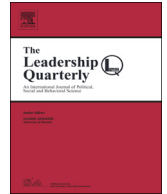




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## Performance feedback, power retention, and the gender gap in leadership

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### ABSTRACT

We propose that performance feedback can be a power retention mechanism that puts women at a relative disadvantage and contributes to the lack of women in leadership positions. Feedback is an evaluative process, with the (typically higher-power) source often having considerable discretion and means to deliver feedback and the feedback recipient often being at the mercy of the will of the source. The feedback process, therefore, has a built-in power component that preserves and amplifies existing power differences in organizations (e.g., differences in organizational authority and rank) and disproportionately harms women's leadership development. We develop a theoretical model concerning how power retention conditions (e.g., when giving feedback advances the source's personal status goals) lead to power retention mechanisms in the feedback process, such as patronizing feedback, particularly for female recipients. We discuss how gender moderates feedback delivery and reactions to feedback, which influence the persistent gender gap in leadership, subsequently reinforcing the power retention conditions. We conclude by discussing areas for future research, potential power equalization forces, and practical suggestions for how organizations can change this cycle.

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### Introduction

The path to leadership is competitive, demanding, and shaped by experience. Leadership development is aided by opportunities, pressure, and elements of complexity (McCauley, Ruderman, Ohlott, & Morrow, 1994), particularly when coupled with clear feedback on learning progress (DeRue & Wellman, 2009). Given the demands of leadership, individuals may self-select out of this path or else be selected out for various reasons, such as their abilities, character, motivation, preferences, and, most strikingly, gender. Indeed, women are less likely than men to (a) emerge as leaders in group tasks, especially when gender roles are salient (e.g., in mixed-gender groups) and the task is gendered (Eagly & Karau, 1991; Heilman & Okimoto, 2007), (b) occupy high-level leadership positions (Bertrand, Goldin, & Katz, 2010; Catalyst, 2016; Eagly & Karau, 1991), and (c) succeed as leaders in male-dominated organizations (Eagly, Karau, & Makhijani, 1995; Hoyt & Murphy, 2016).

Many factors contribute to the gender gap in leadership, such as perceptions of role incongruity between leadership and traditional gender roles (Eagly & Karau, 2002; Heilman, 2012; Hoyt, 2010), stereotyping processes (Heilman, 2012; Rudman, 1998), and organizational barriers for women (Milkman, Akinola, & Chugh, 2015; Ragins & Cotton, 1991; Ragins, Townsend, & Mattis, 1998). In fact, the path to leadership for women has been characterized as a labyrinth, given the many obstacles along the way (Eagly & Carli, 2007). We examine the role of performance feedback, particularly in relation to its inherent power dynamics.

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Feedback is a key process in the life of an organization. It helps employees understand workplace expectations and opportunities for reward (Van Velsor, McCauley, & Moxley, 1998), provides an opportunity for employees to learn and improve performance (Smither et al., 1995; Wohlers, Hall, & London, 1993), and allows organizational leaders to identify and cultivate individuals for leadership positions (Alimo-Metcalfe, 1998). Although previous research has examined differences in the structure of feedback processes (see for instance, Espinilla, de Andrés, Martínez, & Martínez, 2012; Jordan & Nasis, 1992; Kluger & DeNisi, 1996), we focus instead on the interpersonal dynamics that are present in a variety of feedback contexts. Whether formal or informal, 360-degree or dyadic (leader-follower) in structure, feedback influences career development in general and leadership development in particular. However, men and women may have different experiences of feedback in organizations, which may be explained, in part, through the lens of power dynamics. Whereas previous research typically has considered power from either the perspective of the more powerful or the less powerful party, we provide a more comprehensive view that incorporates the interactions between both parties.

We argue that because feedback is an evaluative process, with the source (typically someone with authority over the recipient) having considerable discretion and means to deliver feedback and the feedback recipient at the mercy of the will of the source, there is an inherent power gap or asymmetry between the source of feedback and the recipient. As a result, the feedback process has a built-in power component that preserves and even amplifies existing differences in power in organizations, especially between supervisor and subordinate, and may exert a disproportionately negative influence on women's leadership development. We argue that the feedback process (both its delivery and receipt) often occurs under conditions that conspire to create and exacerbate gender effects (e.g., gender biases in evaluation, Heilman, 2001). These conditions, which we call power retention conditions, include: (a) when giving feedback is a high power experience, (b) when the source treats feedback delivery as a chance to advance personal status goals, (c) when cultural norms and stereotypes favor men as leaders, (d) when the source treats feedback delivery as a chance to affirm group-based power differences, (e) when the organizational hierarchy is unstable, (f) when women are more powerless than men as feedback recipients, and (g) when men have greater access than women to social networks within the organization.

During the feedback process, these conditions serve as antecedents that influence the proximate power retention mechanisms, which we define as processes that preserve pre-existing gender-based power differences in organizations and create barriers to advancement for women. We identify two forms of power retention mechanisms: feedback delivery and recipient's reactions to feedback. Regarding the former, biased feedback delivery involves feedback that is given, wittingly and unwittingly, particularly when evaluating women (e.g., different standards and expectations for men and women, patronizing feedback—meaning feedback that is less challenging and thus less helpful from a developmental perspective, and penalties for counter-normative behavior). Regarding the latter, women are more likely than men to internalize feedback, make negative interpretations of ambiguous feedback, and attend to feedback concerning interpersonal processes. We discuss how the power retention conditions give rise to and exacerbate these power retention mechanisms, particularly when the feedback recipient is female. These power retention mechanisms subsequently reduce the likelihood that women will develop an identity as a leader, and ultimately result in women being less likely to pursue, and receive, opportunities for leadership development and advancement in organizations. Fig. 1 presents a model of these proposed relationships from power retention conditions to power retention mechanisms to leadership outcomes.

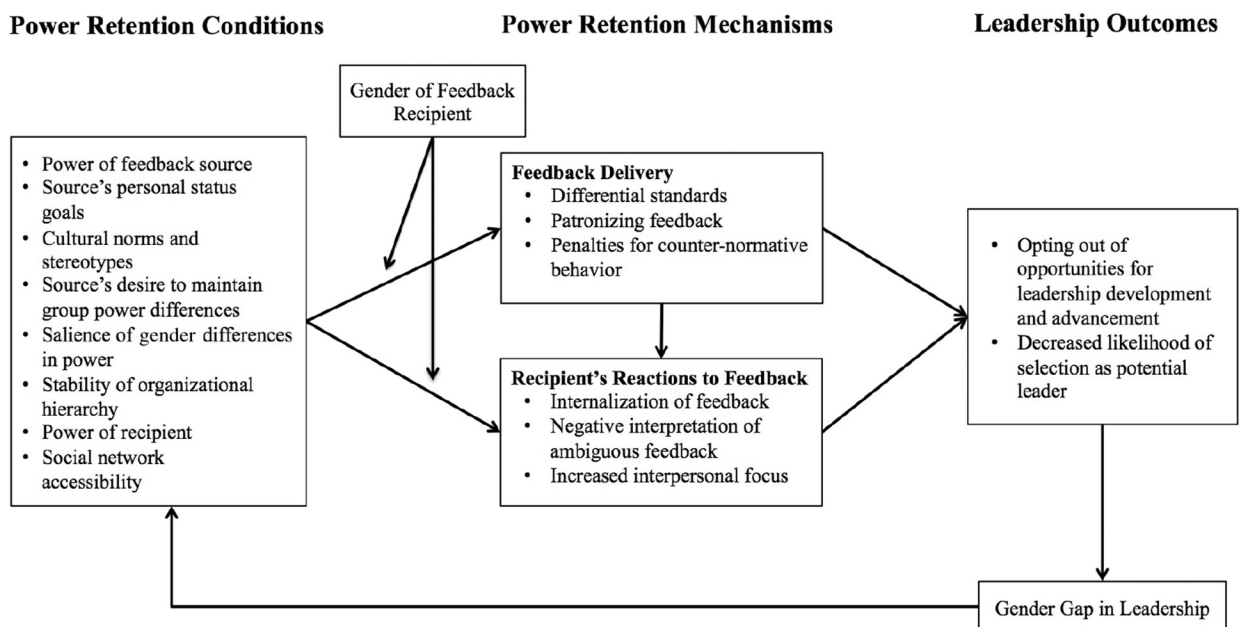


Fig. 1. Model depicting how feedback acts as a power retention mechanism that contributes to and widens the gender gap in leadership.

We build upon previous accounts of how gender stereotypes put women at a disadvantage in pursuing leadership (for reviews, see Heilman, 2001, 2012; Heilman & Parks-Stamm, 2007). Adding to previous accounts that highlight the negativity that female leaders and prospective leaders face in the workplace (e.g., stereotyping, Heilman & Okimoto, 2007, 2008; Heilman, Wallen, Fuchs, & Tamkins, 2004; and backlash, Rudman, 1998; Rudman & Kilianski, 2000; Rudman, Moss-Racusin, Phelan, & Nauts, 2012), we focus on the content, valence, and process of feedback through the lens of power. In particular, we suggest that women do not just face certain biases and backlash for violating gender stereotypes; women also receive objectively lower quality feedback than men—meaning that women are less likely than men to receive feedback that promotes leadership advancement—and have more negative experiences with the feedback process generally. By promotion of leadership advancement, we are referring broadly to feedback that may include critical, constructive content that leads directly to performance improvement, as well as positive, encouraging feedback that signals being identified as a high potential individual, leading to leadership aspirations (Day, Fleener, Atwater, Sturm, & McKee, 2014). Moreover, the feedback process also influences seeking additional feedback and setting developmental goals (Fecteau, Fecteau, Schoel, Russell, & Poteet, 1998), making the lower likelihood of feedback that promotes leadership advancement for women to be especially pernicious. Differential effects of feedback for men and women, resulting from these power retention mechanisms, place women at a disadvantage relative to men as they pursue and occupy leadership positions. We consider these effects in the context of men and women's differential responses to evaluative feedback, which further compound women's disadvantage. We also examine how power equalization forces and mechanisms could potentially counter the effects of power retention.

### Power retention conditions

A central tenet of our proposal is that feedback often occurs under conditions that are likely to promote specific power retention mechanisms that disproportionately affect women and exacerbate gender differences in leadership outcomes. We describe the specific mechanisms in later sections. In this section, we describe the power retention conditions and how they transform the feedback process, setting the stage for specific gender effects in the delivery and receipt of feedback. These conditions range from those that are likely to exist, to some extent, in nearly all cases of feedback (i.e., inherent features, such as giving feedback being a high power experience) to those that are by no means inevitable (e.g., the source treating feedback delivery as a chance to affirm personal power).

#### *Features of the feedback process*

##### *When giving feedback is a high power experience*

Delivering feedback is a power-affirming act typically performed by relatively powerful people. In organizations, performance feedback is used to make key decisions about career development and promotion, as well as to identify talented and high potential employees, while still depending on the subjectivity of the evaluator. In this way, the ability to give and control feedback is a source of organizational power (London, 2015). The concept of power, recently defined as “having the discretion and means to asymmetrically enforce one's will over entities” (Sturm & Antonakis, 2015), is useful for illuminating social structures and interpersonal relationships. It is both a structural variable (e.g., power deriving from a position within a social hierarchy; Brass & Burkhardt, 1993) and a psychological experience (Anderson, John, & Keltner, 2012; Tost, 2015).

Power is an inherent component of performance feedback. Feedback processes generally consist of an interaction between a higher power individual and a lower power individual. Indeed, many measures (Sherman et al., 2012) and manipulations (Galinsky, Gruenfeld, & Magee, 2003) of power explicitly identify the evaluation of subordinates as a task that inherently confers power. Feedback givers typically have considerable discretion and means to deliver feedback as they see fit—choosing the content on which to focus and the tone to adopt—and, therefore, can use the process as they desire (i.e., to exert their will), whether their goal is the development of the feedback source or something else (e.g., reaffirming the social hierarchy, personal status goals). In the modal case, the feedback process consists of a relatively high-ranking individual (e.g., a manager) performing the power-affirming task of delivering feedback to a subordinate. Thus, the delivery of feedback, particularly evaluative feedback that has material consequences (e.g., for pay, promotion, and job security) empowers the feedback source, thereby reinforcing power asymmetries and making it more likely that power will be retained by current powerholders. Among the power retention conditions we identify, we propose that this one—an inherent feature of feedback—is the most prevalent, occurring in nearly all cases of feedback. Although the feedback giver has the discretion and means to exert their will in the feedback process, some of our propositions do not require that the source have an explicit goal or deliberate intent. In these cases, the source is unwittingly affected by the power dynamics inherent to the feedback process. Regardless of the source's will, having the discretion and means to enforce that will (should he or she choose to do so) confers power, which shapes cognition and behavior in ways that impact how feedback is delivered and received.

##### *When the source treats feedback delivery as a chance to advance personal status goals*

Beyond the inherent power dynamic in feedback, the nature of the feedback process also depends on the extent to which the source is motivated to attain status (McClelland, 1975; McClelland, Koestner, & Weinberger, 1989) and the form of status—dominance or prestige—pursued. Status is the prominence that one holds in the eyes of other individuals (Anderson & Kilduff, 2009). Unlike power, it is determined by the opinions and actions of others, such as displays of deference or submission (Henrich & Gil-White, 2001). Within an organization, individuals can strive for and attain different forms of status. They may

strive for dominance (McClelland, 1975), status achieved through the use or threat of force (e.g., via authority within an organizational hierarchy) or they may strive for prestige, status that is freely conferred (i.e., not coerced through force) on account of one's skill or excellence in an important domain (Blader & Chen, 2012; Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013; Hays, 2013; Henrich & Gil-White, 2001).

Dominance motives are likely to create conditions that foster power retention, whereas prestige motives are likely to create conditions that mitigate them, at least in certain cases (Maner & Case, 2016). An individual focused on dominance may view status as a limited resource to be approached with a zero-sum mindset—gaining status requires taking it from someone else (McClelland, 1970). For a feedback source with this approach, delivering feedback may be an opportunity to claim status. Feedback sources who are personally motivated to attain and maintain status through dominance may deliver feedback in a way that serves their own power goals (to ensure that they “win” and others who might threaten their position “lose”). Many of the specific feedback power retention mechanisms that we review below (e.g., patronizing, low quality feedback) would serve these status goals well.

Acting aggressively, dominantly, and with a strict zero-sum mentality is not the only path to status, however (Cheng et al., 2013; Henrich & Gil-White, 2001). Desires for status can also be satisfied by fostering certain social relationships or by distributing rewards to subordinates. For example, consistent with the concept of “competitive generosity” (Clark & Blake, 1994), doing favors for peers and subordinates can lead to gains in status (Flynn, 2003) and people ascribe high status (specifically, prestige) to individuals who act generously toward their fellow group members (Halevy, Chou, Cohen, & Livingston, 2012; Willer, Younggreen, Troyer, & Lovaglia, 2012). In terms of developing relationships, a major channel for cultivating prestige is mentoring (for a review, see Frieze & Boneva, 2001). For a prestige-motivated manager, mentoring may be a way to enhance one's reputation and establish a strong and loyal base of status (Ragins & Scandura, 1999). Simply being a mentor—someone who lower-ranking individuals come to for advice and guidance—may be a cue to others that one has prestige (Henrich & Gil-White, 2001). A prestige-oriented leader might see the feedback process as a chance to initiate and cultivate mentoring relationships in which the successful development and advancement of subordinates provides a boost in his or her own status. An organizational figure with a large network of successful advisees and mentees would presumably enjoy substantial prestige. In this case, status is not zero-sum—as long as the protégé is not a direct threat to the mentor, those who increase their protégé's status will likely also increase their own. Although the feedback process will typically make social status salient, the particular approach of the feedback source (dominance vs. prestige) is likely to influence the feedback experiences of men versus women.

#### *When cultural norms and stereotypes favor men as leaders*

We also consider the broader context of gender and organizations, especially gender roles and stereotyping. According to social role theory (Eagly, 1987; Wood & Eagly, 2012), the masculine breadwinner role encompasses agentic traits, such as assertiveness and competitiveness, which contrasts with the caretaking role that entails feminine, communal traits such as deference and agreeableness (Bem, 1974; Eagly, Wood, & Diekmann, 2000). These roles are positively reinforced by stereotypes and societal expectations of behaviors and negative responses such as derision or rejection when violated (Rudman & Fairchild, 2004). There are some cross-cultural differences in gender egalitarianism and expectations for leadership as demonstrated by the GLOBE study and others (Hofstede, 1997; House, Hanges, Javidan, Dorfman, & Gupta, 2004). Nevertheless, overall the leadership gap remains a global phenomenon (Catalyst, 2016). Moreover, across cultures, men are more likely than women to be associated with the traits most valued by a particular culture (Cuddy et al., 2015).

Thus, descriptive and prescriptive norms for the female gender role run counter to the demands of the leadership role, engendering disadvantage for women in the leadership domain (Eagly & Johnson, 1990; Eagly et al., 1995; Heilman, 1983; Lyness & Heilman, 2006; Schein, 1975, 2007). Indeed, whereas stereotypes have been shown to reduce women's leadership aspirations, exposure to an “identity safe” environment (i.e., an environment that undermines the validity of the stereotype of leadership as masculine) while conducting a leadership task can mitigate the negative effects of stereotyping on women's leadership aspirations (Davies, Spencer, & Steele, 2005). Furthermore, Rudman et al. (2012) argue that gender nonconformity leads to backlash only when status-violating; specifically, when women act in powerful ways. Given that feedback processes have direct implications for decisions concerning changes in organizational power (e.g., promotion), backlash effects are likely to be amplified, particularly for ambitious women.

#### *When the source treats feedback delivery as a chance to affirm group-based power differences*

Feedback may sometimes occur in contexts where gender-based differences in power and status exist and/or are considered preferable or justified. For example, when men are disproportionately represented in the higher ranks of an organization, this disparity can reinforce the belief that group-based power inequalities (e.g., between men and women) are acceptable and preferable. This belief in the acceptability of social inequalities is more than just a stable individual difference construct (i.e., social dominance orientation; SDO; Pratto, Sidanius, Stallworth, & Malle, 1994)—contextual factors also matter (Sidanius & Pratto, 1999). Most notably, spending time in environments that reinforce group-based hierarchies can increase one's endorsement of SDO (Sinclair, Sidanius, & Levin, 1998). An organization that resembles privileged groups—for example, by being predominantly male—may amplify the tendency of individual employees to endorse SDO. To the extent that the organization is masculine, feedback may be delivered in a context where leadership is seen as a role to be handled exclusively by men. In this way, a feature of the organizational context (gender diversity) shapes the beliefs of those in positions of power as they deliver feedback to lower-ranking employees. This feedback condition, which determines the extent to which feedback delivery is treated as a chance to affirm group-based power differences, could determine whether a female employee receives useful, objective, and

constructive feedback as opposed to low-quality, subjective, and patronizing feedback that undermines leadership advancement.

#### *When the organizational hierarchy is unstable*

Many forces conspire to maintain the stability of social hierarchies (Chase, 1980; Chase, Tovey, Spangler-Martin, & Manfredonia, 2002; Magee & Galinsky, 2008), including the power-retention mechanisms that we propose in our account of feedback. Nevertheless, social hierarchies sometimes have periods of instability. Variability in the stability of a hierarchy has proven important in several lines of research. For example, the positive relationship between health and social rank across human (Marmot, 2005) and non-human species (Sapolsky, 1995) depends on the stability of the social hierarchy. This relationship typically does not emerge in unstable hierarchies in which the dominance of the higher-ranking individuals is tenuous and routinely contested by lower-ranking individuals (Knight & Mehta, 2017; Sapolsky, 2005).

How might feedback processes differ in unstable hierarchies? A recipient who receives positive, constructive feedback may be a greater threat to advance within the company and rise in status. Thus, a feedback source who feels that his or her status within the organizational hierarchy is precarious may see the feedback process as a chance to reaffirm his or her own status and keep the feedback recipient at a disadvantage. Much like a high-SDO source, a feedback source in a contested or unstable hierarchy may use feedback delivery to preserve current power asymmetries and stabilize the hierarchy. Ironically, women may be most vulnerable to these effects. A woman who attains a position of power in an otherwise masculine organization may be particularly likely to view her status as unstable and contested. In this situation, the few female leaders may stand out and face extra scrutiny. As a result, any opportunity she has to deliver feedback to subordinates takes on heightened importance as a chance to reaffirm and stabilize her status within the organization.

#### *When women are more powerless than men as feedback recipients*

As a default, the recipient of feedback lacks power given the asymmetry between the feedback source and the feedback recipient in terms of the discretion and means to enforce one's will (Sturm & Antonakis, 2015). The feedback recipient is generally at the mercy of the source, having limited discretion and means to shape the feedback process in order to get what he or she wants. Even though all feedback recipients will tend to feel relatively powerless, there is good reason to suspect that, on average, women will feel more powerless than men when receiving feedback. A woman seeking to advance in a male-dominated domain or organization may be particularly likely to perceive many barriers to advancement and that their advancement depends on gaining the approval of male leaders who may, on account of gender norms and stereotypes (Heilman, 2012; Richeson & Ambady, 2003), see women as less-suited to leadership than men. As a result, women who desire to advance in their organization will be more likely than men to feel that they have limited means by which to realize that desire. Not surprisingly, one reason women lack interest in male-dominated career paths is because they foresee that they would lack interpersonal power in those fields (Chen & Moons, 2015).

#### *When men have greater access than women to social networks*

Though formal evaluations are typically done for all employees, social networks can serve as a platform for the delivery of informal feedback. For leadership development, networking is especially vital for knowing who to turn to for problem solving resources, exposure to others' thinking that challenges basic assumptions, and developing social capital that can increase support (Day, 2001). Relatedly, in organizational cultures in which status identity and power differentials are important, individuals are likely to use indirect means of seeking feedback and may be more likely to seek feedback from peers rather than their supervisor (Sully de Luque & Sommer, 2000). Thus, networks play a crucial role in informal feedback for leaders. Above and beyond the usefulness of this informal feedback in and of itself, access to the information contained within informal feedback can provide crucial insights that then facilitate responding to (and being less surprised by) formal feedback, as well as greater insight into how to effectively seek feedback.

Men and women are likely to have different informal networks, which may have important implications for gender effects on feedback. The structure of men and women's networks tend to differ primarily for two reasons: (1) Men are more likely than women to have powerful formal positions in organizations (Bertrand et al., 2010; Eagly & Karau, 1991) and (2) People prefer to interact with others who are similar to them (homophily; McPherson, Smith-Lovin, & Cook, 2001). It is not surprising then that, in organizations in which men hold most positions of power, women have fewer ties than men at the executive level (Ibarra, 1993) and are less likely than men to be promoted by their mentors (Ibarra, Carter, & Silva, 2010). In short, women typically have less access to social networks that serve as a platform for both seeking and receiving informal feedback and interpreting feedback received.

#### *Summary*

We have described several antecedents to the feedback process that we characterize as power retention conditions. These conditions vary in their likelihood, from being moderately likely to occur (e.g., feedback delivery seen as chance to advance personal status goals) to being inherent to the feedback process itself (e.g., feedback givers experiencing greater power than feedback recipients). These conditions also vary in terms of intentionality on the part of the feedback source. Some of the conditions may operate such that the feedback source is unintentionally influenced by them, such as the extent to which giving feedback is inherently a high power experience and stereotypes favor men as leaders. In contrast, some of the conditions entail intentionality

on the part of the feedback source, such as when the feedback source uses feedback delivery as a way to achieve his or her status goals or to affirm group-based power differences.

### Power retention mechanisms

So far, we have described these antecedents and their relevance to feedback processes. In the next sections, we explain the downstream consequences: how the power retention conditions interact with the gender of the feedback recipient, thereby giving rise to and/or exacerbating differential feedback delivery to men and women, as well as differential responses to feedback on the part of men and women.

#### *Gender of feedback recipient moderates feedback delivery*

The feedback conditions reviewed above, when they occur, will set the stage for men and women to have different feedback experiences, which, in turn, have important consequences for developing an identity as a leader and advancing to a leadership position. Thus, gender of the feedback recipient moderates the effects of the power retention conditions on feedback delivery in terms of both feedback content and recipient responses, as well as subsequent leadership outcomes. We now review research supporting two ways in which men and women have different feedback delivery experiences: (1) Men and women are evaluated according to different criteria; and (2) Men and women receive different types of feedback. Through the lens of power, we consider how these different feedback experiences contribute to and amplify pre-existing gender-based power differences in organizations and create barriers to advancement for women.

#### *Differential standards*

Men and women are held to different standards for performance in organizations, both in terms of interpersonal relationships and task performance. A robust stream of literature dating back to the Ohio State and Michigan studies has suggested that both task- and relationship-oriented behaviors are important for leaders (Cartwright & Zander, 1960; Hemphill & Coons, 1957). More recent studies suggest that these behaviors predict both leader- and team-level outcomes (Judge, Piccolo, & Ilies, 2004; Kozlowski, Gully, McHugh, Salas, & Cannon-Bowers, 1996). In both task-oriented and relationship-oriented behaviors at work, women tend to be held to different standards than men. For instance, helping is less optional for women than for men. On the job, women are expected to be helpful and to go beyond their job descriptions to assist their co-workers, that is, engage in altruistic, or prosocial, citizenship behavior. When they do not behave this way, they receive more negative performance ratings than men who withhold helping behavior (Heilman & Okimoto, 2007). However, when men engage in altruistic citizenship behavior, they are rated more favorably than women, since men are not necessarily expected to be helpful (Heilman & Chen, 2005; Kidder & Parks, 2001). Likewise, when women and men behave competently at work, women are rated as less likeable than men, unless they compensate in some way by also providing evidence of their communality (Heilman & Okimoto, 2007).

The findings concerning differential feedback to men and women are consistent with the shifting standards model of stereotyping and discrimination (Biernat & Fuegen, 2001; Biernat & Manis, 1994). By virtue of holding stereotypes about certain groups, people judge members of different groups according to different standards. Compared to men, women are held to a higher standard for communal behavior but a lower standard for assertiveness, such that the same behavior is more likely to be judged as overly aggressive when performed by a woman than a man (Tolbert, Graham, & Andrews, 1999).

In terms of task performance, women often report anecdotally that they must work harder and outperform men substantially in order to compete. For example, a female Wall Street executive remarked, “We have to know everything before we take action. A guy can be more brazen. If he gets caught with his pants down, he just laughs and says, ‘No big deal,’ whereas a woman looks like an utter fool. If you ever show weakness in nuts-and-bolts knowledge, you really are never forgiven” (quoted in Eagly & Carli, 2007: 116). This sentiment is supported by research showing that to be perceived as equally competent as men, women must clearly outperform men (Lyness & Heilman, 2006). Other studies have shown that total work experience, number of hours worked, employment gaps, and organizational tenure are more predictive of career success for men than for women (Kirchmeyer, 1998; Konrad & Cannings, 1997).

This phenomenon is particularly problematic for group tasks (which are common in organizations) since individual contribution levels are often ambiguous. Unless individual contributions are clear, men are more likely than women to receive credit for group work (Heilman & Haynes, 2005). This empirical research reflects gender status beliefs theory (Ridgeway, 2001), namely, the idea that the predominance of categorization and stereotyping by gender continually reinforces the widespread belief that men are more competent than women in employment arenas.

#### *Patronizing feedback*

In general, workplace feedback that is specific, constructive, and development-oriented is most effective at facilitating performance and leadership development (Day, 2001). Women are more likely than men to receive both patronizing feedback (i.e., feedback that is less challenging and less critical of performance) and feedback that is indeed critical, but critical about interpersonal, non-task related behaviors (Glick & Fiske, 2001). In other words, women are more likely than men to be patronized in feedback regarding performance, but highly criticized in feedback regarding interpersonal-related behaviors.

Concerning the former, King et al. (2012) surveyed managers about the degree of evaluative feedback that they had received throughout their careers. On average, female managers reported receiving fewer offers for challenging, developmental assignments, an effect which appeared to stem from benevolent sexism, the belief that women should be shielded from challenging experiences (Glick & Fiske, 2001). Likewise, an analysis of performance reviews of Wall Street lawyers (Biernat, Tocci, & Williams, 2012) found that female lawyers were more likely than male lawyers to receive superlatives about their performance in the narrative portions of the evaluations, but were less than half as likely to be rated as “partner material” in the numerical ratings (which ultimately determined promotion decisions). Patronizing feedback does women no favors for their long-term career development. It creates a disconnect between actual performance and the more positive evaluations that women think they are receiving.

Patronizing feedback may be consequential in other ways, as it can elicit anger and impede performance (Vescio, Gervais, Snyder, & Hoover, 2005). Regarding the latter—critical feedback about non-task related competencies—performance reviews have been found to differ in tone and content based on gender of the employee and manager who rated the employee. Specifically, women are more likely than men to be instructed to tone down interpersonal behavior and to receive negative critiques of their personality (Snyder, 2014).

#### *Penalties for counter-normative behavior*

The aforementioned results are consistent with a long tradition of research showing that interpersonal warmth and helping behaviors are more expected of women than of men (Bennett, 1982; Park, Smith, & Correll, 2008), and that when women fail to meet these expectations, they are penalized in terms of likeability and hireability (Heilman & Okimoto, 2007; for a review, see Cuddy, Glick, & Beninger, 2011; and Williams & Tiedens, 2015). When women are identified as equally competent as men, women are deemed less likeable than men (Heilman et al., 2004; Spence & Helmreich, 1972). Thus, unlike men, women face a tradeoff between warmth and competence (Cuddy, Fiske, & Glick, 2004; Heilman, 1983, 2001). This tradeoff negatively affects evaluations and feedback for competent women who are perceived as less interpersonally warm and who face backlash for threatening the gender hierarchy with their counter-stereotypical behavior (Rudman, 1998; Rudman et al., 2012).

The gendered nature of jobs and tasks also influences how men and women who perform those tasks are evaluated (Heilman, 2001; Heilman et al., 2004; Ridgeway, 2001). In particular, the likelihood that women will be evaluated more negatively than men in terms of both performance and interpersonal qualities is greater for masculine tasks. A meta-analysis by Eagly, Makhijani, and Klonsky (1992) found that female leaders were more likely to be devalued when they occupied male-dominated roles and when their evaluators were men. Likewise, Heilman and Okimoto (2007) demonstrated that women experience social penalties to a greater extent than men in traditionally male domains, but that this effect is mitigated if there is unambiguous evidence that the women possess communal attributes (e.g., they are caring). In general, there is a preponderance of evidence that women are evaluated more poorly in male sex-typed jobs and/or domains (i.e., jobs or domains strongly associated with men) compared to contexts that are either gender neutral or feminine sex-typed (i.e., jobs or domains strongly associated with women; Davison & Burke, 2000; Lyness & Heilman, 2006; Pazy & Oron, 2001).

In sum, women are (a) less likely than men to receive constructive, useful feedback about task performance at work, and (b) more likely than men to be patronized (i.e., to receive overly positive feedback at the expense of critical evaluations that spur career development). In other words, women are less likely than men to receive feedback that promotes leadership advancement. This disparity then sets off a vicious cycle of women losing out on opportunities for development and thus advancement in an organizational pipeline, despite expressing similar interest in developmental opportunities (Cassirer & Reskin, 2000; for a recent survey of highly educated men and women's career aspirations, see Ely, Stone, & Ammerman, 2014). When women are recipients of critical feedback, they are much more likely than men to receive feedback concerning interpersonal qualities (i.e., whether they are warm versus cold), as opposed to feedback concerning performance-related issues that lead to opportunities for skill-development. Since both interpersonal skills and task-oriented skills are important for leadership, feedback on interpersonal qualities can be valuable if constructive and not determined by stereotyping—that is, if it is focused on behaviors rather than penalties for counter-stereotypical personal characteristics.

#### *Power dynamics in feedback delivery*

These three mechanisms—differential standards, patronizing feedback, and negative reinforcement of counter-normative behavior—are well-established effects and their general power-retention functions are well appreciated (Vescio et al., 2005). These effects may also occur outside the context of formal (or informal) feedback processes (e.g., a female employee who is the target of patronizing offhand comments by similarly-ranked co-workers). Yet, we propose that the performance feedback process formalizes and consolidates these processes in the power-salient, and potentially power-affirming, context of feedback delivery. Depending on the particular conditions under which feedback occurs, the feedback process has the potential to amplify or dampen the aforementioned effects. We summarize the role of power and gender in feedback delivery in the following proposition and then discuss the specific effects of the power retention conditions in the section below.

**Proposition 1.** *To the extent that the feedback process is characterized by certain power retention conditions, it will create and amplify the degree to which men and women receive differential feedback with women less likely than men to receive feedback that promotes leadership advancement.*

*The power of giving feedback*

The inherently power-affirming nature of being in a position to deliver feedback should shape the feedback process itself. Several of the known psychological effects of power are particularly relevant, including (a) increased reliance on automatic (vs. controlled) cognition (Keltner, Gruenfeld, & Anderson, 2003; Richeson & Ambady, 2003), including stereotypes (Fiske, 1993; Goodwin, Gubin, Fiske, & Yzerbyt, 2000), and (b) more disinhibited, less situationally constrained, behavior (Keltner et al., 2003), including the tendency to rely on one's own subjective experience as a guide for judgment and behavior (Guinote, 2010). As such, feedback givers may be unwittingly influenced by the nature of the process itself.

Power can increase reliance of stereotypical information (Fiske, 1993). For example, one study found that among decision-makers who were evaluating hypothetical applications for a subordinate position, those who had more power were more likely than those who were powerless to be influenced by social category information (e.g., academic major) instead of specific, individuating traits (Goodwin et al., 2000). Additionally, consistent with power's known effect on automatic (vs. controlled) cognition (Keltner et al., 2003), power has been shown to increase automatic stereotyping and prejudice (Richeson & Ambady, 2003). Moreover, the approach-inhibition theory of power (Keltner et al., 2003) holds that power lessens the inhibitions that constrain people's behavior. People who have power are more likely to show behavioral approach tendencies and to take action in general (Anderson et al., 2012; Galinsky et al., 2003; Smith & Bargh, 2008). They are also more likely to act on their dispositions and to speak their opinions freely and openly (Anderson & Berdahl, 2002; Berdahl & Martorana, 2006; Morrison, See, & Pan, 2015). Altogether, in the context of feedback, powerful people may be especially likely to have gender stereotypes come to mind during the feedback process and to express those stereotypes in the content and/or tone of their feedback. In short, high-ranking individuals who assume the power-affirming role of feedback giver may find their feedback is colored by the gender stereotypes and biases that automatically come to mind.

Feedback givers form judgments of the recipients and convey those judgments in the form of feedback; it is, therefore, important to consider the origins of those judgments. Power increases the likelihood that one will rely on their own subjective experience as a guide to judgment and behavior (Guinote, 2010; Hecht & LaFrance, 1998; Weick & Guinote, 2008). Feedback recipients may wish to be judged purely on objective indicators of performance yet there is reason to think that the inherent power-affirming nature of feedback delivery will insert some degree of subjectivity into the feedback process. This subjectivity may benefit an employee who is perhaps demographically similar (e.g., to the extent that similarity leads to liking; Sunnafrank, 1983); it may be a distinct disadvantage for an employee who is demographically different from the feedback source. Given the predominance of men in leadership positions (Bertrand et al., 2010; Catalyst, 2016; Eagly & Karau, 1991), we propose that male employees are more likely than female employees to benefit from the subjective nature of feedback delivery. For example, a woman trying to advance in a male-dominated organization may be disliked by male leaders (as women who violate gender norms often are; Rudman, 1998; Rudman et al., 2012). These male leaders may want to be objective and may explicitly disavow gender stereotypes and gender norms. Nevertheless, the inherent sense of power that comes with being in a position to deliver feedback may empower the feedback giver to rely on these diffuse feelings of negativity to guide the content and tone of his feedback, even if he cannot pinpoint the source of that negativity.

As Fiske (1993) argues, power and stereotyping are self-reinforcing, with the effect of power on stereotyping providing a mechanism for the retention and amplification of power among those who already possess it. We extend this reasoning to illustrate the centrality of the feedback process in this cycle. Feedback is a regular feature of organizational life that affirms power and increases reliance on stereotypes in the exact context (e.g., performance review) in which those stereotypes can arguably have the most material consequences for the recipient (e.g., determining rewards and advancement). In short, feedback is an omnipresent organizational process that has the potential to formalize and amplify the reinforcing cycle between power and stereotyping.

**Proposition 1a.** *The greater the extent to which the feedback source feels powerful delivering feedback, the less likely that women (relative to men) will receive feedback that promotes leadership advancement.*

**Proposition 1b.** *Because power increases reliance on stereotypes, the greater the extent to which cultural norms and stereotypes favor men as leaders, the less likely that women (relative to men) will receive feedback that promotes leadership advancement.*

*The source's personal status goals and the stability of the organizational hierarchy*

Beyond the momentary feelings of power that are likely to accompany the act of delivering feedback, the source of feedback may be motivated, implicitly or explicitly, to use the feedback process to achieve his or her own personal status goals. In this way, the feedback process serves as a conduit for "enforcing one's will" (Sturm & Antonakis, 2015). As we reviewed in the previous section, the source may be motivated by a desire for dominance (McClelland, 1975; McClelland et al., 1989) or a desire for prestige (Cheng et al., 2013; Henrich & Gil-White, 2001). Whether the source picks dominance or prestige as his or her preferred path to high status will matter greatly for determining whether he or she will be motivated to help vs. impede the status of the recipient. A dominance-oriented source may use the feedback process to assert his or her own status at the recipient's expense. This outcome is particularly likely when an organization's hierarchy is unstable and, therefore, the feedback source's authority is threatened. Under these conditions, the source would be more likely to use the feedback process to reinforce and stabilize his or her position in the organizational hierarchy, particularly if he or she views the feedback recipient as a potential threat.

A prestige-oriented source, however, may use the feedback process to establish a mentoring relationship with the goal of promoting the advancement of the recipient, which could reflect well on the source and provide a boost to his or her organizational prestige (Ragins & Scandura, 1999). On the surface, the latter outcome seems to be a mitigating factor, since it would incentivize



the source to provide high-quality, constructive, development-oriented feedback. However, this would only be true if the source provided such high quality feedback indiscriminately to all subordinates to which he or she provides feedback. Yet the feedback source, with limited time and resources, may not be able to invest equally in all subordinates. Instead, he or she would likely select a limited number of protégés. This selection would presumably be based on the perceived leadership potential of the subordinate and his or her projected success within the organization (Allen, Poteet, & Russell, 2000; Allen, 2004; Olian, Carroll, & Giannantonio, 1993). This selection process presents a clear opportunity for gender bias and stereotypes to exert their influence (Noe, 1988). If the source believes that a man has a better chance of succeeding (e.g., because of lack of gender diversity, or because the source sees leadership as a masculine task), the source may be more likely to seek out mentoring relationships with, and to promote, male subordinates (Ibarra et al., 2010; Ragins, 1997). In this way, an ordinary and usually welcome part of the feedback process—the development of mentoring relationships—may further exacerbate gender differences in the quality of feedback delivered.

**Proposition 1c.** *The greater the extent to which the source of feedback is motivated by personal status goals, the less likely that women (relative to men) will receive feedback that promotes leadership advancement.*

**Proposition 1d.** *The greater the extent to which the organizational hierarchy is unstable, the less likely that women (relative to men) will receive feedback that promotes leadership advancement, particularly when the source of feedback has personal dominance goals.*

#### *Salience of gender differences in power*

To the extent that the act of delivering feedback (a) makes pre-existing status and power asymmetries salient (e.g., that the organizations has more male leaders than female leaders), and (b) increases the source's psychological sense of power, feedback givers may be even more likely to deliver lower-quality, less relevant, or patronizing feedback to female employees. Indeed, patronizing feedback both requires and supports power asymmetries—it is delivered from powerful individuals and groups to marginalized, less powerful individuals or groups (Vescio et al., 2005). Consequently, to the extent that the feedback process makes these power asymmetries salient (e.g., a man delivering feedback to a subordinate woman in a male-dominated organization), patronizing feedback should be more likely. We propose that the inherent power dynamics of the feedback process will often exacerbate the cycle of female employees receiving patronizing feedback, becoming less likely to emerge as leaders, and in turn becoming even more likely to receive patronizing feedback.

**Proposition 1e.** *The greater the extent to which gender differences in power within the organization are salient, the less likely that women (relative to men) will receive feedback that promotes leadership advancement.*

#### *The source's desire to maintain group power differences*

As we reviewed in the previous section, organizations that are male-dominated, especially in the upper levels, may be particularly prone to believe that gender differences in power are legitimate. This belief in the legitimacy of group-based power inequalities, captured by the individual difference social dominance orientation (SDO), is associated with the tendency to rely on stereotypes. Those high on SDO tend to perceive people based on their social categories and group memberships rather than their individuating traits (Carter, Hall, Carney, & Rosip, 2006; Tausch & Hewstone, 2010). This tendency has been found to predict important outcomes (even after accounting for structural power), such as a diminished ability to read other's mental states through non-verbal cues (Sherman, Lerner, Renshon, Ma-Kellams, & Joel, 2015). Not surprisingly, research has shown that in male-dominated organizations, the few "token" women typically receive extra scrutiny (Budig, 2002; Kanter, 1977). This extra scrutiny may translate into greater likelihood of biased feedback delivery, as well as greater likelihood that the token women in the organization will be more sensitive to feedback than men.

**Proposition 1f.** *The greater the extent to which the source of feedback views feedback delivery as a chance to affirm group-based power differences such that men are more powerful than women, the less likely that women (relative to men) will receive feedback that promotes leadership advancement.*

#### *Recipient's reactions to feedback*

How someone responds to feedback depends in part on how he or she interprets that feedback. Below, we review evidence of gender differences in the interpretation of, and response to, feedback, including, (1) the tendency to internalize evaluative feedback, and (2) the tendency to interpret ambiguous feedback negatively. These gender differences in response to feedback are important to consider because they will amplify the strength of the feedback power retention mechanisms for women. First, however, we consider the role of gender in overconfidence, which may contribute to the gender differences in how men and women interpret and respond to feedback.

#### *Overconfidence*

People tend to overestimate their abilities or performance, particularly in domains related to competence and positive traits (Camerer & Lovallo, 1999; Moore, Kurtzberg, Fox, & Bazerman, 1999). The evidence for gender differences in overconfidence is

mixed (for a review, see Croson & Gneezy, 2009), with some studies finding that men are more overconfident in their performance than women (Barber & Odean, 2001; Moshavi, Brown, & Dodd, 2003; Niederle & Vesterlund, 2007; Pulford & Colman, 1997; Visser, Ashton, & Vernon, 2008) and others finding no significant differences (Moore & Healy, 2008). However, in stereotypically male domains and tasks, gender differences are more reliable (Beyer, 1990; Deaux & Farris, 1977; Lundeberg, Fox, & Punčohář, 1994; cf. Nekby, Thoursie, & Vahtrik, 2008), with evidence that male managers are more likely to over-estimate their performance whereas female managers are more likely to match peer and subordinate ratings of their performance (Brutus, Fleenor, & McCauley, 1999; Fleenor, Smither, Atwater, & Sturm, 2010). Another study found that female students were less overconfident than male students in stereotypically masculine subjects such as mathematics, but there were no gender differences in overconfidence in gender-neutral subjects, such as social science (Jakobsson, Levin, & Kotsadam, 2013). In MBA student teams, men consistently overestimated their abilities and, as a result, were chosen as leaders more frequently by their teammates, even when females had actually performed better (Reuben, Rey-Biel, Sapienza, & Zingales, 2012). Leadership is a stereotypically masculine domain (Eagly & Karau, 2002). Thus, in the workplace, a gender difference in overconfidence may emerge, with men being more likely than women to be overconfident when it comes to the performance of managerial or leadership behaviors.

#### *Internalization of negative feedback*

As they pursue leadership, men and women may be armed with different levels of overconfidence, setting the stage for different experiences with evaluative feedback. The greater overconfidence and inflated self-assessments of men in this domain may buffer against the potentially deflating effects of negative feedback. Indeed, men are more likely than women to discount evaluative feedback (Cleveland, Lim, & Murphy, 2007; Vecchio & Anderson, 2009).

However, self-awareness includes both an understanding of self and the ability to anticipate how others perceive the self (Taylor, 2010). Schwalbe and Staples (1991) found that women rated reflected appraisals—other people's reactions to them—as more important than men in terms of their self-esteem. Thus, even if men and women have equivalent confidence in their own abilities, they may have different perceptions of how others view their abilities. For example, Sturm, Taylor, Atwater, and Braddy (2014) found that female leaders were more pessimistic than male leaders when estimating how their bosses would rate them on leadership behaviors. Men and women were actually rated similarly by their bosses; yet, women assumed that their boss's ratings of them would be lower. These findings combined with the aforementioned findings on overconfidence suggest that both male and female leaders may lack self-awareness in certain respects: male leaders may lack self-awareness in the sense that they overestimate their own abilities; female leaders may lack self-awareness in the sense that they underestimate how others perceive their abilities.

When women do receive clear feedback, they may use it to calibrate their assumptions of how others view them. In a study of participants in a developmental assessment center, women's self-assessments of performance after receiving feedback were more accurate than those of men (Halman & Fletcher, 2000). This finding is consistent with research showing that women's self-assessments more accurately reflect assessments from subordinates compared to those of men (Fletcher, 1999; London & Wohlers, 1991). Nevertheless, feedback appears to have a more negative affective influence on women compared to men. Compared to men, women report lower self-esteem and greater intentions to change their behavior after receiving negative feedback (Roberts & Nolen-Hoeksema, 1994). Furthermore, in a survey of employees before and after a face-to-face evaluation with their supervisor, women and men evaluated their performance similarly. Yet, while women's self-esteem improved slightly after receiving positive feedback and dropped substantially after receiving negative feedback, men's self-esteem was unaffected (Johnson & Helgeson, 2002). Altogether, women are more sensitive to negative feedback and, in the absence of clear feedback, underestimate the extent to which their superiors value their performance.

#### *Interpreting ambiguous feedback more negatively*

Consistent with this tendency for women to assume negative evaluations unless they receive clear feedback to the contrary (Sturm et al., 2014), women may interpret subjective, ambiguous feedback more negatively than men do (Biernat & Danaher, 2012). Women receiving ambiguous, moderately negative feedback (e.g., words and phrases such as “nice try” and “weak”) about their leadership performance interpreted it as conveying objectively more negative performance than did men. Women presumably interpreted the feedback as primarily about the value of pursuing leadership because women subsequently devalued the importance of leadership after receiving the feedback, whereas men did not (Biernat & Danaher, 2012). This finding exemplifies how women's more negative interpretation of feedback compared to men could impact future career decisions. Indeed, feedback may have a stronger influence on women's leadership identity than on men's. In a six-month study of peer feedback on leadership competencies in MBA teams, women were more likely than men to align their self-ratings of leadership with peer ratings, while men continued to inflate their ratings regardless of peer feedback (Mayo, Kakarika, Pastor, & Brutus, 2012). In another study, the only condition under which men and women rated themselves equally when performing a leadership-related task was after receiving explicit, positive feedback about ability (Heilman, Lucas, & Kaplow, 1990).

#### *Attention to interpersonal behavior*

Feedback seeking is another important aspect of the feedback process in organizations. Ashford and Cummings (1983) define feedback seeking as, “...conscious devotion of effort toward determining the correctness and adequacy of behaviors for attaining valued end states” (p. 370) and proposed two strategies that individuals use to seek feedback: (1) observing one's environment, specifically situational cues, behavioral cues from other individuals, and how others respond to one's own behavior; and (2)

directly asking for evaluative feedback. According to this model, the specific strategy chosen will depend on the perceived costs and benefits of using a particular strategy (Ashford & Cummings, 1983). Feedback seeking facilitates individual adaptation and use of resources for achieving creative outcomes (De Stobbeleir, Ashford, & Buyens, 2011).

Consistent with the differential criteria upon which men and women are evaluated, particularly in the interpersonal domain, men and women may attend to and seek different types of feedback in relation to organizational processes and outcomes. In particular, women may attend to feedback about interpersonal relationships to a greater extent than men because they are held to higher standards than men for communal behavior at work (Heilman & Chen, 2005; Heilman & Okimoto, 2007; Kidder & Parks, 2001). Past research has shown that women are more likely to attend to cues about collaborative and consensus building than men (Bart, 2013; Benko & Pelster, 2013) and are more sensitive than men to the interpersonal meaning of communications (Cross & Madson, 1997; Wood, 2009; Wood & Eagly, 2009). There is some evidence that they shy away from competitive challenges that focus on winning rather than relationships (Niederle & Vesterlund, 2008), avoid results-oriented, ego-reinforcing feedback (Eagly, 1997), and feel more comfortable seeking feedback in female-oriented tasks and teams (Miller & Karakowsky, 2005).

However, we do not mean to imply that women care less about concrete outcomes than men do. Indeed, evidence suggests that they will seek out concrete performance feedback when they are engaged in masculine tasks in male-dominated groups (Miller & Karakowsky, 2005). We suggest that women are more likely than men to attend to feedback on interpersonal processes (e.g., effectively managing relationships among team members while leading the team toward a shared goal), especially in light of the high expectations for these behaviors that women experience. In contrast, without the expectation that they must be nice and helpful to others, men are freer to focus on outcomes, such as whether they are making progress toward the desired goal.

Women's differential responses to feedback compared to men are not necessarily detrimental and could be beneficial in organizations. Ostensibly, being self-aware, self-accurate, and responsive to feedback should be valuable to organizations and beneficial to the individual. Although there may be some organizational benefit to these traits, women's greater self-awareness and sensitivity to evaluative feedback may also reduce the likelihood that they pursue leadership positions in the first place, especially if they receive lower quality feedback. Indeed, transitioning to a leadership role requires anyone—male or female—to make a leap of faith, since no one individual encompasses all of the characteristics necessary to be an effective leader (Judge, Bono, Ilies, & Gerhardt, 2002). If women are influenced more by evaluative feedback than men and are more accurate and realistic about their own shortcomings than men, on top of receiving lower quality and patronizing feedback, then they may hesitate to take the leap of faith necessary for leadership. In the broader context of gender relations in organizations, this means that the cycle of gender relations favoring men is likely to continue. Thus, in the next section, we consider the downstream effects of feedback power retention mechanism, which are likely to be compounded given gender differences in response to feedback.

#### *Power dynamics in feedback reactions*

We have reviewed evidence that women are less overconfident and more reactive to evaluative feedback compared to men. The specific power dynamics of the feedback process should matter greatly for these effects.

**Proposition 2.** *To the extent that the feedback process is characterized by certain power retention conditions, gender differences in the response to feedback (e.g., women being more reactive than men to feedback) will be exacerbated.*

#### *The power of the feedback recipient*

Of particular importance is the interpersonal power of the feedback recipient. As we argued earlier, women may, on average, feel more powerless than men when receiving feedback, particularly if they are seeking to advance in a male-dominated domain that presents barriers to female advancement (Chen & Moons, 2015). The proposed greater relative powerlessness of female feedback recipients is important because feelings of power can buffer stress (Jordan, Sivanathan, & Galinsky, 2011; Schmid & Schmid Mast, 2013; Sherman et al., 2012) and decrease the sting of social rejection (Kuehn, Chen, & Gordon, 2015). Power also increases overconfidence (Fast, Sivanathan, Mayer, & Galinsky, 2012) and optimism (Anderson & Galinsky, 2006). As a result, feeling relatively powerful (or less powerless) as a feedback recipient may lead one to interpret ambiguous feedback more favorably and to have a thicker skin and brush off critical feedback. It is possible that the tendency for women to be more reactive to critical feedback and to interpret ambiguous feedback negatively arises, at least in part, from their relative powerlessness in the feedback process.

**Proposition 2a.** *The greater the extent to which women feel more powerless than men when receiving feedback, the more likely that women will internalize feedback and interpret ambiguous feedback negatively to a greater degree than men.*

#### *Social network accessibility*

Relatedly, women's lesser access to social networks compared to men (Ibarra, 1993; Ibarra et al., 2010) is likely to also influence how women interpret ambiguous feedback. Social networks provide important context for interpreting feedback; individuals can learn more generally about standards for feedback, helping to serve as a reference point for ambiguous information.

**Proposition 2b.** *The lesser the extent to which women have access to social networks than men, the more likely that women will interpret ambiguous feedback negatively to a greater degree than men.*

In sum, regardless of the specific origins of gender differences in response to feedback, we propose that they will be exacerbated to the extent there is a gender gap in perceived interpersonal power as feedback recipient, as well as in access to social networks.

### Leadership outcomes

Leadership can be an ambiguous process that lacks a built-in feedback mechanism. Yet, receiving appropriate feedback and reflecting on it (and the experiences on which it is based) is key for learning from mistakes (DeRue & Wellman, 2009). Some evidence even suggests that reflection without feedback may not enhance performance because learners may inadvertently adopt ineffective strategies (Anseel, Lievens, & Schollaert, 2009; Mayer, 2004). Conversely, when potential leaders face challenging work assignments, appropriate feedback combined with reflection can reduce the evaluation uncertainties that arise, and, in turn, allow the leader to dedicate cognitive resources to the task at hand (DeRue & Wellman, 2009).

Given the crucial role of feedback, we argue that the feedback processes discussed thus far will contribute to the gender gap in leadership in two ways: (1) Reducing the likelihood that women will develop identities as leaders and thus increasing the likelihood that they opt out of leadership; and (2) Reducing the likelihood that women will be identified as leaders or as having leadership potential.

**Proposition 3.** *The power retention mechanisms underlying the feedback process—biased feedback delivery to men versus women and gender differences in response to feedback—impede female advancement in organizations, thereby leading to gender differences in leadership outcomes.*

#### *Developing an identity as a leader*

When predicting who will emerge in leadership positions, an important consideration is whether or not an individual *wants* to be a leader. Indeed, the motivation to lead has been shown to predict leader emergence (Chan & Drasgow, 2001; Hong, Catano, & Liao, 2011; McClelland & Boyatzis, 1982). The goals that people set and pursue, including leadership goals, are determined in part by the feedback they receive (Fishbach, Eyal, & Finkelstein, 2010). Although stable individual difference factors play a role, leadership aspirations change dynamically based on past experiences as a leader and, in particular, by the sense of confidence (leadership self-efficacy) that formal and informal feedback can bolster or undermine (Chan & Drasgow, 2001; McCormick, Tanguma, & López-Forment, 2002; Paglis & Green, 2002). In short, individuals are more likely to aspire to leadership roles if they receive feedback suggesting that they might excel in those roles.

Research on gender suggests that signals provided by feedback should exert influence particularly on women's motivation to pursue leadership roles. Past work has shown the ways in which personal preferences are influenced by external factors. For example, masculine tasks lead women to rate their competence lower compared to men, subsequently reducing their career aspirations compared to men (Correll, 2004). Thus, career aspirations are influenced by environmental factors that send subtle cues that nevertheless exert substantial influence (e.g., Cheryan, Plaut, Davies, & Steele, 2009).

Typically, those who pursue leadership have more than just a goal to be a leader—they also have an identity as a leader, which fosters leader emergence (DeRue & Ashford, 2010; for reviews, see Ely, Ibarra, & Kolb, 2011; Kark & Van Dijk, 2007; van Knippenberg, van Knippenberg, Cremer, & Hogg, 2004). Feedback may shape whether or not one comes to identify with leadership. Feelings of “fit” (Chemers, Watson, & May, 2000) are constantly updated based on incoming feedback that shapes one's confidence as a leader. Given that women's communal gender role, with its emphasis on being caring and cooperative, is a poorer fit with leadership roles compared to men's agentic gender role, with its emphasis on being assertive and exerting influence, women may experience greater hurdles compared to men when developing an identity as a leader (Eagly & Karau, 2002; Koenig, Eagly, Mitchell, & Ristikari, 2011). Indeed, career aspirations and goals reflect gender roles, with men more likely than women to pursue careers that are stereotypically masculine in nature (Konrad, Ritchie, Lieb, & Corrigan, 2000; Powell & Butterfield, 2003). Moreover, if women receive, and internalize, objectively lower quality feedback, meaning feedback that does not promote leadership advancement, this process may further undermine their tendency to develop identities as leaders.

**Proposition 3a.** *Biased feedback delivery to men versus women and gender differences in response to feedback will increase the likelihood that women (compared to men) will opt out of leadership opportunities.*

#### *Being identified as a leader*

A person is likely to be more motivated to be a leader if she or he is identified by others as a leader. Indeed, organizations identify promising “high potential” prospective leaders and give them feedback to further their leadership development (e.g., through mentoring or coaching relationships; Bernthal & Wellins, 2006; Higgins & Kram, 2001). This feedback-fueled growth and learning can help leaders develop the self-confidence and leadership efficacy that are crucial for leader success (McCormick, 2001). Based on our application of a power perspective to the feedback literature, we believe that because women are held to higher standards, receive patronizing feedback, and are expected to behave in stereotypical ways, they

will be less likely to be identified as potential leaders. Eagly et al. (1992) came to a similar conclusion in their meta-analytic review of how women are evaluated. They found that women's managerial contributions were generally devalued, especially when these women occupied male-dominated roles or were evaluated by men. As we have reviewed, the nature of the feedback process itself and the power retention forces at play will likely only exacerbate these effects, making it even less likely that women will be identified as potential leaders and provided with leadership development opportunities.

**Proposition 3b.** *Biased feedback delivery to men versus women and gender differences in response to feedback will increase the likelihood that men (compared to women) will be identified as leaders.*

Finally, we argue that these feedback outcomes subsequently loop back to influence power retention conditions, such as stereotypes favoring men as leaders. A small initial gender difference in organizational power (e.g., men disproportionately represented in leadership positions) can trigger a cycle of feedback that preserves this power difference and expands it over time. For example, the feedback process itself could draw attention to even small initial gender differences in power, increasing the likelihood that (a) the source will deliver lower quality, patronizing feedback to women and (b) female recipients will feel especially powerless as feedback recipients. Armed with less useful feedback and feelings of powerlessness, women will be at a relative disadvantage in their development, making them more likely to opt out of, or be passed over for, advancement opportunities. This change in concrete leadership outcomes will, in turn, widen the gender gap in organizational power and set the stage for future feedback that is even more patronizing and less constructive.

**Proposition 4.** *Increases in the gender gap in leadership outcomes will increase the magnitude of power retention conditions in the feedback process (e.g., women feel more powerless as feedback recipients than men do; stereotypes favor men as leaders), creating a reciprocal loop that can turn small initial gender differences in leadership into large ones.*

## Discussion

### *Implications for research*

In order to test the proposed model, future empirical research could measure and manipulate the proposed power retention conditions and mechanisms underlying feedback to understand their impact on the gender gap in leadership. The propositions could be effectively tested using multilevel, longitudinal field research that looks across organizations as well as across individuals over time within organizations. Measures are needed to characterize power retention conditions, assessing organizations and units within them, at the levels of the source of feedback (e.g., using feedback to advance personal status goals), the unit and organization (e.g., extent to which it is male-dominated), and the organization or geographic region (e.g., the extent to which cultural norms and stereotypes within the organization and across national boundaries favor men as leaders). Samples of feedback and the reactions it engenders could be used to assess the content and manner in which feedback is delivered and responded to.

Longitudinal measures are important to capture the continuity of feedback power retention mechanisms and changes in reactions to feedback (e.g., the extent to which women's self-identity as a leader diminishes as a result of patronizing feedback from a supervisor or "mentor"), and how these outcomes exacerbate power retention conditions, reinforcing this dysfunctional cycle. Organizations can be followed over time, perhaps even from their start-up days, to observe how power retention conditions and mechanisms emerge and strengthen to diminish women's leadership motivation and opportunities. Sources and recipients of feedback can be followed over time to see how power dynamics influence the delivery of performance feedback and leadership opportunities for women compared to men. Case studies can collect examples of power conditions and feedback with retrospective analysis of differential experiences of men and women with similar backgrounds.

When using these non-experimental approaches, researchers must consider the issue of endogeneity. Our model contains a feedback loop from the dependent variable (leadership outcomes) to the antecedents (power retention conditions); it is, therefore, characterized by simultaneous causation or simultaneity, a form of endogeneity (Antonakis, Bendahan, Jacquart, & Lalive, 2010). Consequently, our independent variables are not truly exogenous. In order to generate valid estimates of the effects of the power retention conditions on the power retention mechanisms (and, likewise, of the power retention mechanisms on leadership outcomes) in a non-experimental setting, one could take an instrumental-variable approach (Stock & Watson, 2003). For example, one could identify stable individual difference variables (e.g., personality characteristics) that are not of theoretical interest but relate strongly to the independent variable. Candidate variables, which would serve as instrumental variables in a two-stage least squares model, could include, for example, age, extraversion, agreeableness, neuroticism, or physiological measures (Antonakis et al., 2010).

Manipulating power retention conditions using an experimental design would also be a useful way to test these propositions in a more controlled, internally valid context. This approach, by using random assignment to condition, has the additional benefit of addressing endogeneity concerns (Antonakis et al., 2010). Laboratory research with performance and feedback simulations can randomly assign subjects to differing power retention conditions and examine effects on feedback delivery with male and female confederates as recipients. Other research can examine recipients' reactions to different feedback under varying power retention conditions.

*Power equalization as a countervailing force*

Research could also investigate whether the converse of the variables and processes in our model could produce positive change. In other words, feedback may become a power equalization process that has a countervailing effect on power retention. Conditions for power equalization might include (a) the source's need for affiliation and desire to mentor for positive value to the protégé, (b) gender diversity in the team and organization, and (c) positive role models and social networks in the organization or elsewhere in society. These factors may influence the feedback delivery power equalization mechanisms, wittingly and unwittingly, providing clear and immediate feedback and mentoring. The feedback recipient's characteristics and behavioral tendencies, including attention to task requirements, clarifying ambiguous feedback, experimenting with new behaviors, and developing resilience in the face of power retention forces and mechanisms could moderate (increase and amplify over time) the relationship between power equalization mechanisms and leadership outcomes. Although beyond the scope of the present paper, ways to increase power equalization and decrease power retention conditions underlying feedback processes would be a worthwhile objective for future research and would suggest directions for positive change for women's advancement.

*Implications for practice*

As discussed earlier, individuals are more likely to pursue leadership when they receive feedback suggesting that they might be good at it. Thus, self-selection into leadership and selection into leadership by the organization are inherently related. On a purely pragmatic level, one could argue that power retention conditions are unlikely to change, and women should simply develop “thick skins” and brush off patronizing or inaccurate feedback. In this scenario, perhaps experiencing negative and/or inaccurate evaluative feedback would not necessarily undermine leadership opportunities for women as we have argued thus far. This approach may hold for individuals who are particularly resilient or less sensitive to others' expectations. The challenge to this argument, however, is that, as Ely et al. (2011: 475) argue, “If constructing and internalizing a leader identity is central to the process of becoming a leader...subtle yet pervasive forms of gender bias may impede women's progress by obstructing the identity work necessary to take up leadership roles.” Indeed, we suggest that the gender effects on feedback discussed above are likely to impede this identity work. Rather than simply admonishing women to develop thicker skin, organizations should take this issue seriously in order to promote power equalization and ensure that the path to leadership is equitable.

In their paper about understanding gender and organizational change, Ely and Meyerson (2000) propose four frames that offer different approaches to addressing issues of gender equity in organizations: (1) fix the women; (2) value the feminine; (3) create equal opportunity; and (4) assess and revise work culture. According to their assessment, each frame has the goal of improving gender equity in organizations and concomitant advantages and disadvantages in terms of doing so. We use this framework to guide our recommendations for how to address the gender effects in feedback processes reviewed here with the aim of creating the power equalization conditions noted above.

In accordance with Frame 1 (“fix the women”), women need to find ways to deal with the status quo, particularly in terms of biased evaluations (Mohr, 2014). No doubt this approach is realistic and practical. However, this argument puts the onus on women to perform the difficult job of disentangling the degree to which feedback contains valuable information about the evaluator's work-related expectations or simply reflects the evaluator's biases. Nevertheless, this frame is a pragmatic approach in that women in leadership positions can learn to reframe feedback and to parse the useful from the useless feedback. External coaches may be particularly helpful to women for parsing feedback (Gregory & Levy, 2012). Furthermore, this frame implies that women should also consider feedback in light of the feedback source's motivations in terms of personal status goals and desire to affirm group-based power differences.

Furthermore, a great deal of research has shown that bias is mitigated when evaluations are based on information that is unambiguous, relevant to the job being evaluated, and clear about contribution to job outcomes, the latter being particularly important for tasks conducted by teams (for a review of the literature on ambiguity and biased evaluations, see Heilman, 2012). Applied to Frame 1, these findings imply that women can potentially improve their feedback experiences by providing their evaluators with unambiguous information about their performance to the greatest extent possible. Given the social penalties that women experience for being assertive at work, this solution is far from foolproof. Providing this information—however unambiguous it might be—may be perceived as self-promotional and overly assertive, which may trigger negative repercussions for women. Nevertheless, while placing the onus on women to deal with an inequitable system, these approaches may still help individual women to be more strategic in terms of both understanding and seeking feedback.

In contrast, Frame 2 (“value the feminine”) focuses more on recognizing differences, at the risk of reinforcing stereotypes. In terms of feedback, this frame implies that managers should be educated about how men and women react to feedback differently and should adjust their behavior accordingly when delivering feedback. We believe that this approach, though it acknowledges gender differences in response to feedback, risks perpetuating women's greater likelihood of receiving patronizing feedback compared to men. In addition, this approach does not leave room for the possibility that women's differential responses to feedback compared to men stem from the power retention conditions reviewed above as opposed to some immutable, biological difference. Altogether, we do not see this frame as particularly useful unless managers understand the broader context of gender relations in organizations. Otherwise, the likelihood of delivering patronizing feedback by using this approach becomes too great.

Frame 3 (“create equal opportunities”) entails leveling the playing field in terms of feedback, such as by increasing accountability surrounding the feedback process. Research suggests that backlash against women who behave assertively is mitigated when accountability mechanisms are present. For example, Rudman (1998) found that women prone to self-promotion were

considered by male perceivers to be more competent than women who did not self-promote, but were less likeable and less hireable, except in cases in which the male perceivers were outcome-dependent (i.e., reliant on the female candidate's success). One way to increase accountability is to audit feedback, that is, to verify that, on average, gender is not significantly influencing the type of feedback employees receive. Companies are already performing audits to mitigate another important gender difference—the wage gap between men and women (Bertrand et al., 2010; Hegewisch & Hartmann, 2014)—by introducing real-time auditing systems so that managers can easily analyze whether they are paying their male and female employees at different rates. A similar system could be implemented for monitoring performance feedback. Data from this type of audit could indicate whether stereotypes are influencing feedback delivery in organizations. Nevertheless, accountability is not a panacea, since it has been shown to lead decision-makers to behave in ways consistent with the beliefs of those to whom they are being held accountable, even when those beliefs are discriminatory (e.g., Brief, Dietz, Cohen, Pugh, & Vaslow, 2000). Consequently, if stereotyping is prevalent in organizations, accountability will not be a seamless solution.

Relatedly, given the aforementioned role of ambiguity in responses to feedback, we likewise recommend that organizations ensure that evaluative feedback focuses on specific behaviors as opposed to general subjective assessments of leaders. This approach is consistent with past research showing greater accuracy in evaluating task performance as opposed to interpersonal performance (Viswesvaran, Ones, & Schmidt, 1996). Overall, the more organizations reduce subjectivity and increase objectivity, the more likely they will be to create an equal playing field for male and female employees (Heilman & Haynes, 2006). However, though objectivity is an admirable goal, it is often difficult to attain, particularly when power retention conditions are present.

Finally, Frame 4 (“assess and revise work culture”) concerns completely revamping organizational cultures and structures to create gender equity and the conditions of power equalization noted above. This frame is the most revolutionary of the four frames in that it calls for changing organizational practices that have been developed by and for men and that support and reflect men's lives. In a sense, this frame calls for changing the “ideal worker” (Acker, 2006) from being based on a man completely unencumbered from any other responsibilities to representing the diverse experiences of both men and women with complex identities. In terms of feedback, applying Frame 4 includes some of the changes discussed in Frame 3 in terms of creating more equitable assessments, but would go above and beyond these changes to address people's implicit assumptions and stereotypes about men and women. In other words, rather than adding accountability measures to temper these stereotypes, Frame 4 calls for upending these stereotypes and the concomitant penalties for stereotype violation. Thus, Frame 4 has the potential to directly address stereotypes, group-based power differences, women's lesser access to social networks relative to men, and women's tendency to feel more powerless relative to men in organizations.

Frame 4 likewise implies that men's overconfidence should also be addressed critically in organizations rather than being taken as a given, and that men's self-assessments should be more accurate and related to the feedback that they receive. This is a challenging goal. As a start, companies could somehow make the detrimental effects of biased evaluations tangible, such as by showing how they have (a) lost specific talented women due to biased feedback processes and (b) promoted overconfident men who may have inflated their abilities and subsequently underperformed. These realizations could be the first step for changing people's assumptions and stereotypes. In sum, Frame 4 is the most comprehensive approach and the most likely to address the power retention conditions and mechanisms that enable the feedback process to contribute to the gender gap in leadership.

## Conclusion

Feedback is an intervention linked to behavior priming (i.e., goal setting) that is in need of theory building (Locke, 2015). In this paper, we explored theory and research that suggest, inductively, how power dynamics may contribute to gender differences in feedback processes, content, and outcomes, which in turn may lead to interventions to improve career experiences and opportunities for women.

The path to leadership for women has been aptly described as a “labyrinth” (Eagly & Carli, 2007)—it presents numerous challenges and obstacles that women must navigate to reach leadership positions. We argue that feedback processes are an important obstacle in this labyrinth. Feedback is especially pernicious in that the results of gender bias are likely to accumulate over time, with women ultimately being more likely than men to select themselves out of leadership positions and less likely than men to be identified as leaders. Furthermore, feedback is a significant mechanism by which individuals retain power, and this power dynamic, as well as the subjective nature of feedback itself, is more likely to benefit men compared to women. Finally, the feedback effects reviewed here are more likely in male-dominated organizations and in the context of masculine tasks, both of which characterize many organizations.

Despite these obstacles, however, the labyrinth is not by definition insurmountable (compared to the “glass ceiling,” another popular metaphor), and many women can and do attain leadership positions. We believe that a hybrid approach to address the gender effects on feedback, involving both organizational accountability and change, as well as encouraging individual women to become careful consumers of feedback, can be helpful in transforming the labyrinth into a more direct path to leadership for women.

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