SHE IS THE CHAIR(MAN): GENDER, LANGUAGE, AND LEADERSHIP

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Abstract

This article presents results from two complementary experiments that examine the effects of a potential obstacle to female leadership: gendered language in the form of masculine leadership titles. In the first experiment (N=1,753), we utilize an unobtrusive writing task to find that a masculine title ("Chairman" vs. "Chair") increases assumptions that a hypothetical leader is a man, even when the leader's gender is left unspecified. In the second experiment (N=1,000), we use a surprise recall task and a treatment that unambiguously communicates the leader's gender to find that a masculine title increases the accuracy of leader recollection only when the leader is a man. In both studies, we find no significant differences by gender of respondents in the effects of masculine language on reinforcing the link between masculinity and leadership. Thus, implicitly sexist language as codified in masculine titles can reinforce stereotypes that tie masculinity to leadership and consequently, weaken the connection between women and leadership.

Keywords: gendered language; masculine titles; leadership titles

> "I was lucky enough to receive the *Time* Person of the Year... They used to
> call it 'Man of the Year,' but they can't do that anymore, so they call it
> 'person.' They want to be politically correct."
> — Donald Trump, post-election rally in Des Moines, Iowa (Isidore, 2016)

In December 2016, *Time Magazine* named then President-elect Donald Trump its 2016 Person of the Year, a designation *Time* has used to indicate individuals, groups, or entities that have "had the greatest influence on the events of the year – for better or worse" (Gibbs, 2016). Although Trump acknowledged the award as a "very, very great honor," he had a bone to pick with *Time* (Isidore, 2016). He complained of the "politically correct" name of the award. He wanted to be *Time's* Man of the Year. At a rally of adoring followers in Louisiana, Trump took a straw poll by vocal acclaim. They cheered for "Man of the Year." They booed "Person of the Year" (Isidore, 2016). To Trump and his followers, apparently, it is better to be called a man than any other type of person.

In the United States and around the world, women lag far behind men in prominent leadership positions across nearly all economic, political, social, and religious contexts (e.g., Geiger & Kent, 2017). Wide-ranging scholarship has identified reasons to explain the leadership gap, but limited research has examined the role of stereotype-reinforcing language in exacerbating gender stereotypes in leadership. Masculinized leadership titles may contribute to such gender gaps by reinforcing gender-stereotyped assumptions about leaders.

Titles used to describe positions of power can take gendered or gender-neutral forms. For instance, *Time's* 1999 decision to rename its honorific from "Man of the Year" to "Person of the Year" reflects a decision to use language that is gender-neutral rather than masculine. Similarly, organizations may use masculine ("Chairman") or gender-neutral

("Chair") titles for their leaders. This distinction matters because people carry mental images of leaders and leadership (Schyns, Tymon, Kieer, and Kerschreiter, 2012), and gendered titles may subtly reinforce gendered leadership stereotypes. We argue that masculine, as opposed to gender-neutral, titles convey and reinforce stereotypes about who sits in leadership positions. While most people assume men hold leadership positions (e.g., Schyns et al., 2012), masculine titles can exacerbate this belief by invoking gender stereotypes about leadership and thus strengthening the connection between masculinity and leadership. That is, masculine titles may serve as a subtle impediment to women's progress in leadership by reinforcing stereotypes of who typically holds positions of power.

Based on our review of existing research, there is little available evidence that demonstrates the power of masculine language used in leadership titles and its impact on women who hold these positions. We find that masculine language serves as a powerful force that undermines beliefs that women hold leadership positions. To understand these effects, we draw on two experimental studies that assess the implications of masculine titles for female leadership. The first study examines assumptions about who holds a leadership position by varying the title ("Chair" versus "Chairman") and using a gender-neutral first name for the leader in question. The second study examines recollections about who holds a leadership position by pairing these two leadership titles with leaders who have traditionally masculine or feminine first names. Some institutions require the "Chairman" title regardless of the leader's gender, and some women leaders choose to go by "Chairman" in an effort to present themselves as more masculine. The second study will speak to one potential consequence of these policies and choices by assessing whether masculine versus gender-neutral titles affect the accuracy of recollections of who holds

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power. Thus, our work speaks to several conditions under which gendered titles influence expectations about the possibility of female leadership.

Leadership, Masculinity, and Gendered Titles

Although the vast majority of Americans say that men and women possess comparable leadership traits and capabilities in politics and business (Pew Research Center, 2015), gender imbalances in leadership persist. Women make up just 30.8% of the state legislatures in the U.S. (Center for American Women and Politics [CAWP], 2021a), and the U.S. House and Senate are only 27.1% and 24% women, respectively (CAWP, 2021b). Of the 146 nations included in the World Economic Forum's 2014 and 2016 analyses, only 56 (38%) had a woman as the head of government or state for at least one year out of the past 50 (Geiger & Kent, 2017). Women comprise almost 45% of the S&P 500 labor force but only 6% of CEOs (Catalyst, 2020). Finally, though women have gained parity with men in all levels of educational attainment, only 30% of university presidents are female (American Council on Education, 2017). While there are many components of the labyrinth (Eagly & Carli, 2007) that contribute to such gender gaps in leadership, we focus on one subtle yet potentially powerful factor: masculine leadership titles.

We argue that masculine leadership titles represent an avenue through which gender stereotypes that disadvantage women can be reinforced. We begin with the premise that language conveys meaning (Elshtain, 1982) and argue that masculine versus gender-neutral titles of leadership positions can reinforce the connection between leadership and masculinity, constituting a form of sexist language. Our approach reflects that of Swim, Mallett, and Stangor (2004), who state: "Sexist language is an example of subtle sexism in that it consists of speech that reinforces and perpetuates gender

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stereotypes and status differences between women and men" (p. 117). Specifically, we posit such language undermines the degree to which individuals even assume or recall if a woman holds a leadership position.

Stereotypes Linking Masculinity and Leadership

The connection between leadership and masculinity via stereotypes has been well documented in studies of Implicit Leadership Theories (ILTs). ILTs are based on individuals'—as opposed to experts'—conceptions of what traits characterize a prototypical leader (Ayman & Korabik, 2010; Epitropaki et al., 2013; Junker & van Dick, 2014). These schemas of leadership are products of socialization and past experiences with leaders and serve as benchmarks for followers' perceptions of leaders (Brown, 2018; Epitropaki & Martin, 2004). In addition to prototypic traits such as intelligence and dedication, aprototypic traits such as masculinity have historically comprised people's ILTs (Epitropaki & Martin, 2004; Offerman, Kennedy, & Wirtz, 1994). For example, when prompted to "draw a leader," Schyns et al. (2012) found that a majority of research participants depicted male leaders, which suggests masculine stereotypes dominate people's prototypes and exemplars of leadership. This bias toward male leaders begins early in life, as these patterns emerge when school-aged children are asked to draw a leader (Ayman-Nolley & Ayman, 2005).

Relatedly, social structural theories about gender and leadership examine historical differences between normative societal roles for men versus women (for an overview, see Ayman and Korabik, 2010). The typical elevation of men over women in social status has undermined women's consideration for leadership roles and acceptance as a leader; beyond perceptions that women have less leadership ability than men, women who are in

positions of power are often penalized for failing to conform with "desirable" female behaviors (Ayman & Korabik, 2010; Eagly & Karau, 2002). Structures in society, therefore, have shaped people's views on the social roles women are expected to assume, and women's roles are seen as incongruent with leadership (Eagly & Carli, 2007). This phenomenon has negative consequences for women's prospects as leaders. They often face greater scrutiny in positions of power (Ayman & Korabik, 2010; Eagly & Karau, 2002) and are viewed as less legitimate leaders (Vial et al., 2016). Additionally, research suggests women leaders are even more disadvantaged when evaluated in more masculine contexts based on factors like task or occupation (Eagly & Carli, 2003).

The connection between masculinity and leadership has been studied using direct and indirect measures (for a review and typology see Epitropaki et al., 2013). Direct, or explicit, measures reveal a closer connection between leadership and masculine traits than leadership and feminine traits. Studies examining the "think manager-think male" model (Heilman et al. 1989; Schein, 1973, 1975, 2001; Schein et al., 1996) uncover stronger correlations between ratings of men and leadership than ratings of women and leadership, particularly among male respondents. This work and related scholarship has found explicit stereotypes of leaders generally emphasize masculine traits like aggression and assertiveness as opposed to communal, feminine traits like being sympathetic or helpful (Duehr & Bono, 2006; see Koenig et al., 2011 for a meta-analysis).[3] Though there is some evidence that explicit stereotypes may be changing in a manner that promotes women's

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[3] However, research considering the intersection of gender and race finds such stereotypes of the superordinate category of "women" do not always apply to all women (Rosette, Koval, Ma, and Livingston, 2016).

leadership (e.g., Diekman & Eagly, 2000; Duehr & Bono, 2006), it is clear that a strong link between leadership and masculinity persists.

Relatively less scholarship on this topic has used indirect measures to assess the degree to which people link men with leadership (Epitropaki et al., 2013). Indirect, or implicit, measures are unobtrusive, minimize research participants' awareness of what is being measured, and are typically less prone to demand effects and social desirability bias. In an exception that uses implicit association tests (Mo, 2015), people (implicitly) associate men with leadership and women with followership. Additional work incorporating indirect measures, especially measures that are less contrived and more ecologically valid, could profitably expand our understanding of how ILTs manifest in everyday life.

Taken together, existing scholarship provides evidence based on primarily explicit measures of a perceived incongruity between women and leadership in cultural stereotypes (Eagly & Karau, 2002; see also Eagly and Carli, 2003 for an overview). When the connection between a leadership role and masculinity is strong, it has direct consequences for women's success in leadership: Women are perceived to be less effective leaders (Eagly et al., 1995; Hoyt, 2010). Additionally, cues that make masculinity salient to leadership may activate a sense of stereotype threat among women that negatively affects their performance (Hoyt & Murphy, 2016). Our studies examine one potential way that the relationship between masculinity and leadership may be subtly reinforced: masculine leadership titles.

Current Variation in the Usage of Masculine Leadership Titles

The issue of gendered leadership titles speaks to contemporary phenomena. As more women have risen in leadership ranks and taken on positions formerly held by men,

questions over their use of gender-neutral or masculine titles have arisen. In various state

and local governments across the U.S., policymakers have debated replacing masculinized

titles such as "alderman", "councilman", "chairman", and "committeemen" with their

gender-neutral alternatives (e.g., Garrison, 2018; Keeperman, 2019; McClelland, 2019; Sato,

2019; Smith, 2011). Some leaders have skipped the debate and simply abandoned the use

of masculine leadership titles regardless of what their institutional guidelines require.

When Janet Yellen succeeded former Chairman Ben Bernanke in 2014 as the first female to

head the Federal Reserve, *New York Magazine* wondered what she would be called (Roose,

2013). The Federal Reserve Act (like so many other by-laws for governing bodies)

explicitly designates a title of "Chairman" (and "Vice-Chairman," a title Yellen had

previously held). However, Yellen reportedly instructed her staff to refer to her as "Chair"

(Mui, 2014), and the official website of the Federal Reserve referred to Yellen as "Chair of

the Board of Governors."[4]

Members of the U.S. House of Representatives seem to strategically use gender-

neutral or masculine titles to reflect their leadership. A 2017 content analysis of how

members of Congress (MCs) referred to their leadership positions on their Congressional

websites finds that of the 61 female MCs who explicitly noted a current or previous

leadership position, 69% used the gender-neutral terms "Chair" or "Chairperson," 10%

used the term "Chairman," and 21% used the term "Chairwoman."[5] Of the 227 male

members who explicitly noted a current or previous leadership position, 30% used the

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[4] The position reverted to "Chairman" in 2018 when Trump nominee, Jerome Powell, took office.

[5] When both a gender-neutral and a gendered title is used, we count that member as using a gendered title.

gender-neutral term and 70% used the term "Chairman." There are also significant

differences across party lines in how female leaders referred to their leadership positions

($\chi^2(2)$=15.72, p<0.0001). In describing their leadership positions, female Democrats

overwhelmingly used a gender-neutral term (79%), whereas only 2% (N=1) used the term

"Chairman" and 19% used the term "Chairwoman." Among female Republicans, 36% used

the term "Chair," 36% "Chairman," and 29% "Chairwoman."[6] Taken together, it is clear

that variation in the usage of masculine and gender-neutral leadership titles by women and

men exists. Sometimes, institutional rules (that are increasingly under debate) dictate the

usage of titles.[7] Sometimes, a leader strategically chooses one title over another, as

highlighted in particular by the partisan differences above and also discussed in Andrews

(2008). In either case, the ongoing debate about titles and variation in their usage

highlights the societal importance of investigating the effects of gender-neutral versus

masculinized titles.

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[6] These party differences also emerge among male MCs who listed leadership positions ($\chi^2(1)$=50.75, p<0.0001). Among male Democrats, 59% relied strictly on the gender neutral "Chair" while 41% used the term "Chairman." Among male Republicans, only 14% used the term "Chair" while 87% used the term "Chairman."

[7] The title "Chairman" continues to be used across a variety of contexts, including *Robert's Rules of Order*, corporate boards, various levels of government, and even in the bylaws of university Boards of Trustees. Current style guides in academia and the media also highlight these concerns while simultaneously pointing to unresolved issues. For example, guidelines from the American Psychological Association advocate using the title "Chair" or "Chairperson" rather than "Chairman" except in specific circumstances (2019). The American Political Science Association Style Manual also suggests using the gender-neutral "Chair" when making generic references (2018). Many style guides at academic institutions instruct authors to avoid gendered language (and explicitly use the "Chair" versus "Chairman" distinction as an example). The style guide for the venerable *New York Times* proclaims that it "reflects a society that no longer assigns roles or occupations to men only or women only. Thus, the copy shuns stereotypes and assumptions" (Siegal & Connolly, 2015, p. 56). The *Times* encourages writers to "resist modifiers that imply a 'norm' of maleness or femaleness…In general references use a neutral job title like *letter carrier* rather than *mailman*, and *police officer* rather than *policeman or policewoman*" (Siegal and Connolly, 2015, p. 193). Still, the *Times* forbids the use of the gender-neutral term "chair" as a title and insists upon the use of "chairman" and "chairwoman," expressly forbidding the use of "chairlady" or "chairperson" (Siegal & Connolly, 2015, p. 56). Thus, the media may also propagate specific titles, despite what leaders themselves prefer.

Hypotheses

In line with existing work examining gendered language and the non-neutrality of masculine terms (Banaji & Hardin, 1996; McConnell & Fazio, 1996; Moulton et al., 1978; Silveira, 1980), we expect that the masculine forms of job titles will reinforce the association between masculinity and leadership, and thereby, increase expectations that men occupy such positions.

Titles are applied in contexts where the gender of a leader is unknown as well as where the gender of the leader is known. When the gender of a leader is unknown, people will rely on stereotypes, and the gender-marked title of "Chairman" will heighten the link between masculinity and leadership compared with the gender-neutral title of "Chair."

> *H1*: A masculine leadership title, "Chairman," compared with a gender-neutral leadership title of "Chair," will increase the probability that people assume the person holding that position is a man.

In some contexts, the gender of a leader is known. Still, a masculine title may minimize a woman's imprint as a leader relative to a man, similar to prior research that finds categorical thinking leads to misremembering or misattribution of leaders' behaviors (e.g., Brown, 2018; Scott & Brown, 2006). Our theoretical framework suggests that the masculinized title of "Chairman" will reinforce the stereotyped link between masculinity and leadership relative to the gender-neutral title of "Chair." This means that when people are asked to recall whether a man or a woman sits in the leadership position, gender stereotypes will be more likely to be activated in the "Chairman" versus "Chair" condition.

H2: The accuracy of recollections regarding the leader's gender will be enhanced when the title of "Chairman" as opposed to "Chair" is used to refer to a man versus a woman.

We also examine potential differences in both of these hypothesized effects by respondent gender. Extensive prior work suggests men and women followers often perceive men and women leaders differently (Deal & Stevenson, 1998). For instance, men tend to stereotype leaders as more masculine than women (Atwater et al., 2004; Schein, 2001), and meta-analyses of the "think manager-think male" studies suggest men are less likely than women to associate women with leadership (Koenig et al., 2011). Ayman-Nolley and Ayman (2005) find evidence of these gender differences among children, as boys tend to draw men when asked to draw a leader while girls draw both men and women. Again, this suggests that these biases start early in life. Similarly, masculine individuals expect more masculinity from their leaders (Johnson et al., 2008). Women respondents also tend to associate leadership with women more than male respondents (Duehr & Bono, 2006). Given the stronger association between masculinity and leadership among men, we expect differences in how masculine versus gender-neutral leadership titles affect men and women in relation to our first two hypotheses.

H3a: The effect of the masculine leadership title, "Chairman," compared with the gender-neutral title of "Chair," on gendered assumptions (H1) will be greater among male respondents than female respondents.

H3b: The effect of the masculine leadership title, "Chairman," compared with the gender-neutral title of "Chair," on the accuracy of recollections (H2) will be greater among male respondents than female respondents.

It is, however, worth noting there may be no differences in effects by respondent gender because beliefs about gender roles are learned at a societal level and individuals are not typically conscious of when ILTs affect their perceptions (Epitropaki et al., 2013). That is, societally ingrained stereotypes may be activated implicitly and equally among women and men outside of their awareness and thereby without being subject to filtering for social desirability purposes.

Overview of Studies

We investigate these hypotheses using a pair of original survey experiments which help us understand whether masculine leadership titles reinforce assumptions and recollections that men hold leadership positions. In these studies, we specifically focus on the effects of randomly assigning individuals to read about a leader who uses the masculine title of "Chairman" as compared to its gender-neutral counterpart, "Chair." We focus on "Chairman" and "Chair" because of their (aforementioned) prevalence, but similar patterns could emerge for other gendered versus gender-neutral leadership titles.

Our pair of studies enables us to investigate two observable implications of masculinized titles: (a) their effect on assumptions of leadership and (b) their effect on the accuracy of recollections of leadership. In so doing, we provide additional nuance to the literature examining the consequences of gender stereotypes for gender discrimination (see Eagly and Heilman, 2016 for an overview). Moreover, scholars have also noted that research on masculine stereotypes of leadership has primarily relied on explicit measures; our design uses indirect measures that help avoid demand effects and social desirability bias (Duehr & Bono, 2006; Epitropaki et al., 2013; Koenig et al., 2011) and that possess greater ecological validity.

Study 1 probed the assumptions people make about who holds leadership positions based on whether a given leader, whose gender is unknown, is referred to as "Chairman" versus "Chair." Comparing the probability the leader is assumed to be a man across titles provides a test of H1. Study 2 probed the recollections people have about who holds leadership positions when the leader's gender is unambiguously communicated based on whether they were referred to as "Chairman" versus "Chair." Comparing the accuracy of recollections for male versus female leaders across titles provides a test of H2. Gender differences across respondents are analyzed in both Study 1 and Study 2 to test H3a and H3b, respectively.

Study 1

Method

Participants and Procedure. 1753 adult U.S. citizens from Amazon.com's Mechanical Turk (MTurk) workplace forum completed a Human Intelligence Task (HIT) which was advertised as a four-minute-long job requesting reactions to text. The study was fielded in January 2017. We required workers to be located in the U.S., have a HIT approval rate greater than 90%, and have completed more than 100 HITs. We removed all cases with duplicate IP addresses. The age of our respondents ranged from 18 to 88 with a mean age of 36.6 (s.d. = 11.6). We used quotas to ensure a roughly equivalent proportion of men and women in the sample (50.7% male and 49.3% female).[8] After answering

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[8] In comparison to known MTurk samples, ours is slightly closer to national representative samples: Berinsky, Huber, and Lenz's (2012) MTurk sample was 60.1% female with an average age of 32.3 years, while the American National Election Studies (ANES) 2016 web sample was 52% female with an average age of 47.2 years. Typically, results based on MTurk samples are reasonably generalizable to more nationally representative ones (Coppock, 2019; see Krupnikov and Levine, 2014 for some exceptions).

demographic questions about gender, age, and citizenship, participants were then randomly assigned to receive the experimental stimulus. Balance tests appear in the Appendix.

The study employed a 2 (*Chair* versus *Chairman*) x 3 (*Context*) factorial between-subjects design in which all participants read a three-sentence vignette about a hypothetical leader with a gender-ambiguous name.[9] The first factor randomly varied whether the leader had the title of "Chair" or "Chairman."[10] The second factor randomly varied the leadership context to be business (a paperclip factory, following McConnell and Fazio, 1996), politics (a state legislative Ways and Means Committee), or academia (a sociology department) in order to assess the generalizability of any leadership title effects. Appendix A contains the full stimuli.

After reading the brief vignette, participants received the following instructions:

"Describe (in five complete sentences) what you think a typical morning in the office for [Chair/Chairman] Simmons might be like."

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[9] The names themselves are theoretically inconsequential – we simply wanted to make sure that our results did not hinge upon solely one name. We analyzed data from the Social Security Administration that listed the popularity of names over time. By constructing a measure that took into account the popularity of names for males and females, we settled on a list of gender-neutral names that included Pat and Taylor. Other names (Jamie and Jessie) were used in a pilot study, but were not perceived to be as neutral as Pat and Taylor. Supplementary analyses show no average treatment effects for the names Pat and Taylor and no conditional treatment effects by name.

[10] We follow McConnell and Fazio (1996) and include these two titles in our study. We do not use "Chairperson" as they do. While "Chairperson" was evaluated lower in the masculine stereotype index than "Chairman" (McConnell and Fazio, 1996), both "Chair" and "Chairperson" are gender-neutral, yet "Chairperson" is rarely used (N=2 in our study of MCs' uses of titles). Further, "Chair" and "Chairman" are useful to focus on given their prevalence in institutional documents describing leadership positions. Finally, we do not investigate "Chairwoman" here because it is a qualitatively different title than "Chair" or "Chairman." While women frequently adopt "Chair" or "Chairman" for themselves—both titles that men use—the reverse is rarely (if ever) the case. Therefore, understanding the gendered expectations that "Chair" and "Chairman" might create is particularly useful because more than one gender uses such titles.

Five distinct text boxes followed, one designated for each sentence. Participants then answered three attitudinal questions and received instructions on how to receive payment for their participation before submitting their work. Each worker received $1 for completing the HIT. The median completion time for the study was four minutes, and the median length of each sentence in each text box was nine words.

Dependent Measure. Two undergraduate research assistants who were blind to the design and hypotheses hand-coded the responses. They read each of the respondents' entries and coded each respondent as assuming the gender of the leader to be male, female, or neither (i.e., through the use of "they" or "he/she" as a pronoun, through references to the leader by proper name, or through the use of phrases lacking a grammatical subject). Given our hypothesis, our dependent measure consists of whether or not the respondent assumes the leader is male. A random sample of two hundred responses were coded by both coders, yielding intercoder reliability of $\kappa=1.00$ for this dependent variable.

Results

Means, standard deviations, and correlations of variables can be found in Table 1. We test H1 using OLS regression with robust standard errors, with the DV being whether the leader is assumed to be male. The percentage of participants who assume the leader is male is 57.1% in the Chair condition and rises to 63.8% in the Chairman condition, a significant difference as shown by the coefficient on *Chairman Title* in column 1 of Table 2

(b=0.07, robust s.e. = 0.02, p=0.004).[11] When respondents described the morning of a "Chair" with a gender-ambiguous name, the majority assumed the leader was male, and the masculine title of "Chairman" further accentuated that assumption.

[Insert Tables 1 and 2 about here]

To test H3a, we estimate a fully interactive OLS regression that includes respondent gender and its interaction with treatment condition. Column 2 of Table 2 reports the results. Use of the "Chairman" as opposed to "Chair" title elicits significantly higher percentages of respondents assuming the leader is male among male respondents as well as female respondents; the main effect for *Chairman Title* is significant (b=0.07, robust s.e. = 0.03, p=0.02), and the coefficient for the interaction between *Chairman Title* and *Respondent Female* is not distinguishable from zero (b=-0.02, robust s.e. = 0.05, p=0.73). There is no evidence to suggest that the gendered title heightens expectations of male leadership differentially across male respondents and female respondents.[12]

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[11] In the Chair condition, 8.6% of respondents assumed the leader was female and 34.4% provided ambiguous characterizations. In the Chairman condition, 7.5% of respondents assumed the leader was female and 28.7% provided ambiguous characterizations. Exploratory tests of proportions as they refer to female and gender-ambiguous responses are as follows: The masculinized title reduces assumptions that the leader is female but this is not significant; z=0.78(1749), p=0.43, Cohen's h = 0.04. The masculinized title reduces gender-ambiguous characterizations: z=2.56(1749), p=0.01, Cohen's h = 0.12.

[12] Our design allows for an exploratory analysis of the generalizability of our findings across contexts. The degree to which individuals perceive role incongruity between women and leadership can vary by the perceived masculinity or femininity of a given field (Eagly and Karau, 2002). We employed three contexts—business, state politics, and academic sociology—that, ex ante, vary in the presence of women. We acknowledge, however, that our design does not permit a strict disentangling of the effects of contexts *per se* and gender representation (as there may certainly be other ways in which these contexts differ from each other besides gender representation, and even within a given context such as academia, there are differences across disciplines in gender representation). In 2016, women held 19.9% of board seats on S&P 500 Companies (Catalyst, 2017), 24.5% of seats in state legislatures (CAWP, 2017), and constituted 52.9% of American Sociological Association members (American Sociological Association, 2017). Aggregating the title conditions, respondents assume business leaders to be male (64.4% of respondents) more than political leaders (58.8%) or academic leaders (57.9%) (χ^2 test, p=0.046). These overall differences reinforce existing findings concerning the masculine nature of leadership in the business realm in particular (Brooks, 2013). To determine whether the effect of the masculinized title is similar or different across contexts, we estimate an

Discussion

Study 1 uses a novel design to uncover findings that reveal implicit gender biases in leadership as well as the power of masculine leadership titles in reinforcing those biases. Our results reflect the stereotype that males hold leadership positions. Moreover, the masculine title of "Chairman" (versus "Chair") reinforces the connection between masculinity and leadership. The title of "Chairman" cues participants to assume the leader is male more than the gender-neutral title of "Chair." The effect of the gendered cue appears similar among male and female respondents. In sum, this study suggests that masculine language, even in what seem to be innocuous leadership titles, triggers assumptions about who sits in the seat of power.

Do these findings simply reflect stereotypes grounded in the representativeness heuristic (e.g., Bordalo et al., 2016)? Recall that, according to our content analysis of websites of members of Congress, it was actually the case that male MCs were more likely than female MCs to use the title "Chairman." (Of the 166 MCs who used "Chairman," 96% were male; of the 109 MCs who used the title "Chair," 67% were male.) Given that we have provided no information about the leader's gender in this study, perhaps respondents are simply applying descriptive stereotypes to our vignette in the absence of concrete information. The assumptions in this case perhaps simply reflect de facto differences in the use of these titles given the lack of available information about the leader's gender. Our next study addresses this issue by providing unambiguous information about the leader's

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OLS regression model that interacts *Chairman Title* with a dummy variable for *Politics* and a dummy variable for *Academic* (business is used as the suppressed reference category). The regression results appear in the Appendix, and they indicate there were no significant interactions between gendered title and context ($b_{\text{chairman x politics}}$ = 0.05, robust s.e. = 0.06, p=0.39; $b_{\text{chairman x academia}}$ =-0.04, robust s.e. = 0.06, p=0.48).

gender. In so doing, we can also examine the effects of women leaders using masculine

titles. Namely, we examine whether "Chairman" reinforces the connection between

masculinity and leadership such that a woman's imprint as a leader is minimized relative to

a man's.

Study 2

Method

Participants and Procedures. The experiment was fielded on a 1,000 respondent

module of the 2016 Cooperative Campaign Election Study (CCES). When weighted, it is a

nationally representative internet study of U.S. adults. Respondents were drawn from the

YouGov/Polimetrix standing panel of respondents. The twenty-minute pre-election survey

wave, fielded in October 2016, included core instrumentation assessing a broad range of

political attitudes, values, and demographics as well as this experimental module. Within

the experimental module, respondents were randomly assigned to read a vignette about a

hypothetical leader that featured the experimental manipulations. Balance tests appear in

the Appendix.

We fielded a 2 (*Chair* versus *Chairman*) x 2 (*John* versus *Joan*) factorial between-

subjects design in which respondents were asked to read a brief vignette regarding the

selection of a new leader for a state legislature's Ways and Means Committee. The design is

an adaptation of the strong leader vignette developed by Johnson et al. (2008, Study 2) for

a political scenario.[13] We manipulated the job title by randomly assigning respondents to read about a "Chair" or "Chairman." We manipulated the gender of the leader by randomly assigning the leader an unambiguously gendered name (John versus Joan) along with gender-aligned pronouns.[14]

Following the vignette, all respondents answered a series of evaluative questions about the leader. We then administered a surprise recognition question aimed at detecting the respondent's recollection of the gender of the leader. The surprise task asked, "Do you happen to recall the name of the new [Chair/Chairman]?" Five response options accompanied the question: John, Joan, Joseph, Josie, and Don't Know.

Dependent Measures. We measure accuracy of recall using "hits" and "false alarms," consistent with the literature on memory and stereotyping (e.g., Marsh, Cooks, and Hicks, 2002). Hits reflect cases where the respondent correctly recalls the gender of the leader. False alarms reflect cases where the respondent incorrectly recalls the gender of the leader. We code John or Joseph as reflecting recollection that the target was male. We code Joan or Josie as reflecting recollection that the target was female.[15] Hits and false

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[13] We build upon Johnson et al. (2008) and McConnell and Fazio (1996) in constructing our hypotheses and design. Per Johnson et al. (2008), we acknowledge that perceptions of leaders may vary by the gender of the leader and the stereotypicality of the traits assigned to the leader (i.e., strong versus sensitive). We base our study on a schema for a strong leader, as it has greater ecological validity in the political context (e.g., Schneider & Bos, 2014).

[14] We could have included a control condition where the gender of the leader was left ambiguous. This would have enabled us to deduce the baseline assumptions that respondents bring as they read the vignette. Future research would profit from including this control condition as a way of measuring default expectations.

[15] Appendix A contains the full stimuli. For brevity and focus, we restrict our analysis to the surprise recall task. We worded the recall task as such in an effort to subtly, rather than explicitly, assess recollection of the leader's gender.

alarms are coded by comparing recollections as they align with the gender of the leader in the treatment.

Results

Table 3 lists the means, standard deviations, and correlations of variables in Study 2. Table 4 lists the Hits and False Alarms by condition. We test H2 by estimating OLS regressions reported in Table 5.

[Insert Tables 3, 4, and 5 about here]

Hits. As noted in Table 4, among those who read about a male leader, 75.1% of respondents in the Chairman condition correctly recalled John as being male compared to 59.4% of respondents in the Chair condition. Among those who read about a female leader, 57.0% of respondents in the Chairman condition and 59.3% of respondents in the Chair condition correctly recalled Joan as being female. As shown in the results in column [1] of Table 5, the effect of the gendered title when pooled across male and female targets is not significant (b=0.06, s.e. = 0.04, *p*=0.15). Respondents in the male leader condition, when averaged across titles, are significantly more likely to correctly recall the leader's gender (b=0.09, s.e. = 0.04, *p*=0.04). We include an interaction between *Chairman Title* and *John* in column [2]; the coefficient on the interaction term indicates that the effect of the masculine title is significantly greater in the male leader condition than the female leader condition, supporting H2 (b=0.18, s.e. = 0.09, *p*=0.04).

False Alarms. As Table 4 indicates, among those who read about a male leader, 0.5% of respondents in the Chairman condition and 2.3% of those in the Chair condition misrecalled John as a female leader. Among those who read about a female leader, 11.7% of respondents in the Chairman condition and 7.7% of respondents in the Chair condition

incorrectly recalled Joan as being male. Column [4] of Table 5 indicates that the title itself, when pooled across male and female leaders, makes no difference in false alarms (b=0.01, s.e. = 0.02, *p*=0.54). However, respondents assigned to the male leader condition are significantly *less* likely to register false alarms (to assign the wrong gender to the leader) (b=-0.08, s.e. = 0.02, *p*<0.0001). We test whether the difference-in-difference is significant in column [5] by including an interaction between the title and the leader gender. The coefficient on the interaction term shows that the effect of the masculine title in triggering false alarms varies significantly by gender of the leader (b=-0.06, s.e. = 0.04, *p*=0.07, one-tailed), lending support for H2. The title "Chairman" accentuates the connection between masculinity and leadership, insofar as to trigger more false alarms that misattribute the positions of women leaders to positions held by men.

To test H3b, we re-examine the above comparisons as they interact with gender of respondent. We specify a regression model that controls for gender of respondent, the masculinized title (*Chairman*), the gender of the leader (*John*), and the interaction of the two treatment dummies (*Chairman x John*); further, we interact gender of respondent with *Chairman, John,* and *Chairman x John.* We apply this model to each of the two dependent variables. The three-way interaction terms in column [3] and column [6] of Table 5 reveal if gender of the respondent influences the interactive effect of masculine title and gender of the leader. Neither of the three-way interactions is significant (b=0.10, s.e. = 0.17, *p*=0.58 in column [3]; b=0.03, s.e. = 0.08, *p*=0.70 in column [6]). Thus, there is no evidence to support the hypothesis that the effect of masculine titles is stronger among men compared with women.

Discussion

Despite having read a full vignette containing unambiguous information about the leader's gender, these side-by-side comparisons demonstrate how masculine leadership titles can underscore the connection between masculinity and leadership and exacerbate the application of gender stereotypes. The gendered title of "Chairman" relative to the gender-neutral title of "Chair" heightens the accuracy of recall for male leaders and dampens the accuracy of recall for female leaders. These findings underscore the asymmetrical ways in which a masculinized title affects women leaders: Their gender is less likely to be correctly recalled compared to their male counterparts', and their leadership is more likely to be ascribed to men. By reinforcing the connection between masculinity and leadership, the masculinized title of "Chairman" appears to minimize the leadership status of women.

Conclusions

Our two studies demonstrate that masculine language can serve as a barrier to female leadership. In one surreptitious task, we uncovered gendered stereotypes of leadership: When given a gender-neutral name of a leader, people tend to assume that person is a man. The masculine title of "Chairman" further increases expectations that a man holds that position of power. In a second surreptitious task, we found that even when the gender of a leader is clearly known, a masculine title undermines the accuracy of recollections when applied to female versus male leaders. The masculine title leaves respondents with a greater (mistaken) recollection that the leader is male, erasing the imprint of women's leadership among some respondents. Although the significant effects that we have uncovered are substantively small, they are elicited using indirect and implicit measures that enable us to avoid demand effects. Moreover, existing work on implicit

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associations suggests that even effect sizes in the substantively small-to-moderate range may have "societally large effects" (Greenwald et al., 2015).

We also examined gender differences in these effects. Across both studies, the masculine title accentuates the link between masculinity and leadership to a similar extent among both male and female respondents. Implicit linkages between masculinity and leadership are not confined to one sector of society, and language as codified in gendered titles can broadly accentuate such linkages.

To the extent that masculine language is entrenched in institutions throughout society—politics, academia, and business, alike—our work speaks to how such language can affect people's expectations of who has held and who has succeeded in such positions of power. Hearing that an organization has a "Chairman" instead of a "Chair" significantly increases the likelihood that people think the person filling such a position is a man, and significantly decreases the likelihood that the imprint of a woman in that leadership position will be recalled. While some observers may dismiss efforts to institute gender-neutral leadership titles and honorifics as misguided moves towards "political correctness," our studies provide clear empirical evidence that masculinized titles reinforce masculinized views of leadership. As such, our results also provide advocates for gender-neutral titles an evidentiary foundation upon which to press for change.

Moreover, decisions about titles convey meaning to those within and outside of organizations about who has held (descriptive beliefs) and who should hold (proscriptive

beliefs) such positions of power, whether intended or not.[16] That is, continued use of titles

referring to the "Chairman" of a corporate board, the DNC or RNC, or a legislative

committee likely reinforces stereotypes of who holds such positions and affects the degree

to which women feel they would be fit for and would succeed in such positions (e.g., Stout

& Dasgupta, 2011). While a woman might strategically elect to use the term "Chairman" to

emphasize masculinity and navigate the double-bind of leadership, there are negative

repercussions in that her contributions as a leader may be forgotten. Moreover, there are

cumulative externalities that reach beyond a given leader's self-presentational choices. The

additive effects of such language can have downstream implications for who is

remembered to have held leadership, for who may be selected to be a leader, and for who

even steps up to be considered for leadership.

Our findings also speak to the broader literature on institutional practices that may

affect women's success in leadership (e.g., Kalysh et al., 2016; Mendelberg & Karpowitz,

2016; Sojo et al., 2016) and may generalize to ongoing discussions about gender-neutrality

in leadership titles. Insofar as masculinized titles such as "alderman", "councilman", and

"committeeman" reinforce masculinized stereotypes about leadership, they are likely to

shape expectations of who has, who will, and who can hold such positions. Our findings

also reflect the broader societal conversation regarding gender-neutral as opposed to

gender-marked *occupational* titles: Our work would suggest that the continued usage of

gender-marked occupational titles such as "cleaning lady" or "fireman" is likely to reinforce

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[16] See Eagly and Carli (2007) and Brooks (2013) for discussions of the importance of both descriptive and
proscriptive stereotypes in relation to gender.

gender stereotypes in assumptions, recollections, and expectations about who holds these positions (Liben et al., 2002; Vervecken & Hannover, 2015).

The United States' earliest founding documents declared rights and equality for "all men"—ideals that not only directly contradicted the realities of the time, but that also contain implicitly sexist language. Indeed, the Declaration of Sentiments presented at the Seneca Falls Convention sought to explicitly include women in its statement of equality over 70 years later. While women have made progress in the years since, they continue to fight both *de jure* and *de facto* sexism today – the latter of which is present in masculine leadership titles. As our studies demonstrate, the use of such masculine language is not merely a matter of rebuking "political correctness." Masculine leadership titles are a meaningful obstacle to female leadership.

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Table 1. Means, Standard Deviations, and Correlations for Study 1

Variable	Mean	SD	1	2	3
1. Chairman Title	0.50	0.50	1.00		
2. Respondent Female	0.49	0.50	0.002	1.00	
3. Chairman Title x Respondent Female	0.25	0.43	0.57***	0.58***	1.00
4. DV: Target Male	0.60	0.49	0.07***	0.05**	0.06***

Note: *N*=1751. Chairman Title was coded as 0 = Chair and 1 = Chairman; Respondent Female was coded as 0 = male and 1 = female; Target Male was coded as 0 = Female or Ambiguous and 1 = Male.
*p<0.10, **p<0.05, ***p<0.01

Table 2. OLS Results of the Effects of Title on Assumptions that the Leader is Male

Variable	Assumption: Male [1]	Assumption: Male [2]
Chairman Title	0.07***	0.07**
	(0.02)	(0.03)
Respondent Female		0.05
		(0.03)
Chairman Title x Respondent Female		-0.02
		(0.05)
Intercept	0.57	0.54
	(0.02)	(0.02)
F statistic	8.23***	4.12***

Note: N=1751. Table entry is the OLS regression coefficient with robust standard errors below.
*p<0.10, **p<0.05, ***p<0.01

Table 3. Means, Standard Deviations, and Correlations for Study 2

Variable	Mean	SD	1	2	3	4	5	6	7	8
1. Chairman Title	0.49	0.50	1.00							
2. John	0.48	0.50	-0.05	1.00						
3. Female Respondent	0.52	0.50	-0.004	0.02	1.00					
4. Chairman Title x John	0.22	0.42	0.55***	0.56***	0.02	1.00				
5. Female Respondent x Chairman Title	0.25	0.44	0.59***	-0.004	0.56***	0.35***	1.00			
6. Female Respondent x John	0.25	0.43	-0.02	0.61***	0.56***	0.36***	0.30***	1.00		
7. Female Respondent x Chairman Title x John	0.12	0.33	0.38***	0.39***	0.36***	0.69***	0.64***	0.64***	1.00	
8. DV: Hits	0.62	0.49	0.06	0.09	0.05	0.14***	0.06	0.06	0.11***	1.00
9. DV: False Alarms	0.06	0.23	0.03	-0.18***	-0.01	-0.12***	0.03	-0.14***	-0.08***	-0.32***

Note: N=993. Chairman Title was coded as 0 = Chair and 1 = Chairman; John was coded as 0 = Joan and 1 = John; Respondent Female was coded as 0 = male and 1 = female; Hits was coded as 1 = Target gender correctly recalled; False Alarms was coded as 1 = Target gender incorrectly recalled. Survey-weighted means, standard deviations, and correlations.
*p<0.10, **p<0.05, ***p<0.01

Table 4. Recollection of Target Gender by Experimental Condition

	Chairman		Chair	
Target: John	Hits:	75.1%	Hits:	59.4%
	False Alarms:	0.5%	False Alarms:	2.3%
	Don't Know:	24.4%	Don't Know:	38.3%
Target: Joan	Hits:	57.0%	Hits:	59.3%
	False Alarms:	11.7%	False Alarms:	7.7%
	Don't Know:	31.3%	Don't Know:	33.0%

Note: *N*=993. Hits indicate instances in which the respondent correctly recalled the target's gender. False alarms are instances in which the respondent incorrectly recalled the target's gender.

Table 5. Hits and False Alarms by Leadership Title, Target Gender, and Respondent Gender

Variable	Hits [1]	Hits [2]	Hits [3]	False Alarms [4]	False Alarms [5]	False Alarms [6]
Chairman Title	0.06	-0.02	0.00	0.01	0.04	0.03
	(0.04)	(0.06)	(0.10)	(0.02)	(0.03)	(0.05)
John	0.09**	0.00	0.06	-0.08***	-0.05**	-0.03
	(0.04)	(0.06)	(0.10)	(0.02)	(0.03)	(0.04)
Female Respondent			0.10			0.01
			(0.09)			(0.04)
Chairman Title x John		0.18**	0.13		-0.06†	-0.07
		(0.09)	(0.13)		(0.04)	(0.06)
Female Respondent x Chairman Title			-0.05			0.02
			(0.13)			(0.07)
FemaleRespondent x John			-0.11			-0.05
			(0.13)			(0.05)
Female Respondent x Chairman Title x John			0.10			0.03
			(0.17)			(0.08)
Intercept	0.55	0.59	0.54	0.09	0.08	0.07
	(0.04)	(0.04)	(0.07)	(0.02)	(0.02)	(0.03)
F statistic	3.66**	5.13***	2.31**	9.40***	9.41***	5.13***

Note: N=993. Table entry is the OLS coefficient with standard errors below. Survey weights applied. Hits indicate instances in which the respondent correctly recalled the target's gender. False alarms are instances in which the respondent incorrectly recalled the target's gender.
*$p<0.10$, **$p<0.05$, ***$p<0.01$
†$p<0.10$, one-tailed

Treatment Text for Study 1 (2017 MTurk)
Participants *were randomly assigned to read one of the following vignettes, randomizing the name (Pat vs. Taylor) and the title (Chair vs. Chairman)*.

Please read the following description:
[Pat/Taylor] Simmons is the [Chair/Chairman] of the Board of Directors for Birchmont Industries. Simmons is 58 years old and has been with Birchmont for 20 years. Birchmont makes a variety of paper clip products.

[Pat/Taylor] Simmons is the [Chair/Chairman] of the Department of Sociology at Vail State University. Simmons is 58 years old and has been with the Department for 20 years. Faculty in the Department of Sociology engage in research and teaching.

[Pat/Taylor] Simmons is the [Chair/Chairman] of the state legislature's Ways and Means Committee. Simmons is 58 years old and has been in office for 20 years. The Ways and Means Committee sets the budget for the state.

Describe (in five complete sentences) what you think a typical morning in the office for [Chair/Chairman] Simmons might be like.

Type Sentence 1 here:
Type Sentence 2 here:
Type Sentence 3 here:
Type Sentence 4 here:
Type Sentence 5 here:

Treatment Text for Study 2 (2016 CCES Module)
Participants were randomly assigned to read one of the following vignettes, randomizing the gender of the leader (John vs. Joan) and the title (Chair vs. Chairman).

Please read the following selection and answer the questions that follow.

State Ways and Means Committee Announces New [Chair/Chairman]

On Friday, the State Legislature's Ways and Means Committee announced that it has selected *[John/Joan]* Davenport as its new committee *[Chair/Chairman]*. Some committee members remain unsure about the selection, despite Davenport's 20 years of experience in state and local government. Davenport is credited as having led *[his/her]* county out of serious financial distress. However, the state's problems are much larger than the ones Davenport has previously faced, and the committee has had a long history of problems with its leadership.

In a telephone interview, the new *[Chair/Chairman]* responded to questions about how *[he/she]* will approach *[his/her]* new position.

"Leaders need to be strong," said Davenport, who is known for *[his/her]* strong leadership style. "That's the way I will lead on the Ways and Means Committee, despite what my critics say."

Whether Davenport will succeed as *[Chair/Chairman]* of the State Legislature's Ways and Means Committee remains to be seen.

APPENDIX B: Balance Tests

Table B1. Study 1 Balance Tests

	(1) Age	(2) Female
Chairman	-0.22	0.002
	(0.56)	(0.02)
Business	-0.46	0.02
	(0.68)	(0.03)
Politics	-0.33	0.03
	(0.68)	(0.03)
Intercept	36.93***	0.48**:
	(0.56)	(0.02)
R^2	0.00	0.00

Note: N=1751. Table entry is the OLS coefficient with standard errors in parentheses.
*p<0.10, **p<0.05, ***p<0.01

Table B2. Study 2 Balance Tests		
	(1)	(2)
	Age	Female
Chairman	-0.58	0.00
	(1.61)	(0.04)
John	0.63	0.02
	(1.59)	(0.04)
Intercept	46.96***	0.51***
	(1.59)	(0.04)
R^2	0.001	0.001

Note: N=1000. Table entry is the OLS coefficient with standard errors in parentheses. Survey weights applied.
*p<0.10, **p<0.05, ***p<0.01

APPENDIX C: Supplementary Analyses

Table C1. OLS Results of the Effects of Title on Assumptions that the Leader is Male, by Context (Study 1)

	Target Male
Chairman Title	0.06
	(0.04)
Politics	-0.08**
	(0.04)
Academia	-0.04
	(0.04)
Chairman Title x Politics	0.05
	(0.06)
Chairman Title x Academia	-0.04
	(0.06)
Intercept	0.61
	(0.03)
F statistic	3.38***

Note: N=1751. Table entry is the OLS regression coefficient with robust standard errors below.
*p<0.10, **p<0.05, ***p<0.01