

## Why Are Women Penalized for Success at Male Tasks?: The Implied Communality Deficit

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In 3 experimental studies, the authors tested the idea that penalties women incur for success in traditionally male areas arise from a perceived deficit in nurturing and socially sensitive communal attributes that is implied by their success. The authors therefore expected that providing information of communality would prevent these penalties. Results indicated that the negativity directed at successful female managers—in ratings of likability, interpersonal hostility, and boss desirability—was mitigated when there was indication that they were communal. This ameliorative effect occurred only when the information was clearly indicative of communal attributes (Study 1) and when it could be unambiguously attributed to the female manager (Study 2); furthermore, these penalties were averted when communality was conveyed by role information (motherhood status) or by behavior (Study 3). These findings support the idea that penalties for women's success in male domains result from the perceived violation of gender-stereotypic prescriptions.

*Keywords:* prescriptive gender stereotypes, sex discrimination, penalties for success, communal prescriptions

Research on sex bias in the workplace has demonstrated repeatedly that in situations in which performance level is ambiguous or lends itself to distortion, women are not perceived to be as competent as men in performing male gender-typed work (Dipboye, 1985; Heilman, 1983, 1995; Heilman, Martell, & Simon, 1988; Swim, Borgida, Maruyama, & Myers, 1989). Consequently, ambiguity about performance quality has been shown to result in discrimination in selection, placement, and performance evaluation (Cejka & Eagly, 1999; Heilman, 1995, 2001; Nieva & Gutek, 1980; Tosi & Einbinder, 1985). Recent evidence suggests, however, that even when unequivocal evidence exists that a woman is successful in male gender-typed work, she faces career-hindering problems in work settings—problems of being disliked and interpersonally derogated (Heilman, Wallen, Fuchs, & Tamkins, 2004). The research reported in this article is designed to provide further insight into why these responses to successful women arise and the conditions that can inhibit their occurrence. In particular, we propose that negative reactions to women who are successful in traditionally male domains are a consequence of the perception that these women have violated stereotype-based “oughts” about how women should behave and the resulting assumption that they are deficient in feminine attributes.

In contrast to the descriptive component of gender stereotypes, which designates what men and women are like, there is a prescriptive component that designates what men and women should be like (Burgess & Borgida, 1999; Eagly & Karau, 2002; Heilman,

2001; Rudman & Glick, 2001). The dictates of prescriptive sex stereotypes are highly specific and widely shared. They specify that women should behave communally, exhibiting nurturing and socially sensitive attributes that demonstrate concern for others, such as being kind, sympathetic, and understanding. They also specify what women should not do—engage in behaviors typically prescribed for men that are thought to be incompatible with the behaviors prescribed for women. Thus, agentic behavior, behavior that demonstrates dominance, competitiveness, and achievement orientation, is generally considered out of bounds for women.

These gender-stereotyped prescriptions can affect reactions to women. Because the behavioral prescriptions inherent in gender stereotypes function as norms to be fulfilled, their perceived violation is likely to arouse disapproval and promote negativity, as do counternormative behaviors more generally (Cialdini & Trost, 1998). Penalties are therefore likely to ensue.

Research has demonstrated that penalties indeed result when women engage in behaviors that are counter to female stereotypic prescriptions. These penalties have been found to take the form of social rejection and personally directed negativity and to have detrimental consequences for career-relevant organizational rewards. For example, Rudman (1998; Rudman & Glick, 2001) found that women who engaged in self-promoting behavior were judged as lacking social skills and were less likely to be recommended for hiring. Results of other studies also have indicated that when women behave in ways that are typically reserved for men in our culture, they are less liked and found less socially acceptable than men who behave in a similar manner or than women who behave in more stereotype-consistent ways (Bartol & Butterfield, 1976; Carli, 1990; Carli, LaFleur, & Loeber, 1995; Jago & Vroom, 1982).

However, it is not necessary for women to actually behave counternormatively to induce social penalties; the mere knowledge that a woman has been successful in a male domain produces

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inferences that she has engaged in stereotype-violating behavior, resulting in social penalties. Much of the research supporting this idea has concerned women who are successful in the organizational role of manager, a role that is typically seen as male gender typed (Powell, Butterfield, & Parent, 2002; Schein, 2001). Several investigations have found that when research participants were told only that female managers had been successful (with no additional behavioral information supplied), they characterized these managers as lacking the prescribed favorable interpersonal qualities related to communality and as instead possessing traits such as selfishness, deceitfulness, deviousness, coldness, and manipulateness (Heilman, Block, & Martell, 1995; Heilman, Block, Martell, & Simon, 1989; Heilman et al., 2004). There also has been indication that female managers who are reported to be successful are decidedly less liked than their male counterparts and less preferred as bosses (Heilman et al., 2004). It thus appears to take little more than the knowledge that a woman is successful at male sex-typed work to instigate interpersonally negative reactions to her. Moreover, the fact that this negativity directed at female managers who are successful has not been found to occur when their success is in an arena that is designated as female or neutrally gender typed (Heilman et al., 2004, Study 2) lends support to the idea that it is not success but rather the inferences success produces about the violation of gender-stereotypic prescriptions that fuels these negative reactions.

There is, however, lack of clarity about what, exactly, is at the root of the penalties that women incur for their success in male domains. Violating gender-stereotyped prescriptions by being successful in these arenas has two different consequences. Most directly, because agentic behavior is believed to be essential for excellent performance of male gender-typed tasks regardless of the sex of the performer, it indicates that a woman has done what men, not women, are supposed to do—be agentic. However, because communality and agency tend to be conceived of as oppositional, agentic behavior also implies that a woman has failed to do what women are supposed to do—be communal. Which of these gender norm violations is the source of the disapproval and social rejection? We believe successful women's assumed desertion of feminine imperatives is critical for explaining the penalties they incur and for understanding whether and how such penalties can be averted.

Our reasoning is rooted in the nature of the penalties themselves. Negative reactions to successful women tend to target interpersonal traits in the communal domain: These women are characterized as the antithesis of the female nurturer—as the quintessential “bitch” who is concerned not at all about others but only about herself (e.g., Heilman et al., 2004). These findings suggest that it is the perceived deficiency in communality implied by a woman's success in a male job, not the perception of inappropriate agentism, that is the true irritant and the primary source of the disapproval driving the resulting social penalties. Thus, the woman's success, which in this situation demonstrates agentism, may not be the problem; rather, the trouble may be the implications of the success for perceptions of her communality. If this is the case, when the assumption of the communality violation is precluded, a woman's success in a nontraditional role should not produce negative consequences.

The following studies test this idea. We propose that penalties for a woman's success in a male domain arise from the perceived

violation of communality prescriptions, and we therefore expect that providing verification of communality will prevent the social disapproval and social penalties otherwise directed at a woman when she is successful in a male job. Because there is no communal prescription for men that is perceived to be violated when they are successful in male jobs, we do not expect information about communality to affect men's evaluations. The first study directly tests this proposition. In this study, participants reviewed information about a woman and a man who were depicted as highly successful at a male gender-typed managerial job, and additional information about their communality was or was not communicated. To demonstrate that communality information in particular, not favorable information in general, is responsible for the averting of penalties, we also included a control condition in which additional information was provided about the manager that was favorable but not communal in its content. We expect the following:

*Hypothesis:* Female managers who are successful in male gender-typed jobs will be more disliked, elicit more negative interpersonal characterizations, and be less preferred as bosses than similarly successful male managers unless information about their communality is provided.

## Study 1

### *Method*

#### *Participants and Design*

Participants were 75 male and female undergraduates recruited from an introductory psychology course who participated in exchange for partial fulfillment of course experiment participation requirements. The design was a  $2 \times 3$  mixed factorial with sex of the stimulus person (male or female) a within-subject factor and type of information provided (no added information, communal information, or positive noncommunal information) a between-subjects factor. Participants were randomly assigned to one of the three information conditions, and each reviewed both a male and a female target.

#### *Procedure*

The experimenter informed the participants that the study concerned relationships at work and, in particular, first impressions. They were told that they would be asked to read about and evaluate 3 managers, randomly selected from among a group of 10, who had recently been hired for a similar position in different divisions of a large organization. Participants were then given packets containing information about the position and about each of the 3 managers and were asked to give their reactions to them on a brief questionnaire. Two of the managers, 1 male and 1 female, were our stimulus targets. After the questionnaires were completed and collected, the experimenter gave both a written and a verbal debriefing that revealed the purpose of the experiment and the manipulations used in the study.

#### *Stimulus Materials*

The stimulus packet began with a checklist containing the names of 10 managers (9 male and 1 female), all ostensibly potential evaluatees, 3 of whom had been designated as the managers to be reviewed by the participant. The checklist was overwhelmingly male to reinforce the male-dominated nature of the position. This was followed by a job description summary indicating the position held by all 3 managers, vice president (VP) of financial affairs, and the responsibilities of the job (e.g., supervising

ing the financial affairs department, overseeing allocation of company funds, directing financial affairs employees, preparing budget reports, and leading work projects). The male gender-typed nature of the job was communicated in the job summary via the type of job (top manager of a finance department), demographics (the summary indicated that 88% of these managers company-wide were male), and the types of job responsibilities involved (e.g., managing, supervising, leading, directing, overseeing).

The participants then read memos from the chief executive officer (CEO) to the company employees introducing each VP as a new member of his or her respective management group. The memos were described as instrumental in the company's efforts to introduce employees to incoming upper level managers. Each memo was four paragraphs long and contained background information regarding the new VP. Memos about the two stimulus targets reported their educational background (undergraduate degree from the University of Southern California or University of Michigan; master's in business administration from Northwestern University or the University of California, Berkeley), city of origin (Cleveland or Saint Louis), interests outside of work (movies, jogging, and photography or reading, tennis, and travel), and past work experience (approximately 3 years in a financial manager position). The two stimulus targets were depicted as having been highly successful at the last company they had worked for, and they were described as having been awarded organizational recognition for their performance and commitment. Additionally, there were accounts of past supervisors and coworkers attesting to the targets' outstanding effectiveness, competence, and aggressive achievement focus. The memo also reported excerpts of the VPs' personal statements ascribing their success to taking active measures and doing what it took to succeed in the financial industry.

After reading the memo regarding the first stimulus person, participants evaluated him or her on a two-page questionnaire. They then read about and evaluated the second stimulus person and then the third person. The last of the three managers was always a male target and was included both to be consistent with the proportions of male and female managers who would be expected in a male gender-typed position and to make less apparent our interest in employee sex; data regarding him were not used in the analyses. The order of presentation of the two managers of interest, one male and one female, was counterbalanced, and memos about them always preceded the memo about the third, dummy manager. Also, the information provided about the first two managers was alternated so that each memo version was used for the male target half of the time and the female target the other half. The information regarding the third manager was always the same, regardless of experimental condition.

### Experimental Manipulations

**Sex of stimulus person.** Each participant was exposed both to a male and to a female target (as well as to a third target who was male but was not of interest to us). We manipulated information regarding target sex by altering the names and gender pronouns in the memos describing each manager.

**Type of information.** The type of additional information provided about the stimulus person was manipulated in the CEO's introductory memo. In both the communal and the positive noncommunal information conditions, two sentences were added at the beginning of the last paragraph. Because participants reviewed both a male and a female manager, we had two versions of each information manipulation. In the communal information condition, the added comments were either

Although Andrea's [James's] coworkers agree that she [he] demands a lot from her [his] employees, they have also described her [him] as an involved manager who is caring and sensitive to their needs. She [he] emphasizes the importance of having a supportive work environment and has been commended for her [his] efforts to promote a positive community.

or

Subordinates have often described Andrea [James] as someone who is tough, yet understanding and concerned about others. She [he] is known to encourage cooperation and helpful behavior, and has worked hard to increase her [his] employees' sense of belonging.

In the positive noncommunal information conditions, the added comments were similar in length and design to the comments in the communal information condition, although the information provided concerned positive but not communal attributes. They were either

Although Andrea's [James's] coworkers agree that she [he] demands a lot from her [his] employees, they have also described her [him] as someone who is fair-minded in her [his] treatment of others. She [he] emphasizes the importance of having an open forum for the exchange of ideas and has been commended for her [his] efforts to promote performance excellence within her [his] department.

or

Subordinates have often described Andrea [James] as someone who is tough, yet outgoing and personable. She [he] is known to reward individual contributions and has worked hard to maximize her [his] employees' creativity.

In the control condition, the CEO's memo was presented without any information added to the last paragraph.

### Dependent Measures

There were two measures of liking. The first was a composite of responses to two 9-point scale items ( $\alpha = .80$ ), a bipolar adjective scale rating (*likable-not likable*) and the question "How much do you think you would like this individual?" (*very much-not at all*). The second liking measure, obtained on the second questionnaire after each of the two stimulus managers had been reviewed separately, was the participants' choice of which of the two managers they thought they would like better.

We created a perceived interpersonal hostility scale by combining participants' ratings of the target individuals on five 9-point bipolar adjective scales. The scale items (*abrasive-not abrasive, pushy-not pushy, untrustworthy-trustworthy, manipulative-not manipulative, and selfish-not selfish*;  $\alpha = .70$ ) were compiled from those used in previous research (Heilman et al., 1989, 1995, 2004).

Boss desirability was assessed by two measures. The first was a single item 9-point scale asking, "How much would you want this person as your boss?" (*very much-not at all*). The second measure, obtained on the second questionnaire after the two stimulus targets had been reviewed, was the participant's choice of which target they would prefer as a boss.

In addition to the dependent variable measures, we created a perceived communality manipulation check by combining four 9-point bipolar adjective scales: *supportive-not supportive, understanding-not understanding, sensitive-insensitive, and caring-not caring* ( $\alpha = .90$ ). We also checked to make sure that the communality manipulation did not differentially affect the perceived agenticism or competence of the managers. Our perceived agenticism measure was a composite of six 9-point bipolar adjective scales: *strong-weak, assertive-not assertive, tough-not tough, bold-timid, active-passive, and dominant-submissive* ( $\alpha = .82$ ). Our perceived competence measure ( $\alpha = .79$ ) was a composite of three 9-point bipolar adjective scales (*competent-incompetent, effective-ineffective, and productive-unproductive*) and one 9-point question asking, "How successful do you expect this individual to be in the new position?" (*very successful-not successful at all*). All the dependent measure scales were labeled only at the endpoints.

## Results

### Manipulation Check

Analysis of variance of the communality ratings indicated a significant main effect for information,  $F(2, 72) = 10.78, p < .001$ , indicating that our information manipulation was effective. Participants perceived managers in the communal condition ( $M = 5.37$ ) to be more communal than managers for whom no additional information ( $M = 4.23$ ) or positive information that was not communal ( $M = 4.09$ ) was provided. Analysis of variance further indicated that perceptions of the managers' agentism did not vary as a function of either the sex of the manager or the information manipulation. Additionally, analysis of variance indicated no significant effects in competence perceptions as a function of information condition, although women ( $M = 7.88$ ) were generally rated as less competent than men ( $M = 8.18$ ),  $F(1, 72) = 4.01, p < .05$ . Competence in all conditions was thought to be very high, with the means ranging from 7.78 to 8.19 on a 9-point scale.

### Data Analysis

Initial analyses of variance with participant sex included as a factor indicated no significant main effects or interactions involving participant sex on any of the three dependent measure scales. Additionally, the results of the chi-square analyses of the choice measures did not differ when the data of male and female participants were analyzed separately. Consequently, the data of male and female research participants were combined for all subsequent analyses.

A multivariate analysis of variance (MANOVA) was conducted on the two composite scales (likability and perceived interpersonal hostility) as well as the single-item scale of boss desirability. Results indicated significant main effects for both target sex,  $F(3, 70) = 4.12, p < .01$ , and type of information,  $F(6, 142) = 2.58, p < .05$ , and a significant Sex of Target  $\times$  Information Type interaction,  $F(6, 142) = 3.26, p < .01$ . Univariate analyses of variance were then conducted on each of the scales, and intercell comparisons were conducted both to clarify interaction effects and

to directly test the hypotheses by examining differences in reactions to male and female managers in each information condition. Because of the within-subject nature of the sex of manager manipulation, paired  $t$  tests were used to test these differences. The correlation between the likability and interpersonal hostility ratings was  $-.55$ , the correlation between the likability and boss desirability ratings was  $.58$ , and the correlation between the interpersonal hostility and boss desirability ratings was  $-.41$ . Table 1 presents the means and standard deviations for each of the dependent measure scales. Chi-square tests were used to analyze participants' selections of which manager, the man or the woman, they liked better and which one they preferred as a boss. Table 2 presents the frequencies of the preference item responses in each experimental condition.

### Likability

**Scale ratings.** Analysis of variance of participants' ratings on the likability scale revealed significant main effects for sex of target,  $F(1, 72) = 4.07, p < .05$  ( $\eta^2 = .05$ ), and for the type of information provided,  $F(2, 72) = 4.80, p < .05$  ( $\eta^2 = .12$ ). In addition, a significant Sex of Target  $\times$  Type of Information interaction was obtained,  $F(2, 72) = 8.44, p < .005$  ( $\eta^2 = .19$ ).

Results of the paired comparisons between male and female targets supported our predictions. In the no added information condition, participants rated the female manager as significantly less likable than the male manager,  $t(24) = 2.80, p < .05$ . The same pattern was found in the positive noncommunal information condition,  $t(24) = 2.45, p < .05$ . However, when communal information was provided, this pattern was not evident; in fact, with communal information the pattern was reversed, and participants rated the female manager as significantly more likable than the male manager,  $t(24) = 2.80, p < .05$ .

**Comparative judgments.** The results of the chi-square analysis of participants' choices of the more likable manager were consistent with the results of the analyses of the liking ratings. The choice of the female manager was significantly less frequent than the choice of the male manager in both the no added information

Table 1  
Study 1: Means and Standard Deviations for Dependent Measure Scales

Dependent measure scale	No added information		Positive information		Communal information	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Likability						
Male target	6.28 <sub>ad</sub>	1.24	6.26 <sub>ad</sub>	1.48	6.30 <sub>a</sub>	1.28
Female target	5.34 <sub>b</sub>	1.39	5.38 <sub>b</sub>	1.78	7.04 <sub>d</sub>	1.37
Interpersonal hostility						
Male target	4.26 <sub>ac</sub>	1.03	4.70 <sub>a</sub>	1.10	4.54 <sub>a</sub>	1.43
Female target	3.42 <sub>b</sub>	0.95	3.67 <sub>bc</sub>	1.21	4.90 <sub>a</sub>	1.19
Boss desirability						
Male target	6.20 <sub>a</sub>	1.35	5.88 <sub>ac</sub>	2.09	6.04 <sub>a</sub>	2.17
Female target	5.08 <sub>bc</sub>	1.58	4.89 <sub>b</sub>	2.06	6.56 <sub>a</sub>	2.02

*Note.* All ratings were done on 9-point scales, and the higher the number, the more favorable the rating (the more likable, the less interpersonally hostile, the more desirable a boss).  $n = 25$  in each condition. Means for each dependent measure grouping that do not share subscripts differ significantly, as indicated by paired  $t$  tests for comparisons between male and female targets and by least significant difference tests for comparisons between information conditions.

Table 2  
*Study 1: Frequencies of Target Choices on Liking and Boss Preferences*

Preference	No added information		Positive information		Communal information	
	Freq.	%	Freq.	%	Freq.	%
Liking						
Male target	18	72	16	70	8	32
Female target	7	28	7	30	17	68
Boss						
Male target	21	84	17	77	12	50
Female target	4	16	5	23	12	50

Note. Freq. = frequency.

condition,  $\chi^2(1, N = 25) = 9.68, p < .01$ , and the positive noncommunal information condition,  $\chi^2(1, N = 23) = 7.04, p < .01$ . This was not the case in the communal information condition, however. In fact, in the communal information condition, female targets were selected as the more likable manager more often than the male targets,  $\chi^2(1, N = 25) = 6.48, p < .05$ .

#### Perceived Interpersonal Hostility

Analysis of variance of the interpersonal hostility adjective ratings revealed a significant main effect for sex of target,  $F(1, 72) = 10.74, p < .005$  ( $\eta^2 = .13$ ); a significant main effect for information condition,  $F(2, 72) = 5.48, p < .01$  ( $\eta^2 = .13$ ); and a significant Sex of Target  $\times$  Information Condition interaction,  $F(2, 72) = 8.05, p < .005$  ( $\eta^2 = .18$ ). Paired comparisons comparing ratings of the male and female manager in each information condition indicated that, as predicted, female managers were rated as more interpersonally hostile than male managers in the no added information condition,  $t(24) = 3.94, p < .005$ , and in the positive noncommunal information condition,  $t(24) = 3.44, p < .005$ , but not in the communal information condition, in which participants did not rate male and female managers differently in terms of interpersonal hostility,  $t(24) = 1.30, ns$ .

#### Boss Desirability

*Scale ratings.* Analysis of variance of participants' ratings of boss desirability revealed a significant main effect for sex of target,  $F(1, 72) = 5.66, p < .05$  ( $\eta^2 = .07$ ), but not for the type of information provided,  $F(2, 72) = 1.99$ . A significant effect was also obtained for the Sex of Target  $\times$  Type of Information interaction,  $F(2, 72) = 5.71, p < .01$  ( $\eta^2 = .14$ ).

The results of paired comparisons between ratings of male and female managers also supported our predictions. Participants rated the female manager as less desirable as a boss than the male manager in both the no added information condition,  $t(24) = 3.02, p < .01$ , and the positive noncommunal information condition,  $t(24) = 2.83, p < .01$ . In the communal information condition, however, ratings of boss desirability did not differ as a function of the manager's sex,  $t(24) = 1.24, ns$ .

*Comparative judgments.* The results of the chi-square analysis of participants' boss preferences indicated that, when asked whom they preferred as a boss, participants chose the male manager significantly more often than the female manager in the no added

information condition,  $\chi^2(1, N = 25) = 23.12, p < .01$ , and in the positive noncommunal information condition,  $\chi^2(1, N = 22) = 13.09, p < .01$ . However, in the communal information condition there was no difference in the frequency with which male and female managers were chosen,  $\chi^2(1, N = 24) = 0.00$ .

#### Discussion

These results both replicate and extend earlier findings. By demonstrating that women who were depicted as being successful at male gender-typed jobs were not liked, were viewed as having very undesirable interpersonal attributes, and were seen as less desirable as bosses relative to similarly described male managers, the data replicate the findings of studies that have been reported in the literature (Heilman et al., 1989, 2004; Rudman & Glick, 2001). However, the results also go beyond the earlier findings, demonstrating that the negativity directed against successful women did not occur when communal information about them was provided. Thus, the findings lend insight into the process underlying these negative reactions.

It is important to note that the suspension of negativity toward the successful female managers occurred only when communal information was supplied; other types of commendable information did not have the same effect. This suggests that it was indeed indication of communality, not simply of favorability, that was responsible for mitigating the negative reactions. These findings lend support to our contention that the key issue underlying the negative reactions to women who are successful in male tasks and roles is the perceived deficiency in their communality. The provision of communal information softened reactions to women, eradicating (and, in the case of liking, even reversing) the negativity that was so evident when this information was not made available.

However, information of communality is not likely to always assuage penalties for women's unconventional success. Only when the information is taken to be indicative of the woman's personal attributes should it have this salutary effect. The proclivity to see women who are successful in male domains as deficient in communal qualities is likely to be accompanied by resistance to seeing them otherwise. Thus, if there is ambiguity in the potentially disconfirming communality information, it is likely to be discounted or dismissed (Fiske & Taylor, 1991). The focus of our second study is to demonstrate how important it is for the communality information to provide unequivocally disconfirming in-

formation about the successful woman's attributes if it is to counteract the negativity directed at her.

## Study 2

The hierarchical structure of organizations often creates ambiguity about the actual impetus for behavior. That is, it is sometimes unclear whether a particular behavior should be attributed to the actor or to situational constraints, such as company policies or superiors' directives. This raises the question of whether the employee was actually doing what he or she chose to do or was merely complying with the demands of the work setting. Thus, the ambiguity about the source of behavior provides an "out" for the perceiver through attributional rationalization (Heilman & Haynes, 2005) and is likely to limit the degree to which information about a woman's communal behavior actually is taken to provide useful information about her. In situations in which this is the case, the communal information should not be an effective antidote to the communality deficits implied by the woman's success in a male role.

We therefore expected that when a woman is successful in male domains, information of her communality will be of little consequence if there is ambiguity about whether she is the impetus for the communal behavior or whether her communality is merely a consequence of her efforts to fulfill an organizational responsibility. To test these ideas, we used the same procedure as that used in Study 1 but in this case varied the degree of ambiguity about the source of the manager's communality.

As in Study 1, we predicted that female managers who had been successful in male gender-typed jobs would be disliked more, elicit more negative interpersonal characterizations, and be viewed as less desirable as a boss than would similarly successful male managers unless information about their communality was provided. However, we did not expect information of communality to have ameliorative effects unless the communal behaviors associated with the successful woman were clearly and unambiguously a reflection of who she was and not a possible result of external demands.

*Hypothesis:* Communal information will mitigate the dislike, negative characterizations, and undesirability as a boss of successful female managers as compared with successful male managers only when it is clear that the communality originates from them and is not ambiguous with respect to its source.

## Method

### Participants and Design

Participants were 96 male and female undergraduates recruited from an introductory psychology course who participated in exchange for partial fulfillment of course experiment participation requirements. The design was a  $2 \times 3$  mixed factorial with sex of the stimulus person as a within-subject factor and type of additional information provided as a between-subjects factor. The type of information conditions included a no information condition and two communal information conditions, one in which the source of the communal behavior was clearly the stimulus person (clear communality), and one in which the source of the communal behavior was ambiguous and potentially externally induced (ambiguous communality). Participants were randomly assigned to one of the three

information conditions, and all participants reviewed both a male and a female target.

### Procedure

The procedure and stimulus materials were identical to those of Study 1 except for the experimental manipulations described in the following section.

### Type of Additional Information Manipulation

The type of additional information provided about the stimulus person was again manipulated in the CEO's memo. In both the clear and the ambiguous communality conditions, two sentences were added at the beginning of the last paragraph. In the clear condition, the two sentences were the same as those presented in the communal information condition in Study 1. These sentences alluded not only to the manager's communal behavior (creating a supportive work environment and building a positive community or encouraging cooperation and increasing employees' sense of belonging) but also to his or her communal attributes (involved, caring, and sensitive or understanding and concerned about others), thereby implying that the communal behaviors were a clear result of the manager's predispositions and personal decisions about how to behave as a manager. However, in the ambiguous communality condition, the manager was described as performing the same communal behaviors, but either under the direction of a supervisor or as part of a company-wide initiative, thereby implying that the communal behavior might have been performed to fulfill a job responsibility. In particular, in the ambiguous communality condition one of the two following passages, appearing equally for male and female managers, was included just preceding the sentence describing the communal behaviors performed: "In his [her] last year at [unnamed company] Inc., James [Andrea] worked for a supervisor who was known for placing high importance on employee relations. Under his [her] boss's direction, James [Andrea] . . ." or "In recent years, [unnamed company] has updated their mission statement, placing greater importance on understanding the concerns of employees. As part of this company-wide initiative, James [Andrea] . . ." As in Study 1, the control condition memo was presented without any information added to the last paragraph.

### Dependent Measures

The dependent measures were the same as those used in the previous study, including composite measures of likability ( $\alpha = .83$ ) and interpersonal hostility ( $\alpha = .71$ ) and the single item assessing boss desirability. Comparative judgments regarding likability and boss preferences were also collected. Although we could not directly check participants' perceptions of whether the source of the target's communal behavior was clear or ambiguous without potentially biasing responses, we included a communality measure to ensure that the participants interpreted our type of information manipulation as intended. The communality manipulation check ( $\alpha = .86$ ) and measures of perceived agenticism ( $\alpha = .75$ ) and competence ( $\alpha = .75$ ) were also the same as those used in Study 1.

## Results

### Manipulation Check

Although analysis of variance revealed no significant effects for the communality ratings, planned comparisons tested at the  $p < .05$  level revealed that participants in the clear communality condition ( $M = 5.37$ ) gave significantly higher ratings of target communality than those in the no information condition ( $M = 4.23$ ) or the ambiguous communality condition ( $M = 4.09$ ). Examination of the competence scores indicated that the competence

ratings in all conditions were again very high, with the means ranging from 7.52 to 8.10 on a 9-point scale, and analysis of variance revealed no significant effects for either perceived agenticism or perceived competence as a function of information condition, gender of target manager, or the interaction between the two variables.

### Data Analysis

Analyses of variance with participant sex included as a factor revealed only one effect involving participant sex, a main effect for likability ratings,  $F(1, 68) = 5.68, p < .05$ , indicating that female participants generally rated the manager as more likable than did male participants. There was no evidence of participant sex interacting with our independent variables, and the responses of male and female participants were combined for subsequent analyses. Separate chi-square analyses of the male and female participants' preference data also indicated no differences as a function of participant sex, so these data also were combined for subsequent analyses.

A MANOVA conducted on the three dependent measure scales (likability, interpersonal hostility, and boss desirability) indicated no significant main effects for target sex,  $F(6, 67) = 2.24$ , or type of information,  $F(6, 136) = 1.04$ , but a significant Sex of Target  $\times$  Information Type interaction,  $F(6, 136) = 2.69, p < .05$ . Univariate analyses of variance were then conducted on each of the scales, and paired  $t$  tests were conducted to test hypothesized cell mean differences between ratings of male and female targets in each information condition. The correlation between the likability and the interpersonal hostility scales was  $-.59$ , the correlation between the likability and the boss desirability scales was  $.64$ , and the correlation between the interpersonal hostility and the boss desirability scales was  $-.35$ . Table 3 presents the means and standard deviations for each of the dependent measure scales. Chi-square tests were used to analyze participants' responses to the forced choice questions involving selection of which manager they

liked better and which manager they preferred as a boss. These frequencies are presented in Table 4.

### Likability

*Scale ratings.* Analysis of variance of participants' ratings on the likability scale revealed no significant main effects for the type of information provided,  $F(1, 69) = 2.03$ . There was, however, a significant effect for sex of target,  $F(1, 69) = 4.37, p < .05$  ( $\eta^2 = .06$ ), as well as a significant Sex of Target  $\times$  Type of Information interaction,  $F(2, 69) = 8.37, p < .005$  ( $\eta^2 = .20$ ).

Results of the paired comparisons between male and female targets supported our hypotheses. When no information was provided, participants rated the female manager as significantly less likable than the male manager,  $t(23) = 2.97, p < .01$ , but this was not the case when the source of communality was clear. In fact, as in Study 1, the participants in the clear communality condition rated the female target as significantly more likable than the male target,  $t(23) = 2.17, p < .05$ . When the source of communality was ambiguous, however, it did not have the same ameliorative effect as when it was clear. When provided with ambiguous communality information, participants saw the female target manager as less likable than the male target manager,  $t(23) = 2.75, p < .05$ .

*Comparative judgments.* When participants were asked whom they liked better, the male or the female manager, their responses supported our predictions. The female manager was selected significantly less frequently than the male manager not only in the no information condition,  $\chi^2(1, N = 24) = 12.00, p < .01$ , but also in the ambiguous communality condition,  $\chi^2(1, N = 24) = 7.04, p < .01$ . In the clear communality condition, however, there was no significant difference between the frequency with which the male and female managers were chosen,  $\chi^2(1, N = 23) = 0.33$ .

### Perceived Interpersonal Hostility

Analysis of variance of the interpersonal hostility ratings revealed a significant main effect for sex of target,  $F(1, 69) = 6.76$ ,

Table 3  
Study 2: Means and Standard Deviations for Dependent Measure Scales

Dependent measure scale	No added information		Clear communality information		Ambiguous communality information	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Likability						
Male target	6.02 <sub>acd</sub>	1.74	5.92 <sub>abc</sub>	1.73	6.12 <sub>ad</sub>	1.28
Female target	5.08 <sub>b</sub>	1.34	6.60 <sub>d</sub>	1.27	5.21 <sub>bc</sub>	1.71
Interpersonal hostility						
Male target	4.68 <sub>ac</sub>	1.58	4.26 <sub>ab</sub>	1.60	4.85 <sub>a</sub>	1.14
Female target	3.63 <sub>b</sub>	0.97	4.69 <sub>ac</sub>	1.14	4.04 <sub>bc</sub>	1.03
Boss desirability						
Male target	6.04 <sub>a</sub>	2.12	5.46 <sub>abc</sub>	2.28	5.71 <sub>abc</sub>	1.73
Female target	4.87 <sub>bc</sub>	1.80	5.96 <sub>ab</sub>	2.05	4.79 <sub>c</sub>	1.93

*Note.* All ratings were done on 9-point scales, and the higher the number, the more favorable (the more likable, the less interpersonally hostile, the more desirable as a boss) the rating.  $n = 24$  in each condition. Means for each dependent measure grouping that do not share subscripts differ significantly, as indicated by paired  $t$  tests for comparisons between male and female targets and by least significant difference tests for comparisons between information conditions.

Table 4  
*Study 2: Frequencies of Target Choices on Liking and Boss Preferences*

Preference	No added information		Clear communality information		Ambiguous communality information	
	Freq.	%	Freq.	%	Freq.	%
Liking						
Male target	18	75	11	46	16	70
Female target	6	25	13	54	7	30
Boss						
Male target	18	75	9	38	18	75
Female target	6	25	15	62	6	25

Note. Freq. = frequency.

$p < .05$  ( $\eta^2 = .09$ ), and a significant Sex of Target  $\times$  Information Condition interaction,  $F(2, 69) = 6.35$ ,  $p < .005$  ( $\eta^2 = .16$ ). No significant main effect for information condition was observed,  $F(2, 69) = 0.74$ .

Paired comparisons comparing ratings of the male and female manager in each information condition indicated that female managers were rated as more interpersonally hostile than male managers in the no information condition,  $t(23) = 3.47$ ,  $p < .01$ , but no more interpersonally hostile than the male managers in the clear communality condition,  $t(23) = 1.07$ , *ns*. Moreover, as we had predicted, participants in the ambiguous communality condition responded similarly to participants in the no information condition, rating female managers as more interpersonally hostile than male managers,  $t(23) = 2.42$ ,  $p < .05$ .

### Boss Desirability

*Scale ratings.* Analysis of variance of participants' ratings on the single-item scale assessing boss desirability revealed no statistically significant main effects for the sex of the target manager,  $F(1, 69) = 3.83$ , or for the type of information provided,  $F(2, 69) = 0.47$ . However, a significant effect was found for the Sex of Target  $\times$  Type of Information interaction,  $F(2, 69) = 3.70$ ,  $p < .05$  ( $\eta^2 = .10$ ).

Paired comparisons between male and female targets indicated that, as predicted, participants rated the female target manager as significantly less desirable as a boss than the male target manager when no added information was provided,  $t(23) = 2.93$ ,  $p < .01$ , but not when clear communal information was provided,  $t(23) = 1.07$ , *ns*. Although the difference in ratings of the male and female managers when the source of the communal information was ambiguous was not found to be statistically significant at the  $p < .05$  level, the trend was in the hypothesized direction,  $t(23) = 1.74$ ,  $p = .096$ .

*Comparative judgments.* The results of the chi-square analysis of participants' choices of the more desirable boss were similar to the comparative ratings regarding likability. As in Study 1, when asked whom they preferred as a boss, participants preferred the male manager significantly more often than female manager in the no information condition,  $\chi^2(1, N = 24) = 12.00$ ,  $p < .01$ . There was also a significant difference in selection of the male and female managers in the ambiguous communality condition,  $\chi^2(1, N = 24) = 12.00$ ,  $p < .01$ , in which male managers were again

selected more frequently. In the clear communality condition, however, there were no differences in the frequencies of male and female boss choices,  $\chi^2(1, N = 24) = 3.00$ .

### Discussion

The results of Study 2, like those of Study 1, indicate that the negativity produced by a woman's success in a male gender-typed job can be averted if there is information that the woman has engaged in communal behavior. However, the results also make clear that simply providing evidence that a woman has behaved in a communal manner is insufficient to counteract the detrimental effects of her success. Her communal behavior must be seen as a reflection of who she is, not as mere compliance with demands of the work setting, if it is to dampen the tendency toward negativity that we have demonstrated in this and the previous study. As the results indicate, simply verifying that a woman has displayed communal behavior does not ensure that she will be seen as an individual who has communal attributes.

However, what types of information lead to inferences of communal attributes? In Studies 1 and 2 we have provided behavioral information about a woman's communality and have found that it can lead to inferences that she is a communal person. However, information about communality can take forms other than reports of behavior. To explore the robustness of our findings, it is important to determine whether nonbehavioral forms of information about communality also can attenuate negative reactions to successful women. This is the focus of Study 3.

### Study 3

Lifestyle decisions are an important source of information about a woman's communality. In particular, the decision to have children is likely to imply communal attributes. Although the information it carries about communality is not as explicit as the report of actual behavior, the role of mother carries with it a set of inferences about selflessness, caring, and nurturing that are a central part of the communality construct. In this study, we sought to determine whether women who are clearly successful in male domains and also are known to be mothers induce less negative reactions compared with men than women who also are clearly successful but do not have children.



Suggesting that motherhood may mitigate negative reactions to highly successful working women may seem paradoxical because research evidence has repeatedly shown maternal status to lead to negative perceptions of a woman's competence and her commitment to her job (Cuddy, Fiske, & Glick, 2004; Williams & Segal, 2003). However, we are positing that in those instances when a woman's success is incontrovertible and her competence and commitment thus undeniable, information of maternal status will be helpful to her because it verifies her communality.

We therefore expected that when women who had been successful in male gender-typed jobs were also mothers, there would be less of a tendency to react negatively to them as compared with men than when they were not mothers. We did not expect parental status to affect reactions to successful men because the boost in communality perceptions that we expected to accompany parental status should not, any more than our communal information manipulations in the first two studies, be of consequence in their evaluations. Study 3 used the same research procedure as the first two studies, except that parental status was systematically varied. The dependent measures again included composite scales of likability, perceptions of interpersonal hostility, and the single-item assessment of desirability as a boss. We formulated the following hypothesis:

*Hypothesis:* Female managers who are successful in male gender-typed jobs will be disliked more, will elicit more negative interpersonal characterizations, and will be found less desirable as bosses than similarly successful male managers when information about parental status is not provided rather than when information about parental status is provided.

## Method

### Participants and Design

Participants included 46 male and female undergraduates recruited from an introductory psychology course who participated in exchange for partial fulfillment of course experimental participation requirements. The design was a  $2 \times 2$  mixed factorial with sex of the stimulus person (male or female) a within-subject factor and parental status information (no parental status information or information that the target has children) a between-subjects factor. Participants were randomly assigned to one of the parental status information conditions, and participants reviewed both a male and a female target.

### Procedure

The procedure and stimulus materials were the same as those used in Studies 1 and 2 except for the parental status manipulation, which is described in the following section.

### Parental Status Manipulation

The CEO's letter from the control conditions of Studies 1 and 2 was used in all conditions of Study 3. The parental status information was manipulated by the addition of a single sentence at the beginning of the last paragraph. In the condition that provided information that the manager had children, the additional sentence indicated that he or she was moving to the city with his or her children. Because respondents evaluated both a male and a female target manager, there were two versions of this statement, each assigned with equal frequency to the male and female manager. They

read as follows: "James [Andrea] plans to move to Chicago with his [her] two children in the next few weeks, and looks forward to meeting his [her] new staff" or "James [Andrea], his [her] son, and his [her] daughter, will be moving to the area in the near future." The no information about parental status condition memos simply left out mention of children. In all cases, there was indication that the manager was married.

### Dependent Measures

The dependent measures were identical to those used in the previous two studies, including composite measures of likability ( $\alpha = .81$ ) and interpersonal hostility ( $\alpha = .71$ ) and the single-item desirability as boss measure. Comparative judgments regarding likability and boss preferences were also collected. Although we could not directly ask participants to report whether the target managers had children without signaling our interest in the parenthood variable, we again included a communality measure to ensure that the participants interpreted our type of information manipulation as intended. Using the same measures as in Studies 1 and 2, we collected ratings of communality ( $\alpha = .90$ ) as well as agentism ( $\alpha = .79$ ) and competence ( $\alpha = .85$ ).

## Results

### Manipulation Checks

Analysis of variance of ratings on the communal scale indicated that our parental status manipulation had its intended effect. There was a significant main effect for parental status information,  $F(2, 66) = 3.45, p < .05$ , with managers who were described as having children ( $M = 5.71$ ) viewed as more communal than managers for whom no information regarding parental status was provided ( $M = 4.83$ ). Analysis of variance also indicated that there were no significant effects of our independent variables on agentism ratings or competence ratings and that, as in the earlier studies, managers in all conditions were viewed as highly competent, with cell means ranging from 7.68 to 8.27 on a 9-point scale.

### Data Analysis

Initial analyses revealed a significant main effect for participant sex on the boss desirability ratings,  $F(1, 43) = 6.67, p < .05$ , indicating that women were generally more favorable in their ratings than were men. However, there were no interaction effects involving participant sex, which indicated that the pattern of responses of men and women as a function of our independent variables did not differ, and therefore the responses of male and female participants were combined for subsequent analyses. Separate analyses of the choice data provided by male and female participants also showed no differences in pattern as a function of sex of the respondent, so the data of male and female participants were combined for subsequent chi-square analyses.

A MANOVA conducted on the three dependent measure scales (likability, interpersonal hostility, and boss desirability) indicated no significant main effects for parental status information,  $F(3, 42) = 1.96$ , or sex of target,  $F(3, 42) = 1.28$ , but a significant effect was found for the Sex of Target  $\times$  Parental Status interaction,  $F(3, 42) = 4.62, p < .01$ . Univariate analyses of variance were then conducted on each of the scales, and paired *t* tests were conducted to test the predicted differences between ratings of male and female targets in each information condition. The correlation between the ratings on the likability and interpersonal hostility

scales was  $-.54$ , the correlation between the likability and the boss desirability scales was  $.81$ , and the correlation between the interpersonal hostility and the boss desirability scales was  $-.53$ . Table 5 presents the means and standard deviations for each of the dependent measure scales. Chi-square tests were used to analyze participants' responses to the forced choice questions involving selection of which manager they liked better and which they preferred as a boss. These frequencies can be found in Table 6.

### Likability

*Scale ratings.* Analysis of variance of participants' ratings on the likability scale revealed no significant main effects for sex of target,  $F(1, 44) = 2.76$ . There was, however, a significant effect for parental status,  $F(1, 44) = 4.49, p < .05$  ( $\eta^2 = .09$ ), as well as a significant Sex of Target  $\times$  Parental Status interaction,  $F(1, 44) = 8.44, p < .01$  ( $\eta^2 = .16$ ).

Paired comparisons between ratings of male and female managers supported our hypotheses. They indicated that when no parental information was provided, participants rated the female target manager as significantly less likable than the male target manager,  $t(22) = 3.00, p < .01$ , but when information was provided that the manager had children, there was no difference in the likability ratings of the male and female manager,  $t(22) = 0.96$ .

*Comparative judgments.* The results of the chi-square analysis of participants' choice of the more likable manager were consistent with the results of the analyses of the liking ratings. In the no information condition, the choice of the female manager was significantly less frequent than the choice of the male manager,  $\chi^2(1, N = 22) = 5.82, p < .05$ . However, when the manager was said to have children, there was no significant difference in the frequency of the choice of the male and female managers,  $\chi^2(1, N = 23) = 0.78$ .

Table 5  
Study 3: Means and Standard Deviations for Dependent Measure Scales

Dependent measure scale	No parental status information		Target has children	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Likability				
Male target	6.26 <sub>a</sub>	1.34	6.41 <sub>a</sub>	1.22
Female target	5.30 <sub>b</sub>	1.80	6.67 <sub>a</sub>	1.19
Interpersonal hostility				
Male target	4.42 <sub>a</sub>	1.30	4.38 <sub>a</sub>	1.38
Female target	3.64 <sub>b</sub>	0.85	4.86 <sub>a</sub>	1.37
Boss desirability				
Male target	5.52 <sub>ab</sub>	1.93	6.04 <sub>a</sub>	1.52
Female target	4.96 <sub>b</sub>	2.18	6.22 <sub>a</sub>	1.51

*Note.* All ratings were done on 9-point scales, and the higher the number, the more favorable (the more likable, the less interpersonally hostile, the more desirable as a boss) the rating.  $n = 24$  in each condition. Means for each dependent measure grouping that do not share subscripts differ significantly, as indicated by paired  $t$  tests for comparisons between male and female targets, and by least significant difference tests for comparisons between parental status conditions.

Table 6  
Study 3: Frequencies of Target Choices on Liking and Boss Preferences

Preference	No parental status information		Target has children	
	Freq.	%	Freq.	%
Liking				
Male target	15	68	10	43
Female target	7	32	13	57
Boss				
Male target	14	64	10	43
Female target	8	36	13	57

*Note.* Freq. = frequency.

### Perceived Interpersonal Hostility

Analysis of variance of the interpersonal hostility adjective ratings revealed no significant main effects for sex of target,  $F(1, 44) = 0.40$ . Again, a significant main effect was found for parental status information,  $F(1, 44) = 4.37, p < .05$  ( $\eta^2 = .09$ ), as well as a significant Sex of Target  $\times$  Parental Status Information interaction,  $F(1, 44) = 7.22, p < .01$  ( $\eta^2 = .14$ ).

Paired comparisons of the ratings of the male and female manager in each parental status condition indicated that, as anticipated, when there was no indication of parental status, female managers were rated as more interpersonally hostile than male managers,  $t(22) = 2.47, p < .05$ , but when the managers were said to have children, the female managers were rated no differently in terms of interpersonal hostility than the male managers,  $t(22) = 1.39, ns$ .

### Boss Desirability

*Scale ratings.* Although the means fell in the predicted pattern (see Table 5), analysis of variance of participants' ratings on the boss desirability measure revealed no significant main effects for sex of manager,  $F(1, 44) = 0.382$ , and no significant interaction effect,  $F(1, 44) = 1.362$ . There was, however, a significant main effect for parental status information,  $F(1, 44) = 4.320, p < .05$  ( $\eta^2 = .09$ ), with parents rated as generally less desirable as bosses.

*Comparative judgments.* Despite the lack of support for our hypothesis about boss desirability in our rating measure, the forced choice boss preferences fell into the predicted pattern. When participants were asked whom they preferred as a boss, the choice of the female manager was significantly less frequent than the choice of the male manager in the no information condition,  $\chi^2(1, N = 22) = 4.26, p < .01$ . However, when managers were thought to have children, frequencies of choices between male and female managers did not differ from one another,  $\chi^2(1, N = 23) = 0.78, ns$ .

### Discussion

The results were consistent with those of the first two studies. In the absence of information about parental status, successful female managers were viewed far more negatively than identically described male managers. However, as hypothesized, information that the successful female manager was a mother, which created perceptions of her as a communal person, eliminated the negativity

directed at her. These data therefore lend additional support to the idea that the perceived deficit in communality drives negative reactions to women who are successful at traditionally male jobs. They also suggest that although motherhood has been shown to be so problematic for women seeking to advance their careers, when there is a perceived communality deficit, as appears to be the case with successful female managers, being a mother can be advantageous rather than disadvantageous for career-oriented women.

### General Discussion

The studies presented in this article replicate the findings of others, showing that women who are successful in male gender-typed domains are penalized for their success. They indicate that these women are decidedly more disliked and interpersonally derogated than identically described men and, in addition, that they are found to be less desirable as bosses. However, the studies also indicate that information that causes such women to be seen as communal appears to counteract these negative responses. The information provided must be of the sort that not just is favorable but also affects the perceptions of the successful woman's communal attributes (Study 1) and does not merely report the performing of communal behavior without verifying that the behavior's source is the woman herself (Study 2). Moreover, the information of communality need not be explicitly behavioral; it can be conveyed by a role inferred to require communal traits, such as motherhood (Study 3).

These results lend support to the idea that when women are successful in male domains, it is their violation of gender-stereotypic prescriptions that produces negative reactions to them. Their success and the agenticism that it entails apparently cause them to be seen as deficient in the feminine attributes mandated by gender stereotypes, and they are penalized as a result. Because the negative reactions to successful women are alleviated with evidence that they are, in fact, communal, our data suggest that these women's perceived violation of feminine "shoulds," not their taking on of masculine "should nots," underlies and fuels the penalties these women incur for their success.

Furthermore, although our results suggest that women who are believed to have behaved agentically are presumed to have violated prescriptive injunctions to be communal, they do not imply that this inference is inevitable or immutable. On the contrary, our results indicate that it is possible for women who are successful to be seen as both agentic and communal simultaneously. This finding is important and challenges the idea that being respected for task competence and being liked for interpersonal qualities are mutually exclusive reactions to individuals from stereotyped groups (Glick & Fiske, 1997).

It is important to point out once again that information of a woman's communality can be a double-edged sword. There is a great deal of literature attesting to the deleterious consequences of women being seen as communal rather than agentic because of the presumption of incompetence at supposedly male tasks that this stereotyped perception evokes (Heilman, 1995, 2001). Yet the research reported in this study suggests that when women's competence is beyond question, perceptions of communality may sometimes work in their favor, counteracting negative interpersonal responses and perhaps curtailing career-hindering reactions that have been found to ensue (Heilman et al., 2004). However,

because our dependent variables did not include actual personnel decisions, it is premature to make claims about possible effects on career advancement; it is conceivable that the favorable affective reactions are not accompanied by similarly favorable employment decisions. Needless to say, this potentially paradoxical effect of communality on evaluations of women is worthy of more study, as is the question of what types of information effectively communicate that a woman is communal.

It is interesting to note that although female participants occasionally demonstrated a tendency to be more lenient in their ratings than male participants, in none of our studies did male and female participants respond differently to the male or to the female manager as a consequence of the experimental manipulations. This finding, which is consistent with that of earlier studies (Heilman et al., 2004), suggests that women and men subscribe to the same normative gender prescriptions and enforce them in similar ways. It also attests to the power and universality of the prescriptive aspects of gender stereotypes in our culture.

In both Study 1 and Study 2, there was an apparent augmentation in the likability ratings of the successful women about whom unambiguous communal information was provided. In contrast to the negative reactions to the women about whom no communal information was supplied, participants rated the communal female manager as even more likable than her male counterpart. This bias toward favorability might have been brought about by the sharp contrast between observation and stereotypical expectations (Feldman, 1981; Weber & Crocker, 1983), by the perception that our successful women who also were communal were truly extraordinary, or, more simply, by the belief that women who are normatively appropriate and have feminine attributes are inherently more likable than men—the "women are wonderful" effect reported by Eagly and Mladinic (1989; Eagly, Mladinic, & Otto, 1991). These possible explanations can only be disentangled by future research.

Further research should also address the question of whether men, too, are penalized for success that violates gender norms. If they are, which we suspect to be the case, it would be because they violate gender prescriptions to be agentic. Therefore, the negative consequences of disapproval are likely to take a different form than those for women who violate gender norms. Moreover, the type of information needed to combat the negativity also might differ. Research addressing these questions is currently underway.

There are limitations of the present research that should be noted. First, the use of paper-and-pencil stimulus materials in these three studies, although it allowed us to test the role of prescriptive stereotypes in a controlled manner, limits the degree to which conclusions can be drawn about how people react to successful women in actual work situations. There is no question that participation in the research session lacked the richness and intricacies of involvement in an actual organizational setting and in true-life relationships and that the questions we address in this study need to be explored further in a field setting where work relationships are of consequence and more textured information about coworkers is readily available. Moreover, because our participants were put into the role of potential subordinates, it is important to determine whether there are similar reactions on the part of those who are organizationally senior to the successful female manager. In addition, although many of the undergraduate participants were soon to be entry-level employees themselves and although assessment of the participant pool indicated that 91% of them had

worked for more than a 1-year period (with an average of 3.4 years), they still might not have had the organizational experience that would ensure that their responses were representative of people in work settings. Therefore, it is also important to test out these ideas using a sample of working people. Thus, although we have demonstrated that the penalties women incur for being successful in male-dominated areas can, under some circumstances, be mitigated by communality information, specification of when, for whom, and under what conditions this occurs remains to be determined.

Nevertheless, the potential implications of our results for women in the workplace are highly provocative. They suggest that if the assumptions arising from women's success in male-dominated fields are counteracted with evidence of communality, negativity directed at these women can be averted. Thus, the results may help explain why some women are not burdened with the pernicious and potentially career-limiting consequences of treading where they are believed not to belong. However, the results also starkly highlight that the path up the organizational ladder can be replete with potential minefields for women who are striving to reach the upper echelons of power and authority. Doing what men do, as well as they do it, does not seem to be enough; women must additionally be able to manage the delicate balance of being both competent and communal.

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