiske and her colleagues (2002) found that stereotypes for the subgroups "poor Blacks" and "professional Blacks" differed from the categorization of Blacks in general. Moreover, the stereotype content model acknowledges that there are conditions under which individuals can be simultaneously perceived as both high in competence and high in warmth (i.e., high in both agency and communality), and we posited that top women leaders may constitute a subgroup for which this categorization may be particularly applicable.

First, the stereotype content model proposes and empirical research has shown that individuals are perceived as more competent to the extent that they are perceived as high in status (because status leads to respect, which in turn influences perceptions of competence; Eckes, 2002; Fiske et al., 2002), and position in the organizational hierarchy corresponds to status. Women in top leadership positions have attained the highest position in the organizational hierarchy and are perceived to be high in status (e.g., Bacharach, Bamberger, & Mundell, 1993; Hoel, Cooper, & Faragher, 2001). Second, women are perceived to be relatively warm and communal to the extent that they are not perceived to be in competition with others (because not competing leads to liking, which in turn influences perceptions of warmth and communality; Eckes, 2002; Fiske et al., 2002). Unlike business women at lower levels who are still in the early stages of their careers, women who have reached the top positions in an organization's hierarchy are not likely to be perceived as competing with most other organizational members. That is, women at the top of the organizational hierarchy represent an elite group whose members have successfully advanced up the organizational hierarchy to occupy a position that is only accessible to a select few. Hence, they are likely to be viewed as vying for limited resources with only a small portion of organizational members. However, women at lower levels may be perceived to be in direct competition for limited opportunities in organizational settings with a greater number of organizational members. Thus, consistent with the tenets of the stereotype content model, we hypothesized that there may be a

change in stereotype content as women leaders move from lower levels in the organization to top leader positions, such that women top leaders can be evaluated as simultaneously agentic and communal.

Moreover, while the stereotype content model supports the notion that women top leaders may be viewed as simultaneously agentic and communal, recent research on gender and leadership suggests that leaders' communal traits may increasingly be viewed as advantageous to them and their followers (Dezso & Ross, 2008; Eagly, 2007; Eagly & Carli, 2003b; Fondas, 1997). Specifically, proponents of the existence of a female leadership advantage have argued that the conceptualization of successful leadership has changed such that women's presumed communal abilities may no longer be viewed as a detriment, but rather as an advantage, to their leadership abilities relative to men (Dezso & Ross, 2008; Eagly, 2007; Eagly & Carli, 2003b; Fondas, 1997). Recent research in transformational leadership, a leadership construct comprised of behaviors consistent with communal traits (Avolio, Bass, & Jung, 1999; Bass, 1985; Judge & Bono, 2000), supports this assertion. Both research in the field (Eagly et al., 2003a) and research utilizing scenario studies (Powell, Butterfield, & Bartol, 2008) have shown that women were rated more favorably than men on most dimensions of transformational leadership. These findings have been suggested as being representative of a female leadership advantage because transformational leadership, and the primarily communal behaviors that it comprises, have been associated with leadership success (Judge & Piccolo, 2004; Lowe, Kroeck, & Sivasubramaniam, 1996).

Thus, in accordance with research on stereotype content and the female leader advantage, we predicted that women top leaders would be evaluated as more communal than men top leaders. That is, stereotype content research indicates that at top organizational levels, perceptions of agency and communality are not likely to be in conflict for women leaders, and they may simultaneously be evaluated as possessing both types of characteristics. In addition, because there is an increasing value placed on the feminine approach to leadership, the communal expectations of the female gender role is not likely to be viewed as conflicting with leadership success. Instead, the communality associated with the female gender role is likely to be viewed as advantageous, further boosting evaluations of women top leaders and resulting in a female leader advantage for women top leaders relative to their male counterparts. Therefore, we expected that women leaders who succeed in top organizational levels are perceived to demonstrate not only high agentic abilities but also high abilities on communal behaviors as well. However, just as we pointed out with respect to evaluations of agentic abilities, the attribution of credit for success is critical in this evaluation process because without the perceived responsibility for success, stereotype-based role prescriptions may distort perceptions of communality (Fiske & Taylor, 1991; Kunda & Spencer, 2003; Nieva & Gutek, 1980). Hence, we expected that women top leaders would be evaluated as more communal than men top leaders when they are perceived as responsible for successful outcomes.

We conducted two studies to examine these effects. In Study 1, we investigated our predictions for women top leaders and men top leaders on agentic and communal characteristics. In Study 2, we examined whether the proposed high communal and high agentic characteristics are unique to the top-level position and do not occur

at mid-level positions. In Study 2, we also tested the mediating roles of perceptions of double standards and feminized management tactics in producing these effects.

Study 1: Successful Outcomes and Performance Attributions

Study 1 was designed to assess the conditions under which women top leaders would be evaluated as more agentic and more communal than their male counterparts. Consistent with the tenets of the double standards of competence, we predicted an interaction between performance and attribution such that women top leaders would be evaluated as more agentic than male top leaders but only when success was clearly attributed to the leader (Hypothesis 1). Consistent with the stereotype content model and research that posits a female leader advantage, we predicted an interaction between performance and attribution such that women top leaders would be evaluated as more communal than male top leaders but only when success was clearly attributed to the leader (Hypothesis 2).

Method

Participants and study design. A total of 323 undergraduate and graduate students (186 women, 130 men, 7 declined to report) participated in a 45-min experimental session that included this study in exchange for \$10. Approximately 56% of the participants were upperclassmen (juniors and seniors) or graduate students. The study was constructed as a 2 (leader gender: female, male) \times 2 (performance: failure, success) \times 3 (attribution: internal, external, control) between-subjects design. A control condition was included in the experimental design to function as a baseline and to examine how men and women top leaders are perceived without the consideration of performance attributions.

Procedure and manipulations. Participants were recruited to participate in a study titled "Reading Between the Lines," in which the goal was to examine how people make inferences about the newspaper articles they read. Participants were presented with an article about a chief executive officer (CEO) and the recent performance of a company called Dosagen. Thus, in this study, top leader was operationalized as the CEO. The article contained the experimental manipulations of leader gender, organizational performance, and performance attribution. After reading one of the 12 versions of the article, the participants completed the post-task questionnaire and were debriefed.

CEO gender. We manipulated the gender of the CEO by the name of the CEO embedded in the article and a photograph. As recommended by Kasof (1993), the male and female names were matched to reduce biases that can result from different perceptions of intelligence and attractiveness. A headshot of the CEO was included to ensure the salience of the CEO's gender. A pretest of the photographs confirmed that the male and female photos were matched both for emotional expression and for physical attractiveness ($t_s < 1.6$, $p_s > .10$).

Organizational performance. The company's performance was manipulated as successful or unsuccessful in two ways. First, the last sentence in the first paragraph described the company's earnings as having increased (successful performance) or decreased (unsuccessful performance). Second, a graph noting the percentage change in earnings over the past 5 months also was included. For successful perfor-

mance, the graph displayed a steady increase in company earnings over a 5-month period. For unsuccessful performance, the graph displayed a steady decline over a 5-month period.

Attributions. Quotes provided by an industry analyst in the second paragraph of the article manipulated attributions. We communicated internal attributions by having the analyst place the credit or the blame for the performance on the CEO. The implication was that the company's performance was attributable to the CEO's abilities, behaviors, and decisions. We communicated external attributions by having the analyst assign credit or blame for the performance to the marketplace. In the versions of the article in which external attributions were made, the analyst argued that the economic context of the industry, not the CEO, was accountable for the company's performance. Finally, in control conditions, these quotes and the references to the analyst were excluded.

Manipulation checks. Participants responded to two manipulation checks to confirm their understanding of the leader gender, organizational performance, and performance attribution manipulations communicated in the article. Twenty participants (approximately 6%) failed at least one of these tests. Accordingly, these participants were not included in the analysis. Removing manipulation check failures yielded the same outcomes as the inclusion of all cases in the analysis.

In addition, in a pretest that was independent of the current study, we assessed whether the CEO position described in the newspaper article was indeed perceived as a masculine job. In all, 176 participants (77 men, 99 women) read a "stripped" version of the newspaper article. Photos and names were not included, the directional trend of organizational performance was not provided (i.e., the company's performance has changed), and both internal and external attributions were made equally for the company's performance (i.e., it was indicated that the performance of the company should be attributed both to the performance of the CEO and to occurrences in the marketplace). After reading the article, participants answered the question, "What do you think is the gender of the CEO?" Of the 176 participants, 168 (96%) responded that they believed the CEO was male. These results provide evidence that the CEO position tends to be viewed as a highly masculine position.

Measures. Participants were asked to assess both agentic and communal characteristics.

Agentic characteristics. In assessing agentic characteristics, participants were asked to evaluate the CEO on a number of task dimensions representing agentic characteristics, including confidence, skillfulness, competitiveness, power, and capability (e.g., "I think the CEO is skillful"). These types of traits have been shown to represent agentic characteristics (Abele, 2003; Bakan, 1966; Fiske & Stevens, 1993). These five items were measured on a 7-point Likert-type scale anchored by 1 (*strongly disagree*) and 7 (*strongly agree*) and were characterized by high inter-item consistency (Cronbach's $\alpha = .86$). The items were averaged together to form a single composite score, where higher scores indicated greater agentic characteristics. Scores ranged from 2.0 to 6.6 ($M = 4.25$, $SD = 0.92$).

Communal characteristics. In assessing communal characteristics, participants were asked to evaluate the CEO on a number of relational dimensions, including warmth, good nature, friendliness, consideration, caring, and understanding (e.g., "I think the CEO is friendly"). These types of traits have been shown to represent communal characteristics (Abele, 2003; Bakan, 1966; Fiske & Stevens, 1993). These six items were measured on a 7-point

Likert-type scale anchored by 1 (*strongly disagree*) and 7 (*strongly agree*) and were characterized by good inter-item consistency (Cronbach's $\alpha = .73$); therefore, they were averaged together to form a single composite score, where higher scores indicated more communal characteristics. Scores ranged from 2.29 to 5.86 ($M = 3.76, SD = 0.45$).

Consistent with findings in previous research (Ghaed and Gallo, 2006; Kurt & Paulhus, 2008; Wojciszke, Abele, & Baryla, 2009), agentic and communal characteristics were correlated ($r = .48, p < .001$). Positive relationships between agency and communality are especially likely to occur when individuals, as opposed to groups, are evaluated (Judd, James-Hawkins, Yzerbyt, & Kashima, 2005), as is the case here. Accordingly, Hypothesis 1 was supported.

Results

Agentic characteristics. We conducted a four-way analysis of variance (ANOVA) with leader gender, organizational performance, analyst's attribution, and participant gender as between-subject factors. The participant gender was included as a fourth factor because it has been found to influence evaluations of female versus male leaders in previous research (Brenner et al., 1989; Eagly et al., 1992; Graves & Powell, 1995, 1996). See ANOVA results in Table 1 and means in Table 2.

Consistent with our predictions, the analysis revealed a three-way interaction among leader gender, performance, and attribu-

Table 2
Means for Agentic and Communal Traits (Study 1)

Trait	Agentic traits		Communal traits	
	Mean	SD	Mean	SD
Success, internal attributions				
Female top leader	5.39	0.68	4.11	0.49
Male top leader	4.81	0.73	3.73	0.22
Success, external attributions				
Female top leader	4.57	0.64	3.76	0.48
Male top leader	4.74	0.77	3.82	0.31
Success, no attribution (control)				
Female top leader	5.02	0.81	3.92	0.53
Male top leader	5.22	0.66	4.07	0.54
Failure, internal attributions				
Female top leader	3.67	0.69	3.61	0.33
Male top leader	3.65	0.66	3.63	0.39
Failure, external attributions				
Female top leader	3.92	0.85	3.87	0.38
Male top leader	3.66	0.83	3.70	0.52
Failure, no attribution (control)				
Female top leader	3.59	0.54	3.58	0.29
Male top leader	3.54	0.63	3.51	0.43

tions, and this three-way interaction was not qualified by participant gender. To localize the effect of the predicted three-way interaction, and to test the predictions made in Hypothesis 1, we conducted contrast analyses (Keppel, 1991). Within the success condition, analysis revealed a significant interaction between attribution and leader gender, $F(2, 274) = 4.45, p = .012$. When internal attributions for success were made, female leaders were evaluated more favorably than male leaders, $F(1, 274) = 6.32, p = .013, r = .15$, on agentic traits. However, when success was attributed to external attributions and in the control group, women leaders were evaluated comparably to men leaders, both $F(1, 274) < 0.62$ and both $ps > .43$, on agentic traits. By contrast, in the failure condition, the interaction contrast was not significant, $F(2, 274) = 0.69, p = .50$. Also, the simple effect comparisons between men and women in the failure conditions were not significant, all $F_s < 0.65$ and all $ps > .42$.

Communal characteristics. We again conducted a four-way analysis ANOVA. See ANOVA results in Table 1 and means in Table 2. As predicted in Hypothesis 2, the analysis revealed a significant three-way interaction among performance, attribution, and leader gender, and again, this three-way interaction was not qualified by participant gender. To localize the effect of the predicted three-way interaction, we again conducted contrast analyses (Keppel, 1991). Within the success condition, analysis revealed a significant interaction between attribution and leader gender, $F(2, 274) = 5.06, p = .007$. When internal attributions for success were made, female leaders were evaluated more favorably than male leaders, $F(1, 274) = 7.86, p = .005, r = .17$, on communal traits. However, when success was attributed to external attributions and in the control group, women leaders were evaluated comparably to men leaders, both $F(1, 274) < 1.17$ and both $ps > .28$, on communal traits. By contrast, in the failure condition, the interaction contrast was not significant, $F(2, 274) = 0.55, p = .58$. Also, the simple effect comparisons between men and women in the failure condition were not significant, all $F_s < 0.45$ and all $ps > .50$. Thus, Hypothesis 2 was supported.

Table 1
Analysis of Variation for Agentic and Communal Traits With Leader Gender, Performance, Attributions, and Participant Gender as Between-Subjects Factors (Study 1)

Variables	Agentic traits		Communal traits	
	F	r	F	r
Performance	173.60***	0.62	21.73***	0.27
Attribution	1.05	0.09	0.37	0.05
Leader gender	0.45	0.04	0.59	0.05
Participant gender	0.24	0.03	0.52	0.04
Performance × Attribution	7.65***	0.23	8.79***	0.25
Performance × Leader Gender	0.07	0.02	0.15	0.02
Attribution × Leader Gender	1.00	0.09	1.04	0.09
Performance × Attribution × Leader Gender	3.15*	0.15	4.04*	0.17
Performance × Participant Gender	6.05*	0.15	0.55	0.04
Attribution × Participant Gender	0.00	0.00	0.24	0.04
Performance × Attribution × Participant Gender	4.43*	0.18	1.02	0.09
Leader Gender × Participant Gender	0.01	0.00	0.36	0.04
Performance × Leader Gender × Participant Gender	0.44	0.04	1.65	0.08
Attribution × Leader Gender × Participant Gender	0.84	0.08	2.11	0.12
Four-way interaction	0.10	0.03	0.45	0.06

Note. Following Rosenthal, Rosnow, and Ruben (2000), we computed the correlation, r , to estimate the effect size. Estimates had unsigned (and thus positive) directions and could range from 0 to 1.
* $p < .05$. *** $p < .001$.

Discussion

The Study 1 findings were consistent with the predictions derived from research on double standards of competence and the stereotype content model and support our argument for the existence of a female leader advantage when women in top organizational positions are credited with success. It was only when internal attributions were made for success that women top leaders were rated as both more agentic (Hypothesis 1) and more communal (Hypothesis 2) than men top leaders. In the other study conditions, women top leaders were evaluated as comparable to men top leaders. Thus, women's presence in a top leader position was not sufficient to lead to more favorable evaluations for women relative to men; favorable evaluations on both agentic and communal traits occurred only when the female leader was perceived as clearly responsible for the organization's success. Although these findings are consistent with our predictions, we conducted a second study to confirm these effects, to make comparisons to evaluations at middle management levels, and to investigate the mechanisms that we expect to act as mediators.

Study 2: Replication and Tests of Mediation

In this second study, we manipulated leader gender and organizational level and kept internal attributions for success constant across conditions. In doing so, we sought to replicate the findings from the previous study for top women leaders and to show the following: (a) that the boost in ratings of agency and communality is unique to women in the top level of the organizational hierarchy, (b) that the augmenting effect for agentic evaluations occurs because of perceptions of double standards for women leaders, (c) that the augmenting effect on communal evaluations occurs because of perceptions that women top leaders are more likely to engage in the feminine management tactics that are increasingly recognized as effective, and (d) that women top leaders are also evaluated more highly on overall leadership effectiveness due to perceptions of double standards and expectations of feminized management skills.

As shown in Study 1, perceptions of high agency emerged when women were successful in top leadership positions, and we argue that these perceptions emerged because of the inference that women at the top have used their high abilities to overcome double standards, reach the top, and perform successfully. Because succeeding in lower levels of organizations provides less information about double standards being overcome, this effect on agentic characteristics is likely to be particular to women in top positions and not to women in lower levels of the organizational hierarchy. We therefore predicted that when successful organizational performances were attributed to internal causes, women top leaders would be evaluated as more agentic than their male peers and more agentic than women middle managers; however, we expected that women middle managers would not be rated as more agentic than men middle managers (Hypothesis 3). We further expected that women top leaders would be perceived as having experienced greater challenges from double standards than men top leaders and women middle managers (Hypothesis 4a) and that these perceptions of double standards of competence would mediate the effect of leader gender on agentic evaluations (Hypothesis 4b).

Also as found in Study 1, perceptions of strong communal characteristics emerged when women were successful in top lead-

ership positions, and we argue that this effect is unique to top levels because, consistent with stereotype content research (Fiske et al., 2002), there is less conflict between perceptions of communality and agency at top levels than at lower levels in the organization. Further, we argue that the increased perceptions of communality emerge because of the perception that successful women top leaders are particularly likely to be perceived as engaging in feminized management tactics. Specifically, just as successful women top leaders are perceived to be highly skilled on agentic traits because of the challenges posed by double standards, they are similarly perceived to be highly skilled on other behaviors that are perceived as consistent with effective leadership. Because feminized management tactics are increasingly perceived to be consistent with effective leadership, we expected that women top leaders would be perceived as more likely to engage in feminized management tactics and consequently would be perceived as highly communal. We therefore predicted that when successful organizational performances were attributed to internal causes, women top leaders would be evaluated as more communal than their male peers and more communal than women middle managers; however, we expected that women middle managers would not be rated as more communal than men middle managers (Hypothesis 5). In addition, we expected that women top leaders would be expected to engage in greater levels of feminized management tactics than would men top leaders or women middle managers (Hypothesis 6a) and that these expectations of feminized management tactics would mediate the effect of leader gender on communal evaluations (Hypothesis 6b).

Finally, we expected that the combined effects of perceptions of double standards for top leaders and increasing valuation of feminine management tactics for leadership effectiveness would produce an overall advantage for women top leaders, such that women top leaders would be viewed more favorably than men top leaders and women middle managers not just on agentic and communal traits but also on overall leadership effectiveness. Specifically, we predicted that when successful organizational performances were attributed to internal causes, women top leaders would be evaluated more favorably on overall leader effectiveness than their male peers and more favorably on overall leader effectiveness than women middle managers; however, we expected that women middle managers would not be rated more favorably on overall leader effectiveness than men middle managers (Hypothesis 7). Further, we predicted that the differences in perceptions of overall leadership effectiveness for women top leaders versus men top leaders and women middle managers would be mediated both by perceptions of double standards (Hypothesis 8) and by expectations of feminized management tactics (Hypothesis 9).

Method

Participants and study design. A total of 106 graduate and undergraduate students (35 men; 71 women) participated in an hour-long experimental session including this study in exchange for \$10. There were no differences in the analysis between the graduate and undergraduate students. Thus, the two groups will not be discussed further. The participants ranged in age from 18 to 50 years and had an average age of 22.00 years ($SD = 4.48$), and 93% of the participants were either currently employed or had previous work experience. The study consisted of a 2 (leader gender: male,

female) \times 2 (organizational position: top leader, middle manager) \times 2 (participant's gender: male, female) between-subjects design. However, participant gender was not significant for any of the dependent variables as a main effect ($ps > .451$) or in an interaction term ($ps > .148$), so here we report the two-factor model.

Procedure. Participants were told that they were participating in a study called "Job Descriptions" and that the purpose of the study was to examine how people use job descriptions to evaluate the performance of employees in organizations. Participants were instructed to read a job description that illustrated one of two levels in the organizational hierarchy of a fictitious company, Buygen, Inc.: top-level (senior executive vice-president) or middle-level (division manager). They were then instructed to read a brief performance summary of a job incumbent. In each of the conditions, the target was described as successful and as responsible for the success. In the top-level conditions, successful performance referenced company-level success. In the mid-level conditions, successful performance referenced division-level success. This indication was included on the basis of the findings in Study 1, which indicated that favorable ratings for women top leaders occur when success is internally attributed. After reading the job description and the performance summary, participants answered the questions that followed in the post-task questionnaire.

Manipulations. Two factors were manipulated: the level of the position in the organization and the gender of the leader.

Organizational position. The organizational position was manipulated as top level or middle level. Top-level positions were described as senior management or executives at the top one or two levels in an organization, with titles such as "senior executive vice president." Holders of these top positions were described as making decisions affecting the entirety of the firm, as setting goals for the entire organization, and as being ultimately responsible for the performance of the organization. Holders of middle-level positions were described as middle managers who ranked below the positions of top managers; they had titles such as "division manager." Middle managers were described as being responsible for carrying out the goals set by top management, setting goals for their department or business unit, assisting employees to achieve business objectives, and communicating upward to top management.

Leader gender. Unlike in Study 1, in which we used pictures and a gender-specific name to manipulate the gender of the leader, we manipulated leader gender in this study by gender titles and the related pronouns. To manipulate the perception of the target as being male, we paired the gender-neutral name, Chris Jones, with the title "Mr.," and pronouns used in the performance summary and post-task questionnaire included "he," "his," or "him." To manipulate the perception of the target as being female, we paired the same name with the title "Ms.," and the pronouns used in the performance summary and post-task questionnaire included "she," "hers," or "her."

Manipulation check. Participants responded to two manipulation checks to confirm their understanding of the leader gender and organizational level manipulations. Two participants failed at least one of the two tests. These participants were not included in the analysis. Removing manipulation check failures yielded the same outcomes as including all cases in the final analysis.

Measures. Participants were asked to respond to measures for five overall factors.

Agentic and communal characteristics. Participants were asked to evaluate the target on the basis of the same agentic and communal measures that were used in Study 1. The items were measured on a 7-point Likert-type scale anchored by 1 (*strongly disagree*) and 7 (*strongly agree*) and were characterized by high interitem consistency (Cronbach's $\alpha = .83$ for agentic and $.79$ for communal). The items for each measure were averaged together to form a single composite score, where higher scores indicated greater agentic and communal characteristics. Scores for the agentic composite ranged from 3.17 to 6.67 ($M = 5.25$, $SD = 0.72$), and scores for the communal composite ranged from 2.33 to 6.00 ($M = 4.28$, $SD = 0.59$). Similar to Study 1 findings, agentic and communal characteristics were positively correlated ($r = .49$, $p < .001$).

Double standards. Participants were asked to assess whether they perceived a double standard of competence for the target in each of the four conditions. Foschi (2000) defined double standards of competence as "situations where stricter requirements are applied to members of devalued groups" (p. 22). Hence, we used this definition to generate four items to measure a double standard of competence. In the women top leader condition, we used the following four items: "In general, women have to work twice as hard to become a top-level manager as men do," "In general, women encounter more road blocks than men as they move up the corporate ladder to become top managers," "In general, women are likely to encounter greater barriers than men when trying to become a top-level manager," and "A woman who is a top-level manager must have exceptional abilities when compared to a man." In the male conditions, the words "women" and "woman" were replaced with the words "men" and "man," respectively. Also, the words "men" and "man" were replaced with the words "women" and "woman," respectively. In the middle-level management conditions, the word "top-level" was replaced with "mid-level." Accordingly, in the two female conditions, the measure assessed perceptions of women facing more double standards than men. Similarly, the two male conditions assessed perceptions of men facing more double standards than women. Because the measure comprised relative comparisons for the target in each condition, the measure used for each of the four targets was pretested, and the measure for each of the targets showed high inter-item reliability (Cronbach's α : women top leaders = $.90$, women middle managers = $.89$, men top leaders = $.86$, and men middle managers = $.90$). Participants indicated their level of agreement using a 7-point response scale (1 = *strongly disagree*, 7 = *strongly agree*). Scores ranged from 1 to 7 ($M = 3.7$, $SD = 1.66$).

Overall leader effectiveness. Participants were asked to indicate the extent to which they perceived the leader's overall effectiveness to be high. In previous research, leadership effectiveness has been examined by assessment of evaluators' satisfaction with the leader (Eagly et al., 1992), observers' desire to work with the leader (Cronshaw & Lord, 1987), the extent to which the leader fit the image of what a leader should be (Cronshaw & Lord, 1987), and observers' general perceptions that the leader is strong (Manz & Sims, 1987). Therefore, we built on these approaches to create a measure of leadership effectiveness in which participants responded to the following three items: "I would feel very comfort-

able if [Mr./Ms.] Jones were my boss,” “[Mr./Ms.] Jones is the right person for the job,” and “I think that [Mr./Ms.] Jones is an exceptional leader.” The items shared a univariate factor structure, and inter-item consistency was high (Cronbach’s $\alpha = .83$). Accordingly, responses were averaged together and ranged from 2.40 to 6.80 ($M = 4.82$, $SD = 0.77$).

Feminine management skills. Participants were asked to indicate the extent to which they expected that the leader would engage in feminine management behaviors. Fondas (1997) described feminized management skills as sharing responsibility, developing others’ skills and abilities, helping others, and building and maintaining connections and relationships. Eagly and Carli (2003a) similarly pointed out that feminized approaches to management and leadership include a reduction in hierarchy and a coaching and democratic approach to leadership, rather than an autocratic or dictatorial style. Thus, we included the following six items in the measure of feminine management skills “I think that [the leader] would be sensitive to the needs of others,” “I think that [the leader] would seek out team members’ opinions on important issues,” “I think that [the leader] would show respect for people regardless of their level or status,” “I believe that [the leader] would work with employees in a satisfactory way,” “I think that [the leader] would take a real interest in [his or her] employees,” and “I think that [the leader] would be genuinely interested in learning about [the leader’s] employees’ background and interests.” The items shared a univariate factor structure, and interitem consistency was good (Cronbach’s $\alpha = .76$). Accordingly, responses were averaged together and ranged from 3.50 to 6.50 ($M = 4.58$, $SD = 0.54$).

Masculine position. A pretest was conducted to assess the perceived masculinity of the two organizational positions. Participants in the pretest did not participate in Study 1 or Study 2. One hundred ninety participants (107 women; 83 men) who were drawn from the same sample population as Study 2 participants participated in the pretest. Half of the participants read the job description for the top-level position; the other half read the job description for the middle-level position. Both descriptions were the same as those used in the Study 2 manipulations. After reading the descriptions, participants were asked to respond to the item, “My impression of the [top-level position/middle-level position] is that it is:” Participants used a 7-point scale to respond anchored by 1 (*a highly masculine position*) and 7 (*a highly feminine position*). Analyses of their responses confirmed that indeed the top-level position was perceived as more masculine ($M = 2.76$, $SD = 1.16$) than was the middle-level position ($M = 3.52$, $SD = .98$), $F(1, 188) = 23.84$, $p < .001$, $r = .37$.

Results

Agentic characteristics. As predicted in Hypothesis 3, the ANOVA analysis revealed a significant two-way interaction between leader gender and organizational level. See ANOVA results in Table 3 and means in Table 4. Simple effect comparisons revealed that, consistent with Hypothesis 3, women top leaders were indeed viewed as more agentic than men top leaders, $F(1, 100) = 6.12$, $p = .015$, $r = .24$, and further that women middle managers were not rated as more agentic than men middle managers, $F(1, 100) = 1.11$, $p = .295$, $r = .11$. In addition, as predicted in Hypothesis 3, women top leaders were also viewed as more agentic than women middle managers, $F(1, 100) = 22.33$, $p < .001$, $r = .428$. Thus, Hypothesis 3 was supported.

When perceptions of double standards were considered, a two-way ANOVA with leader gender and organizational level as between-subjects factors revealed a significant two-way interaction. Moreover, as predicted in Hypothesis 4a, simple effects comparisons showed that women top leaders were perceived as having experienced greater challenges from double standards than women middle managers, $F(1, 99) = 14.92$, $p = .001$, $r = .36$. There were no differences in perceptions of double standards between men top leaders and men middle managers, $F(1, 99) = 0.89$, $p = .35$, $r = .09$. Also, as expected, double standards were perceived to be higher for women top leaders than men top leaders, $F(1, 99) = 114.41$, $p < .001$, $r = .73$.

To assess the mediation effect proposed in Hypothesis 4b, we followed the procedures developed by Edwards and Lambert (2007). We began by regressing leader gender (female leader = 1, male leader = 0) and organizational level (top level = 1, middle level = 0) on perceptions of double standards. We then regressed leader gender and perceptions of double standards on agentic evaluations. In both equations, we controlled for participant gender (female = 1; male = 0), because it has been shown to influence evaluations of female and male leaders in previous research (Brenner et al., 1989; Eagly et al., 1992; Graves & Powell, 1995, 1996). The results of these regression analyses can be found in Table 5. These regression analyses provided initial support for the first-stage moderated mediation proposed in Hypothesis 4b. We therefore used the results of these regressions in conjunction with the reduced form equation to decompose the effects for both levels of the moderator variable (i.e., at both top and middle organizational levels), and we conducted the bootstrap in order to produce bias-corrected confidence intervals. The results of this analysis are included in Table 6.

Table 3
Analysis of Variance With Leader Gender and Organizational Level As Between-Subjects Factors (Study 2)

Variable	Agentic traits		Communal traits		Double standards		Feminized management		Leadership effectiveness	
	$F(1, 100)$	r	$F(1, 100)$	r	$F(101)$	r	$F(1, 102)$	r	$F(1, 101)$	r
Leader gender	1.81	0.10	1.73	0.13	139.46***	0.76	10.49**	0.31	3.32*	0.18
Organizational level	17.02***	0.38	5.63*	0.23	4.06*	0.20	8.19**	0.28	19.30***	0.40
Leader Gender \times Organizational Level	6.21**	0.24	6.83*	0.25	11.35***	0.32	4.74*	0.21	3.92*	0.20

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4
Means for Agentic and Communal Traits, Double Standards, Feminized Management, and Leader Effectiveness (Study 2)

Role	Agentic traits			Communal traits			Double standards			Feminized management			Leadership effectiveness		
	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD	n	Mean	SD	n
Female top leader	5.76	0.53	25	4.73	0.63	25	5.51	1.09	25	5.00	0.53	25	5.39	0.60	25
Male top leader	5.33	0.59	27	4.35	0.46	27	2.33	0.87	26	4.46	0.49	27	4.88	0.68	26
Female middle manager	4.94	0.80	28	4.25	0.42	28	4.38	1.14	28	4.50	0.52	28	4.52	0.84	28
Male middle manager	5.12	0.53	24	4.38	0.44	24	2.61	1.12	24	4.39	0.44	24	4.55	0.56	24

The indirect effect of leader gender on agentic traits, mediated through perceptions of double standards, was significant to both organizational levels—bias-corrected 95% confidence intervals (CI): [.032, .909] at top level; [.027, .552] at middle level—indicating that double standards mediated the effect of leader gender at both organizational levels. Furthermore, the direct effect of leader gender on agentic evaluations was not significant ($b = -0.270, p > .10$), indicating the presence of full mediation. Thus, Hypothesis 4b was supported. In addition, a comparison of the indirect effects at the top versus middle organizational level indicated that the indirect effect was stronger at the top level than at the middle level, showing that the mediating effect of perceptions of double standards was stronger at the top organizational level than at the middle organizational level.

Communal characteristics. To test Hypothesis 5, we conducted a two-way ANOVA with leader gender and organizational level as between-subjects factors and with ratings of communal traits as the dependent variable. See ANOVA results in Table 3 and means in Table 4. As predicted in Hypothesis 5, the ANOVA revealed a significant two-way interaction between leader gender and organizational level. Consistent with Hypothesis 5, simple effects comparisons revealed that women top leaders were viewed as more communal than men top leaders, $F(1, 100) = 7.727, p = .007, r = .268$, and further that women middle managers were not rated as more communal than men middle managers, $F(1, 100) = .841, p = .361, r = .089$. In addition, as predicted by Hypothesis 5, women top leaders were also viewed as more communal than women middle managers, $F(1, 100) = 12.667, p = .001, r = .334$. Thus, Hypothesis 5 was supported.

To test Hypothesis 6a, we again conducted a two-way ANOVA with leader gender and organizational level as between-subjects factors and with perceptions of feminized management tactics as the dependent variable. As predicted in Hypothesis 6a, the analysis revealed a significant two-way interaction between leader gender and organizational level. See ANOVA results in Table 3 and means in Table 4. Simple effects comparisons revealed that women top leaders were indeed perceived to engage in greater levels of feminized management tactics than were men top leaders, $F(1, 100) = 14.70, p < .001, r = .358$, or women middle managers, $F(1, 100) = 12.945, p = .001, r = .339$. Thus, Hypothesis 6a was supported.

We tested Hypothesis 6b using the same approach that we used to test Hypothesis 4b. The results of this analysis are included in Tables 5 and 6. At the top organizational level, the indirect effect of leader gender on communal traits, mediated through perceptions of feminized management, was significant—bias-corrected 95% CI [.119, .503]—indicating that perceptions of feminized management tactics mediated the effect of leader gender at the top organizational level. Furthermore, the direct effect of leader gender on communal evaluations was not significant ($b = -0.05, p > .10$), indicating the presence of full mediation. However, the indirect effect was not significant at the middle organizational level, indicating that leader gender does not have an effect on perceptions of feminized management tactics at the middle organizational level. Thus, Hypothesis 6b was supported but only for leaders at top organizational levels.

Overall leadership effectiveness. We conducted a two-way ANOVA with leader gender and organizational level as between-

Table 5
Regression Results for Testing Moderated Mediation (Study 2: Hypotheses 4b, 6b, 8, and 9)

Outcome variable	Double standards	Agentic traits	Feminized management	Communal traits	Leadership effectiveness
Leader gender	1.78***	-0.27	0.10	-0.05	-0.38*
Organizational level	-0.29		0.07		
Leader Gender × Organizational Level	1.39***		0.43*		
Double standards		0.15*			0.16**
Feminized management				0.53***	0.71***
Participant gender	0.17	0.08	-0.05	0.07	0.04
R^2	.61***	.07	.19***	.31***	.36***

Note. All entries other than R^2 are nonstandardized regression coefficients.
* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6
Decomposed Effects for Moderated Mediation Analyses
(Study 2)

Organization level/difference	Stage		Effect		
	First	Second	Indirect	Direct	Total
Hypothesis 4b					
Top level	3.17**	0.15*	0.476*	-0.27	0.206
Middle level	1.78**	0.15*	0.267*	-0.27	-0.003
Differences	1.39**	0.00	0.209*	0.00	0.209*
Hypothesis 6b					
Top level	0.53**	0.53**	0.281**	-0.05	0.228
Middle level	0.10	0.53**	0.05	-0.05	0.000
Differences	0.43*	0.00	0.231*	0.00	0.228*
Hypothesis 8					
Top level	3.17**	0.16**	0.507**	-0.38*	0.127
Middle level	1.78**	0.16**	0.285**	-0.38*	-0.095
Differences	1.39**	0.00	0.222**	0.00	0.222**
Hypothesis 9					
Top level	0.53**	0.71**	0.376**	-0.38*	-0.004
Middle level	0.10	0.71**	0.071	-0.38*	-0.309
Differences	0.43*	0.00	0.305*	0.00	0.305*

* $p < .05$. ** $p < .01$.

subjects factors with leadership effectiveness ratings as the dependent variable. See ANOVA results in Table 3 and means in Table 4. As predicted in Hypothesis 7, the analysis revealed a significant two-way interaction between leader gender and organizational level. Consistent with Hypothesis 7, simple effect comparisons revealed that women top leaders were indeed viewed as more effective leaders than men top leaders, $F(1, 99) = 3.38, p = .009, r = .26$, and further that women middle managers were not rated as more effective than men middle managers, $F(1, 99) = 0.013, p = .911, r = .00$. In addition, as predicted in Hypothesis 7, women top leaders were also viewed as more effective than women middle managers, $F(1, 99) = 20.90, p < .001, r = .42$. Thus, Hypothesis 7 was supported.

We tested Hypotheses 8 and 9 using the same approach that we used to test Hypotheses 4b and 6b. With respect to Hypothesis 8, the indirect effect of leader gender on leadership effectiveness, mediated through perceptions of double standards, was significant at the top and middle organizational levels—bias-corrected 95% CI [.188, 1.033] for top level, [.098, .641] for middle level—indicating that double standards mediated the effect of leader gender. The direct effect of leader gender on leader effectiveness was also significant ($b = -0.38, p < .05$), indicating that the mediation was partial. Thus, Hypothesis 8 was supported. It is also interesting to note that a comparison of the indirect effects at the top versus middle organizational level indicates that the indirect effect was stronger at the top level than at the middle level, indicating that the mediating effect of perceptions of double standards was stronger at the top organizational level than at the middle organizational level.

With respect to Hypothesis 9, the indirect effect of leader gender on leadership effectiveness, mediated through perceptions of feminized management, was significant at the top organizational

level—bias-corrected 95% CI [.153, .678]—indicating that perceptions of feminized management tactics mediated the effect of leader gender at the top organizational level. The direct effect of leader gender on leadership effectiveness was significant ($b = -0.38, p < .05$), indicating that the mediation was partial. However, at the middle organizational level, the first-stage indirect effect of leader gender on perceptions of feminized management was not significant, indicating that leader gender does not have an effect on perceptions of feminized management tactics at the middle organizational level. Thus, Hypothesis 9 was supported but only at the top organizational level.

Discussion

This study accomplished several goals. First, we replicated Study 1 findings and showed that when top leaders were given credit for successful outcomes, women top leaders were evaluated as more agentic and more communal than men top leaders. Second, we showed that these higher ratings for women top leaders who received credit for successful outcomes also occurred on general leadership effectiveness ratings. Third, we showed that these high ratings were applicable only when women resided in top leader positions and not in middle management positions. That is, women middle managers were evaluated as comparable to men middle managers on agentic and communal traits, as well as leadership effectiveness; in addition, women top leaders were evaluated more favorably relative to women middle managers on these three measures. Fourth, our findings provided evidence of our proposed causal mechanisms. The analyses revealed that perceptions of double standards mediated the effect of leader gender on agentic traits and leader effectiveness at both organizational levels and that perceptions of feminized management tactics mediated the effect of leader gender on communal traits and leadership effectiveness but only at the top organizational level.

The nature of this moderated mediation was somewhat different for the two sets of analyses. Specifically, double standards mediated the effect of leader gender on agentic ratings at both organizational levels, but the effect was stronger at the top level. In contrast, feminized management tactics mediated the effect of leader gender on communal ratings only at top organizational levels. These findings suggest that double standards operate for women at both organizational levels but that the effect is stronger at the top level. This is consistent with our argument that perceptions of double standards increase as women move up the organizational hierarchy. The findings also indicate, in contrast, that expectations of feminized management tactics are related to gender only at top organizational levels. While the present evidence is not conclusive regarding why expectations of feminized management tactics are unrelated to gender at the middle organizational level, this finding is consistent with our argument that these expectations are likely to be highest for women in top organizational levels. Overall, the findings of both studies provide support for our overarching prediction that women top leaders may benefit from a female leader advantage under the specific circumstance of internally attributed success.

General Discussion

On the basis of research on double standards of competence, the stereotype content model, and the female leader advantage, we

predicted that women top leaders who demonstrate success in their positions would be rated as more agentic, more communal, and as more effective leaders than men top leaders. In the two studies presented here, the evidence supported this prediction. Study 1 showed that when women top leaders were credited for success, they were viewed as more agentic and more communal than their male counterparts. Study 2 replicated this finding, extended it to ratings of overall leadership effectiveness, and showed that the simultaneous evaluations of agency and communality for women leaders occurred at top levels of the organization, not at middle levels. Study 2 also showed that enhanced ratings for top women credited with success were mediated by both perceptions of double standards and expectations of feminized management tactics.

These studies contribute to the gender and leadership literature in several ways. First, we have shown that the gender biases predicted by role congruity theory that have been found in previous studies at lower organizational levels may not generalize to the top levels of the organizational hierarchy. That is, when women reside in top leader roles, the successful occupation of the position by a woman conveys information to observers that may augment their evaluation of the woman top leader. Our findings suggest that these enhanced evaluations occurred because women were perceived to face higher standards than men and were expected to engage in increasingly valued feminized management tactics. As a consequence, a unique stereotype content may exist for top female leaders, one that ascribes both high agentic and high communal abilities. This is an important contribution, because much of our current understanding of gender bias is based on research at middle organizational levels,¹ and as women increasingly come to occupy more influential roles in organizations, an understanding of the effects of gender biases at all organizational levels will become increasingly important.

Second, our findings have shown that perceptions of agency and communality can be compatible for women leaders. In both studies, women top leaders were evaluated as more agentic and more communal than men top leaders. Previous studies have shown that when women are perceived as agentic, they are viewed as violating the prescriptions of the female role and are evaluated as having low social skills (Rudman, 1998; Rudman & Glick, 1999) and low warmth (Eckes, 2002; Fiske et al., 2002). Our findings build on this previous research and show that success in masculine positions may, under certain circumstances, instead produce favorable evaluations of women top leaders' communal traits. In addition, it is interesting to note that, while top women leaders receive boosts in ratings of both agentic and communal traits, it appears in both of our studies that the boost is bigger on the agentic than the communal dimension.

Third, and most important, our findings contribute to the ongoing debate about the existence of a female leader advantage. Advocates of the existence of a female leadership advantage (Eagly, 2007; Eagly & Carli, 2003a; 2003b; Fondas, 1997) have argued that women have been shown to exhibit more democratic leadership styles and that such behaviors result in a female leader advantage because this participative style is more similar to the styles advocated by contemporary trade-focused books, newspapers, and business magazines (e.g., Tuhus-Dubrow, 2009; Werhane, Posig, Gundry, Ofstein, & Powell, 2007; Wilson, 2007). However, others contend that claims of an overall female advantage are overstated and that there is neither a male nor a female

advantage because existing gender research has yielded null findings, small effect sizes, or contradictory results (Vecchio, 2002; 2003). Although these opposing parties are in stark disagreement about the existence of an overarching female leader advantage, both factions agree that context is paramount. Vecchio (2003) noted, "It would be far more accurate to describe this . . . as a 'gender-in-context advantage,' rather than a gender advantage" (p. 847). Eagly and Carli (2003a) concurred, "As situational theories of leadership contend (e.g., Chemers, 1997), the effectiveness of leader behaviors depends on contextual variables" (p. 808). Our findings help to reconcile the divide regarding the existence of a female leader advantage by showing the conditions under which the female leader advantage is likely to occur (i.e., when top women leaders are credited with success). Thus, the findings of our studies support the existence of a qualified female leadership advantage.

In addition, this research suggests that women executives may face changing stereotypes in evaluative contexts over the course of their careers. While working in the lower and middle levels of the organizational hierarchy, women may face the biases predicted by role congruity theory and the backlash effect. However, as women progress to the higher levels of the organizational hierarchy and experience success in those positions, they may be perceived more positively. One clear area for future research is to explore the ways in which top-level women make it past the barriers of the glass ceiling and into the top-level ranks. How do they transition from one level to another, and how does the transition impact their behavior? Are there actual changes in behavior, or is it just perceptual differences that account for our results?

Although our findings are consistent and robust, we must, however, note considerations that could potentially limit the generalizability of our findings. First, in both studies, fictitious leaders were used, and it is possible that if our participants evaluated actual leaders, their perceptions may be more variable because social interactions can influence leader ratings. However, at top organizational levels, there is a public aspect of leadership that emphasizes the importance of the perceptions of individuals who do not interact with the leader directly. As increasing numbers of women come to occupy positions in the upper levels of corporate and government hierarchies, the perceptions of others with whom they do not directly interact becomes increasingly relevant. These

¹ Much of the research on the differences and similarities between gender and leader roles has occurred at lower level leadership positions in the organization. For example, in Eagly et al.'s (1992) meta-analysis of gender and leader evaluation, 51 of the 80 relevant studies examined leaders in line management or middle management positions, whereas only 16 included studies that examined leaders at higher levels of organizational hierarchy. In Eagly et al.'s (1995) meta-analysis of gender and leadership effectiveness, less than 2% of the studies included were identified as examining leaders above the middle management level. Similarly, in Eagly and Johnson's (1990) meta-analysis of gender and leadership style, whereas 242 studies examined line management or middle level managers, only 11 studies examined leadership among higher level managers. Finally, in Eagly et al.'s (2003) meta-analysis of gender and leadership style, executive-level leaders were examined in only 6 of 45 studies. Hence, our understanding of the explanatory power of role incongruity for evaluations of men and women leaders derives primarily from research at lower levels in the organization.

perceptions made by social perceivers who are not likely to come in personal contact with the leader but instead become familiar with the leader through the leader's public appearances or through various media outlets can act as sources of legitimacy and power for both the leaders and their organizations (e.g., Chakravarthy & Gargiulo, 1998; Hollander, 1992, 1993). In this sense, given that we focused primarily on perceptions of top-level leaders, the use of perceivers with only limited information about the leaders they were evaluating may not be viewed as a limitation, but may instead be viewed as consistent with the type of perceptions and conclusions made by the general public about prominent leaders in top positions.

Second, the participants in our studies were students. The use of student populations can sometimes limit the generalizability of empirical findings to other contexts. However, young adults frequently have experiences with managers and leaders in organizational settings and their opinions and perceptions frequently mimic those views of organizational members with full-time employment (see Eagly & Carli, 2003a, for a discussion of these similarities). For example, Schein's well-known findings on the "think manager—think male" effect have been shown to be similar across samples of managers and students (Schein, 1973, 2001; Schein et al., 1989; Schein, Mueller, Lituchy, & Liu, 2005). In addition, numerous studies have replicated laboratory studies with student populations in field settings (e.g., Dobbins, Cardy, & Truxillo, 1988), and meta-analyses have revealed that studies conducted in laboratory settings on student samples can generalize both to business contexts and to government and military contexts (e.g., Judge, Bono, Ilies, & Gerhardt, 2005). In the present studies, over 56% of the participants in Study 1 were upperclassmen or graduate students, and most Study 2 participants (more than 90%) were either employed at the time of the study or had previous work experience. Hence, our participants were likely more familiar with the conceptualization of organizational leaders than other populations, and accordingly, it is more probable than not that our findings would generalize to other populations with organizational experience. However, future research should attempt to replicate these findings with other populations.

Conclusion

The findings of our research suggest that once women break through the glass ceiling, they may experience a leadership advantage relative to men. Specifically, when women succeed in top-level positions, they are more likely to be viewed as highly agentic, and their communal characteristics are more likely to be considered beneficial due to the changing construction of what it means to be a good leader (Eagly & Carli, 2003a; Sitkin, Lind, & Long, 2005). Effective leaders not only need to be achievement oriented, competitive, decisive, and independent but also must recognize the importance of building strong relationships, collaborating with others, and taking care of their employees through coaching and development. Successful top female leaders were perceived as possessing all of these characteristics. Perhaps the most pressing problem now, as highlighted in much of the gender stereotype research (Ryan & Haslam, 2005), is how to empower more women to acquire these top-level positions.

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