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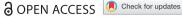
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The communality-bonus effect for male transformational leaders – leadership style, gender, and promotability

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ABSTRACT

Women have made considerable inroads into the workforce but remain underrepresented in leadership positions. Even though studies show that men and women hardly differ in their leadership behaviours, we argue that male and female leaders are evaluated differentially contingent on the gender-congruence of their leadership style. Drawing arguments from expectancy violation theory, we investigate evaluations of men and women who show transformational leadership (a style consisting of communal behaviours in line with stereotypes about women) and autocratic leadership (a style consisting of agentic behaviours in line with stereotypes about men). We employed a three-study research design combining two experimental studies and a two-wave field study with business leaders (overall N = 344). Overall transformational leadership resulted in higher evaluations of promotability due to higher perceptions of leaders' communality and leadership effectiveness. Importantly, these effects were stronger for men, and men showing transformational leadership were evaluated to be more promotable than women. This implies a communality-bonus effect for male transformational leaders. There was no difference in promotability evaluations for women versus men showing autocratic leadership. This effect was mediated by agency and effectiveness perceptions for women but not for men. Implications are discussed.

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KEYWORDS

Gender stereotypes; transformational leadership; autocratic leadership; expectancy violation theory; leadership effectiveness; promotability; communality bonus

To understand issues related to gender and leadership, researchers reason that an analysis of when and why differences in perceived leadership effectiveness occur is more important than investigating actual gender differences in leadership styles (Paustian-Underdahl, Walker, & Woehr, 2014). We agree and argue that one reason for women's underrepresentation in leadership positions is that male and female leaders are perceived to have different effectiveness, despite showing the same leadership styles. We further argue that these differences in perceived effectiveness will prospectively impact their promotability.

Previous research has demonstrated that the same behaviours do not always result in the same consequences for men and women. For example, self-promotion can lead to positive evaluations of men, but neutral or even negative evaluations of women (Rudman & Phelan, 2008). The reasons for such differing evaluations are gender stereotypical expectations that men should be more agentic (e.g., self-assured, assertive, dominant) than women and that women should be more communal (e.g., modest, considerate, understanding) than men (Prentice & Carranza, 2002). Leaders are also expected to be agentic such that expectations about men – more than women – are in line with what is expected from leaders (Eagly & Karau, 2002). Importantly, if men and women do not follow these expectations, they can face social penalties (e.g., being disliked or not being hired, Rudman & Phelan, 2008). Expectancy violation theory (Prentice & Carranza, 2004), on the other hand, suggests that people who show stereotypically unexpected but positive behaviours can actually be evaluated more favourably than people for whom that same behaviour is stereotypically expected. In other words, men and women may receive social bonuses for not following certain stereotypical expectations, if their behaviour is deemed positive (e.g., being evaluated more favourably, Bettencourt, Dill, Greathouse, Charlton, & Mulholland, 1997).

In this research, we aimed to investigate this disparity between theoretical perspectives and apply them to the context of leadership and career advancement. We set out to test how men and women are evaluated in terms of leadership effectiveness and promotability when they show leadership styles that are in line with or violate gender stereotypical expectations. We focus on transformational leadership, a style predominantly characterized by communal behaviours in line with expectations about women (Eagly & Carli, 2003), compared with autocratic leadership, a style characterized by agentic behaviours in line with expectations about men (Judge, Piccolo, & Ilies, 2004).

This research makes several contributions to the extant literature. We integrate expectancy violation theory with research on leadership styles to argue that transformational leadership advantages men's rather than women's promotability. Advancing research on gender stereotypes, we



predict that exhibiting transformational leadership confers a communality-bonus to men that makes them seem more promotable than women. In making these predictions, our work challenges the assumption that a transformational leadership style confers particular benefits to female leaders (Eagly & Carli, 2003). Our work also extends knowledge on the factors influencing career success by shifting the focus from leadership outcomes for organizations or followers to leaders' personal career gains. To test our claims, we use a mixed-methods approach with experimental and field designs, comparing the effects of leadership styles (transformational versus autocratic) on male and female leaders' perceived effectiveness and promotability.

Leadership styles and perceptions of leadership effectiveness

Leaders show different patterns of behaviour to influence followers. These leadership styles elicit perceptions of leadership effectiveness. One leadership style that after decades of research has been deemed to be very effective is transformational leadership (Judge & Piccolo, 2004). Transformational leadership has many positive outcomes, including increased follower satisfaction, organizational citizenship behaviour, and performance (e.g., Braun, Peus, Weisweiler, & Frey, 2013; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). It builds on four dimensions: (1) intellectual stimulation that promotes innovative thinking in followers; (2) inspirational motivation that encourages followers to pursue a shared vision; (3) idealized influence, that is, communicating and acting in line with personal values and being a role model; and (4) Individualized consideration, namely, supporting and caring about followers' needs and interests (Avolio, Bass, & Jung, 1999).

Contrarily, in the tradition of the "great men theory" in leadership research, effective leadership was predominantly characterized in autocratic terms (e.g., Shaw, 1955). Autocratic leaders assert control over followers, make decisions for them, and structure task assignments (De Cremer, 2006; White & Lippitt, 1960). Today, autocratic leadership is considered to be effective only under certain circumstances, for example, in situations requiring clear direction, forcefulness, or strong centralized control (Fiedler, 1964; Foels, Driskell, Mullen, & Salas, 2000). While transformational leadership is considered to be generally effective, the effectiveness of autocratic leadership seems rather limited. Research suggests that transformational leadership is not just positively related to objective effectiveness but also to perceptions of effectiveness (Bass & Bass, 2008). Transformational leaders are likely to be perceived as more promotable because their style matches modern organizational challenges such as managing diversity or continuous innovation (Kearney & Gebert, 2009; Nijstad, Berger-Selman, & De Dreu, 2014). In contrast, autocratic leadership has been shown to be ineffective in the long term (Bass & Bass, 2008). Therefore, we expect:

Hypothesis 1: Transformational leadership results in higher perceptions of leadership effectiveness and higher evaluations of promotability than autocratic leadership.

Gender stereotypes and evaluations of leaders

Showing the same leadership style does not necessarily result in the same evaluations of leadership effectiveness for men and women. Gender stereotypes have a significant impact on the evaluation of leaders as well as on promotion decisions (see, Eagly & Karau, 2002; Heilman, 2012). They represent people's overgeneralized perceptions about attributes of men and women (Heilman, 2012). These attributes fall under two fundamental categories of social perception (Abele, Uchronski, Suitner, & Wojciszke, 2008): agency and communality. Agency refers to attributes and behaviours related to taking charge and being in control of a situation or group; communality refers to attributes and behaviours related to taking care of others and building relationships. Men are generally perceived to be more agentic than women, while women are generally perceived to be more communal than men (Haines, Deaux, & Lofaro, 2016). Gender stereotypes are also prescriptive, that is, they comprise norms for appropriate behaviours. Women are not only perceived to be more communal than men but they are also expected to be more communal (Prentice & Carranza, 2002).

Transformational leadership

Agency and communality are part of common stereotypes about leadership (Heilman, Block, & Martell, 1995). Being a leader is traditionally perceived to require agentic attributes and accordingly, men have been deemed as more fitting to (high) leadership positions than women (Eagly & Karau, 2002). Due to prescriptive stereotypes that women should not behave in a highly agentic manner, female leaders have often been evaluated more negatively than male leaders (Eagly & Karau, 2002). However, in contemporary organizations, leadership also requires communality such as empathy and taking care of others, which is reflected in current perceptions of leadership to a certain degree (Koenig, Mitchell, Eagly, & Ristikari, 2011). Transformational leadership addresses such communal requirements, because it incorporates behaviours for relationship building (Kark & Shamir, 2013). While being inherently agentic due to the nature of leadership per se, transformational leadership is made up of communal behaviours (Hackman, Furniss, Hills, & Paterson, 1992), which women are assumed to show more than men (Vinkenburg, Van Engen, Eagly, & Johannesen-Schmidt, 2011). On average, women actually tend to show more transformational leadership than men - although the difference is small (Eagly, Johannesen-Schmidt, & Van Engen, 2003).

Eagly and Carli (2003) suggested that female leaders could overcome disadvantages resulting from agentic leadership by showing transformational (i.e., communal) behaviour. Thereby female transformational leaders would show both the desired characteristics for their gender as well as the desired characteristics for leaders. This is hypothesized to lead to a female leadership advantage (Eagly & Carli, 2003). In line with this idea, Maher (1997) suggests that transformational leadership may contribute to a lower bias against female leaders and heighten women's chances of promotion. Accordingly, arguments based on the female leadership advantage hypothesis

would suggest that female transformational leaders would either be equally or even more likely to be promoted than male transformational leaders.

On the contrary, expectancy-violation theory suggests that violating a stereotype in a positive way - in comparison to confirming a stereotype - can have a stronger influence on evaluations (Jussim, Coleman, & Lerch, 1987). Counter-stereotypical behaviour is seen as unexpected and therefore more noticeable. Thus, as long as communal behaviours are perceived as positive, men showing these behaviours would be evaluated more favourably than women. For example, men who performed well in a gender-incongruent job (fashion writers) were evaluated more favourably than women working in the same job (Bettencourt et al., 1997). Applying expectancy-violation theory to the leadership context, this suggests that, transformational leadership would be more beneficial for men than women. Even though it is expected of women to be more communal than men, being communal is not necessarily undesirable in men (Prentice & Carranza, 2002). When a man displays communal behaviour in the form of transformational leadership, he may actually exceed perceivers' expectations (while a woman may merely achieve them; see also Prentice & Carranza, 2004). Contrary to this idea, there is some evidence to suggest that communal men face societal penalties (e.g., Moss-Racusin, Phelan, & Rudman, 2010). We argue however that male transformational leaders would not face such penalties because they are in a high status position and therefore unlikely to be perceived as weak or wimpy (Moss-Racusin et al., 2010).

Initial research findings support the reasoning of expectancy violation theory. Men are evaluated more positively than women when showing verbal consideration at work, for example, when asking subordinates to express their views (Mohr & Wolfram, 2008). Men also reach better outcomes than women when starting negotiations with small talk, a form of communal communication (Shaughnessy, Mislin, & Hentschel, 2015) and are perceived as more deserving of organizational rewards when helping a colleague (Heilman & Chen, 2005). These findings promote the idea that men can get more credit for communal behaviour than women do. We refer to these findings as the communality-bonus effect for men.

Vinkenburg et al. (2011) surveyed people's beliefs about gender, transformational leadership, and promotability. They found that people assumed both men and women would profit from transformational leadership. However, whereas female leaders were assumed to be particularly promotable when showing individualized consideration, male leaders were expected to particularly benefit from inspirational motivation (Vinkenburg et al., 2011). These findings about laypeople's beliefs differ from predictions of expectancy violation theory which would suggest that men profit more than women from individualized consideration as well as from transformational leadership overall. While the research by Vinkenburg et al. (2011) offers important insights, laypeople's beliefs might be grounded in stereotypes, such as an assumption that women need to display communality in the form of individualized consideration to get ahead. Beliefs do not always reflect the true intentions or behaviours of individuals; therefore, it is

crucial to test people's actual reactions to transformational leaders. Based on expectancy violation theory and research supporting a communality-bonus effect for men, we expec

t: Hypothesis 2: Male transformational leaders are perceived to be more effective and are evaluated to be more promotable than female transformational leaders.

Autocratic leadership

When men and women violate gender role stereotypes in a way considered as negative, they face social penalties. These backlash effects result in women who display high levels of agency being liked less and receiving lower organizational rewards than men who display the same behaviours (see Rudman & Phelan, 2008, for a review). When women display high levels of agency, evaluators are likely to assume that they lack communality (i.e., implied communality deficit, Heilman & Okimoto, 2007). Autocratic leadership consists of predominately agentic behaviours like dominance and control, which are associated with a lack in communality (Abele et al., 2008). Since women are expected to show communality, autocratic leadership is likely to result in backlash effects for female leaders. Meta-analytical findings, however, only partly support this logic. While Williams and Tiedens (2016) showed that dominant men and women are seen as equally competent overall, Eagly, Makhijani, and Klonsky (1992) found that male leaders were evaluated as more competent than female leaders when employing highly agentic leadership styles. Thus, we expect:

Hypothesis 3: Female autocratic leaders are perceived to be less effective and are evaluated to be less promotable than male autocratic leaders.

Perceived communality and effectiveness

Research suggests that leadership effectiveness is considered in promotion decisions (Eagly & Carli, 2007). Because organizations seek to promote the most effective leaders (Lyness & Heilman, 2006), it is likely that a person's leadership style influences the perception of effectiveness, which then foster evaluations of promotability.

Because transformational (but not autocratic) leadership behaviours are concerned with relationships (Kark & Shamir, 2013), we assume that evaluators will infer leaders' communal attributes from transformational leadership. Without additional information, men are perceived as less communal than women (Haines et al., 2016). However, with additional information about the person, this can change. When men and women are described as homemakers - a role requiring communal attributes - they are perceived as equally communal (Bosak, Sczesny, & Eagly, 2008). A similar effect may occur when people receive information about a person's leadership style. Since transformational leadership is likely to fuel communality perceptions, we expect male and female transformational leaders to be perceived as equally communal. These

communality perceptions are likely to mediate the relationships of transformational leadership with effectiveness and promotability.

Building on expectancy violation theory and the idea that communality is less expected of men than women (Jussim et al., 1987), men may be exceeding expectations for communality by showing transformational leadership. According to shifting standards theory (Biernat, 2012), men will be judged in relation to other men, while women will be judged in relation to other women. Because people assume that men are less communal than women, they have a lower standard to be perceived as notably communal. This means that a man, who is being perceived as communal because of his transformational leadership style, would likely be perceived as especially communal; thus as particularly effective in leadership and highly promotable. This is less likely to be the case for female transformational leaders, because the standard for women to be perceived as highly communal is higher due to assumptions of women's generally high levels of communality. Thus, we expect:

Hypothesis 4: Perceived communality and effectiveness will mediate the relationship of transformational leadership with evaluations of promotability. The mediation effect will be stronger for male than for female leaders.

Figure 1 summarizes the research model and hypotheses. In sum, this research aims to identify whether different communality and effectiveness evaluations of male and female leaders with transformational and autocratic leadership styles result in different evaluations of promotability. We conducted a pretest, two experimental studies as well as a two-wave field study to increase the generalizability of our findings.

Pretest

To test whether evaluators expect women to show more transformational leadership than men, we conducted a pretest with 45 participants (42.2% female, $M_{\text{age}} = 40.2$, $SD_{\text{age}} = 9.6$, 94% working, 42.2% work in a leadership position) recruited online. Participants were asked to imagine a typical male leader and a typical female leader (in randomized order) and to indicate on a 7-point Likert scale how much they expected the leader to show transformational leadership (4 items, a_{male} = .85, a_{female} = .91; e.g., "The male (female) leader encourages his (her) employees to think about problems from different points of view") and autocratic leadership (4 items, $\alpha_{\text{Male leader}} = .84$, $\alpha_{\text{Female leader}} = .76$; e.g., "The male (female) leader takes on the responsibility to assign tasks to each subordinate"). The items were taken from widely used operationalized forms of autocratic and transformational leadership (Felfe & Goihl, 2002; Molero, Cuadrado, Navas, & Morales, 2007; White & Lippitt, 1960) and presented in randomized order. Results showed that transformational leadership was expected significantly more of female (M = 5.09; SE = .22) than of male leaders (M = 4.67; SE = .22), F(1, 44) = 8.05,p = .007, $\eta_p^2 = .16$. There was no significant difference in the expectation of autocratic leadership behaviours, between female (M = 4.72; SE = .19) and male leaders (M = 4.57; SE = .17), F(1, 44) = .49, p = .487, $\eta_p^2 = .01$. In line with earlier research (Stempel, Rigotti, & Mohr, 2015), these results suggest that evaluators hold differential expectations about transformational leadership depending on the leader's gender. The finding for autocratic leadership is surprising, because in the past agentic behaviours were found to be expected more of men than women (Diekman & Eagly, 2000). Further testing was needed to understand the extent to which these expectations affect evaluations of male and female leaders.

Studies 1a and 1b

Method

Design and participants

We conducted two experimental studies using a 2×2 between-participant design with leader gender (male, female) and leadership style (transformational, autocratic) as the independent variables. In Study 1a, the sample consisted of 85 university students (55% female; $M_{\text{age}} = 24.5$, $SD_{\text{age}} = 4.0$; average of 7 study semesters, SD = 4 semesters; different majors). In Study 1b, the sample consisted of 185 working adults (63% male; $M_{\text{age}} = 38.1$, $SD_{\text{age}} = 8.1$; education: 77% held a university degree, 23% a high school diploma; 54% were leaders; 84% had experience with personnel selection and evaluation).

Procedure and manipulation

Study 1a focused on the academic context, which student participants were familiar with, while Study 1b focused on the business context, which working participants were most familiar with. While data for Study 1a were collected with paper-pencil questionnaires distributed at the university, we collected Study 1b online by posting the study link on a professional networking website. Due to the greater susceptibility of rash or careless responses in online surveys that pose

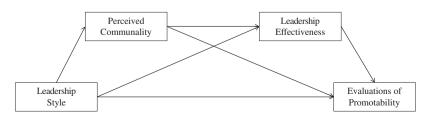


Figure 1. Proposed model of the relationship between leadership style, perceived communality, perceptions of leadership effectiveness, and evaluations of promotability.

a threat to data quality, we followed the suggestions of various researchers and added several checks for inappropriate responses in Study 1b (Huang, Liu, & Bowling, 2015; Meade & Craig, 2012). To ensure data quality, we employed three robust manipulation and data quality checks in Study 1b and excluded participants who did not meet these criteria (Meade & Craig, 2012). We initially collected data from 389 working adults, but participants were only included in the final sample if they answered the manipulation checks correctly (see later) as well as a test question ("It is important to us that you read all guestions. Please answer this guestion with '1 not at all'."; cf., Oppenheimer, Meyvis, & Davidenko, 2009). The excluded participants did not differ from the final sample regarding demographic variables but differed in how conscientiously they had participated in the study.

In both studies, participants were asked to imagine they were members of a promotion committee. They were asked to evaluate an assistant professor going up for tenure (Study 1a) or a business leader considered for promotion (Study 1b). Academic field or business area was not specified. To distract any attention from our interest in leadership styles and leader gender as predictors of promotion decisions, we told participants that the study dealt with promotion decisions on the basis of limited information. Participants then were asked to read an excerpt from an interview with the professor/business leader, in which the person described how he or she leads a team. Leader gender was manipulated with the name of the leader (Christiane or Thomas).

Leadership style was manipulated in the interview. Leaders responded to two interview questions ("How do you make sure your team meets the high performance requirements of our university/organization?" and "How do you lead your subordinates?") and their responses indicated either a transformational or autocratic leadership style. Transformational leadership was manipulated based on the German validation of items from the Multifactor Leadership Questionnaire (MLQ; Felfe & Goihl, 2002), a widely used instrument to assess transformational leadership (Avolio et al., 1999). Leaders answered the questions as follows:

I believe that one should point out to employees how important it is to commit 100% (idealized influence). This way, they can see how meaningful their work is, that is to say that they do their part to a common goal. This encourages high performance! This is also why I often speak with enthusiasm about goals that should be achieved in our team (inspirational motivation).

I think that it is important to consider the individuality of one's employees. This is why I treat each person in the team as an individual, not just as one amongst many (individual consideration). It is also important to me that my employees learn to look at problems from different points of view (intellectual stimulation).

In the autocratic leadership condition (manipulated on the basis of Molero et al., 2007; White & Lippitt, 1960), leader's responses indicated the following:

I believe that one should clearly assign tasks to employees. This way, they can see what exactly they ought to do. This encourages high performance! With some employees one just has to say what they need to do. If necessary, I specify this step-by-step.

I think that one does not need to handle employees with velvet gloves but can also lead with a firm hand. Because who, if not I as

team leader, should make decisions about strategies and tasks and should specify explicitly how to get them done.

Manipulation checks were employed to determine whether participants perceived the leadership styles as intended. Participants indicated their perceptions on 7point Likert scales (from 1 "do not agree at all" to 7 "totally agree"). Statements similar to those used in the pretest and based on the manipulations (Felfe & Goihl, 2002; Molero et al., 2007; White & Lippitt, 1960) measured perceptions of transformational leadership (4 items, α = .81; e.g., "This person encourages his/her employees to think about problems from different points of view") and autocratic leadership (4 items, $\alpha = .80$; e.g., "This person leads his/her subordinates with a firm hand"). In both studies, manipulation checks confirmed that participants perceived the leadership styles as intended. Participants in the transformational $(M_{1a} = 5.77, SD_{1a} = 1.35; M_{1b} = 6.11, SD_{1b} = .80)$ compared to the autocratic leadership condition ($M_{1a} = 4.26$, $SD_{1a} = 1.00$; $M_{1b} = 2.71$, $SD_{1b} = .99$) perceived leaders to show significantly more transformational leadership, $t_{1a}(83) = 5.83$, $p < .001, t_{1b}(171) = 25.57, p < .001.$ Participants in the autocratic ($M_{1a} = 6.28$, $SD_{1a} = .67$; $M_{1b} = 5.75$, $SD_{1b} = .90$) as compared to the transformational ($M_{1a} = 4.99$, $SD_{1a} = .98$; $M_{1b} = 3.10$, $SD_{1b} = .99$) leadership condition perceived leaders to show significantly more autocratic leadership, t_{1a} $(83) = -7.07, p < .001, t_{1b}(183) = -18.81, p < .001. In Study$ 1b, we employed three additional manipulation checks and excluded participants who did not answer the checks correctly to ensure that all participants in our final sample understood the manipulation as intended (cf., Casler, Bickel, & Hackett, 2013; Huang et al., 2015).² We were strict about excluding participants with careless responses and those who failed the manipulation checks, because we were specifically interested in reactions to the target leader dependent on whether his or her behaviour was indeed perceived to be autocratic or transformational.

Dependent measures

Our dependent variables were leadership effectiveness and promotability (Studies 1a and 1b) as well as communality (only in Study 1b). Leadership effectiveness was measured with the three items: "This person is a competent leader", "This person is highly competent in leading employees", and "This person can lead a team effectively" ($\alpha = .95$). Evaluations of promotability were measured with the three items: "This person should be given tenure", "This person should be excluded from the selection process for tenure" (reversed), and "This person should be recommended for tenure" (α = .91; in Study 1b, the word "tenure" was exchanged for the word "promotion"). Participants responded to the items on 7-point Likert scales (from 1 "do not agree at all" to 7 "totally agree"). In Study 1b, perceived communality ($\alpha = .85$) was computed based on three 7-point bipolar items (not supportive-supportive, not encouraging-encouraging, not selfishselfish [reverse coded]) and the response to the item, "How likeable is this person?" (1 "not at all " to 7 "very"; based on items from Bosak & Sczesny, 2011; Rudman, Moss-Racusin, Phelan, & Nauts, 2012).3



Results

Table 1 presents means, standard deviations, and correlations for both studies. Because of the high correlations between leadership effectiveness and evaluations of promotability (similar to other studies, e.g., Heilman & Chen, 2005), we tested the discriminant validity of the constructs. We adopted a confirmatory factor analysis approach in the R package lavaan (Rosseel, 2012). In Study 1a, we compared the fit of two nested models. The first was a one-factor model with all six items loading on the same factor. The second was a correlated two-factor model in which items were allowed to load onto their respective factors (i.e., leadership effectiveness and evaluations of promotability). Results indicated that the two-factor model showed a reasonable fit ($y^2 = 21.00$, df = 8, p < .001, CFI = .98, RMSEA = .11) and was clearly preferable over the one-factor model ($\chi^2 = 92.82$, df = 9, p < .001, CFI = .91, RMSEA = .27, $\Delta \chi^2$ = 71.82, df = 1, p < .001). In Study 1b, we included our communality items in the CFA. The three-factor model with communality, effectiveness, and promotability separated out showed a reasonable fit $(\chi^2 = 84.35, df = 32, p < .001, CFI = .97, RMSEA = .096)$ and was clearly preferable over the two-factor model with promotability and effectiveness loading on the same factor $(\chi^2 = 186.71, df = 34, p < .001, CFI = .90, RMSEA = .16,$ $\Delta x^2 = 102.37$, df = 2, p < .001). Both CFAs confirmed that the measured variables may be overlapping but are not redundant constructs.

To test the effects of leadership style and leader gender on leadership effectiveness and evaluations of promotability in both studies as well as on communality in Study 1b, a multivariate analysis of covariance (MANCOVA) was conducted. As covariates, we included semester of study in Study 1a and age in Study 1b. These were included, because more advanced students and older participants typically have more experience and might therefore hold different expectations about the skills and behaviours of a tenured professor/business leader.4 MANCOVA results in both studies indicated a significant main

effect of leadership style, $F_{1a}(2, 74) = 10.53$, $p_{1a} < .001$, $\eta_{p_{1a}}^2 = .22$, $F_{1b}(3, 177) = 106.25$, $p_{1b} < .001$, $\eta_{p_{1b}}^2 = .64$, but not of leader gender, $F_{1a}(2, 74) = .62$, $p_{1a} = .544$, $\eta_{p_{1a}}^2 = .02$, $F_{1b}(3, 74)$ 177) = 1.06, p_{1b} = .368, $\eta_{p_{1b}}^2$ = .02. In addition, in Study 1a, a significant interaction effect of the two emerged, F(2, 74) = 4.18, p = .019, $\eta_p^2 = .10$; in Study 1b, the interaction effect was not significant but trending in the expected direction, F(3, 1)177) = 2.33, p = .076, $\eta_p^2 = .04.5$ To test our specific hypotheses, we conducted univariate analyses of covariance (ANCOVAs) on the dependent measures followed by pairwise comparisons. Finally, we conducted the mediation analyses. Table 2 presents means and standard deviations for each study condition for Studies 1a and 1b. In both studies, there was no effect of participant gender.

Ratings of leadership effectiveness

In both studies, significant effects for leadership style emerged, $F_{1a}(1, 75) = 11.52$, $p_{1a} = .001$, $\eta_{p_{1a}}^2 = .13$, $F_{1b}(1, 75)$ 179) = 124.20, p_{1b} < .001, $\eta_{p_{1b}}^2$ = .41, supporting Hypothesis 1 that transformational leaders were seen as more effective than autocratic leaders. There were no significant effects for leader gender, $F_{1a}(1, 75) = 1.02$, $p_{1a} = .316$, $\eta_{p_{1a}}^2 = .01$, $F_{1b}(1, 75)$ 179) = .52, p_{1b} = .474, $\eta_{p_{1b}}^2$ = .00. We also found significant interactions between leader gender and leadership style, $F_{1a}(1,$ 75) = 8.47, p_{1a} = .005, $\eta_{p_{1a}}^2$ = .10, F_{1b} (1, 179) = 6.84, p_{1b} = .01, $\eta_{p_{1b}}^2 = .04$. In line with Hypothesis 2, pairwise comparisons (using the robust method bootstrapping, because of heterogeneity of cell variances discovered using Levene's test; Field, 2013) showed that male transformational leaders were perceived as more effective than female transformational leaders (though in Study 1b only by trend). In Hypothesis 3, we expected female autocratic leaders to be evaluated as less effective than male autocratic leaders. Contrary to this assumption, but in line with our findings in the pretest, male

Table 1. Overall means, standard deviations, and correlations in Study 1a (and Study 1b).

Variable	М	SD	1	2	3	4	5
Leadership style	.52 (.38)	.50 (.48)		-		· ·	
Leader gender	.48 (.51)	.50 (.50)	11 (.07)	_			
Perceived communality (Study 1b)	(3.61)	(1.39)	(.77**)	(.10)	_		
Leadership effectiveness	4.98 (4.10)	1.40 (1.68)	.37** (.63**)	11 (.11)	(.65**)	_	
Evaluations of promotability	4.62 (3.73)	1.45 (1.56)	.44** (.68**)	04 (.02)	(.70**)	.79** (.79**)	_
Semester of study (covariate Study 1a)	6.83	4.06	15	.05	_	.02	.10
Evaluator age (covariate Study 1b)	(38.14)	(8.09)	(06)	(.05)	(04)	(18*)	(18*)

^{*}p < .01; **p < .001. Leadership style is coded as 0 autocratic, 1 transformational. Leader gender is coded as 0 male leader, 1 female leader.

Table 2. Means and standard errors for each condition in Study 1a (Study 1b).

	Tr	Transformational leadership style				Autocratic leadership style			
	Male lea	Male leader		Female leader		Male leader		Female leader	
	M	SE	М	SE	М	SE	М	SE	
Perceived communality	(4.99 _a)	(.16)	(4.94 _a)	(.14)	(2.63 _b)	(.12)	(2.90 _b)	(.12)	
Leadership effectiveness	5.69 _a (5.14 _a)	.28 (.21)	4.52 _b (4.80 _a)	.30 (.19)	3.79_{c} (2.67_{b})	.33 (.16)	$4.37_{b,c}$ (3.27 _c)	.28 (.16)	
Evaluations of promotability	6.00_a (5.78 _a)	.25 (.21)	5.27 _b (5.32 _b)	.27 (.19)	$4.13_{c} (3.11_{c})$.30 (.16)	$4.61_{b,c}$ (3.32 _c)	.26 (.16)	

Ratings were given on a 7-point scale in which higher scores indicate higher perceived communality (only Study 1b), higher leadership effectiveness, and higher evaluations of promotability. Means are adjusted for the covariate semester of study (Study 1a) or evaluator age (Study 1b). For each study, means in a row with different subscripts differ significantly at p < .05 (one-tailed) as indicated by pairwise comparisons using bootstrapping

autocratic leaders and female autocratic leaders did not differ in leadership effectiveness ratings in Study 1a and female autocratic leaders were actually evaluated to be more effective than male autocratic leaders in Study 1b.

Evaluations of promotability

In both studies, we again found significant main effects for leadership style, $F_{1a}(1, 75) = 21.31$, $p_{1a} < .001$, $\eta_{p_{1a}}^2 = .22$, $F_{1b}(1, 75)$ 179) = 161.76, p_{1b} < .001, $\eta_{p_{1b}}^2$ = .48, indicating in line with Hypothesis 1 that transformational leaders were evaluated to be more promotable than autocratic leaders. There were no significant main effects for leader gender, $F_{1a}(1, 75) = .21$, $p_{1a} = .646$, $\eta_{p_{1a}}^2 = .00$, $F_{1b}(1, 179) = .44$, $p_{1b} = .51$, $\eta_{p_{1b}}^2 = .00$. The interaction between leader gender and leadership style was significant in Study 1a, $F_{1a}(1, 75) = 4.94$, $p_{1a} = .029$, $\eta_{p_{12}}^{2} = .06$, and approaching significance in Study 1b, $F_{1b}(1,$ 179) = 3.33, p_{1b} = .07, $\eta_{p_{1b}}^2$ = .02. We subsequently compared means of interest to test our hypotheses (Rosnow & Rosenthal, 1991). As expected in Hypothesis 2, pairwise comparisons using bootstrapping indicated that male transformational leaders were evaluated to be significantly more promotable than female transformational leaders in both studies. Again, contrary to Hypothesis 3, in both studies, male autocratic leaders and female autocratic leaders did not differ in evaluations of promotability (see results for Study 1a displayed in Figure 2).

Mediation analyses

In Study 1b, we set out to test Hypothesis 4, which stated that communality and effectiveness perceptions would mediate the relationship of leadership style with evaluations of promotability and that this mediation would be stronger for male than female leaders. To be able to test a serial mediation model using the SPSS PROCESS macro (Hayes, 2013), we tested the mediation model separate for male and female leaders. We included leadership style (coded as 0 = autocratic, 1 = transformational) as the independent variable, perceived communality as the first mediator, leadership effectiveness as the second mediator, and evaluations of promotability as the dependent variable. Participant age was kept as a covariate.

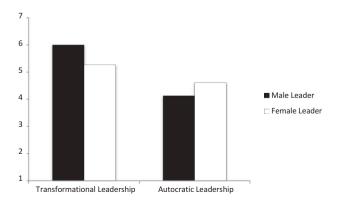


Figure 2. Evaluations of promotability of male and female leaders by transformational and autocratic leadership style (Study 1a). Higher ratings indicate higher likelihood of being promoted.

We used Model 6 with 5,000 bootstraps and 95% bias correction. Results for male leaders showed that leadership style (b = 2.37, SE = .20, CI [1.97, 2.77]) predicted perceived communality. Both leadership style (b = 1.25, SE = .35, CI [.56, 1.94]) and perceived communality (b = .51, SE = .11, CI [.28, .74]) predicted leadership effectiveness. Finally, leadership style (b = .84, SE = .33, CI [.18, 1.49]), perceived communality (b = .28, SE = .11, CI [.06, .51]), and leadership effectiveness (b = .47, SE = .10, CI [.28, .66]) predicted evaluations of promotability. The proposed indirect effect of leadership style on leadership effectiveness and evaluations of promotability through perceived communality was significant (*indirect effect* = .57, SE = .24, CI [.19, 1.16]).

Results for female leaders also showed that leadership style (b=2.05, SE = .18, CI [1.69, 2.41]) significantly predicted perceived communality. Only perceived communality (b=.36, SE = .15, CI [.07, .66]) predicted leadership effectiveness. Finally, perceived communality (b=.33, SE = .13, CI [.07, .59]) and leadership effectiveness (b=.55, SE = .09, CI [.37, .72]) predicted evaluations of promotability. Importantly, the proposed indirect effect on leadership effectiveness and evaluations of promotability through perceived communality was not significant for female leaders ($indirect\ effect=.41$, SE = .28, CI [-.04, 1.08]). Perceived communality mediated the relationship between leadership style, effectiveness, and evaluations of promotability for male but not for female leaders.

Discussion

Even though transformational leaders were generally perceived to be more effective and evaluated to be more promotable than autocratic leaders, male leaders gained more from displaying transformational leadership than female leaders did. Surprisingly, male and female autocratic leaders were not seen as differently promotable or effective, with female autocratic leaders actually being seen as more effective in Study 1b. The communality-bonus through transformational leadership resulted in higher perceptions of leadership effectiveness and higher evaluations of promotability only for male leaders.

Study 2

The subsequently conducted two-wave field study had three aims. First, we wanted to test the generalizability of findings to organizational contexts. Second, we opted to analyse whether specific dimensions of transformational leadership would lead to different effects (Kunze, De Jong, & Bruch, 2013; Vinkenburg et al., 2011). This was not possible in Studies 1a and 1b, in which all dimensions were manipulated simultaneously. Vinkenburg et al. (2011) found that laypeople assumed women to be more promotable when showing individualized consideration and men to be more promotable when showing inspirational motivation. On the basis of expectancy violation theory (Prentice & Carranza, 2004), we disagree with the assumptions of their study participants: All dimensions of transformational leadership are concerned with relationships, either with individual members or with the group as a whole (Wu, Tsui, & Kinicki, 2010). Thus, all dimensions of transformational leadership should fuel perceptions of communality in male more so than female leaders.

The third aim of this study was to investigate the high effectiveness evaluations (Study 1b) and the general lack of social backlash (Rudman & Phelan, 2008) we found for female autocratic leaders. Autocratic leadership incorporates agentic behaviours like dominance and control (De Cremer, 2006). Because agency is less expected of women than men (Prentice & Carranza, 2002), and assuming that autocratic leadership is perceived as positive rather than negative, we suggest on the basis of expectancy-violation theory (Prentice & Carranza, 2004) that female autocratic leaders will receive an agency-bonus. Because men are already perceived as highly agentic, male autocratic leaders may not receive the same agency-bonus. We expect agency to mediate the relationships of autocratic leadership with evaluations of leadership effectiveness and promotability.

Hypothesis 5: Perceived agency and effectiveness will mediate the relationship of autocratic leadership with evaluations of promotability. The mediation effect will be stronger for female than for male leaders.

Method

We surveyed managers about the level of autocratic and transformational behaviours that team members showed when interacting with others in the team (i.e., men's and women's lateral leadership). We believe the approach to look at supervisors' perceptions of the target person's lateral leadership behaviours to be of particular value because it closely reflects organizational reality and is likely to resemble what supervisors take into account when making promotion decisions (Eagly & Carli, 2007).

Design and participants

To reduce the impact of common method bias on subsequent results, we employed a two-wave panel design and measured the predictor and outcome variables at different times (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Supervisors were asked to rate a randomly selected member of their team. The final sample consisted of 74 supervisors who had participated at both time 1 and time 2. Supervisors (42% female; $M_{\text{age}} = 48.1$, $SD_{\text{age}} = 8.9$; education: 60% held a university degree, 40% a high school diploma; $M_{leadership\ experi-}$ $_{ence}$ = 14.3 years; Med $_{team size}$ = 6.5 members) worked in different industries (65% service, 22% production, 11% public sector); 57% of supervisors categorized themselves as toplevel, 28% as mid-level, and 15% as lower level managers. When asked about their influence on promotion decisions, they indicated a value of 5.2 (SD = 2.0) on a scale from 1 "none at all" to 7 "very strong". Of the randomly selected team members, 49% were female, the majority was between 30 and 60 years old (younger than 20 years: 3%, 20–29 years: 14%, 30-39 years: 28%, 40-49 years: 24%, 50-60 years: 23%) and raters indicated a team tenure of 6.4 years on average.

Procedure

Data were collected in collaboration with a professional panel provider. We told participants that we were interested in teamwork in organizations and asked them to participate in two surveys separated by 1 week. One hundred and sixty-six supervisors completed the questionnaire at Time 1. Data from 12 participants were deemed inadequate on the basis of dishonest responses, missing values or retirement and we did not invite them to the second survey. A total of 128 supervisors completed the questionnaire at Time 2. Because 16 respondents did not answer 2 control questions adequately ("Cross your heart: Can your answers be used?", "I have never used a computer."), they were excluded (Aust, Diedenhofen, Ullrich, & Musch, 2013). At Time 1, we asked participants to rate a member of their team. They were instructed to choose the person by selecting the team member whose given name was first of all given names in the team in alphabetical sequence and explained this with an example. At Time 2, we asked participants to think about the same team member and reiterated how they had chosen the person at Time 1.6 Despite our instructions, the team member demographics of 39 participants did not match and we had to exclude them from the analyses.

At Time 1, we measured the predictors: supervisors' perceptions of transformational and autocratic leadership of the target person, as well as statistical questions. At Time 2, we measured the outcomes: supervisors' evaluations of promotability, leadership effectiveness, perceived communality, and perceived agency of the target person. Because we did not manipulate either transformational or autocratic leadership, instead measuring the perceived levels of autocratic and transformational leadership in peer interactions, we cannot compare autocratic and transformational leadership in this study. Instead, we investigated the influence of low versus high levels of transformational leadership and low versus high levels of autocratic leadership separately on supervisors' evaluations of men and women.

Measures

Transformational leadership ($\alpha = .96$) was measured with items from the German translation of the MLQ (Felfe & Goihl, 2002). Items were slightly adapted to fit the lateral leadership context: individualized consideration (4 items, e.g., "The person helps others in the team to develop their strengths.", $\alpha = .90$), inspirational motivation (4 items, e.g., "The person talks optimistically about the future.", $\alpha = .91$), intellectual stimulation (4 items, e.g., "The person brings others in the team to think about problems from different points of view.", $\alpha = .93$), and idealized influence behaviours (3 items, e.g., "The person emphasizes the importance of team spirit and a joint task understanding.", α = .83). Autocratic leadership was measured with six items from White and Lippitt (1960) also adapted slightly to fit the lateral leadership context (e.g., "The person tells other team members clearly what to do.", "The person decides strategies and tasks for other team members.", α = .94). The outcome measures leadership effectiveness (α = .98) and communality (α = .90) were measured with the



same items as in Study 1b, as was promotability (α = .89) with the additional item, "If I had to choose a successor for my position, it would be this person." (α = .89, Thacker & Wayne, 1995). Agency was measured with a 7-point semantic differential of the four items; "not assertive – assertive", "not self-confident – self-confident", "not active – active", and "not self-reliant" (α = .93, Abele & Wojciszke, 2007).

Results

Correlations of all variables are depicted in Table 3. We again included participant age as a control variable for all analyses.⁷ As in the other two studies, our measures of promotability and effectiveness were significantly correlated. We again subjected all variables to a CFA to analyse their empirical distinctiveness (Rosseel, 2012). Results revealed that a six-factor model (in which transformational leadership, autocratic leadership, communality, agency, leadership effectiveness, promotability were separated) had an acceptable fit ($\chi^2 = 1,008.57$, df = 579, p < .001, CFI = .86, RMSEA = .10) and was clearly preferable over other potentially valid five-factor models in which (1) leadership effectiveness and promotability ($\chi^2 = 1,120.27$, df = 584, p < .001, CFI = .83, RMSEA = .11, Δx^2 = 111.7, df = 5, p < .001), (2) transformational leadership and communality ($\chi^2 = 1,111.83$, df = 584, p < .001, CFI = .83, RMSEA = .11, $\Delta \chi^2 = 103.3$, df = 5, p < .001), (3) transformational leadership and autocratic leadership ($\chi^2 = 1,354.93$, df = 584, p < .001, CFI = .75, RMSEA = .13, $\Delta \chi^2$ = 354.9, df = 5, p < .001), or autocratic leadership and agency loaded on the same factor $(\chi^2 = 1,526.68, df = 588, p < .001, CFI = .70, RMSEA = .15,$ $\Delta \chi^2 = 518.1$, df = 9, p < .001).

The goal of this study was to compare evaluations of men and women with low versus high levels of transformational and autocratic leadership. We thus conducted median splits of the transformational leadership scale, its subscales, and the autocratic leadership scale. For greater comparability of the three studies (Studies 1a, 1b, and 2) and to be able to calculate group differences between men and women with high or low levels of transformational and autocratic leadership styles, we then conducted analyses of variance rather than regressions. We first calculated a MANCOVA with high versus low levels of perceived transformational leadership. Results revealed a significant main effect of transformational leadership, F(4, 66) = 7.56, p < .001, $\eta_p^2 = .31$, but not of leader gender, F(4,66) = 2.37, p = .062, $\eta_p^2 = .13$ (though there was a marginal trend), and no significant interaction, F(4, 66) = .85, p = .500, $\eta_p^2 = .05$. The MANCOVA with high versus low levels of perceived autocratic leadership indicated a significant main effect of autocratic leadership, F(4, 66) = 7.44, p < .001, $\eta_p^2 = .31$, but not of leader gender, F(4, 66) = 2.31, p = .067, $\eta_p^2 = .12$ (though there again was a marginal trend), and no significant interaction, F(4, 66) = 1.60, p = .184, $\eta_p^2 = .09$. We followed up with ANCOVAs, paired comparisons, and mediation analyses. As in the previous two studies, there were no effects of participant gender. There were also no effects of work sector. To test our hypotheses, we again compared means of interest independent of whether the interaction effect was significant (Rosnow & Rosenthal, 1991). If not otherwise indicated, the pattern of results for the sub-facets of transformational leadership paralleled the results for the overall construct. Results for the individual dimensions can be found in Supplemental material.

ANCOVA results for both transformational and autocratic leadership can be found in Table 4. In line with Hypothesis 1, the ANCOVAs indicated positive main effects of transformational leadership on all outcome variables, indicating that men and women with high as compared to low levels of transformational leadership were perceived as more effective in leadership, more promotable, more communal, and more agentic. The ANCOVAs also indicated main effects of autocratic leadership on leadership effectiveness and agency, indicating that men and women with high as compared to low levels of autocratic leadership were perceived as more competent in leadership as well as more agentic. Finally, the main effects for gender of the target person were significant for both transformational and autocratic leadership on promotability, indicating that men were seen as overall more promotable than women. Means and standard errors can be found in Table 5.

Leadership effectiveness

Pairwise comparisons showed that men and women with high levels of transformational leadership were evaluated similarly on leadership effectiveness, though in line with Hypothesis 2, there was a marginally significant trend favouring men. As in Study 1a, pairwise comparisons showed that men and women with high levels of autocratic leadership were perceived as similarly effective in leadership.

Evaluations of promotability

In line with Hypothesis 2, pairwise comparisons showed that men as compared to women demonstrating high (but not

Table 3. Overall means, standard deviations, and correlations in Study 2.

Variable	М	SD	1	2	3	4	5	6	7
Autocratic leadership	3.60	1.66	_						
Transformational leadership	4.76	1.32	.24*						
Target gender	.50	.50	19	14					
Communality	5.00	1.39	01	.52***	16				
Agency	5.25	1.31	.37**	.41***	22*	.57***			
Leadership effectiveness	4.10	1.86	.37**	.52***	25*	.66***	.69***		
Evaluations of promotability	4.28	1.85	.22	.43***	32**	.63***	.51***	.85***	
Evaluator age (covariate)	48.12	8.91	.12	.10	.06	.11	.01	.10	.23*

^{*}p < .05; **p < .01; ***p < .001. Autocratic and transformational behaviours are coded as 0 low levels, 1 high levels. Target gender is coded as 0 men, 1 women.



Table 4. ANCOVA main and interaction effects for transformational and autocratic leadership.

	Main e	Interaction effect			
	Transformational behaviours	Target gender	Transformational behaviours × target gender		
Communality Agency Leadership effectiveness Promotability	$F(1, 69) = 23.83, p < .001, n_p^2 = .26$ $F(1, 69) = 12.87, p < .001, n_p^2 = .16$ $F(1, 69) = 23.09, p < .001, n_p^2 = .25$ $F(1, 69) = 13.48, p < .001, n_p^2 = .16$	$F(1, 69) = .76, p = .386, \eta_p^2 = .01$ $F(1, 69) = 2.15, p = .147, \eta_p^2 = .03$ $F(1, 69) = 3.54, p = .064, \eta_p^2 = .05$ $F(1, 69) = 8.03, p = .006, \eta_p^2 = .10$	$F(1, 69) = .84, p = .362, \eta_p^2 = .01$ $F(1, 69) = .13, p = .724, \eta_p^2 = .00$ $F(1, 69) = .31, p = .577, \eta_p^2 = .01$ $F(1, 69) = .70, p = .406, \eta_p^2 = .01$		
	Autocratic behaviors	Target gender	Autocratic behaviors × Target gender		
Communality Agency Leadership effectiveness Promotability	$F(1, 69) = .18, p = .674, \eta_p^2 = .00$ $F(1, 69) = 10.45, p = .002, \eta_p^2 = .13$ $F(1, 69) = 8.50, p = .005, \eta_p^2 = .11$ $F(1, 69) = 1.54, p = .22, \eta_p^2 = .02$	$F(1, 69) = 2.01, p = .161, \eta_p^2 = .03$ $F(1, 69) = 1.71, p = .196, \eta_p^2 = .02$ $F(1, 69) = 3.01, p = .087, \eta_p^2 = .04$ $F(1, 69) = 7.86, p = .007, \eta_p^2 = .10$	$F(1, 69) = .78, p = .379, \eta_p^2 = .01$ $F(1, 69) = 5.05, p = .028, \eta_p^2 = .07$ $F(1, 69) = .48, p = .49, \eta_p^2 = .01$ $F(1, 69) = .00, p = .999, \eta_p^2 = .00$		

Table 5. Means (and standard errors) - Study 2.

	1	Transformatio	nal behaviou	rs	Autocratic behaviours				
	Low		High		Lo	w	High		
	Men	Women	Men	Women	Men	Women	Men	Women	
Communality	4.58 _a (.30)	4.07 _a (.27)	5.71 _b (.26)	5.73 _b (.31)	5.49 _a (.36)	4.72 _a (.30)	5.05 _a (.30)	4.88 _a (.37)	
Agency	5.00 _a (.30)	4.48 _a (.27)	5.92 _b (.27)	5.61 _b (.31)	5.36 _a (.31)	4.33 _b (.26)	5.63 _a (.26)	5.92 _a (.32)	
Leadership effectiveness	3.44 _a (.40)	2.95 _a (.35)	5.44 _b (.35)	4.53 _b (.40)	4.03 _{a,b} (.45)	3.03 _a (.37)	4.94 _{a,b} (.37)	4.52 _b (.46)	
Promotability	3.95 _a (.40)	3.21 _a (.35)	5.62 _b (.35)	4.26 _a (.40)	4.60 _{a,b} (.44)	3.46 _a (.37)	5.11 _b (.37)	3.97 _{a,b} (.46)	

Ratings were given on a 7-point scale in which higher scores indicate higher communality, agency, leadership effectiveness, and higher evaluations of promotability. Means are adjusted for the covariate evaluator age. Means in a row for each leadership style with different subscripts differ significantly at p < .05 as indicated by pairwise comparisons.

low) levels of transformational leadership were evaluated to be more promotable. This effect was not significant for the dimension idealized influence. When showing high levels of idealized influence, both men (M=5.64; SE = .33) and women (M=4.78; SE = .42) were evaluated to be similarly promotable. Another exception from the overall pattern of results for transformational leadership was the finding that when showing low levels of individualized consideration, women (M=2.93; SE = .36) were evaluated to be significantly less promotable than men (M=4.16; SE = .37). In line with Studies 1a and 1b, we again found men and women with high levels of autocratic leadership to be evaluated as similarly promotable (there was a marginal trend favouring men).

Mediation analyses

As for Study 1b, we tested Hypothesis 4 with a serial mediation model separate for men and women (Model 6 with 5,000 bootstraps and 95% bias correction). Results for men showed that transformational leadership (b = 1.15, SE = .35, CI [.43, 1.86]) significantly predicted communality. Both transformational leadership (b = 1.29, SE = .42, CI [.45, 2.14]) and communality (b = .60, SE = .18, CI [.24, .96]) predicted leadership effectiveness. Only effectiveness (b = .71, SE = .17, CI [.36, 1.06]) predicted promotability. The total (b = 1.67, SE = .50, CI [.67, 2.68]) and the indirect (b = .49, SE = .33, CI [.11, 1.70]) effects were significant. The pattern of results for the subdimensions of transformational leadership paralleled these findings. Diverging somewhat from our results in Study 1b, all depicted effects were similar for women showing transformational leadership, although the total effect did not reach significance (b = 1.01, SE = .58, CI [-.17, 2.19]). Hypothesis 4 was supported, because the total mediation effect was larger for men than for women.

To test Hypothesis 5, we employed a serial mediation model with autocratic leadership (coded as 0 = low, 1 = high) as the independent variable, perceived agency as the first mediator, leadership effectiveness as the second mediator, and evaluations of promotability as the dependent variable. Results for women indicated that autocratic leadership (b = 1.59, SE = .51, CI [.55, 2.63]) significantly predicted perceived agency. Only agency (b = .80, SE = .19, CI [.42, 1.18]) predicted leadership effectiveness. Leadership effectiveness (b = .90, SE = .08, CI [.73, 1.07]) then predicted promotability. Only the indirect (b = 1.14, SE = .39, CI [.54, 2.11]) effect was significant. Contrarily, autocratic leadership (b = .26, SE = .33, CI [-.40, .93]) did not influence agency for men, and neither the direct (b = -.27, SE = .39, CI [-1.05, .52]) nor indirect (b = .26, SE = .33, CI [-.33, 1.02]) effects were significant. Agency only mediated the relationship of autocratic leadership on leadership effectiveness and promotability for women but not for men. This finding in part supports Hypothesis 5.

Discussion

Focusing on supervisors' perceptions of team member's lateral leadership, the expected communality-bonus effect for men was replicated. Though higher levels of transformational leadership increased evaluations of both men and women, men showing high levels of transformational leadership were evaluated to be more promotable. In this study, perceived communality mediated the effect of transformational leadership with effectiveness and promotability for both men and women. Agency mediated the relationship of autocratic leadership with leadership effectiveness and promotability for women but not men.



General discussion

In this research, we set out to investigate whether differing evaluations of male and female leaders are a reason for the persisting gender inequality in leadership. Previous theory and research remains ambiguous as to whether different leadership styles and subsequent evaluations of men's and women's leadership effectiveness cause different probabilities of promotion. We found that overall transformational leaders were perceived to be more communal, effective in leadership, and evaluated as more promotable than autocratic leaders. We also found that both men and women showing high rather than low levels of transformational leadership were perceived as more communal, agentic, effective, and promotable. Importantly, male transformational leaders were evaluated as more promotable - and at times as more effective - than female transformational leaders. Somewhat unexpectedly, results indicated that female autocratic leaders were not evaluated as less effective or less promotable than male autocratic leaders.

Transformational leadership has been shown to be highly effective (Braun et al., 2013). Evaluators may expect transformational leaders to offer employees the freedom and motivation required for doing their work, and to be supportive advisors whom employees can talk to if problems arise. Evaluators may also have (correctly) assumed that this leadership style will result in higher employee performance. Accordingly, evaluators perceived transformational leaders as highly effective and promotable.

Importantly, however, men and women did not profit to the same extent from transformational leadership. Male as compared to female transformational leaders were perceived to be somewhat more effective and were evaluated to be more promotable. This finding represents the primary contribution of this research. With transformational leadership, women are, "doing everything right", that is, they lead in a way that has been shown to have many positive outcomes for employees and organizations and they demonstrate both agentic characteristics required of leaders and communal characteristics required of women (Eagly et al., 2003). However, this does not help them in promotion and career advancement to the same extent as it helps men.

Our pretest showed that transformational leadership was expected more of women than of men. Based on expectancy violation theory (Prentice & Carranza, 2004) and shifting standards theory (Biernat, 2012), we argued and found that this lower expectation will result in more favourable evaluations of male transformational leaders. In line with this reasoning, we found that for men, transformational leadership causally increased perceptions of communality, which increased evaluations of leadership effectiveness and promotability. For female transformational leaders, this relationship was weaker. This evidence of a communality-bonus effect for male transformational leaders is in line with initial research indicating that men are evaluated particularly positively when showing certain communal behaviours (Heilman & Chen, 2005; Mohr & Wolfram, 2008; Shaughnessy et al., 2015). Other research shows that transformational leadership can even translate into better follower outcomes if shown by men (e.g.,

Reuvers, Van Engen, Vinkenburg, & Wilson-Evered, 2008; Wolfram & Mohr, 2010).

We did not find many distinct effects of transformational leadership dimensions. All dimensions of transformational leadership focus at least in part on relationships (Wu et al., 2010) and thus seem to fuel perceptions of a leader's communality. Our findings differ in part from Vinkenburg et al. (2011), whose participants assumed men to only profit more than women from inspirational motivation and women to profit more than men from individualized consideration. Those assumptions may have been grounded in stereotypical beliefs. Our results that men are perceived as more promotable when showing all but one transformational leadership dimension challenge this assumption. Only for idealized influence behaviours were men and women perceived as equally promotable. This is important, as our study suggests that fostering team spirit and referring to values may be a strategy for women to achieve equal career success than men. We also found that women who show low levels of individualized consideration were evaluated to be less promotable than men (see also Heilman & Chen, 2005). This is in line with research on the implied communality deficit effect (Heilman & Okimoto, 2007): When women do not show concern for others, they have to anticipate more negative consequences than their male counterparts. Thus, showing individualized consideration is important for women as it prevents them from experiencing backlash. Nevertheless, men profit more from it than women.

Interestingly, we found that autocratic leadership was expected similarly of men and women and that female autocratic leaders were evaluated similarly or in one instance even more effective than male autocratic leaders. Like Luthar (1996), we did not observe the expected penalization effect of autocratic leadership on evaluations of female leaders (Eagly et al., 1992). Schaumberg and Flynn (2016) also found mixed evaluations of dominant female leaders with no or weak backlash effects. Further, they found that self-reliant female leaders were evaluated more positively than self-reliant male leaders because they were perceived to be similarly competent but more communal. This means that women are not necessarily penalized for showing agentic behaviours and in some cases may even be rewarded for it (i.e., they may receive an agency-bonus).

In line with this, female autocratic leaders were not perceived as lower on communality than male autocratic leaders. This finding may be seen as tentative evidence of an assimilation effect. Assimilation theory suggests that people perceive information confirming their preexisting beliefs as more convincing than disconfirming information (Munro & Ditto, 1997). Female autocratic leaders may have been perceived at least partly congruent with the stereotype of women being communal. Alternatively, from the perspective of expectancy violation theory (Prentice & Carranza, 2004), the agentic behaviour of female autocratic leaders may not have been perceived as a negative violation (and it may not have led to an implied communality deficit, Heilman & Okimoto, 2007). It may rather have been perceived as a positive effort to overcome stereotypes. In line with this, we found that women showing low levels of autocratic leadership were evaluated as less agentic than men. Female autocratic leaders may have exceeded their agency requirement, which then heightened their evaluations



of effectiveness and promotability, which was not the case for male autocratic leaders.

Limitations and future research

It is important to note that our findings are not about the effects of transformational or autocratic leadership per se, but about the effects of observer's perceptions of men's and women's leadership styles. Therefore, we had to exclude several participants in Study 1b who did not perceive the leadership styles as intended in the manipulations. Considering people's perceptions on workplace issues has at times been found to be more relevant than objective realities in shaping workplace outcomes (Hentschel, Shemla, Wegge, & Kearney, 2013).

In future studies, it will be important to investigate under which circumstances evaluations of female leaders would be less biased, potentially, if the leadership position were framed in more communal or gender-neutral ways (Horvath & Sczesny, 2016) or when it were a precarious position (Ryan et al., 2016). It would also be valuable to investigate under which circumstances women are faced with negative evaluations for agentic behaviour, as well as under which circumstances men are faced with negative evaluations for communal behaviour. Relatedly, it would be valuable to analyse which types of evaluations of men are affected by the communality-bonus effect. While we found communalitybonus effects for men's work-related outcomes, others found communal women to be evaluated as more likeable than men (Heilman & Okimoto, 2007). Replication studies testing the effects of other leadership styles and employing different types of leadership measures would be highly useful in answering these questions.

Practical implications

In recent years, policymakers and the public have placed more emphasis on the selection of effective leaders (Howard, 2001). Our research suggests that transformational leaders have higher chances of promotion, whereby they would achieve higher level leadership positions. We therefore recommend expanding current approaches to leadership development on the basis of transformational leadership (e.g., Knipfer, Shaughnessy, Hentschel, & Schmid, 2017). However, both men and women should be cautious to lead in a style that is aligned with their inner selves and values (leader authenticity; Ibarra, 2015). Transformational leadership cannot become a "requirement" for advancement.

Because our findings indicate that women's career advancement is unlikely to profit from transformational leadership to the same extent as men's, it is essential to debias promotion decisions. One way to achieve this goal is to train organizational decision makers to evaluate all men and women individually on the basis of their skills and credentials. These trainings need to be conducted on a voluntary basis to prevent reactance effects (Dobbin &

Kalev, 2016). Structuring evaluation processes by defining specific criteria for advancement can help reduce the effects of stereotypes in organizations (Heilman, 2012). In line with this, some companies use sophisticated matching technigues to compare the fit of a large number of gualified employees with a given leadership position to achieve higher levels of diversity (Martin, 2013).

Notes

- 1. We chose autocratic leadership as a comparison to transformational leadership, because it is an agentic leadership style without communal attributes (Judge et al., 2004). This is not necessarily true for transactional leadership, which transformational leadership has traditionally been contrasted with, because followers' perspectives would likely be considered during goal setting agreements, for example.
- 2. In Study 1b, we asked participants to describe the leadership style of the target person on the basis of the information that they read in the interview ("On the basis of the information you have just received, how would you describe the leadership behaviour of the target person?"). Participants chose between three options: "The person shows enthusiasm about common goals and treats each follower as an individual" (transformational leadership), "The person leads with a strong hand by allocating tasks to followers and specifying how to execute them" (autocratic leadership), and "I don't know". Participants passed the manipulation check if they selected the option in line with the manipulation they read previously. Further, we asked participants to recall the name of the target person (Thomas Heller or Christiane Heller). This served as a manipulation check of leader gender. Finally, we looked at whether participants actually perceived the target person to not only show transformational leadership but also autocratic leadership in the transformational leadership style condition, and if they perceived the target person to not only show autocratic leadership but also transformational leadership in the autocratic leadership style condition. Participants indicated their perceptions of the target person's leadership style on 7-point Likert scales (from 1 "do not agree at all" to 7 "totally agree"): transformational leadership (4 items, $\alpha = .90$; e.g., "This person encourages his/her subordinates to think about problems from several points of view") and autocratic leadership (4 items, α = .85; e.g., "This person leads his/her subordinates with a strong hand"). For each participant, this criterion required a mean difference of at least one scale point in the direction of the leadership style manipulation they read.
- 3. We included likeability to be an indicator of communality, because it is often described as part of the communality construct (Abele et al., 2008). Similar to other communal attributes, it is also more prescriptive for women to be likeable than for men (Rudman et al., 2012).
- 4. In Study 1a, five participants did not specify their semester of study and had to be left out of the analyses. In Study 1b, participant age correlated significantly with effectiveness and promotability. Ratings of both measures declined with participants' age. One person did not indicate their age and was not included in the analyses.
- 5. When including all participants in Study 1b, the interaction stays non-significant, F(2, 362) = .96, p = .39, $\eta_p^2 = .01$. Because we were interested in perceptions of people who were influenced by the experimental manipulations as intended, we analysed the subsample of participants who passed the manipulation checks.
- 6. To make sure participants rated the same team members at both time points, we asked them to indicate the team member's gender, age (in categorical increments of 10 years), and team tenure. If participants indicated the same gender, were not off by more than one age category and simultaneously not more than 3 years off with regard to team tenure, we included them in the analyses.
- 7. Participant age again correlated significantly with evaluations of promotability, which contrary to Study 1b, indicated that older participants gave higher evaluations.



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References

- Abele, A. E., Uchronski, M., Suitner, C., & Wojciszke, B. (2008). Towards an operationalization of the fundamental dimensions of agency and communion: Trait content ratings in five countries considering valence and frequency of word occurrence. European Journal of Social Psychology, 38, 1202-1217. doi:10.1002/ejsp.575
- Abele, A. E., & Wojciszke, B. (2007). Agency and communion from the perspective of self versus others. Journal of Personality and Social Psychology, 93, 751-763. doi:10.1037/0022-3514.93.5.751
- Aust, F., Diedenhofen, B., Ullrich, S., & Musch, J. (2013). Seriousness checks are useful to improve data validity in online research. Behavior Research Methods, 45, 527-535. doi:10.3758/s13428-012-0265-2
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership Questionnaire. Journal of Occupational and Organizational Psychology, 72, 441-462, doi:10.1348/096317999166789
- Bass, B. M., & Bass, R. (2008). Bass handbook of leadership: Theory, research, and managerial applications. New York, NY: The Free Press.
- Bettencourt, B. A., Dill, K. E., Greathouse, S. A., Charlton, K., & Mulholland, A. (1997). Evaluations of ingroup and outgroup members: The role of category-based expectancy violation. Journal of Experimental Social Psychology, 33, 244-275. doi:10.1006/jesp.1996.1323
- Biernat, M. (2012). Stereotypes and shifting standards. Advances in Experimental Social Psychology, 45, 1-59. doi:10.1016/B978-0-12-394286-9.00001-9
- Bosak, J., & Sczesny, S. (2011). Exploring the dynamics of incongruent beliefs about women and leaders. British Journal of Management, 22, 254-269. doi:10.1111/j.1467-8551.2010.00731.x
- Bosak, J., Sczesny, S., & Eagly, A. H. (2008). Communion and agency judgments of women and men as a function of role information and response format. European Journal of Social Psychology, 38, 1148-1155. doi:10.1002/ejsp.538
- Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. The Leadership Quarterly, 24, 270-283. doi:10.1016/j. leaqua.2012.11.006
- Casler, K., Bickel, L., & Hackett, E. (2013). Separate but equal? A comparison of participants and data gathered via Amazon's MTurk, social media, and face-to-face behavioral testing. Computers in Human Behavior, 29, 2156-2160. doi:10.1016/j.chb.2013.05.009
- De Cremer, D. (2006). Affective and motivational consequences of leader self-sacrifice: The moderating effect of autocratic leadership. The Leadership Quarterly, 17, 79-93. doi:10.1016/j.leagua.2005.10.005

- Diekman, A. B., & Eagly, A. H. (2000). Stereotypes as dynamic constructs: Women and men of the past, present, and future. Personality and Social Psychology Bulletin, 26, 1171-1188. doi:10.1177/0146167200262001
- Dobbin, F., & Kalev, A. (2016). Why diversity programs fail. Harvard Business Review, July-August issue, 52-60.
- Eagly, A. H., & Carli, L. L. (2003). The female leadership advantage: An evaluation of the evidence. The Leadership Quarterly, 14, 807-834. doi:10.1016/j.leagua.2003.09.004
- Eagly, A. H., & Carli, L. L. (2007). Through the labyrinth: The truth about how women become leaders, Boston, MA: Harvard Business School Press.
- Eagly, A. H., Johannesen-Schmidt, M. C., & Van Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing women and men. Psychological Bulletin, 129, 569-591. doi:10.1037/0033-2909.129.4.569
- Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. Psychological Review, 109, 573-598. doi:10.1037/0033-295X.109.3.573
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. Psychological Bulletin, 111, 3-22. doi:10.1037/0033-2909.111.1.3
- Felfe, J., & Goihl, K. (2002). Deutsche überarbeitete und ergänzte Version des "Multifactor Leadership Questionnaire" (MLQ). In A. Glöckner-Rist (Ed.), ZUMA-Informationssystem. Elektronisches Handbuch sozialwissenschaftlicher Erhebungsinstrumente. Version 6.00. Mannheim: Zentrum für Umfragen, Methoden und Analysen.
- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. In L. Berkowitz (Ed.), Advances in experimental social psychology (pp. 149-190). London, UK: Academic Press.
- Field, A. (2013). Discovering statistics using IBM SPSS statistics. London:
- Foels, R., Driskell, J. E., Mullen, B., & Salas, E. (2000). The effects of democratic leadership on group member satisfaction: An integration. Small Group Research, 31, 676-701. doi:10.1177/104649640003100603
- Hackman, M. Z., Furniss, A. H., Hills, M. J., & Paterson, T. J. (1992). Perceptions of gender-role characteristics and transformational and transactional leadership behaviours. Perceptual and Motor Skills, 75, 311-319. doi:10.2466/pms.1992.75.1.311
- Haines, E. L., Deaux, K., & Lofaro, N. (2016). The times they are a-changing ... or are they not? A comparison of gender stereotypes, 1983-2014. Psychology of Women Quarterly, 40, 353–363. doi:10.1177/ 0361684316634081
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis. New York, NY: Guilford Press.
- Heilman, M. E. (2012). Gender stereotypes and workplace bias. Research in Organizational Behavior, 32, 113-135. doi:10.1016/j.riob.2012.11.003
- Heilman, M. E., Block, C. J., & Martell, R. F. (1995). Sex stereotypes: Do they influence perceptions of managers? Journal of Social Behavior & Personality, 10, 237-252.
- Heilman, M. E., & Chen, J. J. (2005). Same behavior, different consequences: Reactions to men's and women's altruistic citizenship behavior. Journal of Applied Psychology, 90, 431-441. doi:10.1037/0021-9010.90.3.431
- Heilman, M. E., & Okimoto, T. G. (2007). Why are women penalized for success at male tasks?: The implied communality deficit. Journal of Applied Psychology, 92, 81-92. doi:10.1037/0021-9010.92.1.81
- Hentschel, T., Shemla, M., Wegge, J., & Kearney, E. (2013). Perceived diversity and team functioning: The role of diversity beliefs and affect. Small Group Research, 44, 33-61. doi:10.1177/1046496412470725
- Horvath, L. K., & Sczesny, S. (2016). Reducing women's lack of fit with leadership positions? Effects of the wording of job advertisements. European Journal of Work and Organizational Psychology, 25, 316-328. doi:10.1080/1359432X.2015.1067611
- Howard, A. (2001). Identifying, assessing, and selecting senior leaders. In S. J. Zaccaro & R. J. Klimoski (Eds.), The nature of organizational leadership Understanding the performance imperatives confronting today's leaders (pp. 305-346). San Francisco, CA: Jossey-Bass.
- Huang, J. L., Liu, M., & Bowling, N. A. (2015). Insufficient effort responding: Examining an insidious confound in survey data. Journal of Applied Psychology, 100, 828-845. doi:10.1037/a0038510
- Ibarra, H. (2015). The authenticity paradox. Harvard Business Review, 93,

- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. Journal of Applied Psychology, 89, 755-768. doi:10.1037/0021-9010.89.5.755
- Judge, T. A., Piccolo, R. F., & Ilies, R. (2004). The forgotten ones? The validity of consideration and initiating structure in leadership research. Journal of Applied Psychology, 89, 36-51. doi:10.1037/ 0021-9010.89.1.36
- Jussim, L., Coleman, L. M., & Lerch, L. (1987). The nature of stereotypes: A comparison and integration of three theories. Journal of Personality and Social Psychology, 52, 536-546. doi:10.1037/0022-3514.52.3.536
- Kark, R., & Shamir, B. (2013). The dual effect of transformational leadership: Priming relational and collective selves and further effects on followers. In B. J. Avolio & F. J. Yammarino (Eds.), Transformational and charismatic leadership: The road ahead (pp. 77-101)). Bingley, UK: Emerald Group Publishing Limited...
- Kearney, E., & Gebert, D. (2009). Managing diversity and enhancing team outcomes: The promise of transformational leadership. Journal of Applied Psychology, 94, 77-89. doi:10.1037/a0013077
- Knipfer, K., Shaughnessy, B. A., Hentschel, T., & Schmid, E. (2017). Unlocking women's leadership potential: A curricular example for developing female leaders in academia. Journal of Management Education, 41, 272-302. doi:10.1177/1052562916673863
- Koenig, A. M., Mitchell, A. A., Eagly, A. H., & Ristikari, T. (2011). Are leader stereotypes masculine? A meta-analysis of three research paradigms. Psychological Bulletin, 137, 616-642. doi:10.1037/a0023557
- Kunze, F., De Jong, S. B., & Bruch, H. (2013). Consequences of collectivefocused leadership and differentiated individual-focused leadership. Journal of Management, 42, 886-914. doi:10.1177/0149206313498903
- Luthar, H. K. (1996). Gender differences in evaluation of performance and leadership ability: Autocratic vs. democratic managers. Sex Roles, 35, 337-361. doi:10.1007/bf01664773
- Lyness, K. S., & Heilman, M. E. (2006). When fit is fundamental: Performance evaluations and promotions of upper-level female and male managers. Journal of Applied Psychology, 91, 777-785. doi:10.1037/0021-9010.91.4.777
- Maher, K. J. (1997). Gender-related stereotypes of transformational and transactional leadership. Sex Roles, 37, 209-225. doi:10.1023/ a:1025647811219
- Martin, J. (2013). A fairer way to make hiring and promotion decisions. Retrieved from https://hbr.org/2013/08/a-fairer-way-to-make-hiring-an
- Meade, A. W., & Craig, S. B. (2012). Identifying careless responses in survey data. Psychological Methods, 17, 437-455. doi:10.1037/a0028085
- Mohr, G., & Wolfram, H.-J. (2008). Leadership and effectiveness in the context of gender: The role of leaders' verbal behaviour. British Journal of Management, 19, 4–16. doi:10.1111/j.1467-8551. 2007.00521.x
- Molero, F., Cuadrado, I., Navas, M., & Morales, J. F. (2007). Relations and effects of transformational leadership: A comparative analysis with traditional leadership styles. The Spanish Journal of Psychology, 10, 358-368. doi:10.1017/S1138741600006624
- Moss-Racusin, C. A., Phelan, J. E., & Rudman, L. A. (2010). When men break the gender rules: Status incongruity and backlash against modest men. Psychology of Men & Masculinity, 11, 140. doi:10.1037/a0018093
- Munro, G. D., & Ditto, P. H. (1997). Biased assimilation, attitude polarization, and affect in reactions to stereotype-relevant scientific information. Personality and Social Psychology Bulletin, 23, 636-653. doi:10.1177/0146167297236007
- Nijstad, B. A., Berger-Selman, F., & De Dreu, C. K. W. (2014). Innovation in top management teams: Minority dissent, transformational leadership, and radical innovations. European Journal of Work and Organizational Psychology, 23, 310-322. doi:10.1080/1359432X.2012.734038
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. Journal of Experimental Social Psychology, 45, 867-872. doi:10.1016/j.jesp.2009.03.009
- Paustian-Underdahl, S. C., Walker, L. S., & Woehr, D. J. (2014). Gender and perceptions of leadership effectiveness: A meta-analysis of contextual moderators. Journal of Applied Psychology, 99, 1129-1145. doi:10.1037/ a0036751

- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. Journal of Applied Psychology, 88, 879–903. doi:10.1037/0021-9010.88.5.879
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. The Leadership Quarterly, 1, 107-142. doi:10.1016/1048-9843(90)90009-7
- Prentice, D. A., & Carranza, E. (2002). What women and men should be, shouldn't be, are allowed to be, and don't have to be: The contents of prescriptive gender stereotypes. Psychology of Women Quarterly, 26, 269-281. doi:10.1111/1471-6402.t01-1-00066
- Prentice, D. A., & Carranza, E. (2004). Sustaining cultural beliefs in the face of their violation: The case of gender stereotypes. In M. Schaller & C.S. Crandall (Eds.), The psychological foundations of culture (pp. 259–280). London: Lawrence Erlbaum Associates.
- Reuvers, M., Van Engen, M. L., Vinkenburg, C. J., & Wilson-Evered, E. (2008). Transformational leadership and innovative work behaviour: Exploring the relevance of gender differences. Creativity and Innovation Management, 17, 227-244. doi:10.1111/j.1467-8691.2008.00487.x
- Rosnow, R. L., & Rosenthal, R. (1991). If you're looking at the cell means, you're not looking at only the interaction (unless all main effects are zero). Psychological Bulletin, 110, 574-576. doi:10.1037/0033-2909.110.3.574
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. Journal of Statistical Software, 48, 1-36. doi:10.18637/jss.v048.i02
- Rudman, L. A., Moss-Racusin, C. A., Phelan, J. E., & Nauts, S. (2012). Status incongruity and backlash effects: Defending the gender hierarchy motivates prejudice against female leaders. Journal of Experimental Social Psychology, 48, 165-179. doi:10.1016/j.jesp.2011.10.008
- Rudman, L. A., & Phelan, J. E. (2008). Backlash effects for disconfirming gender stereotypes in organizations. Research in Organizational Behavior, 28, 61-79. doi:10.1016/j.riob.2008.04.003
- Ryan, M. K., Haslam, S. A., Morgenroth, T., Rink, F., Stoker, J., & Peters, K. (2016). Getting on top of the glass cliff: Reviewing a decade of evidence, explanations, and impact. The Leadership Quarterly, 27, 446-455. doi:10.1016/j.leagua.2015.10.008
- Schaumberg, R. L., & Flynn, F. (2016). Self-reliance: A gender perspective on its relationship to communality and leadership evaluations. Academy of Management Journal. doi:10.5465/amj.2015.0018
- Shaughnessy, B. A., Mislin, A. A., & Hentschel, T. (2015). Should he chitchat? The benefits of small talk for male versus female negotiators. Basic and Annlied Social Psychology, 37, 105-117. 01973533.2014.999074
- Shaw, M. E. (1955). A comparison of two types of leadership in various communication nets. The Journal of Abnormal and Social Psychology, 50, 127-134. doi:10.1037/h0041129
- Stempel, C. R., Rigotti, T., & Mohr, G. (2015). Think transformational leadership - Think female? Leadership, 11, 259-280. doi:10.1177/ 1742715015590468
- Thacker, R. A., & Wayne, S. J. (1995). An examination of the relationship between upward influence tactics and assessments of promotability. Journal of Management, 21, 739-756. doi:10.1016/0149-2063(95)90008-X
- Vinkenburg, C. J., Van Engen, M. L., Eagly, A. H., & Johannesen-Schmidt, M. C. (2011). An exploration of stereotypical beliefs about leadership styles: Is transformational leadership a route to women's promotion? The Leadership Quarterly, 22, 10-21. doi:10.1016/j.leagua.2010.12.003
- White, R. K., & Lippitt, R. (1960). Autocracy and democracy. An experimental inquiry. New York: Harper.
- Williams, M. J., & Tiedens, L. Z. (2016). The subtle suspension of backlash: A meta-analysis of penalties for women's implicit and explicit dominance behavior. Psychological Bulletin, 142, 165-197. doi:10.1037/bul0000039
- Wolfram, H.-J., & Mohr, G. (2010). Gender-typicality of economic sectors and gender-composition of working groups as moderating variables in leadership research. Gender in Management: an International Journal, 25, 320-339. doi:10.1108/17542411011048182
- Wu, J. B., Tsui, A. S., & Kinicki, A. J. (2010). Consequences of differentiated leadership in groups. Academy of Management Journal, 53, 90-106. doi:10.5465/amj.2010.48037079