

Are women better leaders? Insights from psychology.

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In both political and business leadership, gender inequality is a topic of frequent discussion. When examining the literature, one can find a deluge of peer-reviewed articles linking gender differences to leadership. This makes a comprehensive review of the findings untenable. The present work, therefore, focuses instead on reviewing the results from two complementary methodological approaches: self-assessments and other-assessments. Self-assessments involve the administration of surveys and questionnaires to leaders, asking them to rate their own leadership preferences and self-efficacies. Other-assessments involve collecting data from subordinates, peers, and superiors. Surprisingly, both methods offer very similar conclusions about gender differences in leadership: women are generally perceived as being better leaders than men, especially for transformational purposes.

In both political (Folke & Rickne, 2016) and business leadership (Olivetti & Petrongolo, 2016), gender inequality is a frequent topic of discussion. Political representation, for example, can be decidedly male-dominated, even in highly industrialized countries (Jones, 2016). Such disparities have sparked efforts to understand the ways in which gender can influence leadership perceptions and outcomes (Rhode, 2017).

When studying leadership, especially from a biological (Vugt et al., 2007) or psychological (Daniel & Lemons, 2018; Panagopoulos & Ogilvie, 2015) perspective, it is important to recognize the importance of context. Leadership in competitive sports (Bormann & Rowold, 2016) or communities (Lin, Kelemen, & Kiyomiya, 2017) can each entail the use of very different strategies, with some personality traits being more advantageous in one but not the other. In this manner, leadership research is understandably diverse, with many different perspectives and methodologies having been employed to answer a broad range of questions (Schuh et al., 2014).

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leaders, asking them to rate their own leadership preferences and self-efficacies. Other-assessments involve collecting data from subordinates, peers, and superiors. Surprisingly, both methods offer very similar conclusions about gender differences in leadership: women are generally perceived as being better leaders than men, especially for transformational purposes.

Conceptual frameworks for leadership.

Before delving into a full review of self- and other-assessments, it is important to consider, in a broader sense, the conceptual frameworks that have been established to understand and interpret leadership behavior. Recent work has generally favored the view that leadership and followership are outcomes derived through a mixture of biological and environmental factors (Kruger, 2008). It is, of course, inherently difficult (Misawa, 2018) to convincingly attribute any single behavior to origins that are purely biological (nature) or environmental (nurture). Nevertheless, several studies do support the likelihood that biology and environment both have roles to play in the way humans engage with social hierarchies.

For biology, studies of young children have been particularly insightful as children tend to be influenced much less by cultural and societal forces, making them advantageous for studying biological influences on behavior (Vugt et al., 2007). Studies of US pre-teens, for example, have

found girls exhibit higher levels of empathy, more prosocial behavior, and greater self-other distinction (Else-Quest, Hyde, Goldsmith, & Van Hulle, 2006; Garaigordobil, 2009; Matthews, Ponitz, & Morrison, 2009). Boys, on the other hand, were found to exhibit more aggressive and competitive tendencies, especially when establishing social order within a group. This suggests gender differences in interactions with social order begin very early in life, even before formal acculturation (Kennedy & MacNeela, 2014). Studies in the US, Europe, and Turkey have shown these early differences can persist through teenage years (Topcu & Erdur-Baker, 2012; J. Wang, Iannotti, & Nansel, 2009; Weiss et al., 2006), with males remaining more inclined to compete for social positioning rather than cooperate with peers (Kruger, 2008).

On the side of environmental factors, established cultural and societal values are known to correlate strongly with leadership conceptualizations (Rey, 2005). The effects of these parameters have been observed most acutely in studies of leadership aspiration. Work by Beaman and colleagues (2012), for example, surveyed 8,453 adolescents and their parents across 495 villages in India to find female aspirations for leadership were increased by 20% in parents and 32% in adolescents in villages with a female leader. Such results demonstrate very directly how environmental factors and acculturation can help define gender-based leadership roles, setting the standard for what is considered "normal" or "acceptable".

Role congruity is often used to describe this process in which social role expectations are formulated and exercised, often suppressing the leadership aspirations of women (Johnson, Murphy, Zewdie, & Reichard, 2008). A sizable body of work has demonstrated women can be viewed as unsuitable for leadership when cultural expectations and existing examples, often referred to as gender role archetypes, are sufficiently male-oriented (Bosak & Sczesny, 2008; Rudman, Moss-Racusin, Phelan, & Nauts, 2012; Scott & Brown, 2006; White & Özkanlı, 2011). These examples can sometimes motivate women to devalue their own leadership qualities in order to maintain role congruity, even if their leadership qualifications are equivalent or superior to competing men (Bosak & Sczesny, 2008; Johnson

et al., 2008). It is tempting to conclude this devaluation is related to gender differences in social desirability (Fisher & Dube, 2005), but no work the author is aware of has yet investigated this link within the context of leadership.

Differences in industry culture are also known to contain and perpetuate gender role archetypes (Paris, Howell, Dorfman, & Hanges, 2009). Garcia-Retamero and López-Zafra (2006) found prejudice against female leadership candidates was common in a survey of 705 Spanish adults. The authors found female candidates working in industries incongruous with established gender roles were most likely to suffer prejudice. Surprisingly, female observers exhibited even greater prejudice against incongruous female candidates than male observers, demonstrating a way in which female perceptions can become self-perpetuating even without intervention from males.

On a descriptive level, several studies have shown men and women tend to assemble gender role archetypes with different characteristics. Paris and colleagues (2009), for example, studied the archetypes of 6,165 business managers across 27 countries. On average, female managers were found to prefer participative, team-oriented, and charismatic archetypes more than men. What was most surprising was that these preferences were found to be consistent even in countries with very different cultures, suggesting biological origins.

Role incongruity has also been observed in education studies, most notably in science education. Nosek and colleagues (2009) employed over 500,000 Implicit Association Test responses from 34 nations to reveal most nations exhibit implicit stereotypes identifying science as a primarily male vocation. The intensity of these stereotypes directly predicted gender differences in 8th-grade science and mathematics performance on the national level, demonstrating a powerful way in which societal perceptions can be reflected in learning outcomes. Studies such as

this highlight the way in which vocational leadership may be influenced by gender role archetypes that manifest through differences in educational engagement and/or participation.

In more localized settings, research has also demonstrated the potential of education in mediating greater leadership equality. Wayne and colleagues (2010) studied the leadership dynamics of American medical students when engaged in small-group learning. Without any interventions, female students were observed to volunteer much less than male counterparts to be small-group leaders. However, when a “pep talk” was implemented, emphasizing the importance of building leadership experience, female participation improved significantly. This demonstrates directly how facilitated learning environments can be used to improve female leadership participation.

In business, leadership style is often separated into three types (Eagly, 2007): transformational, transactional, and Laissez-faire. Transformational leadership is defined as the approach causing change in individuals and social systems with the end goal of developing followers into leaders. Transactional leadership is defined as the process in which leaders promote compliance from followers through reward and punishment. Finally, Laissez-faire, also known as delegative leadership, is the style in which leaders are hands-off and allow group members to make their own decisions.

In recent years, transformational leadership has gained the most attention and favor in academia as being the least hierarchical and most nurturing in its interpersonal interactions (Eagly, 2007; Hawkins, Glenn, Oswald, & Conway, 2013). This has resulted in transformational leadership attracting disproportionately greater levels of research interest, some of which has examined gender differences. Jogulu and Wood (2006), for example, found both genders believed women were better at and more likely to implement transformational leadership. These results are consistent with work by Cundiff and Komarraju (2008), which showed both genders were also more inclined to believe women exhibit higher levels of cultural empathy, one of the qualities required for successful transformational leadership. Taken together, these results suggest

gender role archetypes may often align with differences in expectation about leadership style.

Results from self-assessments of leadership.

In general, self-assessments of leadership have revealed significant gender differences in leadership style and/or preference consistent with the conceptualization differences described in the previous section. Javidan, Bullough, and Dibble (2016), for example, studied 1,187 business managers from 74 countries, finding women exhibited stronger preferences for diplomacy, diversity, and intercultural empathy. Fein (2010) and Gartzia (2012) reported similar differences in Romanian and Spanish business managers. Each study found female managers exhibited greater preferences for transformational leadership than men. A meta-analysis by O'Brien (2010) also found female workplace mentors reported providing more psychosocial support to their mentees.

Surprisingly, the female preference for transformational leadership appears to hold true even outside of business. Two US studies examined the leadership preferences of college students (Dugan, 2006; Dugan, Komives, & Segar, 2009), finding women scored consistently higher on measures of congruence, collaboration, commitment, consciousness of self, citizenship, and common purpose. The results agree with other pieces of research showing women tend to possess higher levels of social responsibility (Grosch & Rau, 2017; Jung & Vranceanu, 2015; L. C. Wang & Calvano, 2013). Given that transformational leadership is often predicated on equality, diversity, and a sense of responsibility to a collective (Eagly, 2007), it is perhaps not surprising to see the two results go together.

Leadership self-assessments have also been studied from the perspective of established psychology instruments such as personality tests. Work by Duehr (2007) employed the Big Five personality test (Barrick & Mount, 1991) to find transformational leadership preferences in women were strongly associated with extraversion. The authors conclude high extraversion may help women challenge role incongruity by aspiring to and achieving leadership roles amid cultures of disapproval or hindrance. This is a theme directly related to the “glass

ceiling" frequently referenced in business and politics (Folke & Rickne, 2016; Glass & Cook, 2016).

Despite the surprising consistency of findings from leadership self-assessments, it is important to note the existence of a small minority of studies that failed to achieve statistically significant gender differences. Andersen and Hansson (2011), for example, measured the leadership and decision-making styles of 171 school principals, 61 social insurance managers, and 153 vicars in Sweden. The authors found no significant gender differences either as a combined group or within each occupational domain. This leaves open the possibility that gender differences in leadership style and preference, though common, may not be universal for all cultural and/or industrial contexts.

Results from other-assessments of leadership.

The work by Zenger and Folkman (2009) is perhaps the most widely known other-assessment study on gender differences in leadership. This work assessed the leadership styles of 7,280 US business leaders, with subordinates, superiors, and peers rating them across several leadership attributes such as the ability to champion change or innovate. Surprisingly, the results showed women were consistently rated better than men on 12 of 16 attributes. Women leaders were, among other things, rated better at taking initiative, motivating others, displaying integrity, building relationships, collaborating, and practicing self-development.

A similar study in Europe was conducted by Martinsen and colleagues ("Personality for Leadership...", 2014). This study evaluated over 2,900 European business leaders, reaching very similar conclusions. Women were found to be better at four of the five categories studied. These categories included methodical management and goal-setting, initiative and clear communication, openness and the ability to innovate, and sociability and supportiveness.

Like self-assessments, a review of the literature finds other-assessments concluding female affinity for cooperative and/or transformational leadership are surprisingly common across a wide range of contexts. Hallinger and colleagues (2016) performed meta-analysis of 28 studies employing

the Principal Instructional Management Rating Scale (PIMRS), which surveys teachers about their principal's leadership style (Hallinger, 1982). This analysis examined responses about 2,807 principals from 6,175 primary and secondary school teachers across three countries to show female principals consistently received higher ratings for cooperative and transformational behaviors such as goal communication and supervising.

Rohmann and Rowold (2015) used other-assessments to study the perceptions of followers in three German organizations: a recreational sports club ($n = 183$), a government agency ($n = 267$), and a public transport services company ($n = 203$). All three exhibited identical differences in perception with female leaders being viewed as more transformational. Female leaders were also evaluated as being more effective and producing greater job satisfaction than male peers.

Research from a military context in the UK yielded very similar results. Anderson and colleagues (2006) employed interview data from a British army officer recruitment center. The assessments of 1,594 male and 263 female candidates were analyzed to find female candidates were rated significantly higher on interpersonal leadership, which emphasizes oral communication and interpersonal interaction.

From a methodological perspective, an important question is whether self- and other-assessment techniques can agree when they are used simultaneously to evaluate the same group of leaders. Work by Paustian-Underdahl and colleagues (2014) has shown this agreement is gender-dependent with the self- and other-assessments of female leaders tending to agree more often. Male leaders, on average, were found to self-assess themselves more highly than females while also receiving lower other-assessments.

The idea that men are more likely to overestimate themselves is supported by work from Hamori-Ota (2007). This research triangulated a set of over 5,000 leader self-assessments with other-assessments from superiors and peers. Significant gender differences were found on 5 of 12 attributes. As in the Paustian-Underdahl work,

men were found to self-assess themselves higher than their average other-assessment. Women, on the other hand, were found to have profiles in better agreement. The gender of other-assessors was found to be significant with male assessors tending to be more negative overall than women. Self- and other-assessment disagreement was highest in male-male leader-assessor pairs and lowest in female-female pairs.

Focus groups conducted by Zenger and Folkman (2009) offer some insights into why women may be less inclined to overassess their own abilities. First, the authors found women leaders generally felt a greater need to constantly prove themselves. This was, in part, because women felt their positions were not as secure as those of men. Second, women leaders reported feeling more pressure to not disappoint others around them. These feelings likely go hand-in-hand with the findings of higher social responsibility (Grosch & Rau, 2017; Jung & Vranceanu, 2015; L. C. Wang & Calvano, 2013), again linking it to transformational leadership. Differences in social desirability may also play a role but, as mentioned previously, this has yet to be examined.

In addition to higher levels of social responsibility, female leadership behavior has also been shown to be more flexible than men. Cuadrado and colleagues (2012) found women in stereotypically masculine leadership roles were more likely to adopt strategies representative of male colleagues. Interestingly, the reciprocal result of male leaders acting more feminine in stereotypically feminine roles was not observed. This suggests women may be more adaptable to social expectations and a wider variety of industrial contexts.

Subsequent work by Cuadrado (2008) further disambiguated the effects of leader gender and gender stereotypes. The authors found stereotypically feminine leadership styles were always evaluated more favorably than masculine ones, regardless of whether the leader's actual gender was female or not. This addresses an important issue: whether other-assessments faithfully convey opinions about behavior or are tainted with subliminal gender biases (Barbuto, Fritz, Matkin, & Marx, 2007). The Cuadrado work would argue for the former, supporting the integrity of other-assessments.

Personality tests are another angle that have been used to study differences in self- and other-assessment. Brandt and Laiho (2013) employed a mixture of these approaches and the Myers-Briggs test to evaluate 459 leaders from various industries. This work found the self-assessments of female leaders were most likely to agree with other-assessments when the leader was extraverted. When the leader was less extraverted, the self-assessments were more likely to become unfavorable, suggesting introverted women may be more inclined to devalue their own leadership skills.

Like self-assessments, it is important to note a small number of other-assessment studies have failed to uncover gender differences. Barbuto and Gifford (2010), for example, investigated public servant leadership in the US by surveying 388 voters about 75 elected officials, finding no significant differences. A survey of 337 German working university students (Kent, Blair, Rudd, & Schuele, 2010) also failed to demonstrate significant differences in the transformational leadership of workplace leaders. These results again indicate gender differences in leadership may be common but are, by no means, universal.

Conclusions.

In conclusion, this review yields surprisingly consistent results about leadership perception when employing either self- or other-assessment. Women were found more likely to prefer cooperative and nurturing leadership styles. This preference was observed regardless of whether women were leaders or followers, suggesting a consistency that may be driven, in part, by biological forces. Women were also perceived as exhibiting a greater aptitude for transformational leadership. This perception was held by both men and women, suggesting women may exhibit superior leadership qualities, especially for situations where interpersonal engagement and cooperativity can yield better results (Jin, Seo, & Shapiro, 2016). These differences appear to be common across many industrial, cultural, and national contexts.

In addition to characterizing gender differences, this review illustrates the ways in which role incongruity can work against women, marginalizing their leadership participation and

aspirations. In business, the “glass ceiling” (Glass & Cook, 2016; Ryan & Haslam, 2005) is often used to describe this problem. A wide range of research, much beyond the scope of this review, has and is being conducted to devise solutions across many different contexts. Even in this work, one can glimpse some of the ways in which educational interventions (Wayne et al., 2010) and extraverted personality (Brandt & Laiho, 2013;

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