

A Closer Look Beneath the Surface: Various Facets of the Think-Manager–Think-Male Stereotype

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Previous research has indicated that successful managers are perceived as possessing characteristics that belong to a global masculine stereotype. This study was designed to compare the gender-stereotypical perception of leadership by investigating global and leadership-specific gender stereotypes and contrasting self-perception and the perception by others. Descriptive and prescriptive norms were analyzed and abilities studied in a leadership context. The sample consists of 215 management students, and the results indicate an impact of gender stereotypes on the perception of leadership by women and men. Ratings of the importance of leadership characteristics yielded a less gender-stereotypic view, especially by female participants. In their self-evaluations women and men did not differ in the degree in which they possess person- and task-oriented skills. They also did not differ in their ratings of the importance of possessing these skills themselves. Finally, women reported that they possess task-oriented abilities more seldom than such abilities were attributed to leaders-in-general.

KEY WORDS: gender stereotypes; leadership; career.

Previous research has indicated that women are underrepresented in management positions in comparison to men all over the world (for an overview, see Schein, 2001). A low rate of upward movement of women within the managerial ranks can be observed (Powell, 1999). Estimates report proportions of only around 10% of women in management positions (e.g., for Germany and Europe: Dienel, 1996; for the U.S.A.: Deal & Stevenson, 1998; for an overview, see Eagly, in press). This phenomenon is called the “glass ceiling” to describe a barrier so subtle that it is transparent yet so strong that it prevents women and minorities from moving up in the management hierarchy (Morrison & von Glinow, 1990). Gender stereotypes can be conceived as one possible explanation for this phenomenon. The aim of the present study was to analyze the think-manager–think-male stereotype in a multifaceted way, including examinations of

global and leadership-specific gender stereotypes by directly assessing two different managerial qualities, examinations of self-perception and the perception by others, and examinations of descriptive and prescriptive aspects of stereotyping.

GENDER STEREOTYPES AND LEADERSHIP ATTRIBUTION

Stereotypes about women and men are based on observations of their behaviors in gender-typical social roles (e.g., breadwinner, homemaker) and contain consensual beliefs about the attributes of women and men (Eagly, 1987). Research has consistently demonstrated that men are generally seen as more agentic and more competent than women, whereas women are seen as more expressive and communal than men (e.g., Diekmann & Eagly, 2000; Williams & Best, 1982). Two types of expectations or norms have been described in previous research (e.g., Burgess & Borgida, 1999; Fiske & Stevens, 1993). Descriptive norms are beliefs about what women and men actually do, and prescriptive norms are beliefs about what members of

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both social groups ought to do. One area in which gender stereotypes manifest themselves is the attribution of leadership abilities (Heilman, 2001).

In her early research, Schein (1973, 1975) examined the social image of successful middle managers in U.S. samples. She found that the attributes ascribed to managers yielded a significantly higher correlation with the description of a typical man than with that of a typical woman. The phenomenon of *think-manager–think-male* has been confirmed in many subsequent studies; thus management is still associated with men (e.g., Brenner, Tomkiewitz, & Schein, 1989; Heilman, Block, & Martell, 1995; Powell & Butterfield, 1979; Powell, Butterfield, & Parent, 2002; Willemsen, 2002). Schein extended her research on cross-cultural comparisons that indicated that the impact of gender stereotypes on the perception of leadership can also be observed in different cultures: in Germany, the United Kingdom (Schein & Mueller, 1992), China, and Japan (Schein, Mueller, Lituchy, & Liu, 1996). In her more recent research, Schein (2001) observed a shift in the perception of leadership toward a more androgynous view (by female managers and students of management in the United States).

Researchers have identified perceivers' gender as a moderating variable in the evaluation of men's and women's leadership abilities. Men evaluated women more negatively than men, whereas women rated both sexes in a balanced way (e.g., Eagly, Makhijani, & Klonsky, 1992). Deal and Stevenson (1998) found that male and female college students had similar perceptions of prototypical managers and male managers, whereas male students were more likely than female students to have negative views of female managers (ratings were based on the Schein Descriptive Index; Schein, 1973). The male students were less likely than the female students to describe female managers as ambitious, competent, intelligent, objective, and well-informed and more likely to describe them as easily influenced, nervous, passive, having a strong need for social acceptance, and uncertain. Some studies of the think-manager–think-male phenomenon also showed that women did not associate the image of a successful leader primarily with men (e.g., Brenner et al., 1989). On the basis of the less gender-stereotypic view of leadership observed among women (to a differing degree in different countries), Schein (2001) suggested that the responses of women may serve as a "barometer of change."

Heilman (1983) suggested that expectations about the success of an individual are determined by the fit of the perception of an individual's attributes

and the perception of the job's requirements in terms of skills and abilities. She described a divergence as "lack of fit." For organizational jobs that are typically associated with men, such as leadership positions, a lack of fit was proposed between the perceived requirements of the job and the abilities typically attributed to women as a group. Such a lack of fit was assumed to be responsible for gender-biased judgments or behaviors. Prejudice against female leaders occurs especially in situations that intensify perceptions of incongruity between the feminine gender role and leadership roles. In their role congruity theory, Eagly and Karau (2002) proposed two forms of prejudice toward female leaders. The first type consists of the less favorable evaluation of women's potential for leadership than that of men's potential. It stems from the activation of descriptive beliefs about women's characteristics and the consequent ascription of feminine-stereotypic qualities to women, which are unlike the qualities expected or desired in leaders. The second type consists of the less favorable evaluation of the actual leadership behavior of women than that of men, which is derived from prescriptive norms. When women break through the glass ceiling to occupy leadership roles, they are in danger of biased evaluations that originate from their nonconformity to the cultural definitions of femininity. In the context of leadership, women's violation of the traditional gender role can result in the dilemma of either being "too feminine or too masculine."

GENDER DIFFERENCES IN LEADERSHIP ABILITIES

Gender differences in traits, skills, and behavior do not only exist in the eye of the beholder. In their biosocial model of the origins of gender differences, Eagly and Wood (Eagly, 1987; Wood & Eagly, 2002) explained the existing differences with reference to the distribution of women and men into social roles within society. Gender stereotypes represent "dynamic constructs" because role behavior shapes their contents; the feminine stereotype was found to be particularly dynamic, because of greater changes in the recent past in the roles of women than in those of men (Diekmann & Eagly, 2000). For example, Twenge (1997) observed a decrease of gender differences over a 20-year period (1973–93) in masculine and feminine traits. Women increasingly reported that they possessed masculine-stereotyped traits, whereas men showed no changes regarding feminine-stereotyped

traits, that is, their nonendorsement of these traits continued. A smaller number of women than men have had the opportunity to acquire leadership abilities in leadership positions. In contrast to men, women may have internalized the traditional contents of their gender role, which resulted in social different identities with respect to their workplaces (e.g., Ely, 1995).

Nevertheless, recent meta-analytical research with respect to selected core leadership traits indicated an increasing similarity between women and men: In many recent samples, Twenge (2001) found no gender differences in assertiveness. Women and men described themselves as similarly assertive and dominant. Twenge concluded that “women’s assertiveness varies with their status and roles. Social change is thus internalized in the form of a personality trait” (p. 133).

RESEARCH QUESTIONS AND HYPOTHESES

The aim of this study is an analysis of various facets of the think-manager–think-male stereotype. First, in previous studies of gender stereotypes, leadership perceptions were usually assessed using items of general personality traits. These instruments mainly contain global traits of the masculine stereotype, that is, instrumentality (e.g., athletic, individualistic), and of the feminine stereotype, that is, expressiveness (e.g., gentle, child-loving; see Bem, 1974; Schein, 1973; Spence, Helmreich, & Stapp, 1974). Such characteristics can be seen as irrelevant or even misleading in the context of leadership. In leadership research, an analogous dichotomy of leadership characteristics can be found. For example, a differentiation between “initiating structure” and “consideration” is common (for an overview, see Schriesheim, Coglisier, Neider, Fleishman, & James, 1998). Cann and Siegfried (1990) examined the relationship between those two types of leadership styles on the one hand and feminine and masculine behaviors on the other. The results showed that consideration is perceived as more feminine and initiating structure is perceived as more masculine. As an alternative to the more prevalent gender-role-oriented inventories, the influence of gender stereotypes on leadership specific abilities was analyzed.

Whereas previous research has focused on the comparison of *global gender stereotypes* (women and men as stimulus groups) with the perception of *leaders in general*,³ that is, without gender specification,

in the present study also *gender-specific leadership roles* (female and male leaders as stimulus groups) were analyzed (see Heilman et al., 1995), assuming that traditional global gender stereotypes are here also effective (e.g., Deal & Stevenson, 1998). The perception of women’s leadership in contrast to men’s should not be predominately associated with being male, as previous investigations have indicated (for an overview, see Schein, 2001). Thus substantial differences are not expected in women’s perception of women, men, female leaders, and male leaders as compared to leaders-in-general. In contrast, men are expected to ascribe person-oriented skills to a greater extent and task-oriented skills to a lesser extent to women/female leaders than to leaders-in-general, which indicates a more gender-stereotypic view of leadership; thus, they should not differentiate between men/male leaders and leaders-in-general (Hypothesis 1). Most previous research on the think-manager–think-male stereotype has focussed on descriptive norms regarding leadership abilities. Eagly and Karau (2002) emphasized that both kinds of expectations, that is, descriptive and prescriptive norms, have to be taken into consideration because both have implications for the development of prejudice against female leaders. Thus both kinds of expectations were analyzed in the present study, and the prediction of Hypothesis 1 should hold for descriptive as well as prescriptive norms.

Second, on the basis of the idea of gender stereotypes as dynamic constructs and the recently observed changes in the self-images of women in global personality traits and assertiveness (Diekmann & Eagly, 2000; Twenge, 1997, 2001), women should report that they possess task-oriented skills to the same extent as men and person-oriented skills to a greater extent than men do. Thus an analogous change of women’s self-view of leadership competence was assumed, whereas no change in men’s self-view was expected to be observed, that is, their nonendorsement of feminine-typed (person-oriented) traits for themselves should be confirmed (Hypothesis 2). Again this prediction should hold for descriptive as well as prescriptive norms.

Finally, there are two separate lines in previous research: one on the perception of leadership abilities by others (e.g., Schein, 1973, 2001; some designs include self-evaluations as a within-participant factor:

managers as in other studies, because the aim of this study was to analyze stereotypes regarding the whole social group and not specific subgroups.

³The respective comparison term “leaders in general” contained no evaluative component such as “successful” or “good”

e.g., Powell et al., 2002) and one on the self-perception of such abilities (e.g., Deaux, 1979; Twenge, 2001). These two lines do not allow for a direct comparison because their results were based on different samples/populations and materials. Thus, the question of whether there is a lack of fit between the perception of leadership by others and the self-evaluation of women remains unanswered. For this reason, this study was designed to allow a direct comparison of self-perception and perception by others. The self-evaluations of women and men were contrasted with the evaluation of leaders by others. Women were expected to report that they possess person-oriented skills more often and task-oriented skills less often than these skills are ascribed to leaders-in-general by others (descriptive norms; Hypothesis 3a). No such differences were expected for men. Taking the recent changes in gender roles into account (Diekmann & Eagly, 2000; Twenge, 1997, 2001), women are expected to value the importance to possess person- and task-oriented skills to the same extent that these skills are valued as important for leaders-in-general. Similarly, men should not differ in their self-perception from the description of leaders-in-general by others (prescriptive norms; Hypothesis 3b).

METHOD

Design

Management students of both sexes were asked to estimate the percentage to which one of the six stimulus groups/persons "leaders-in-general" (no gender specification), "women," "men," "male leaders," "female leaders," or "self" (between-participants factor) possess two types of leadership characteristics, namely, person-oriented and task-oriented skills (descriptive norms). Furthermore, they were asked to rate the importance of these characteristics for the respective group or themselves (prescriptive norms).

Participants

As in most former studies (e.g., Dodge, Gilroy, & Fenzel, 1995; Schein, 1973; Schein, Mueller, & Jacobson, 1989) the sample consisted of management students; a similar pattern of attitudes between management students and corporate managers has been ascertained (see Schein, 2001). The sample consisted of 215 management students (92 women and 123 men) from the University of Kiel, Germany. They ranged

in age from 19 to 34 years ($M = 24.4$). About 50% of them had completed their professional training, mainly in banks or insurance companies. Participants were randomly assigned to the experimental conditions. Their participation was voluntary. As a reward, participants were entered into a raffle to win a sum of 50 euro.

Materials

Independent Variables

Regarding the independent variable "Stimulus Group/Person," questionnaires concerned leaders-in-general (no gender specification; $n = 36$), women ($n = 37$), men ($n = 37$), female leaders ($n = 36$), male leaders ($n = 39$), and self-evaluation ($n = 30$). For every stimulus condition men and women participated in nearly equal numbers. The independent variable "Sex of Participant" was requested at the beginning of the questionnaire.

Dependent Variables

Participants had to evaluate a particular group/themselves with regard to leadership characteristics. Leadership-specific characteristics served as dependent variables. The selection of these characteristics was based on a pretest conducted with an independent sample of 30 participants. To create a pool of items, 60 characteristics were taken specifically from previous studies on leadership (e.g., Jeserich, 1989; Kirkpatrick & Locke, 1991) and from job advertisements in German newspapers. The participants evaluated the characteristics for comprehensibility and relevance for effective leadership behavior. Characteristics that were rated as not comprehensible or not important in the context of leadership were removed. To reduce the item pool, synonyms were identified (e.g., self-assertive and tough), and only one such attribute was selected for the final questionnaire. Moreover, participants had to decide whether the respective characteristic represents a task- or a person-oriented skill. For the final version of the questionnaire, 20 person-oriented and 20 task-oriented leadership characteristics were selected. The task-oriented skills were determination, successful self-presentation, authority, self-discipline, negotiation skills, readiness to take risks, ambition, ability to cope with stress, self-initiative, diligence, ability to delegate, competitiveness, ability to

organize, self-confidence, innovative thinking, striving for power, objectivity, self-assertiveness, persuasiveness, and career orientation. The person-oriented skills were ability to make good judgments, flexibility, ability to cooperate, ability to solve problems, creativity, fairness, ability to deal with conflicts, intuition, sense of responsibility, ability to work in teams, ability to motivate others, trustworthiness, empathy, openness, communicative manner, balance, consideration, modesty, attractive appearance, tolerance, and ability to admit one's own errors.

To measure descriptive norms, respondents were asked to what extent individual leadership characteristics can be ascribed to all members of a certain group. However, a corresponding pretest indicated that the respondents found it difficult to answer such an abstract question. Therefore it was decided to measure the descriptive norm with the following question (item example "leaders-in-general"): In your opinion, what percent of all leaders possess this characteristic? (percentage estimates). Each question had to be answered on a scale from 0 to 100% (in decadic steps). In the self-evaluation group, participants indicated whether they possessed the given characteristics or not, to avoid the forced-choice character of a *yes/no* answer, four categories were offered: *no* (1), *rather no* (2), *rather yes* (3), or *yes* (4). Although prescriptive norms can probably be measured most efficiently by asking how members of certain groups should be, the pretest indicated that respondents were unwilling to answer such questions. To avoid having participants stop their participation or answer in a socially desirable manner, a less explicit measure was chosen in terms of approximation to prescriptive norms: "How important do you find this characteristic to be for a leader?" (importance ratings). These questions were to be answered on a 7-point rating scale that ranged from 0 (*not at all important*) to 6 (*extremely important*). The participants in the self-evaluation group indicated to what extent they considered the respective characteristics to be important to possess themselves. To avoid order effects, the position of characteristics and the position of percentage estimates and importance ratings were rotated to result in four different versions.

The respective 20 characteristics were combined into the following four reliable scales: "Percentage estimates—Person-oriented skills" ($\alpha = .91$), "Percentage estimates—Task-oriented skills" ($\alpha = .89$; scores ranged from 0 to 100%), "Importance ratings—Person-oriented skills" ($\alpha = .81$), and "Importance ratings—Task-oriented skills" ($\alpha = .86$). The corre-

lations between the respective person-oriented and task-oriented scales were weak (percentage estimates: $r = .10$; importance ratings: $r = .27$).

Participants in the stimulus group "leaders-in-general" were also asked which group they had imagined while answering the questionnaire: male leaders, both male and female leaders, or female leaders.

Procedure

Participants were queried at the end of three economics classes and asked for demographic data such as age, sex, subject of study, and professional training before they were requested to evaluate the particular stimulus group/person. The instructions for the questionnaire contained the following cover story:

Over the last 10 years, the effective selection of leaders has been much discussed in research as well as in practice. Here, the question of relevant personality characteristics has been raised again and again. The following questionnaire is designed to assist in answering the question of which personal characteristics and behaviors are relevant in a leadership context. As a future manager, your participation is very important to us. We are very interested in your personal opinion on this topic.

After completion of the questionnaire, participants were questioned about the cover story and the hypotheses of the experiment. None of the participants were able to guess the hypotheses. Finally, participants were debriefed.

RESULTS

The Image of Leaders-In-General

Participants who completed questionnaires concerning leaders-in-general (no gender specification) imagined male leaders in 55.6% of the cases, and both male and female leaders in 44.4%; no participant conceived of leaders only as female leaders. Female and male participants did not differ in their answers, $\chi^2 = 0.21$, $df = 1$, $p > .10$.

Leaders-in-general were more often attributed with task-oriented skills than with person-oriented skills, $M = 65.9\%$ versus $M = 45.9\%$, $t(35) = -11.27$, $p < .001$. Women and men did not differ in their attributions, $F(1, 34) = 0.92$, $p > .34$. Task- and person-oriented skills were

Table I. Global Comparisons: Percentage Estimates and Importance Ratings of Person-Oriented and Task-Oriented Skills: Means by Sex of Participant and Stimulus Group and *F* Tests of the Four ANOVAs

	Stimulus group			<i>F</i> tests		
	Leaders-in-general	Women	Men	Sex of participant	Stimulus group	SP × SG
<i>Percentage estimates</i>						
Person-oriented skills						
Sex of participant				0.33	26.46***	0.56
Male	46.2	57.5	43.8			
Female	45.4	61.4	43.9			
Both sexes	45.9	59.2	43.8			
Task-oriented skills						
Sex of participant				0.95	24.99***	0.76
Male	64.8	50.1	54.7			
Female	67.5	48.8	58.9			
Both sexes	65.9	49.5	56.5			
<i>Importance ratings</i>						
Person-oriented skills						
Sex of participant				6.77*	3.91*	1.23
Male	4.16	4.24	4.41			
Female	4.52	4.28	4.70			
Both sexes	4.31	4.26	4.54			
Task-oriented skills						
Sex of participant				23.08***	8.44***	7.89***
Male	4.08	3.27	3.78			
Female	4.40	4.30	3.88			
Both sexes	4.22	3.72	3.82			

Note. $N = 110$.

* $p < .05$; *** $p < .001$.

valued as similarly important for leaders-in-general, $M = 4.22$ versus $M = 4.31$, $t(35) = 0.89$, $p > .37$. Women and men did not differ in their attributions, $F(1, 34) = 0.05$, $p > .82$.

Global Comparisons: Evaluations of Women, Men, and Leaders-In-General

Regarding the global comparisons, four 3 (stimulus group: women, men, and leaders-in-general) × 2 (sex of participant: female and male) univariate analyses of variance were conducted with participants' percentage estimates and importance ratings of types of leadership skills as dependent variables (see Hypothesis 1). All means and *F* values of the four analyses are reported in Table I. Furthermore, the respective a priori contrasts were calculated.

Percentage Estimates

Both male and female participants attributed women with the possession of *person-oriented skills* more often and *task-oriented skills* less often than leaders-in-general (a priori contrasts: both $ps < .05$),

whereas the estimations of both types of skills did not differ for men and leaders-in-general: person-oriented skills, $F(2, 104) = 26.46$, $p < .001$; task-oriented skills, $F(2, 104) = 24.99$, $p < .001$. Figure 1 displays the means for both effects of "Stimulus Group."

Importance Ratings

Male participants did not value *person-oriented skills* as more important for women than for leaders-in-general as predicted in Hypothesis 1. Instead, male and female participants valued person-oriented skills as more important for men than for leaders-in-general; $F(2, 104) = 3.91$, $p < .05$; a priori contrast: $p < .05$.⁴ In accordance with Hypothesis 1, *male participants* ascribed a lower importance of *task-oriented skills* to women than to leaders-in-general (a priori contrast: $p < .05$), whereas they did not differ between men and leaders-in-general (a priori contrasts: $p > .10$). *Female participants* did not differ between

⁴Furthermore, female participants evaluated person-oriented skills as more important than did male participants, $M = 4.50$ versus $M = 4.27$, $F(1, 104) = 6.77$, $p < .05$ (see Table I).

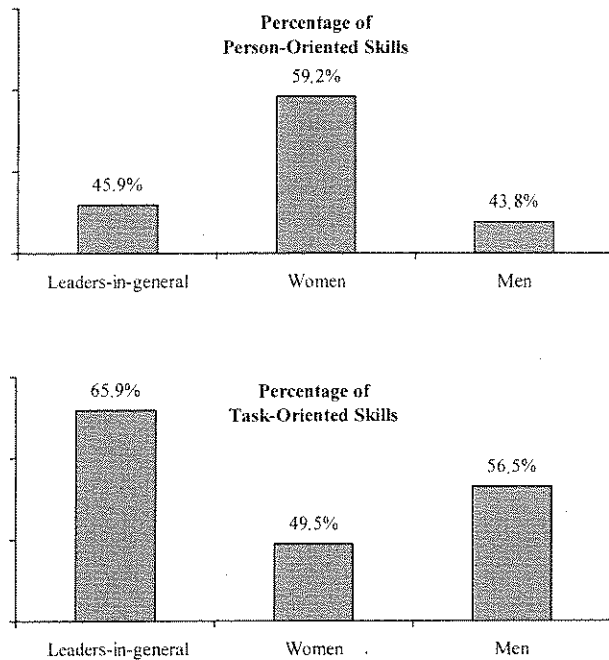


Fig. 1. Global comparisons. Means for the main effects of stimulus group on the percentage estimates for person- and task-oriented leadership skills.

women and leaders-in-general (a priori contrast: $p > .10$). Moreover, they valued task-oriented skills as less important for men than for leaders-in-general (a priori contrast: $p < .05$).⁵

Specific Comparisons: Evaluations of Female Leaders, Male Leaders, and Leaders-In-General

Regarding the specific comparisons, four 3 (stimulus group: female leaders, male leaders, and leaders-in-general) \times 2 (sex of participant: female and male) univariate analyses of variance were conducted with participants' percentage estimates and importance ratings of types of leadership skills as dependent variables (see Hypothesis 1). All means and F values of the four analyses are reported in Table II. Furthermore, the respective a priori contrasts were conducted.

⁵In addition, female participants evaluated task-oriented skills as more important than did male participants, $M = 4.19$ versus $M = 3.71$, $F(1, 104) = 23.08$, $p < .001$. Participants ascribed a lower importance of task-oriented skills to women ($M = 3.72$) as well as to men ($M = 3.82$) compared to leaders-in-general ($M = 4.22$), $F(2, 104) = 8.44$, $p < .001$; both a priori contrasts: $p < .001$ (see Table I).

Percentage Estimates

Male and female participants estimated that female leaders possess *person-oriented skills* more often and *task-oriented skills* less often than leaders-in-general (a priori contrasts: both $ps < .05$), whereas the estimations of both types of skills did not differ for male leaders and leaders-in-general: person-oriented skills, $F(2, 105) = 27.05$, $p < .001$; task-oriented skills, $F(2, 105) = 4.52$, $p < .05$. Figure 2 shows the means for both effects.

Importance Ratings

Male participants did not differ significantly in the ascribed importance of *person-oriented skills* to female leaders and male leaders in contrast to the evaluation of leaders-in-general (a priori contrasts: both $ps > .10$), but the pattern reflected the predicted direction (see Hypothesis 1). Female participants rated person-oriented skills as less important for female leaders than for leaders-in-general (a priori contrast: $p < .05$), whereas they did not differ between male leaders and leaders-in-general, $F(2, 105) = 3.08$, $p = .05$. The analysis on the importance ratings for *task-oriented skills* revealed no significant effects.

Self-Evaluations of Women and Men

Women were expected to report that they possess and think are important to possess task-oriented skills to a similar extent and person-oriented skills to a greater extent than men do (see Hypothesis 2). Therefore, four ANOVAs were conducted with the independent variable "Sex of Participant" and the respective self-evaluations of task- and person-oriented skills as dependent variables, that is, to what degree they possessed the given characteristics (scores ranging from 1 = no, 2 = rather no, 3 = rather yes, to 4 = yes) and how important they rated the given characteristics for themselves (scores range from 0 = not at all important to 6 = extremely important).

Reported Skills

As predicted in Hypothesis 2, female participants reported that they possess more *person-oriented skills* than male participants did, $M = 3.22$ versus $M = 2.98$, $F(1, 28) = 5.13$, $p < .05$. Women and men did not differ in the degree to which they reported

Table II. Specific Comparisons: Percentage Estimates and Importance Ratings of Person-Oriented and Task-Oriented Skills: Means by Sex of Participant and Stimulus Group and *F* Tests of the Four ANOVAs

	Stimulus group			<i>F</i> tests		
	Leaders-in-general	Female leaders	Male leaders	Sex of participant	Stimulus group	SP × SG
<i>Percentage estimates</i>						
Person-oriented skills						
Sex of participant				0.07	27.05***	0.46
Male	46.2	59.4	45.3			
Female	45.4	62.6	44.4			
Both sexes	45.9	60.7	44.9			
Task-oriented skills						
Sex of participant				0.83	4.52*	0.22
Male	64.8	58.7	66.2			
Female	67.5	61.3	66.2			
Both sexes	65.9	59.7	66.2			
<i>Importance ratings</i>						
Person-oriented skills						
Sex of participant				2.04	.055	3.08*
Male	4.16	4.37	4.23			
Female	4.52	4.14	4.56			
Both sexes	4.31	4.28	4.36			
Task-oriented skills						
Sex of participant				0.83	0.54	1.92
Male	4.08	4.25	4.24			
Female	4.40	4.33	4.10			
Both sexes	4.22	4.28	4.18			

Note. $N = 110$.

* $p < .05$; *** $p < .001$.

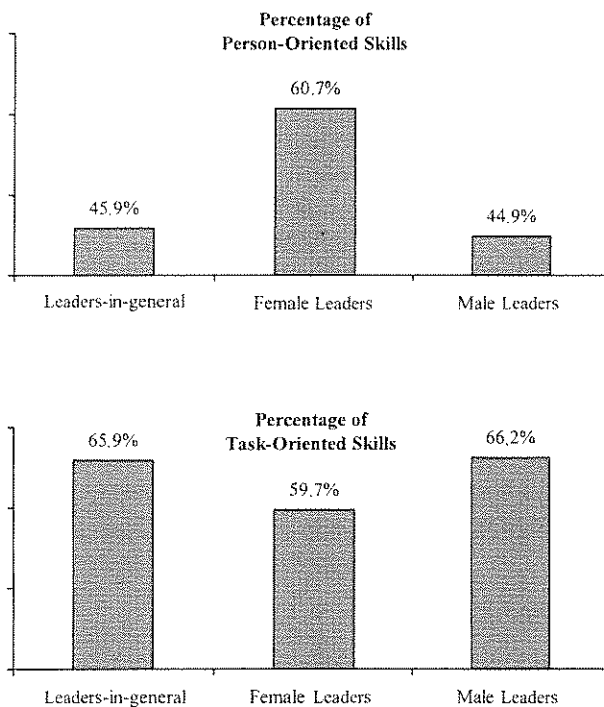


Fig. 2. Specific comparisons. Means for the main effects of stimulus group on the percentage estimates for person- and task-oriented leadership skills.

that they possess *task-oriented skills*, $M = 2.78$ versus $M = 2.87$, $F(1, 28) = 0.42$, $p > .52$.

Importance Ratings

Also as predicted in Hypothesis 2, female and male participants rated the importance of possessing *person-oriented skills* to a similar degree, $M = 4.64$ versus $M = 4.32$, $F(1, 28) = 2.41$, $p > .13$. Contrary to the hypothesis, they also rated the importance of task-oriented skills to a similar degree, $M = 4.15$ versus $M = 4.42$, $F(1, 28) = 1.27$, $p > .27$.

Self-Evaluations of Women and Men Versus Evaluations of Leaders-In-General by Others

Finally, the self-evaluations of leadership skills of female and male participants were contrasted with the evaluations of leadership by others.

Percentage Estimates/Percentage

Women were expected to report that they possess person-oriented skills more often and task-oriented

skills less often than these skills are ascribed to leaders-in-general by others; no such differences were expected for men (Hypothesis 3a). For this reason, four one-sample *t* tests were each conducted on the percentage estimates of leaders-in-general and the group mean of the percentage of female or male participants who had indicated that they possessed person- or task-oriented skills (applied categories 3 = *rather yes* and 4 = *yes*). Contrary to the hypothesis, both female (87%) and male participants (75.3%) indicated that they possess *person-oriented skills* more often than such skills were attributed to leaders-in-general by others (45.9%), $t(35) = -21.29, p < .05$; and $t(35) = -15.24, p < .001$, respectively. In line with the hypothesis, female participants (62.7%) indicated that they possess *task-oriented skills* less often than such skills were attributed to leaders-in-general by others (65.9%), $t(35) = 1.67, p = .05$. Male participants (66.7%) did not differ significantly in their self-evaluation from the evaluation of leaders-in-general by others, $t(35) = -0.42, p > .68$.

Importance Ratings

Women and men were expected to rate the importance of possessing person- and task-oriented skills to the same extent that these skills are ascribed to leaders-in-general. Therefore two ANOVAs with the independent variable "Stimulus Group/Person" (leaders-in-general, self-evaluation of female participants, and self-evaluation of male participants) were conducted. Both ANOVAs revealed no significant effects: person-oriented skills, $F(2, 63) = 2.11, p = .13$; task-oriented skills, $F(2, 63) = 0.91, p > .40$.

DISCUSSION

This study allows a closer look beneath the surface of the think-manager–think-male stereotype. This has been accomplished by using a different approach that increases the reliability and overcomes certain limitations of previous studies by investigating global and leadership-specific gender stereotypes, contrasting perception by others and self-perception, analyzing descriptive and prescriptive norms, and studying skills and abilities that are relevant in a leadership context.

Men were expected not to differentiate between men/male leaders and leaders-in-general and to ascribe person-oriented skills to a greater extent and

task-oriented skills to a lesser extent to women/female leaders than to leaders-in-general (see Hypothesis 1). Contrary to the hypothesis the evaluations by women also indicated a gender-stereotypic view of leadership regarding the ascribed percentage estimates of leadership abilities (descriptive norms). The pattern of specific comparison (female and male executives as stimulus groups) was similar to the global one (women and men as stimulus groups). Altogether these findings support the idea that the traditional feminine gender/leadership role and leadership roles are incongruent (see Eagly & Karau, 2002; Heilman, 1983). Men and male executives showed a better "fit" with "executives in general." These findings are relevant to everyday judgments because such descriptive norms might be caused by mainly automatic processes of which the judging person is normally not aware (e.g., Banaji & Hardin, 1996). Simultaneously, as expected, the results regarding the importance ratings support a less gender-stereotypical view of gender and leadership roles. Although male participants were more prone to share traditional expectancies for the prescriptive norms of global gender roles (lower importance of task-oriented skills in women), they did not see a difference in the importance of the various leadership skills for female and male leaders, which suggests a more androgynous view of leadership roles. In contrast, the evaluations by female participants indicated a more androgynous view of gender as well as of leadership roles (see, e.g., Schein, 2001).

As predicted, women reported that they possess more person-oriented skills than men did regarding their self-evaluation. Both sexes reported that they possess task-oriented skills, and rated the possession of person- and task-oriented skills to a similar extent as important (see Hypothesis 2). The ascribed differences regarding person orientation between women/female leaders and men/male leaders/leaders-in-general in the social perception by others correspond to the self-perception of women. The lesser extent of task orientation ascribed to women/female leaders by others did not match the self-perception of the female participants. On the one hand, this result reflects the decrease of gender differences in global personality traits as observed by Twenge (1997), that is, that women increasingly reported possessing masculine-stereotyped traits, whereas men showed no changes regarding feminine-stereotyped traits. On the other hand, it shows that the impact of gender stereotypes on the perception of leadership by others (both men and women) can still be observed.

By bringing together the perception of leadership abilities by others and the self-perception of such abilities, the results of this study bring another lack of fit to light. As predicted, female students indicated that they possess task-oriented skills less often than such skills were attributed to leaders-in-general by others (see Hypothesis 3a; contrary to the prediction, both sexes reported that they possess person-oriented skills more often than these skills were attributed to leaders-in-general by others). On the one hand, this self-perception of female students probably reflects a realistic view of their task-oriented competencies. Because of fewer opportunities to acquire leadership abilities in their early stages of professional socialization, women may have internalized the traditional contents of their gender role (e.g., Ely, 1995). On the other hand, perhaps women are more modest or less sure of themselves rather than less skilled (e.g., Janoff-Bulman & Wade, 1996). Developing a leadership role presumably violates prescriptive aspects of their gender role (see Eagly, in press; Heilman, 2001). However, as predicted, women and men rated the possessing of person- and task-oriented skills to the same extent as important that the importance of these skills were ascribed to leaders-in-general (prescriptive norms; Hypothesis 3b), which reflects the previously mentioned changes in gender roles (Diekmann & Eagly, 2000; Twenge, 1997, 2001). In sum, female students had developed these specific leadership skills to a lesser degree than executives were ascribed with these skills, but they evaluated these skills as similarly important for themselves as these were evaluated as important for leaders-in-general.

The results of this study are based on a sample of German management students. Would a similar impact of the think-manager-think-male stereotype be observable in executives who had already been socialized in the masculine-stereotyped context of leadership? Would similar differences in the gender-stereotyped perception of leadership abilities by others and self be found in different cultures (e.g., Den Hartog et al., 1999)? Future research will be needed to answer these questions.

Furthermore, the question regarding the importance of the characteristics in this study probably does not represent an adequate measure of prescriptive aspects of social norms. Direct questions about social norms with respect to gender might make participants sensitive, for example, to political correctness concerns. Stereotypical judgments about women and men might then be counteracted, for example, by the tendency to act in a socially desirable manner, which

would call for equal prescriptions for women and men or for counterstereotypic effects ("reversed discrimination effect," Branscombe & Smith, 1990; "women-are-wonderful-effect," Eagly & Mladinic, 1994). Future research based on implicit measurements should therefore answer the question of whether such results reflect motivated judgments (controlled information processing, e.g., Petty & Wegener, 1993) or a real (increasing) similarity of norms for women and men (Diekmann & Eagly, 2000).

In conclusion, on the basis of the different approach for analyzing the think-manager-think-male stereotype, with this study it was possible to look closer beneath the surface of this social phenomenon. The results show that gender stereotypes still influence descriptive aspects in the perception of leadership by others. Simultaneously, a more androgynous view regarding prescriptive aspects was observed. Nevertheless, the think-manager-think-male stereotype can still be considered as one possible cause of gender bias in judgment and decision making regarding leadership.

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