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Gender and leadership: A criterion-focused review and research agenda

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ABSTRACT

There is a large and growing body of work on gender on leadership, but this literature remains fragmented and incomplete, due in part to insufficient attention paid to nuances of the criterion variable of leadership. To provide a broader perspective on this literature, we draw upon Campbell, McCloy, Oppler, and Sager's (1993) theory of job performance as a framework to organize our review. First, we position gender as an indirect determinant of leadership and summarize prior work on (a) gender differences in leadership outcomes (i.e., emergence and effectiveness), (b) gender differences in leader behaviors, (c) gender differences in direct determinants of leader behaviors (i.e., declarative knowledge, skill, and motivation), and (d) potential mediated or indirect relationships between gender and these leadership criteria. Second, we explore gender as a moderator of both interpersonal (i.e., leader behaviors → leadership outcomes) and intrapersonal (i.e., direct determinants → leader behaviors) leadership processes. Throughout our review, we highlight new directions for future research to advance the study of gender and leadership.

Much has been written regarding the relationship between gender and leadership. In fact, scholars from an array of disciplines, including but not limited to psychology, sociology, management, economics, political science, and women's studies, have sought to understand the challenges that women may face in attaining, leading, or succeeding in leadership roles. Despite a flourishing literature, we believe that more attention and theorizing has generally been paid to the role of gender rather than the nature of leadership. Therefore, the purpose of our review is to infuse a new perspective into discussions of gender and leadership by drawing upon a prominent theory and model of job performance to more clearly articulate the criterion side of the equation and its implications for understanding the nature of the gender-leadership relationship.

Specifically, we draw upon Campbell et al.'s (1993) theory and model of job performance as our organizing framework. We adopt this model for two primary reasons. First, in contrast to other models that are solely descriptive in nature, Campbell and colleagues' work best reflects a *theory* of performance, going beyond simply articulating the dimensionality of performance to also specify key antecedents and consequences. This more comprehensive view of performance offers unique insights to the gender and leadership literature; for example, pointing to specific classes of variables that may explain gender differences in leader behaviors. Second, whereas many models of performance are either occupation-specific or very broad to be applicable to the population of jobs, this model strikes the right-level of specificity for our purposes by capturing the multi-dimensional nature of job performance and explicitly recognizing leadership behaviors as a dimension of performance.

Our review is organized as follows. First, we introduce Campbell et al.'s (1993) theory and model of job performance and clarify

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the relationship between job performance and leadership. Second, we review evidence of gender differences in the three categories of leadership criteria specified by the model: (a) outcomes, (b) behaviors or performance, and (c) direct determinants (i.e., knowledge, skill, and motivation). We then discuss indirect relationships between gender and these three domains. Finally, we transition to the moderating effect of gender in these processes. Specifically, we first review how the gender of the actor and perceiver as well as the gender composition of the group or context may influence interpersonal leadership processes (i.e., the relationship between leader behaviors and outcomes), before turning to discuss how the gender of the actor and gender composition of the context may also influence intrapersonal leadership processes (i.e., the relationship between direct determinants and leader behaviors). Throughout our review, we offer new insights and highlight unresolved issues to be pursued in future research that will advance the science of gender and leadership.

Given the continued growth of research on gender and leadership (Eagly & Heilman, 2016; Lord, Day, Zaccaro, Avolio, & Eagly, 2017), a review of this literature is both timely and necessary. By taking a criterion-oriented approach, we contribute to the literature by offering a new framework to conceptualize the relationships between various leadership criteria, helping to create a more organized and cohesive picture of links between gender and leadership. This interconnected approach also brings to light inconsistencies in relationships between gender and various leadership criteria, pointing to potential omitted variables or unexamined moderators that can be pursued in future research. Additionally, our framework also more clearly elucidates the multitude of ways (i.e., directly, indirectly, and interactively) in which gender can exert its influence at different stages of the leadership process. Further, despite the proliferation of research on gender and leadership, our framework and review of the literature reveals that certain aspects of the process where gender may play a role remains understudied and ill-understood. Thus, ultimately, our review of gender and leadership contributes to the literature by both taking stock of what is known on this issue as well as offering new directions forward to advance our understanding of this domain.

1. Leadership criteria and processes

Although traditional research on gender differences in leadership often focuses on gender differences in a single leadership criterion (e.g., transformational leadership), we begin instead by articulating a framework of leadership criteria drawing upon Campbell et al.'s (1993) theory of job performance so that we can unify and review gender differences in key leadership criteria within a single model. This theory provides a useful lens through which to understand leadership criteria and processes because leadership is a key component of performance for jobs that require interpersonal influence as part of the role. Finally, this theory of job performance, when applied to the leadership domain, offers us several critical insights.

The first insight is that performance should be defined by *behaviors* (McCloy, Campbell, & Cudeck, 1994). In other words, a leader's performance should be based on what they *do*. This emphasis on behaviors to define performance coincides with the proliferation of behavioral leadership models in the literature. Scholars have argued that different behavioral models of leadership can be consolidated via three (i.e., task-, relational-, and change-oriented; Yukl, Gordon, & Taber, 2002) or four (i.e., adding passive; DeRue, Nahrgang, Wellman, & Humphrey, 2011) higher-order factors. Subsequently, research has documented the existence of distinct and more destructive forms of leadership behaviors (e.g., Krasikova, Green, & LeBreton, 2013). Thus, leadership behaviors appear to be composed of at least five major types of behaviors: task-oriented, relational-oriented, change-oriented, passive, and destructive. In our review, we structure our discussion of gender differences in leadership behaviors around this typology.

However, in practice, the study of leaders is often the study of managers within business organizations (House & Aditya, 1997). This leads us to a second key point that models of job performance offer us: performance is *multi-dimensional* (Campbell et al., 1993). In other words, managers often engage in behaviors outside of the five categories of *leadership* behaviors that are typically studied by leadership scholars. Specifically, managers are often also technical experts, key communicators to stakeholders inside and outside the organization, and administrators (e.g., Borman & Brush, 1993). These are all types of job-related behaviors that are understudied by leadership scholars that may, nonetheless, make important contributions to leader and group effectiveness. As a result, this theory of job performance expands the criterion space, and we review gender differences in not only “traditional” leadership behaviors, but also discuss other job-relevant managerial behaviors that are rarely considered in this literature.

The third takeaway from theories of job performance relevant to the leadership domain is that performance is distinct from effectiveness, which reflect outcomes of performance behaviors that may be contaminated by environmental factors outside of the individual's control (Campbell, 1990). For example, two leaders may engage in the same behaviors, but ultimately lead groups who experience different outcomes (e.g., sales) due to differences in the size of the client bases the two groups serve or resources available (e.g., ability to offer discounts). Therefore, theories of performance strongly support that employees, including leaders, should be evaluated and rewarded on their *behaviors* rather than on indices of effectiveness. In the leadership literature, the most common effectiveness criteria are the perceived effectiveness of the leader and the performance of the group (Kaiser, Hogan, & Craig, 2008). Other frequently examined leader outcomes include follower satisfaction (Judge & Piccolo, 2004) and evaluations of leader promotion and derailment potential (Bono et al., 2017). Hence, in our review, we review gender differences in leader behaviors and leadership outcomes separately.

The fourth critical piece of information that leadership scholars can take from theories of job performance concerns the direct determinants of performance. Campbell et al. (1993) theorized that there are *only* three direct determinants of performance: knowledge, skill, and motivation. All other predictors of performance are indirect or influence performance via one or more direct determinants. Unfortunately, in the leadership literature, most of the empirical research on antecedents of leader behaviors has focused on indirect rather than direct determinants. Further, extant theorizing often focuses on explaining relationships between indirect determinants and leadership behavior using other indirect determinants (e.g., arguing that gender differences in leadership

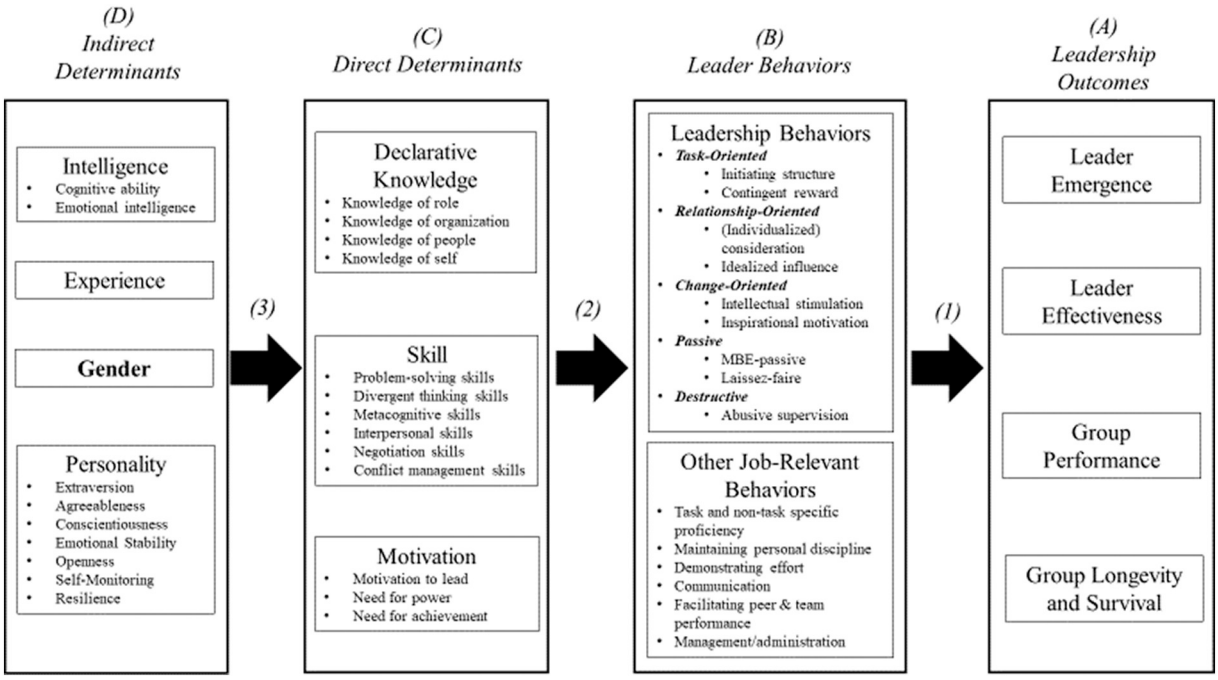

Fig. 1. An integrated model of indirect and direct determinants of leadership, leadership behaviors, and leadership outcomes.

behaviors are due to personality differences). However, a criterion-focused approach suggests that such theorizing is incomplete, as it ultimately fails to identify the most proximal determinants of leader behaviors. Therefore, we review and suggest future work on gender differences in the direct determinants of leader behaviors in this paper.

Together, these four insights from Campbell et al.'s (1993) theory and model of job performance as applied to the leadership domain are encapsulated in Fig. 1. This figure highlights that gender may act as an indirect determinant of leadership processes and the effect of gender on leader outcomes is likely serially mediated through knowledge, skill, or motivation as well as leader behaviors (with examples for each category provided). In support of this process model, prior meta-analytic research finds that the relationship between various leader characteristics (e.g., gender) and leadership effectiveness were mediated by leadership behaviors (DeRue et al., 2011), and there is some evidence that leader traits (i.e., intelligence, personality) impact leadership behaviors via multiple direct determinants of performance, particularly leadership-related knowledge and skill (Van Iddekinge, Ferris, & Heffner, 2009). Building on this foundational understanding of relationships between leadership criteria, in the following section we review evidence of gender differences at each point in the process (i.e., outcomes, behaviors, and direct determinants).

2. Direct (and Indirect) Relationships between gender and leadership criteria

In this section, we first review gender differences in each of the three main phases of the process articulated Fig. 1. We begin with leadership outcomes (denoted as class "A" in Fig. 1), as the bulk of past research has focused here. We then review gender differences in leader behaviors (denoted as class "B" in Fig. 1), followed by gender differences in leadership-related knowledge, skill, and motivation (denoted as class "C" in Fig. 1). Finally, we integrate and examine (in)consistencies in the relationship between gender and leadership criteria at different points in the process by considering indirect effects (captured via paths "1", "2", and "3" in Fig. 1). Whenever possible, we rely on meta-analytic estimates and large-scale studies. Additionally, within each domain, we also point out key areas of omission and opportunities for future research. These research questions are summarized in Table 2, where we also provide information regarding relevant theories and models and sample references for each topic.

2.1. Gender differences in leadership outcomes

The two primary types of leadership outcomes examined in the literature are leadership emergence and effectiveness (Kaiser et al., 2008). Leadership emergence focuses on the extent to which individuals are perceived as "leader-like." Historically, studies of leadership emergence use methods such as the leaderless group discussion to examine how individuals behave and are perceived in groups where there are no formal status differences between individuals. In contrast, leadership effectiveness research focuses on individuals who typically hold formal leadership or supervisory roles, examining their perceived or actual effectiveness in their position.

Table 1
Summary of prior meta-analyses on gender differences in leadership behaviors and outcomes.

Leadership Outcomes	*k*	*d*	Leadership Behaviors	*k*	*d*
Leadership emergence - overall [b]	136	0.21[a]	Interpersonal style [f]	136	0.01
Business settings [b]	11	0.15[a]	Subsequent studies in the 1990s [g]	16	−0.13
Leadership emergence – general (task and unspecified leadership) [c]	74	0.32[a]	Task style [f]	139	−0.02
			Subsequent studies in the 1990s [g]	14	−0.01
Leadership emergence – social leadership [c]	15	−0.18[a]	Democratic vs. autocratic style [f]	28	−0.21[a]
			Subsequent studies in the 1990s [g]	8	−0.19[a]
Leadership effectiveness [d]	82	−0.04	Transformational [h]	44	−0.10[a]
Self-ratings [d]	18	0.20[a]	Idealized influence-attribute [h]	10	−0.12[a]
Other-ratings [d]	64	−0.11[a]	Idealized influence-behavior [h]	15	−0.02
Leadership effectiveness – overall [e]	56	−0.03	Inspirational motivation [h]	29	−0.05[a]
Effectiveness measures [e]	65	0.05[a]	Intellectual stimulation [h]	35	−0.05[a]
Satisfaction measures [e]	17	−0.16[a]	Individualized consideration [h]	28	−0.19[a]
			Contingent reward [h]	21	−0.13[a]
			Management by exception-active [h]	12	0.12[a]
			Management by exception-passive [h]	18	0.27[a]
			Laissez-Faire [h]	16	0.16[a]
			Abusive supervision [i]	14	0.26[a]

Note. Positive effect sizes indicates that men score higher on that constructs, and negative effect sizes indicate that women score higher on that construct. All effect sizes presented here are weighted observed *d*-values to facilitate comparisons across studies.
Whenever possible, we report estimates of gender differences between actual leaders in organizations. [a] 95% confidence interval around this effect does not include zero. [b] Badura et al. (2018). [c] Eagly and Karau (1991). [d] Paustian-Underdahl et al. (2014). [e] Eagly et al. (1995). [f] Eagly and Johnson (1990). [g] van Engen and Willemsen (2004). [h] Eagly, Johannesen-Schdmit, & van Engen (2003). [e] Calculated from Mackey et al. (2017).

2.1.1. Leadership emergence

Table 1 (left panel) summarizes prior meta-analytic findings on gender differences in leadership emergence (denoted as part of class "A" in Fig. 1). The most comprehensive meta-analysis to date on gender differences in leadership emergence was conducted by Badura, Grijalva, Newman, Yan, and Jeon (2018). These authors found that although the magnitude of gender differences in leadership emergence has declined over time, overall women are still less likely to emerge as leaders relative to men ($d = 0.21$, $k = 136$). Further, although most studies included in this meta-analysis sampled students in either laboratory or classroom settings, Badura and colleagues were able to confirm that these effects also occurred in business settings ($d = 0.15$, $k = 11$). However, a prior meta-analysis by Eagly and Karau (1991) found that although men were rated as higher than women on general leadership (i.e., a combination of task and unspecified forms of leadership; $d = 0.32$, $k = 74$), women were rated higher than men on social leadership in leadership emergence ($d = -0.18$, $k = 15$). Both meta-analyses found evidence that the male advantage in leadership emergence was smaller for longer or repeated interactions and attenuated for higher social complexity tasks. Finally, Badura et al. did not observe that cultural gender egalitarianism affected the magnitude of gender differences in emergence.

We position leadership emergence as a leadership *outcome* because it is not completely under behavioral control of the individual. Although individuals can make claims of leadership, these claims must be accepted by others for one to emerge as a leader (e.g., DeRue & Ashford, 2010; Marchiondo, Myers, & Kopelman, 2015). Claims are behaviors that individuals take to assert their leadership, which can be explicit (e.g., saying that one is going to lead the meeting) or implicit (e.g., sitting at the head of the table) in nature (Marchiondo et al., 2015). In the next section, we turn from one's emergence as a leader to one's effectiveness in leadership roles once an individual has been granted (formal) authority over others within organizations.

2.1.2. Leadership effectiveness

Table 1 (left panel) also summarizes prior meta-analytic findings regarding gender differences in leadership effectiveness (denoted as part of class "A" in Fig. 1). Paustian-Underdahl, Slattery Walker, and Woehr (2014) found that men and women were similarly effective ($d = -0.04$, $k = 82$), and these findings echoed that of a prior meta-analysis by Eagly, Karau, and Makhijani (1995) that also found null effects ($d = -0.03$, $k = 56$). However, both meta-analyses also found evidence of moderating effects. Eagly et al. found that men were more effective than women in more masculine and more numerically male-dominated settings. The former may be explained by role congruity effects (i.e., individuals are more effective in roles that are seen as congruent with their gender; Eagly & Karau, 2002) and the latter by social identity theory (Hogg, 2001), as more prototypical group members are more likely to be viewed as effective leaders. Paustian-Underdahl and colleagues also found evidence of role congruity effects, though their findings suggested that both men *and* women are subject to these effects. In other words, their meta-analysis identified settings and leadership roles where women may fit role expectations *better* than men (e.g., middle management positions and in business and educational organizations) and, therefore, are seen as more effective.

Both Eagly et al. (1995) and Paustian-Underdahl et al. (2014) took a broad approach to conceptualizing overall leadership effectiveness, including measures of "performance or leadership ability; ratings of satisfaction with leaders or satisfaction with leaders' performance; coding or counting of effective leadership behaviors; or measures of organizational productivity or group performance" (p. 1134). Thus, their inclusion criteria did include some variables that Campbell et al. (1993) would classify as leader behaviors or performance rather than leader outcomes or effectiveness. Despite this potential source of construct contamination,

when Eagly and colleagues contrasted what they classified as effectiveness versus satisfaction measures, they found that, on average, male leaders were rated slightly higher on effectiveness compared to female leaders ($d = 0.05$, $k = 65$) and, on average, female leaders were rated slightly higher on follower satisfaction with their leader compared to male leaders ($d = -0.16$, $k = 17$), and the confidence interval of these two estimates did not overlap with each other.

Given that prior meta-analytic work found evidence that the relative importance of leadership behaviors differed by leadership effectiveness criteria (DeRue et al., 2011), it may behoove future researchers to take a more nuanced view and distinguish between different effectiveness criteria. For example, perhaps organizational decision-makers tend to value group effectiveness more so than employee satisfaction, rewarding (via salary and promotions) leaders differentially based on these factors. If this is the case, perhaps the different pattern of gender differences in these two leadership outcomes may be contributing to the lower numbers of female leaders ultimately found in top leadership roles. With this understanding of gender differences in leadership outcomes, we now transition to focusing on the *behaviors* of leaders.

2.2. Gender differences in leader behaviors

Table 1 (right panel) summarizes the findings of prior meta-analyses on gender differences in leadership behaviors (denoted as part of class "B" in Fig. 1). In the first meta-analysis of gender differences in leadership behaviors, Eagly and Johnson (1990) found that male and female leaders in organizations did not differ in their interpersonal ($d = 0.01$, $k = 136$) or task leadership style ($d = -0.02$, $k = 139$). However, female leaders were more likely to lead using a democratic (vs. autocratic) leadership style than male leaders ($d = -0.21$, $k = 28$). An updated meta-analysis by van Engen and Willemsen (2004) of studies subsequent to Eagly and Johnson supports that this pattern of results has not changed; they found null effects for gender differences in task ($d = -0.01$, $k = 14$) and interpersonal ($d = -0.13$, $k = 16$) leadership style and a female advantage for democratic (vs. autocratic) leadership style ($d = -0.19$, $k = 8$).

Currently, the dominant behavioral leadership models in the literature are those associated with transformational leadership. In particular, the Multifactor Leadership Questionnaire (Avolio, Bass, & Jung, 1999) has popularized the leadership dimensions associated with the Full-Range model of leadership. Meta-analyzing this literature, Eagly, Johannesen-Schmidt, and van Engen (2003) found evidence of consistent, but small gender differences in favor of female leaders in transformational leadership ($d = -0.10$, $k = 44$) and contingent reward behaviors ($d = -0.13$, $k = 21$). Additionally, men were somewhat more likely to engage in the more ineffective behaviors of management by exception (active, $d = 0.12$, $k = 12$; passive, $d = 0.27$, $k = 18$) and laissez-faire leadership ($d = 0.16$, $k = 16$). Thus, whereas early meta-analytic work suggested near-zero gender differences in leadership behaviors, this subsequent meta-analysis by Eagly and colleagues found a small female leadership advantage.

Although interest in destructive leadership is growing and several constructs have been proposed, the most commonly studied construct in this literature is abusive supervision, "the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact" by one's leader (Tepper, 2000, p. 178). Abusive supervision includes leader behaviors such as ridiculing subordinates, lying and breaking promises, and failing to give appropriate credit. A recent meta-analysis finds that male leaders are rated as higher on abusive supervision than female leaders ($d = 0.26$, $k = 14$; Mackey, Frieder, Brees, & Martinko, 2017). However, it is important to keep in mind that these meta-analytic estimates of gender differences in leader behaviors may be shaped by rater biases; we discuss the impact of this possibility below.

2.2.1. Gender biases in the encoding of leader behaviors

One key caveat in interpreting the above-reviewed findings is that, currently, assessments of leadership behaviors are almost entirely based on ratings (usually by subordinates, bosses, or peers). These ratings typically ask raters to retrospectively recall behaviors that occurred over some unspecified time period or some relatively long time period (i.e., one year). Scholars have called into question whether these ratings can or should be considered high fidelity records of how leaders behaved and have shown that perceivers typically rely on cognitive prototypes or heuristics to guide their information processing and organization of long-term memory (e.g., Shondrick & Lord, 2010).

Some authors have further suggested that the gender of the leader likely affects whether leadership behaviors are even encoded by observers (i.e., recognized and stored in memory; Lord & Maher, 1991) or recognized by the self (Hogue & Lord, 2007). An empirical study by Scott and Brown (2006) demonstrated that participants had a more difficult time encoding the agentic behaviors of female compared to male leaders. This suggests that some caution should be exercised in interpreting findings of gender differences in leader behaviors as they may be driven in part by differences in *encoding* versus how male and female leaders *actually* behaved. However, the extent to which this factor may bias our current conclusions is unclear, given that the feminization of management suggests that communal rather than agentic behaviors may tend to be increasingly emphasized in contemporary leadership roles (e.g., Rudman & Glick, 1999).

New technologies that allow for the objective assessment of behaviors without the aid of subjective human evaluators prone to gender-based biases may help to clarify our understanding of naturalistic gender differences in leader behaviors in the future. As an example, a recent study by Turban, Freeman, and Waber (2017) analyzed email communications and meeting schedule data (for information on frequency of interactions between different individuals and social network ties) and sociometric badge data (assessing movement, proximity to other badges, and speech volume and tone) among employees in a multinational firm and found little evidence of gender differences in behavior. Thus, we encourage scholars to consider and apply new methods that can overcome some of the limitations of perceptual ratings of leadership behaviors to better elucidate actual differences in behaviors between male and female leaders. To better understand potential contributors to these observed gender differences in perceived leadership behaviors, in

the following section we review gender differences in the three posited direct determinants.

2.3. Gender differences in direct determinants of leader behavior

In this section, we review evidence on whether male and female leaders differ in their understanding of what to do (i.e., knowledge), how to do it (i.e., skill), and their desire to do it (i.e., motivation; denoted as class "C" in Fig. 1). Unfortunately, as mentioned above, research on this aspect of the leadership process is the most limited, and the particular type of knowledge, skill, or motivation most critical to shaping each type of leader behavior as well as whether there are gender differences on these variables is generally not well understood. In a positive development, Zaccaro, LaPort, and José (2012) sought to elucidate the key attributes of successful leaders and identified several cognitive (e.g., divergent thinking skills), social (e.g., negotiation skills), and motivational (e.g., motivation to lead) variables that they believe are critical. Thus, future research could build upon this work to examine both the relationship between these variables and different types of leader behaviors as well as whether there are gender differences in these variables among workplace leaders or those seeking leadership roles.

2.3.1. Knowledge

As there is limited research, it is currently unclear whether, on average, male and female leaders tend to differ in job-related knowledge (e.g., knowledge about the job/role and organization). Conventional wisdom suggests that men may have access to valuable social networks (i.e., "old boys" networks) that women do not (Campbell, 1988), which may afford them greater access to institutional knowledge and decision-makers. Although there are relatively few studies examining the social networks of female managers, there is some evidence supporting that the networks of male and female managers do differ (e.g., Ibarra, 1997). Male managers may also have greater technical knowledge of organizations compared to women as they are more likely to be found in line (i.e., business management, operations management, sales) versus staff (i.e., human resources, administration, external affairs) management roles (e.g., Lyness & Heilman, 2006), and line experience is often seen as a necessary prerequisite for entry into the C-suite (Beeson & Valerio, 2012). However, it is unclear whether the idea that line experience is critical to senior leader and CEO performance is empirically supported versus just a preference of decision-makers (e.g., male and female executives disagree on whether line experience is a key explanatory variable for the general lack of female executives and CEOs in business organizations; Oakley, 2000). Future research should seek to bring data to bear on this issue. However, providing some converging support, in a sample of military officers, Hirschfield and Thomas (2011) found that men scored higher than women on test of strategy knowledge. In the following section, we move from gender differences in leader knowledge to those in skill.

2.3.2. Skill

Discussions regarding gender differences among leaders often invoke female leaders' purportedly greater interpersonal skills relative to their male counterparts (e.g., Riggio & Reichard, 2008). Although, some empirical work suggests that gender differences in charismatic leadership behaviors can be explained by gender differences in social and emotional skills (Groves, 2005), generally there is limited empirical evidence strongly supporting or refuting these claims. Further, most of the samples used in these studies are modest in size.

Beyond social and relational skills, cognitive skills are also critical for leadership performance. Recently, Javidan and colleagues developed the Global Mindset Inventory®, which strives to assess many of the knowledge and skills posited by Zaccaro et al. (2012) to be important to leadership behaviors and effectiveness. Based on a large sample of managers and executives, they found that men scored higher than women on overall global mindset, and this appears to be primarily driven by differences on some cognitive dimensions (i.e., intellectual capital, global business savvy, cosmopolitan outlook, cognitive complexity; Javidan, Hough, & Bullough, n.d.). Overall, there is some evidence that female leaders may have an advantage over male leaders on some leadership-relevant social skills, whereas male leaders may have an advantage over female leaders in some of the cognitive determinants of leadership, though generally more research is necessary to clarify the nature and magnitude of these differences. In the next section, we turn to the final posited direct determinant of leader behaviors – motivation.

2.3.3. Motivation

Research on gender differences in motivation in the leadership domain has typically focused on motivation to lead or desire for power. Recent studies of motivation to lead typically utilize Chan and Drasgow's (2001) measure and conceptualization, which posits that motivation to lead is a multidimensional construct consisting of three components: affective-identity (i.e., intrinsically wanting or desiring to lead), noncalculative (i.e., leading for non-selfish reasons), and social-normative motivation to lead (i.e., feeling an obligation or duty to lead). In their recent meta-analysis, Badura, Grijalva, Galvin, Owens, and Joseph (2020) uncovered small, but consistent, gender differences across all three dimensions. Specifically, men scored higher on the affective-identity ($d = 0.10$, $k = 43$) and socio-normative ($d = 0.14$, $k = 27$) dimensions, and women scored higher on the non-calculative dimension ($d = -0.19$, $k = 23$). It should be noted that the credibility intervals for all three estimates are quite large, indicating that there may be moderators of these relationships, such that under some conditions gender differences can even be reversed. We call for future research that identifies these moderators.

There is also evidence of gender differences in motivation or desire for power. Across four samples, including both students and workers, Schuh et al. (2014) found that there were moderate gender differences in desire for power ($d = 0.34$–0.60), and desire for power mediated the relationship between gender and leadership emergence. Providing converging evidence, Gino, Wilmuth, and Brooks (2015) found that both men and women associated high-level positions and professional advancement with power, but

women were less likely to have power-related life goals and were more likely to anticipate negative consequences (i.e., conflict and tradeoffs) connected with obtaining such powerful positions compared to men. Overall, Gino and colleagues found that men and women did not differ in how *attainable* they felt leadership and other high-powered roles to be; however, women found these roles to be less *desirable* compared to men.

In summary, there appears to be small gender differences in favor of men for leadership emergence, but no consistent evidence of gender differences in leadership effectiveness on average, though this does vary based on contextual factors. In contrast, although gender differences in leadership behaviors tend to also be small, they generally favor women over men, in that women tend to be rated as more frequently engaging in more effective leadership behaviors (e.g., transformational leadership) and less frequently engaging in more ineffective leadership behaviors (e.g., passive and destructive leadership). Gender differences in the direct determinants of leadership are generally understudied, such that gender differences on leadership-related knowledge and skill are unclear, though there is some evidence of differences in leadership-related motivation. In the next section, we further interpret this pattern of effects holistically to elucidate potential explanations or areas for future research for inconsistencies in gender differences across leadership criteria or the leadership process as a whole.

2.4. Indirect relationships between gender and leadership criteria

2.4.1. Leadership emergence

When we put together what we know from prior research, it appears that gender differences in leadership emergence are larger than gender differences in leadership effectiveness. Although even small gender differences can compound and lead to major disparities in gender representation (e.g., Martell, Lane, & Emrich, 1996), this suggests that focusing earlier on in the "leaky" leadership pipeline is likely to be more beneficial to alleviating female underrepresentation in leadership roles. Thus, understanding why women are less likely to emerge as leaders relative to men should be a key priority for future research.

To this end, using meta-analytic path analysis, Badura et al. (2018) examined to what extent agentic and communal traits and participation serially mediated the relationship between gender and leadership emergence. Their results were generally supportive of their hypothesized model. Specifically, gender predicted agentic traits (such that men, on average, were more agentic than women) and communal traits (such that women, on average, were more communal than men), agentic traits then strongly and positively predicted participation (i.e., frequency or duration of talking in group discussions) whereas communal traits then weakly and negatively predicted participation, and participation then positively predicted leadership emergence. However, we note that these path modeling results are based almost exclusively on students; therefore, it is currently not clear whether this process explains gender differences in leadership emergence in organizations, particularly as gender differences in leadership emergence differed somewhat in magnitude when examining classroom versus business settings.

However, Badura et al.'s (2018) study also raises other questions. There remained significant residual effects of agentic and communal traits, respectively, on leadership emergence beyond their effects via participation. This suggests that there may be other ways of making leadership claims that explain these relationships, which seems likely given that participation is only one narrow way that leadership can be claimed. Additionally, when a direct path between gender and leadership emergence is added to this model, it is significant and negative, indicating that women are *more* likely to emerge as leaders. We interpret this residual direct effect as suggestive that there may be other behaviors not captured in the current model via which women may be more likely to make leadership claims compared to men that mitigates some of the effects of men's greater tendency to participate relative to women on gender differences in leadership emergence. A recent meta-analysis suggests that women experience interpersonal backlash for explicitly dominant behavior (e.g., direct demands), but not implicitly dominant behavior (e.g., eye contact; Williams & Tiedens, 2016). Thus, one possibility is that women may be more likely to make implicit leadership claims compared to men, and these implicit claims have a weaker relationship with leadership emergence relative to participation.

Generally, we encourage future research that addresses this key gap in understanding gender differences in leadership emergence by studying the potentially gendered nature of leadership claims and grants (denoted as Path "1" in Fig. 1). If gender differences in how leadership claims are made are found for men and women, then it will also be important for researchers to determine whether these are due to gender differences in leadership-related knowledge, skill, or motivation (denoted as Path "2" in Fig. 1), which can help to us to generate appropriate interventions. Next, we turn to indirect linkages between gender and leadership effectiveness via leader behaviors and the three theorized direct determinants.

2.4.2. Leadership effectiveness

Although our review above indicates that gender differences in both leadership behaviors and effectiveness are small, differences in behaviors appear to be larger and more stable than differences in outcomes (denoted as Path "1" in Fig. 1). This is not altogether unexpected, as the magnitude of the two would not necessarily be equal unless leadership behaviors were the *only* determinants of effectiveness. Using meta-analytic path analysis, DeRue et al. (2011) examined to what extent leadership behaviors mediated the relationship between gender and leadership effectiveness. Generally, the indirect effect through the Full-Range leadership behaviors (e.g., transformational leadership, contingent reward, management-by-exception, and laissez-faire leadership) as well as leadership behaviors from other models (i.e., initiating structure and consideration) combined explained most of the total effect of gender on leadership effectiveness.

Unexpectedly, DeRue et al. (2011) found that laissez-faire leadership explained approximately half of the variance in the relationship between gender and leadership effectiveness, followed closely by contingent reward as the next largest contributor. In other words, the leadership behaviors typically invoked and examined by gender and leadership scholars (i.e., transformational

leadership), which usually tend to be either stereotypically communal or agentic in nature, may not necessarily be the behaviors that contribute most to explaining gender differences in leadership effectiveness. Thus, we encourage future research that expands inquiries of gender differences in leadership behaviors to those that, at first glance, may not necessarily be assumed to be gendered. Finally, we note that there remains a small direct effect of gender on leadership effectiveness, suggesting that there may be other untapped mediators of this relationship, a point we explore further below.

It is an interesting "thought exercise" to consider what factors associated with leader gender may be mitigating the female leadership advantage found when examining gender differences in leadership behaviors and this represents another important direction for future research. Eagly and Carli (2003) point to perceptual biases, such that women often do not receive enough credit for their actions, leading to lower perceptions of effectiveness. Although we do not disagree with the contribution of this factor, which we return to when we discuss how gender *moderates* the relationship between leader behaviors and effectiveness, below, we first play devil's advocate and explore other possibilities. Specifically, we consider whether male and female leaders may differ in other behaviors where men demonstrate an advantage or whether men differ in the situations they tend to find themselves leading compared to women.

One possibility is that there are other distinct and important leadership behaviors where men demonstrate an advantage that has been overlooked in the existing literature, which explains the lack of overall gender differences in leadership effectiveness (denoted as Path "1" in Fig. 1). For example, perhaps male leaders tend to engage in more ethical, servant, or authentic leadership behaviors than their female counterparts do. Another possible explanation is that gender differences on narrower aspects of leadership behaviors may occur that are particularly critical to leadership effectiveness. These differences may be masked by our broad behavioral measures. For example, Ibarra and Obodaru (2009) uncovered that female leaders are less visionary than male leaders, despite similarity in other dimensions of leadership behaviors.

A third prospect is that male and female leaders differ in other job-related behaviors that are important for effectiveness outside of leadership behaviors, especially given that Campbell et al. (1993) highlight that job performance consists of behaviors outside of leadership for many roles. In other words, if there is an unexamined or unmeasured male advantage in other aspects of managerial behaviors, such as management/administration, technical proficiency, or communication, this may translate into minimal gender differences in leadership effectiveness when combined with gender differences in leadership behaviors. As an example, Dragoni, Oh, Vankatwyk, and Tesluk (2011) found that male executives scored higher than female executives on behaviors associated with strategic thinking (i.e., "articulate a vision and shape strategy, demonstrate sound business judgment, and attend to global business issues", p. 840).

Rather than unmeasured behaviors, another alternative that can also explain disparate gender differences in behaviors and leadership effectiveness is that men and women typically find themselves leading in different situations, with men tending to lead in contexts that are more advantageous. In fact, prior research shows that relative to men, women may be more likely to lead in precarious roles and times (e.g., failing organizations), a phenomenon known as the glass cliff (Ryan & Haslam, 2005). It should be clarified that others perceive women to be particularly well-suited to lead in these precarious situations only when the leader is asked to endure the poor performance of the division, take responsibility for the ultimate failure of the division, or to guide or manage people through the crisis, and not when the role is to act as a spokesperson or to actually turn the failing division around (Ryan et al., 2011). Although we acknowledge that stereotypes and bias drive the glass cliff phenomenon, the consequence may be that female leaders are more likely to be responsible for objectively less effective groups compared to male leaders due to factors outside of their control.

Finally, although the direct determinants of leadership-related knowledge, skill, and motivation are theorized to mediate the relationship between gender and leader behaviors (denoted as Path "2" in Fig. 1), limited empirical research has examined this link in the leadership process model. Thus, it is currently unclear whether gender differences in these direct determinants are generally congruent with gender differences in leader behaviors. Some might argue that understanding the direct determinants of leader behaviors need not be a priority, given that female leaders tend to be rated as more frequently engaging in effective behaviors (e.g., transformational) and less frequently engaging in ineffective behaviors (e.g., destructive) compared to male leaders. We argue against this interpretation and encourage future research to address this key gap for several reasons. First, it is important to understand what factors may be contributing to women's advantage when it comes to leader behaviors to help disentangle whether these differences in behavior are real or largely perceptual. Second, explanations of women's leadership advantage are often based on stereotypical expectations (e.g., greater interpersonal skills) that are rarely empirically tested and may not necessarily even be true among the subpopulation of interest (i.e., leaders or managers). Third, a greater understanding of the direct determinants of leader behaviors is critical to informing interventions, as they are the most proximal predictors of such behaviors. In summary, we believe that this criterion-focused perspective crucially highlights interconnections between leadership criteria and provides a roadmap forward to explore (in)consistencies between them.

3. Gender as a moderator of leadership processes

In the first half of this paper, we examined gender differences by leadership criteria and positioned gender as an indirect determinant of leadership. In this second half of this paper, we switch gears and examine gender as a *moderator* of leadership processes. Frear, Paustian-Underdahl, Heggestad, and Slattery Walker (2019) refer to the former as an *unequal attributes* and the latter as an *unequal effects* framework. Although traditionally a process-oriented perspective has rarely been used when examining leader trait-outcome relationships, Dinh and Lord (2012) encouraged researchers to do so. Specifically, they distinguished between the intrapersonal effect (i.e., direct determinant—behavior relationships) and the interpersonal effect (i.e., behavior—outcome

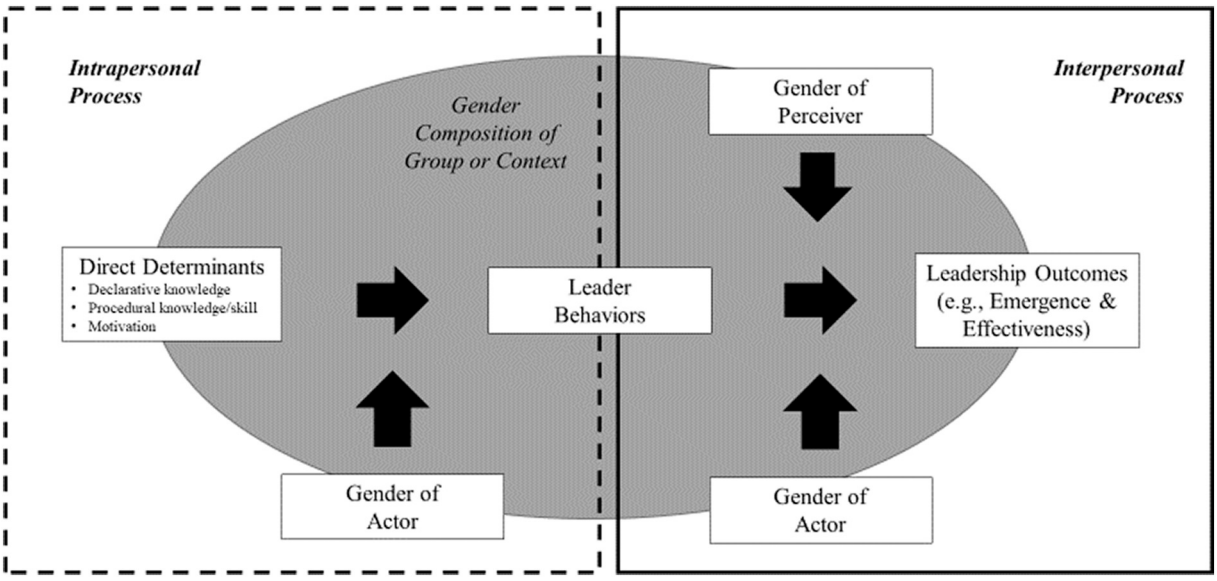

Fig. 2. The moderating effects of gender on intrapersonal and interpersonal leadership processes.

relationships), arguing that disentangling these two phases of the process helps to clarify the nature and meaning of moderating effects. Furthermore, scholars have argued that understanding both interpersonal and intrapersonal barriers to women's underrepresentation in leadership roles is necessary if solutions are to be found (Lyness & Grotto, 2008). Thus, below, we first review whether gender (of the actor, observer, or composition of the group or context) moderates interpersonal effects. We then turn to and theorize whether leader gender or the gender composition of the group or context also moderates intrapersonal effects, which has received more limited attention in the literature. Our overall conceptual model of moderating effects is depicted in Fig. 2.

3.1. Gender moderation of interpersonal effects

When considering interpersonal effects, both the gender of the actor (i.e., the leader whose behaviors are being evaluated) and perceiver (i.e., the individual judging or interacting with the leader) as well as the gender composition of the context can affect the relationship between behaviors and outcomes (denoted in the right-hand square of Fig. 2). Much of the literature has focused solely on the impact of actor gender, with less attention paid to perceiver gender or dyadic or broader group gender composition effects. Below, we first review the empirical evidence regarding the moderating effects of gender on interpersonal leadership processes for the outcome of leadership emergence followed by leadership effectiveness.

3.1.1. Leadership Emergence

Generally, limited research has examined whether gender may moderate interpersonal effects for leadership emergence. In one of the few studies examining this question, McClean, Martin, Emich, and Woodruff (2018) found that engaging in promotive voice, offering improvement-oriented suggestions of one's own volition, was positively related to perceived status and, subsequently, leadership emergence, but this was only true for men and not women. In other words, men appeared more leader-like when they engaged in promotive voice, but women did not. This study also "gives back" to our understanding of behaviors that individuals can use to claim leadership, as promotive voice was associated with leadership emergence, but prohibitive voice (i.e., offering cautions surrounding change of one's own volition) was not. Overall, this study suggests that beyond speaking in a group (i.e., participation), *what* is said and by *whom* is important in determining leadership emergence.

Although McClean et al. (2018) found that women are disadvantaged relative to men when it comes to leadership emergence based on some voice behaviors, Lanaj and Hollenbeck (2015) found that women were advantaged for leadership emergence compared to men when engaging in other types of behaviors. Specifically, in self-managing MBA teams, Lanaj and Hollenback found that women were more likely to be perceived as leader-like when they engaged in task-related (e.g., planning and organizing team tasks) or boundary-spanning (e.g., coordinating with people outside the team for important resources) behaviors relative to men. Interestingly, they call this phenomenon 'over-emergence' as the relationship between these same behaviors and actual effectiveness did not differ for men and women, suggesting that viewing women as more leader-like based on these behaviors was unwarranted.

Illustrating some of Dinh and Lord's (2012) arguments that differentiating between interpersonal and intrapersonal effects is important to unpacking moderation effects, Neubert and Taggar (2004) examined whether gender moderated the relationship between various individual differences and leadership emergence in a field sample. These authors found that the relationship between conscientiousness, emotional stability, and team member network centrality and leadership emergence was stronger for men than women. In contrast, the relationship between intelligence and leadership emergence was stronger for women than men. However, as

intervening behaviors were not assessed, it is unclear whether these moderation effects reflect that these individual differences were differentially related to subsequent leadership claims or actions for men and women, such claims were evaluated differentially for men and women, some combination of the two, or differs by the individual difference variable under consideration.

To our knowledge, only one study has examined the moderating effect of perceiver gender on the relationship between behaviors and leadership emergence. Marchiondo et al. (2015) uncovered that female observers' leadership emergence perceptions depended upon an actor's leadership claims being granted by others, while male observers' leadership emergence perceptions were dependent only on that an actor made leadership claims. Additionally, although there is research examining whether and how gender-based differences in group composition affect the magnitude of gender differences in leadership emergence (e.g., Eagly & Karau, 1991), this research generally does not incorporate the intervening claiming behaviors central to understanding interpersonal processes. In summary, the literature to date reveals that actor gender moderates interpersonal emergence effects in a manner that advantages women for some behaviors and men for others, has rarely explored perceiver gender as a moderator of these relations, and has neglected examining potential dyadic or group gender composition moderation effects. In the next section, we review evidence regarding whether gender moderates interpersonal effects for leadership effectiveness.

3.1.2. Leadership Effectiveness

Similar to the leadership literature more broadly, the emphasis to date when examining whether leader gender moderates relationships between behaviors and outcomes has been on transformational leadership. As an example, Vinkenburg, van Engen, Eagly, and Johannesen-Schmidt (2011) found that participants rated the inspirational motivation component of transformational leadership as more important for the promotion of men than women, whereas the individualized consideration component of transformational leadership was identified as more important for the promotion of women than men. The result of these interactions is that inspirational motivation was rated as the most important behavior for men whereas inspirational motivation and individualized consideration were rated as equally important to the promotion of women. The latter finding is in line with prior research showing that female leaders must balance being competent *and* nice to be seen as effective in a way that is not required of men (e.g., Johnson, Murphy, Zewdie, & Reichard, 2008).

Subsequently, several studies examined whether transformational leadership behaviors were *actually* differentially related to outcomes for men and women. Loughlin, Arnold, and Crawford (2012) presented scenarios manipulating individualized consideration to senior government leaders and found male, but not female, leaders were rewarded for this behavior (i.e., seen as competent and recommended for recognition and organizational rewards). In a sample of leaders of same-sex religious orders within the Roman Catholic Church, Druskat (1994) found that although transformational leadership was positively related to follower satisfaction with the leader, the relationship was markedly stronger for male versus female leaders. In a hospital setting, Reuvers, van Engen, Vinkenburg, and Wilson-Evered (2008) found that transformational leadership was more strongly related to individual perceptions of team innovation when enacted by male compared to female leaders, and these effects appeared to be driven primarily by the idealized influence and individualized consideration subscales.

In contrast to the three studies above, which found that men appear to reap better outcomes from transformational leadership than women, Duehr (2006) found the opposite pattern of effects. In her field study, she found that transformational leadership was more predictive of follower satisfaction for female compared to male leaders. Further, although not reaching conventional levels of statistical significance, Duehr found a similar trend that the relationship between transformational leadership and leadership effectiveness (as rated by subordinates and supervisors) appeared to be stronger for women compared to men.

Although there appears to be some consistent evidence that actor or leader gender serves as a moderator of the relationship between transformational leadership and outcomes, other scholars have argued that this relationship is further moderated by other factors. For example, Braun, Peus, and Frey (2012) argued that leader attractiveness is one such factor, Wolfram and Gratton (2014) theorized that leaders' gender role self-concept (i.e., masculinity and femininity) may be another, and Triana, Richard, and Yücel (2017) posited that status incongruence between the supervisor and subordinate also matters for this relationship. However, evidence to support these higher-order interaction effects are generally mixed and results difficult to interpret.

In contrast to actor gender effects, there is less clear-cut evidence to support perceiver gender effects. Neither Loughlin and colleagues (2012) in their experimental study nor Reuvers et al. (2008) in their field study found evidence that perceiver gender moderated the relationship between transformational leadership and outcomes. However, Kim and Shin (2017) found that subordinate gender moderated the relationship between their manager's transformational leadership and the subordinate's psychological empowerment, such that the relationship was stronger for male compared to female subordinates.

In one of the rare studies that examined potential interactive effects of actor *and* perceiver gender and leadership behaviors, Ayman, Korabik, and Morris (2009) uncovered a significant three-way interaction between transformational leadership, actor gender, and perceiver gender in predicting perceived leadership effectiveness. Specifically, transformational leadership was unrelated to effectiveness for male leaders (regardless of subordinate gender), transformational leadership was unrelated to effectiveness for female leaders when rated by a female subordinate, and transformational leadership was *negatively* related to effectiveness for female leaders when rated by a male subordinate. Thus, male followers do not find transformational behaviors to be effective when enacted by female leaders. However, it should be noted that the lack of a relationship between transformational leadership and leadership effectiveness among the other dyadic gender configurations is surprising and deviates from typical findings in the literature.

Moving beyond transformational leadership, a small number of studies have examined whether leader gender moderates the relationship between other leader behaviors and outcomes. Most of these studies focus on behaviors that are likely to be perceived as gendered in nature (i.e., agentic or communal). In a role-playing exercise, Korabik, Baril, and Watson (1993) found that when female leaders used a more dominating conflict management style, they were perceived as less effective than male leaders doing the same.

They also found that when male leaders used a more obliging conflict management style, they were perceived as less effective than female leaders employing the same style. Similarly, in two field samples, Wang, Chiang, Tsai, Lin, and Cheng (2013) found that the relationship between benevolent leadership and subordinate performance was generally positive for men and null for women, whereas the relationship between authoritarian leadership and subordinate performance was generally negative for women and either null or positive for men.

In contrast, Bono et al. (2017) found that the moderating influence of leader gender on the relationship between ineffective interpersonal behaviors (e.g., not adaptable to different types of people, fails to treat people with respect) and leader evaluations was only observed for some outcomes and not others. Namely, Bono and colleagues uncovered that female (vs. male) leaders were viewed as more likely to derail (i.e., when a manager fails to live up to expectations by being fired, demoted, or plateaued; Lombardo & McCauley, 1988) and less likely to be offered sponsorship and mentorship from senior colleagues when they engaged in ineffective interpersonal behaviors. However, this effect was not observed for evaluations of performance or promotion potential.

Generally, limited research has examined how the gender composition of the group or context (e.g., industry or occupation) would influence the relationship between leader behaviors and outcomes, either singly or in conjunction with leader or perceiver gender. However, a recent study by Gloor, Morf, Paustian-Underdahl, and Backes-Gellner (2020) found that gender differences in ratings of leader effectiveness disappeared in gender-balanced groups relative to male-dominated groups as female leaders were seem as more prototypical in these settings. Although a drawback of this study was that leader behaviors were not directly assessed and thus cannot be definitively equated between men and women, it seems likely that male and female leaders were similar in this study as they were selected based on the same set of criteria and were randomly assigned to lead newly formed small student teams that varied in gender composition.

In summary, our review of the literature on interpersonal effects reveals that there is generally more consistent evidence of leader gender rather than perceiver gender effects. Further, the nature of these moderating effects often disadvantage female leaders. Both dyadic or group gender composition were rarely examined as moderators in this domain. Additionally, prior research has typically focused on examining moderation effects based on transformational leadership or stereotypically masculine or feminine leader behaviors. Thus, prior research has largely neglected whether leader gender may moderate relationships between task-oriented behaviors and leadership outcomes or ineffective/negative behaviors and leadership outcomes.

There are a couple of exceptions, the study by Druskat (1994) examining leadership behaviors among leaders of same-sex religious orders within the Roman Catholic Church did find that followers were more dissatisfied when a male leader engaged in laissez-faire leadership behaviors compared to a female leader. This finding is somewhat surprising given that prior research suggests that descriptive norms indicate that men are *expected* to engage in these passive and ineffective leadership behaviors more so than women (Vinkenburg et al., 2011). Additionally, Schaumberg and Flynn (2017) demonstrate that female leaders who act in a self-reliant manner are evaluated more positively than male leaders who do the same, arguing that this occurs because self-reliance differs from agentic traits such as dominance in that it is not negatively associated with communality. Thus, self-reliant female leaders are viewed as competent *and* communal. Generally, we encourage future research to examine whether and how leader gender moderates relationships between these other types of behaviors and outcomes.

3.1.3. On Determining Bias

On an important methodological note, in lab experiments, since all other characteristics are equated between male and female leaders, any moderating effects of leader gender on the relationship between leader behaviors and outcomes must *necessarily* be the result of bias. However, we note that although lab experiments demonstrate that a phenomenon *can* happen, it does not indicate the extent to which is *does* happen in organizations. In contrast, for field studies, the moderating effect of leader gender on the relationship between leader behaviors and leadership outcomes may not *always* signal the existence of bias.

This interpretational difficulty in field studies is due to an issue known as the omitted variable problem (Sackett, Laczo, & Lippe, 2003). Specifically, the interaction coefficient may be biased when variables associated with the moderator and the criterion are omitted from the model. As an example, let us assume that there are truly gender differences in leaders' strategic behaviors, which are associated with leadership effectiveness. If we then estimate a regression model where we examine the interaction between transformational leadership and leader gender on leadership effectiveness, a significant interaction may not accurately signal the presence of bias as the strategy-related behaviors were omitted. In many of the field studies we draw upon in our review of whether gender moderates interpersonal effects, only one type of behavior is included in the model. However, our review above revealed that there may be gender differences on other relevant behaviors and situational factors. Thus, we caution future scholars to more stringently rule out alternative explanations, prior to concluding that bias has occurred. In the next section, we transition from interpersonal effects to explore intrapersonal effects.

3.2. Gender Moderation of Intrapersonal Effects

Scholars have noted that leadership research tends to be asymmetrical in its focus, with more attention paid to the outcomes of leadership behaviors relative to antecedents (e.g., Bommer, Rubin, & Baldwin, 2004). Therefore, not surprisingly, less research has examined intrapersonal compared to interpersonal leadership effects. Further, research on antecedents of leadership behaviors has almost exclusively focused on distal determinants (e.g., personality, intelligence, and background characteristics, such as age or family structure; Tuncdogan, Acar, & Stam, 2017), with limited research examining the more theoretically proximal predictors of knowledge, skill, and motivation. Given these limitations of the literature, below, we first review empirical research examining whether leader or actor gender moderates the relationship between distal determinants (denoted as part of class “D” in Fig. 1) and

leader behaviors before positing two reasons why gender may moderate intrapersonal effects between proximal determinants and leader behaviors (denoted in the left-hand square of Fig. 2).

A commonly studied, more distal antecedent of leadership behaviors is personality. Duehr (2006) examined whether Big Five personality traits predicted Full-Range leadership behaviors differentially for male and female leaders. She found that extraversion predicted transformational leadership more strongly for women relative to men. However, given that the pathway(s) or direct determinant(s) via which extraversion shapes transformational leadership behaviors is currently unclear, these findings could signal either the presence of omitted variables from the model that are correlated with gender and the criterion or that the relationship between these two variables is, in fact, different for men and women. In contrast, Berry, Kim, Wang, Thompson, and Mobley (2012) examined whether the relationship between Big Five personality traits and both task and contextual performance differed by gender in two samples of managers and concluded that there was little evidence of differential relationships.

Examining the relationship between leaders' managerial philosophies and their behaviors, Sahin, Gürbüz, and Şeşen (2016) found that the positive relationship between endorsement of Theory Y (i.e., workers are intrinsically motivated and desire to work) and transformational leadership was stronger for women than men. In contrast, no such gender moderation effects were found between endorsement of Theory X (i.e., workers require external intervention and rewards to ensure performance) and transformational leadership. Thus, female leaders' transformational leadership behaviors are more strongly influenced by their managerial philosophies or beliefs about workers' motivations than are their male counterparts.

Research on the Queen Bee phenomenon suggests that the gender composition of the context may play a key role in intrapersonal leadership processes. Specifically, these effects whereby senior women are less likely to support (junior) women are theorized to occur primarily in male-dominated organizations or contexts (e.g., Derks, Van Laar, Ellemers, & de Groot, 2011). Generally, some of this research suggests that when women leaders experience greater gender discrimination across time and are low in gender identification to begin with, they are more likely to subsequently demonstrate negative reactions toward women (e.g., greater gender stereotyping and masculine self-descriptions; Derks, Ellemers, van Laar, & de Groot, 2011). However, it should be noted that many Queen Bee studies do not directly assess leader behaviors, and thus it remains possible that these female leaders ultimately do not act upon these more negative attitudes toward women. Finally, it is important to highlight that the Queen Bee phenomenon is not without its critics, some of whom argue that these effects may largely reflect society's tendency to problematize female same-sex conflict (e.g., Sheppard & Aquino, 2017).

Overall, there is some limited evidence that leader gender can moderate relationships between proposed, distal antecedents and leadership behaviors. However, to our knowledge, there is no empirical research that speaks to whether leader or actor gender or gender composition of the group or context moderates the relationship between the most proximal determinants (i.e., leadership-related knowledge, skill, and motivation) and leader behaviors. We further note that such future investigations would be most informative if they assessed all three categories of proximal predictors simultaneously to rule out alternative explanations (i.e., omitted variables). Finally, we also highlight that prior work has largely failed to examine other types of leader behaviors beyond transformational leadership when considering intrapersonal processes. We encourage future research that addresses these gaps. In the next section, we theorize why such gender-based intrapersonal moderating effects may occur.

3.2.1. Possible Theoretical Explanations

Although, to our knowledge, there is currently no empirical data that speaks to whether leader gender moderates intrapersonal leadership processes, anecdotal evidence indicates that such effects may occur or are believed to exist. For example, the idea that women may possess equivalent standing on key leadership determinants as men, but still make the choice to withhold leadership behaviors or fail to claim leadership is rampant in Sheryl Sandberg's (2013) *Lean In*. Below, we offer two classes of explanations for why men and women may not engage in the same level or frequency of leader behaviors even when they are equated on knowing what to do, how to do it, and/or desire to do it.

3.2.2. Risk Tolerance

One possible explanation is that women may be more cautious than men in enacting leadership behaviors, even when equated on leadership qualifications or direct determinants, leading to weaker relationships between leadership-related knowledge, skill, or motivation and subsequent leader behaviors. In line with this possibility, Paustian-Underdahl et al. (2014) found in their meta-analysis that in organizational settings, male leaders rated themselves as higher in leadership effectiveness than did female leaders ($d = 0.20$, $k = 18$), but others (i.e., subordinates, bosses, and trained observers) actually rated female leaders as more effective than male leaders ($d = -0.11$, $k = 64$). Thus, it appears that women leaders may tend to view themselves more negatively or critically than others. However, another way to interpret this pattern of findings is to use others as the referent or a better indicator of "reality," which would suggest that it is male leaders who are *over*confident or overestimate their impact.

Women may be more cautious to engage in leadership behaviors when they possess the requisite leadership-related knowledge, skill, or motivation compared to men due to gender differences in personality; for example, prior research indicates that, on average, men are more prone to taking risks across a variety of domains than women (e.g., Brynes, Miller, & Schafer, 1999). Additionally, men tend to be more narcissistic than women (Grijalva et al., 2015), which could explain their overconfidence. However, external or interpersonal factors could also be responsible in shaping these intrapersonal tendencies. Scholars have theorized that due to current power dynamics in the workplace, women may be more likely to receive patronizing feedback, which is less challenging and critical of performance, than men (Bear, Cushenbery, London, & Sherman, 2017). This could lead to more uncertainty for current or prospective female leaders and a greater tendency to hesitate in taking leadership actions, given that women may be more apt to received mixed messages or feedback (e.g., Biernat, Tocci, & Williams, 2012). In fact, there is some evidence that female leaders tend to have a

less accurate view of how others' view their leadership behaviors compared to male leaders (Taylor, Sturm, Atwater, & Braddy, 2016).

3.2.3. Anticipated Backlash

A second possible explanation for why women may choose not to lead or engage in various leadership behaviors compared to men even when possessing the same level of leadership-related knowledge, skill, or motivation is due to anticipated negative reactions from others. We surmise that this is particularly likely for agentic behaviors, since prior work has most consistently demonstrated negative interpersonal consequences for women relative to men for these types of actions. Providing support, prior research has found that women are less likely to negotiate assertively on their own behalf (vs. for others) due to concerns of backlash (Amanatullah & Morris, 2010), powerful women are less likely to speak in organizations due to fears of negative reactions (Brescoll, 2011), and women are less effective at self-promotion due to greater worries about being penalized compared to men (Moss-Racusin & Rudman, 2010).

These concerns about backlash may cause women to conceptualize or view behaviors that could be construed as agentic differently than men, subsequently shaping their likelihood of taking these actions. As an example, Akinola, Martin, and Phillips (2018) found that although delegation, an important managerial behavior, has both agentic and communal characteristics, women viewed delegation as a more agentic action than men. This view of delegation as more agentic or gender-incongruent led women to engage in lower levels of delegation relative to men and resulted in worse outcomes for women compared to men when they did delegate.

Recent research by Martin and Phillips (2017) suggests that compared to men, women may uniquely benefit from endorsing a gender-blind ideology (i.e., de-emphasizing gender differences) rather than a gender-aware ideology (i.e., acknowledging or celebrating gender differences). Specifically, women who more strongly endorsed a gender-blind ideology reported feeling more confident, and confidence was associated with more agentic actions (e.g., risk-taking, negotiation), particularly in more masculine settings. We speculate that supporting a gender-blind ideology may lead to these beneficial effects for women because of lower concerns about anticipated backlash from others, freeing these women to act as they wish.

Although we present risk tolerance and anticipated backlash as two separate reasons for why leader gender may moderate intrapersonal leadership processes, it should be acknowledged that these mechanisms could co-occur. For example, anticipated backlash from others could be another source of uncertainty for women, leading them to rein in their choice to lead or their specific leadership behaviors, relative to men. Generally, we encourage future research to explore the contribution of each theorized explanation on gender moderation of intrapersonal leadership processes and whether it varies by the type of behavior under consideration (e.g., different types of leader behaviors or different types of leadership claims).

4. Conclusion

Our criterion-focused review of the gender and leadership literature reveals that this relationship is highly complex. Leader gender appears to influence leadership processes directly, indirectly, and by shaping how the process unfolds via moderating effects. Although in our review we present and discuss these effects separately for ease of presentation, a comprehensive view and understanding of inter-relations between gender and leadership likely requires the joint consideration and integration of (in)direct and interactive effects (e.g., Frear et al., 2019).

Our broad review also reveals that female leaders appear to have an advantage over male leaders when it comes to leadership behaviors, engaging in more effective leadership behaviors and less ineffective leadership behaviors, though these differences do not appear to necessarily translate to a female advantage in leadership effectiveness, as gender differences in this domain appear to be close to null on average. There is some evidence that this could be due to the differential circumstances in which men and women find themselves leading (i.e., glass cliff effects) or perceptual biases against women, particularly those who act with high levels of agency. However, other explanations that remain largely untested include the possibility of omitted variables (i.e., leadership or other job-relevant behaviors associated with leadership effectiveness where male leaders demonstrate an advantage over female leaders).

Despite a robust and growing body of research on gender and leadership, our criterion-focused review also highlights that many key questions remain to be addressed (for a detailed summary, see Table 2). In particular, we call for future research that examines: (1) gender differences in the direct determinants of leader behaviors (i.e., leadership-related knowledge, skill, and motivation), (2) whether, why, and how leader gender shapes intrapersonal leadership processes, (3) the influence of actor gender in claiming and emerging as a leader (i.e., being granted leadership by others), and (4) leader behaviors beyond transformational leadership and those that are highly agentic or communal in both intrapersonal and interpersonal leadership processes. We also encourage future research that seeks to address thorny methodological issues, including ruling out alternative explanations for differential relationships besides bias in field studies (i.e., omitted variables) and new methodologies to objectively or creatively assess leader behaviors that avoids human raters who may be prone to gender-based biases.

The proliferation of research on gender and leadership likely reflects both a keen scholarly interest around a theoretically complex and multi-faceted problem as well as societal concern and interest in solutions regarding the continued underrepresentation of women in leadership positions (Hideg & Shen, 2019). This review reveals both the significant progress that has been made as well as the questions that remain to be tackled when examining the association between gender and leadership from an integrative and process-based viewpoint. Our hope is that the criterion-focused perspective introduced in this paper sheds new light and inspires new approaches that may ultimately serve to enrich our collective understanding of this phenomenon and lead to meaningful societal change.

Table 2
Future research directions to improve our understanding of gender and leadership.

Location in Classification Scheme	Research Questions	Relevant Theories or Perspectives	Sample References
Leadership Outcomes (Class "A")	Are different leadership outcomes (e.g., effectiveness vs. satisfaction) differentially related to organizational rewards (e.g., salary and promotions) for male and female leaders?	Role congruity theory	Joshi, Son, and Roh (2015)
Leader behaviors (Class "B")	How do we improve assessments to ensure that we are capturing differences in actual leader behaviors between men and women?	Leader categorization theory; Implicit leadership theory	Scott and Brown (2006); Turban et al. (2017)
Leader behaviors (Class "B")	What are the primary ways in which individuals make claims of leadership? Do men and women tend to make leadership claims differently (e.g., are women more likely to make implicit claims)?	Social role theory; Leadership identity construction theory (DeRue & Ashford, 2010)	Badura et al. (2018); Marchiondo et al. (2015)
Direct determinants (Class "C")	What are the key leadership-related knowledge, skills, and motivation for each type of leader behaviors (e.g., transformational leadership, administration, communication)? Are there gender differences on these determinants?	Social role theory; Human capital theories	Groves (2005); Zaccaro et al. (2012)
Direct determinants (Class "C")	What are the contextual factors (e.g., gender composition of group) that influence gender differences in motivation to lead?	Motivation to lead theory (Chan & Drasgow, 2001); Social identity theory	Badura et al. (2019)
Leader behaviors → outcomes (Path "1")	Are there gender differences on other aspects of performance besides leadership behaviors (e.g., management behaviors) relevant to outcomes? Do these variables mediate the relationship between gender and leadership outcomes?	Social role theory; Biological and sociocultural models (e.g., Feingold, 1994)	Anderson, Lievens, van Dam, and Born (2006); Burke and Collins (2001)
Leader behaviors → outcomes (Path "1")	Are there gender differences on new behavioral models of leadership (e.g., ethical or authentic) or specific aspects of leadership (e.g., vision)? Do these differences mediate the relationship between gender and leadership outcomes?	Empathy-based arguments (e.g., Boulouta, 2013); Biological and sociocultural models (e.g., Feingold, 1994);	Ho, Li, Tam, and Zhang (2015); Ibarra and Obodaru (2009)
Leader behaviors → outcomes (Moderation of Path "1")	Are different types of leadership claims differentially granted by others due to the gender of the individual making the claim?	Role congruity theory; Leadership identity construction theory (DeRue & Ashford, 2010)	McClean, Martin, Emich, &Woodruff (2018); Williams & Tieden (2016)
Leader behaviors → outcomes (Moderation of Path "1")	Does leader gender moderate relationships between leader behaviors that are not seen as stereotypically communal or agentic (e.g., laissez-faire leadership) and leadership outcomes?	Role congruity theory; Decision-making biases	Druskat (1994); Schaumberg and Flynn (2017)
Direct determinants → leader behaviors (Path "2")	What is the relationship between line experience and leader behaviors and outcomes (vs. decision-maker preference)? Given that there are differences in line (vs. staff) experience among male and female leaders, how does this contribute to the continued underrepresentation of female leaders?	Role congruity theory; Human capital theories; Decision-making biases	Lyness and Heilman (2006); Oakley (2000)
Direct determinants → leader behaviors (Moderation of Path "2")	To what extent does risk tolerance and fears of backlash explain how leader gender shapes intrapersonal leadership effects? What other factors might explain why equally qualified women relative to their male counterparts do not enact leadership behaviors or make leadership claims?	Role congruity theory; Social learning theory	Brescoll (2011); Taylor et al. (2016)
Direct determinants → leader behaviors (Moderation of Path "2")	How does actor or leader gender and the gender composition of the group or context individually and jointly shape how intrapersonal leadership processes unfold? Does this vary across different direct determinants as well as different types of leader behaviors or leadership claims?	Role congruity theory; Social identity theory	Derks, Van Laar, et al. (2011); Duehr (2006)

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