

Beyond Meeting Climate Goals: Masculinity and Climate Policy Backlash*

Joshua A. Schwartz,[†] Christopher W. Blair,[‡] and Sabrina B. Arias[§]

Abstract

Political debates over climate change mitigation are inflected with gendered language. While prior work has shown a connection between individual gender and climate-related attitudes, little evidence exists regarding the gendered nature of climate policy itself. We theorize that climate change mitigation policies perceived as “masculine-threatening” elicit more public opposition than gender-neutral climate policies. We further argue that women leaders face a higher penalty when they advocate climate policies that threaten masculine-coded norms and behaviors. To test our theoretical expectations, we fielded three pre-registered survey experiments on representative samples of the US public ($n \approx 2,700$). While we find that masculine-threatening policies face substantially more opposition—suggesting that proposing them is politically fraught—we do not find that women policymakers face a disproportionate penalty for advocating them. These results underscore the nuanced ways gender dynamics shape public attitudes on climate change and bear key implications for our understanding of political communication on climate policy.

*Names are in reverse alphabetical order; equal authorship is implied. Generous support for this research was provided by the Kleinman Center for Energy Policy at the University of Pennsylvania. We kindly thank Sarah Bush, Soohyun Cho, Thomas Flaherty, Alexander Gazmararian, Zoe Ge, Jonathan Guy, Zuhad Hai, Alyssa Heinze, Mirya Holman, Daniela Osorio Michel, Gino Pauselli, Duy Trinh, and Taylor Vincent, as well as participants at the 2023 Princeton Research in Experimental Social Science Workshop and the 2024 Annual Meeting of the American Political Science Association for helpful comments and advice. This study was reviewed by the Princeton University Institutional Review Board and granted exempted status (IRB # 16163).

[†]Assistant Professor, Carnegie Mellon Institute for Strategy and Technology, Carnegie Mellon University, joshschwartz@cmu.edu

[‡]Assistant Professor, Department of Politics, Princeton University, chris.blair@princeton.edu

[§]Assistant Professor, Department of International Relations, Lehigh University sarias@lehigh.edu

Introduction

“Kamala even wants to pass laws to outlaw red meat to stop climate change...You know what that means? That means no more cows.” — President Donald Trump¹

“Kamala can’t have my guns. She can’t have my gasoline engine. And she sure as hell can’t have my steaks and cheeseburgers.” — Senator Ted Cruz²

In the 2024 US presidential campaign, Republicans repeatedly attacked Democratic nominee Kamala Harris with critical messages (like the ones above) about her climate policies, highlighting false claims that she would ban red meat and gasoline-powered engines (Henderson 2024). These messages are part of a broader effort to frame progressive climate policymaking as a threat to traditional conceptions of masculinity. Republican Senator Josh Hawley made this link explicit, asserting that boys are “taught that manhood is inherently dangerous, that it contributes to climate change, that they need to renounce their masculinity” (Hamilton 2023). Similarly, in 2019 then-Fox News host Tucker Carlson derisively mocked MSNBC host Chris Hayes’s positive coverage of the Green New Deal, noting: “Chris Hayes is what every man would be if feminists ever achieve absolute power in this country...deeply, deeply concerned about global warming and the patriarchal systems that cause it” (Bump 2019). Nor are these examples unique to the US. In Germany, the far-right AfD party has campaigned on an anti-climate slogan—“Diesel, Schnitzel, and Billigflug [cheap flights]”—suggesting pro-climate regulations threaten traditional elements of German manhood and culture (Voeten 2023). Implicit in these messages is an assumption that the public finds gendered anti-climate themes compelling, and that attacking women policymakers for their “anti-masculine” climate positions is an effective political communication strategy.

Previous studies have analyzed how gender identity shapes mass attitudes on climate

¹Milbank (2024).

²Blanchet (2024).

change and climate policy. For example, research has shown that women are more knowledgeable and concerned about climate change than men are (McCright 2010), particularly in more developed countries (Bush and Clayton 2023). Further, existing work reveals that more sexist individuals are less supportive of climate mitigation (Benegal and Holman 2021b), that men are more likely to be skeptical of climate science (Tranter and Booth 2015; Krange, Kaltenborn and Hultman 2019), and that eco-friendly behavior is typically viewed as feminine (Brough et al. 2016).³

This body of work leaves several key questions unanswered. First, how do the gendered nature and implications of climate *policies* themselves impact public support? Do policies that challenge traditional conceptions of masculinity—such as meat-eating and driving—receive lower levels of support than comparable policies with implications that are perceived of as more gender-neutral?⁴ Second, how does the sex of a leader proposing masculinity-threatening climate policies shape mass support? Do women politicians face disproportionate penalties for proposing climate policies that challenge traditional conceptions of manhood? Do allegations that proposed climate policies threaten masculine-coded values adhere to women politicians more than their male peers? These questions are highly relevant for understanding the contemporary landscape of climate politics and policymaking in developed democracies, and especially in the United States, where gendered rhetoric on climate change has taken center stage. The ubiquity of political appeals about green policies’ gendered consequences implies that politicians believe these gendered appeals mobilize opposition to

³For broader surveys on climate attitudes, see: Leiserowitz (2006); McCright and Dunlap (2011); Hornsey et al. (2016); Egan and Mullin (2017). For additional research on public opinion and climate policy, see: Bernauer and Gampfer (2015); Drews and van den Bergh (2016); Bergquist, Mildemberger and Stokes (2020); Arias and Blair (2022, 2024); Arias and Schwartz (2024).

⁴Influential cultural narratives link meat-eating (Adams 1990; Rozin et al. 2012; Rothgerber 2013) and driving (Landström 2006; Plananska, Wüstenhagen and de Bellis 2023) with masculinity. While we recognize that gender as a social phenomenon intersects with many (or all) policies to some extent, we validate that meat-eating and driving are two issue domains where green policies are particularly likely to activate gendered anxieties (Figure 1).

climate mitigation. We offer the first systematic empirical test of this political communication strategy in a highly relevant context during the 2024 US presidential election.

Drawing on well-developed literatures in political science, psychology, and gender studies, we posit that masculinity-threatening climate policies are more likely to generate mass opposition, and that women leaders face a disproportionate penalty for proposing these policies. The first part of our argument follows from feminist and social psychological scholarship on backlash against threats to prevailing patriarchal norms in society (Faludi 1991; Glick and Fiske 2001; Kimmel 2013; Yeung, Kay and Peach 2014; Jost 2020; Wolton 2024; Simmons 2025). Given that traditional conceptions of masculinity are privileged under society’s gendered hierarchy (Enloe 1990; Hooper 2001), especially in the climate domain (Daggett 2018; Swim and Geiger 2018; Remsö, Bäck and Renström 2024; Avery et al. 2025), green policies framed as challenging hegemonic conceptions of masculinity should be especially likely to face resistance.

The second part of our argument builds on scholarship on “going-against-type” (e.g., Schultz 2005; Kreps, Saunders and Schultz 2018; Saunders 2018; Mattes and Weeks 2019). When citizens evaluate policies proposed by their leaders, they consider officials’ personal, ideological preferences as well as external circumstances and private information politicians hold about the wisdom of certain policies (Nincic 1988). By “going-against-type”—proposing policies at odds with their perceived ideological preferences—leaders can generate policy support since type-inconsistent proposals offer publics a stronger signal that strategic circumstances, rather than personal beliefs, are motivating leaders’ policy proposals (Schultz 2005; Mattes and Weeks 2019). Publics consider a number of heuristics, including partisanship, gender, and disposition to anticipate leaders’ ideological preferences or “types” (Saunders 2018; Kertzer, Brooks and Brooks 2021; Blair and Schwartz 2023). Extending work on gender and climate attitudes (McCright 2010; Bush and Clayton 2023), we argue that women leaders are more likely to be perceived as holding pro-climate and anti-masculinity preferences. Pro-

climate typecasting of women leaders should raise particular barriers to their green policy proposals. When women are accused of proposing masculinity-threatening climate policies, these accusations (even if false) may be more likely to be believed. When women leaders indeed propose masculinity-threatening climate policies, their proposals are more likely to garner backlash since these proposals are more likely to be viewed as type-consistent and motivated by preferences rather than need.

To test these expectations, we deploy three pre-registered survey experiments ($n \approx 2,700$) on representative samples of the US public.⁵ First, we conduct a validation exercise to assess whether policies like restrictions on red meat, automobiles, and military emissions are in fact perceived as more masculinity-threatening than identically costly climate policies couched in gender-neutral terms. Second, we test how the gendered nature of climate policy proposals shapes public support for climate policy action and for proposing political leaders more broadly. We focus on variation across the sex of proposing leaders and the degree of masculinity-threat created by proposed climate policies. Third, we examine how the public responds to mere *allegations* that policymakers support masculinity-threatening climate policies. Here, we focus on whether a leader's sex shapes public perceptions of the credibility of opposition claims about leaders' climate agendas.

We first establish that climate policies like bans on meat consumption and large automobiles are perceived as masculinity-threatening. In accordance with our theory, we then find strong evidence that criticizing these masculinity-threatening policies is an effective political communication strategy for opponents of climate action. On average, masculinity-threatening climate policies are 17 *percentage points* less likely to be supported than comparable gender-neutral policies. The public is also 12 *percentage points* less likely to vote for leaders that propose masculinity-threatening climate policies. These results are not simply driven by negative reactions from men or Republicans, but hold across key population

⁵Our pre-registration plan can be found at the [OSF Registry](#). Details of it are also reported in the appendix.

subgroups, illustrating a broad-based backlash.

We do not find clear evidence that women leaders pay disproportionate costs for proposing masculinity-threatening climate policies, or that allegations that a politician has proposed masculinity-threatening climate policies are more likely to adhere to women politicians. Masculinity-threatening climate policies are broadly unpopular, irrespective of the sex of the leaders who propose them. Still, the results are not all sanguine. Respondents are more likely to deprioritize electing women leaders when women policymakers advocate masculinity-threatening climate policies than when men advocate these policies. This latter result suggests that gendered attacks on women’s green policy proposals threaten the push for greater gender equality in political officeholding, even if women politicians do not directly suffer disproportionate backlash for making masculinity-threatening proposals.

Supplemental analyses from our experiments underscore two related reasons that likely explain why women are not directly punished more than men for proposing masculinity-threatening policies. The logic of our expectation about backlash against women leaders hinges on our assumption that the public uses sex as a heuristic for “type” and hence views women politicians as more likely to propose masculinity-threatening climate policies. If this assumption is correct, we would expect to observe that respondents express more surprise about male politicians proposing masculinity-threatening policies and less surprise when women politicians do so. First, while gender stereotypes are present in the realm of climate policy (e.g., women leaders are trusted more than male leaders to deal with climate change), we find some evidence that these biased expectations about how women executives will perform are weaker in the climate domain than in other areas like foreign policy (Schwartz and Blair 2020; Cohen and Karim 2022; Blair and Schwartz 2023). Second, while respondents were less surprised when women policymakers proposed pro-climate policies in general, we do not find that respondents are less surprised when women (versus men) propose *masculinity-threatening* (versus non-threatening) climate policies specifically. Consequently, these kinds

of policies are not viewed as in-character or less informative when proposed by women leaders.

Overall, our project makes several important contributions to scholarship on the politics of climate policymaking. First, we connect two major literatures on climate and gender to build a novel theory about how the gendered nature of climate policies can impact public opinion. Our intervention builds on important work on gender, sexism, and climate attitudes (Tranter and Booth 2015; Lewis, Palm and Feng 2019; Benegal and Holman 2021*b*; Bush and Clayton 2023), and represents, to the best of our knowledge, the most systematic test of the efficacy of political communications based on rhetoric about climate policy-related threats to masculinity. Second, we offer new evidence on how gender serves as a heuristic for evaluations of political officials and on how “going-against-type” shapes the credibility of and support for leaders’ policy proposals. While a wide and diverse literature examines the ways type-inconsistent policies can shape opinion in the international realm (Nincic 1988; Cukierman and Tommasi 1998; Kreps, Saunders and Schultz 2018; Saunders 2018; Mattes and Weeks 2019; Blair and Schwartz 2023), we show the limitations of this idea as applied to climate policymaking. Our results suggest that the strength of stereotypes matters crucially for leaders interested in generating support by adopting counter-stereotypic positions. If strong enough stereotypes do not exist—e.g., about women leaders’ preferences for masculinity-threatening climate policies—then “going-against-type” dynamics are unlikely to operate.

Finally, our theory and evidence bear on the viability of important political communication strategies deployed on both sides of the debate over how to tackle climate change. Our results suggest that prominent right-wing efforts to frame green policies in gendered terms can sap support for pro-climate action. Conservative climate-skeptics can undermine public support for mitigation by decrying threats to masculinity posed by green initiatives. This opposition strategy does not only affect women leaders. Male leaders are also susceptible to gendered criticism of their climate policies. Allegations that climate policy proposals are masculinity-threatening can diminish the favorability of women and male policymakers alike.

These findings should inform climate advocates' efforts to insulate their pro-climate appeals from gendered attacks. One implication of our results is that supporters of climate mitigation should couch their green policy proposals in gender-neutral or even masculinity-affirming ways. In the international arena, for instance, states have found success in dominating the climate agenda by framing climate policies in security-related (and traditionally masculine) terms (e.g., [Arias 2022](#)). More research is needed to identify viable pathways for insulating pro-climate appeals from gendered criticism and to support important mitigation and coalition-building efforts. Women leaders will continue to play a key role in these efforts as vocal advocates for green policymaking.

Gender and Climate Attitudes

A large existing literature documents key gender differences in climate attitudes in the US. Gender-based gaps in climate belief relate both to generalized attitudes on climate change ([Leiserowitz 2006](#); [McCright and Dunlap 2011](#); [Hornsey et al. 2016](#); [Egan and Mullin 2017](#)) and support for specific mitigation and adaptation policies ([Bernauer and Gampfer 2015](#); [Drews and van den Bergh 2016](#); [Bergquist, Mildemberger and Stokes 2020](#); [Arias and Schwartz 2024](#)). Across these studies, evidence suggests American women hold more pro-climate views. Cross-national research confirms that this pattern generalizes. Globally, women are more concerned with climate change, particularly in developed democracies ([Lewis, Palm and Feng 2019](#); [Bush and Clayton 2023](#); [Ergun, Karadeniz and Rivas 2024](#)). In contrast, men across the world are more likely to oppose mitigation and hold climate-skeptic attitudes ([Tranter and Booth 2015](#); [Singh 2025](#)).

Several mechanisms have been posited to explain these differences. Economic and material factors are one important driver. [Bush and Clayton \(2023\)](#), for example, show men are less climate-concerned than women in highly developed countries. This gap is driven by

distributional considerations. Specifically, men expect that they will bear greater costs of decarbonization, both because of expected employment losses in male-dominated, carbon-intensive sectors during the green transition (Vona 2019; Clark, Khoban and Zucker 2022), and because men have more carbon-intensive consumer habits (Willer et al. 2013). Beyond egocentric, individualized concern about the costs of the green transition, men are also more sociotropically-concerned about how mitigation and adaptation policies affect other men in general (Bush and Clayton 2023).

Gendered socialization patterns may also play a role in explaining the gender gap in climate concern. Women are socialized into caregiving roles and pressured to be warm and nurturing (Ellemers 2018). Consequently, women often care more than men about community health and safety, resulting in greater concern for environmental issues (McCright 2010; Swim and Geiger 2018). These patterns filter up into women's roles and behaviors in political office. In particular, women politicians are more likely to hold ministerial roles in areas stereotypically associated with women, such as health, education, labor, and the environment (Baturu and Gray 2018). In these roles, women leaders institute more pro-climate standards and policies (Atchison and Down 2019; Barnes and O'Brien 2025).

A third explanation for gender gaps in climate concern relates to status and identity threat. Society's hegemonic social system is patriarchal and structured around masculinity (Enloe 1990; Glick and Fiske 2001; Hooper 2001). Efforts to reform or reshape this prevailing system, for instance by increasing women's representation in politics or promoting feminism, often precipitate backlash (Faludi 1991; Kimmel 2013; Yeung, Kay and Peach 2014; Simmons 2025). This backlash is motivated by perceptions, chiefly of men, that masculinity is under threat and that altering the extant (patriarchal) socioeconomic system will be harmful, unfair, and destabilizing (Jost 2020).

Climate policymaking poses a potential threat to male status and masculinity by upending traditional pillars of the socioeconomic status quo. For instance, decarbonization policies

threaten to reshape the male-dominated energy industry (Vona 2019) and to repattern men’s consumer habits (Willer et al. 2013). These dynamics generate psychological costs, as well as economic ones (Bush and Clayton 2023). Because men benefit from the systemic status quo, which decarbonization policies threaten, men hold stronger incentives to react against pro-climate policies in defense of the prevailing social hierarchy. Social psychological research confirms that perceived threats to masculinity emanating from pro-climate policies play a key role in undermining men’s support for tackling climate change. Men who are fearful of social threats to masculinity are more likely to deny that anthropogenic climate change is real (Remsö, Bäck and Renström 2024) and to oppose environmentalism (Goldsmith, Feygina and Jost 2013; Avery et al. 2025). These dynamics have fueled the rise of far-right movements interested in reinforcing patriarchal social foundations while resisting the green transition (Nagel and Lies 2022).

Sexism and misogyny underpin the status quo that privileges men’s political power. In political communication, misogyny is often deployed to garner support for climate opposition and to delegitimize climate policy advocates, labeling them as feminine and thus inferior, threatening, or unpatriotic. As a political rhetorical tactic, misogyny “functions not simply as hatred or disgust for women, but as a way of accessing a gendered hierarchy whereby that which is labeled “feminine” is perceived as inferior, devalued, and is amenable to be attacked” (Kaul and Buchanan 2023, p. 315). More sexist individuals are less likely to believe in climate change and support policies to combat it (Benegal and Holman 2021b).⁶

Theory

While the links between gender and climate attitudes are well-known, little work gives systematic attention to the ways in which perceptions of climate policies’ gendered impacts

⁶Sexist attitudes constitute an “investment in gendered hierarchies” (Benegal and Holman 2021b) that are potentially threatened by climate mitigation and adaptation policies.

shape mass support. To fill this gap, we focus on two key dimensions: (1) the degree to which pro-climate policies are viewed as threatening to traditional conceptions of masculinity; and (2) the sex of political leaders proposing climate policies.

Masculinity-Threatening Climate Policies

As noted above, masculinity is hegemonic in contemporary society, meaning the status quo social order privileges traits stereotypically associated with men, including strength, assertiveness, confidence, and bravery (Enloe 1990; Hooper 2001).⁷ Around these traits exists a cultural ideal and set of behaviors that characterize how men should act. For individuals, masculinity is “precarious,” meaning it must continually be performed (Vandello et al. 2008). This need induces men to engage in productive, cultural, and consumption activities associated with stereotypical manhood. In many developed democracies, and particularly the US, these activities include eating meat (Adams 1990; Rozin et al. 2012; Rothgerber 2013; Specht 2019), driving large, fossil fuel-powered vehicles (Landström 2006; Plananska, Wüstenhagen and de Bellis 2023), and working in carbon-intensive industries (Johnson 2019). Additionally, the need to perform masculinity creates anxiety, especially among men, towards developments that might threaten masculinity or men’s abilities to embody the masculine cultural ideal (Ducat 2005).

Policies and social movements that threaten to reform the patriarchal status quo are likely to spur backlash (Faludi 1991). For instance, when the #MeToo movement generated a popular effort to hold sexual abusers accountable, male-dominated online communities mobilized to undermine, demean, and harass women vocal about their abusive experiences. Online vitriol was infused with misogynistic rhetoric and imagery representative of extreme masculinity (Simmons 2025). Psychologically, anti-feminist backlash is motivated by anxiety

⁷Masculinity may have achieved hegemonic status because of bio-evolutionary imperatives (Geary 1998), gendered socialization patterns (Eagly and Wood 1999), or a combination of the two.

about status threat—fears, and particularly men’s fear, that their privileged position will decline and they will be unable to maintain masculine-coded cultural activities and traditions they have been socialized to value (Yeung, Kay and Peach 2014; Remsö, Bäck and Renström 2024). Even for non-privileged groups socialized into the status quo, efforts to overturn the prevailing system may generate uncertainty and worry (Jost 2020).

Emotionally, backlash against counter-hegemonic movements and policies often manifests in anger (Jakupcak, Tull and Roemer 2005; Kimmel 2013), aggression (Bosson et al. 2009), and reputational concerns (Wolton 2024) among dominant groups. Backlash can manifest economically, in the form of conspicuous consumption of masculine-coded products (Willer et al. 2013); socially, in the form of collective mobilization in online and offline fora (Simmons 2025); and politically, in the form of support for politicians who embody and policies that preserve traditional masculine traits (Carian and Sobotka 2018). Crucially, because both men and women are socialized into the hegemonic, male-dominated status quo, individuals of both sexes may view the prevailing structure as fair and beneficial (Glick and Fiske 2001; Jost 2020), and may express opposition to reformist policies and movements.

What specifically comprises the masculine status quo when it comes to climate change? In the US, traditional conceptions of masculinity are deeply entwined with a number of activities related to the consumption and production of fossil fuels and meat (Paterson 2000; Johnson 2019; Specht 2019). Perceived cultural threats posed by the green transition are often linked with Americans’ fears about the ways pro-climate policy will upend these sectors integral to US national identity, and American men’s identity in particular (Nelson 2020). As highlighted in the opening examples, contemporary conservative pundits amplify these narratives about masculinity-threatening climate policies targeting carbon-intensive industries like automotives and livestock. Daggett (2018, p. 32) makes the link explicit, describing how central carbon-intensive production and consumption are to male identity in the US: “[T]he American way of life was centered around a version of white, patriarchal rule in which

the achievement of hegemonic masculinity required intensive fossil fuel consumption and, for the working- or middle-class, jobs within or reliant upon fossil fuel systems...extracting and burning fuel was a practice of white masculinity.”

In other wealthy, developed democracies, a similar pattern links masculinity and national identity with climate-forcing behaviors like fossil fuel and meat consumption. For instance, in Germany diesel cars are closely linked with traditional conceptions of manhood and national pride (Plananska, Wüstenhagen and de Bellis 2023). Far-right parties have seized upon German men’s anxieties about the effects on the diesel and automotive industries to advocate against pro-climate policies (Voeten 2023). Similarly, in the UK, Sweden, and Norway, men’s opposition to decarbonization policies is motivated by perceived threats these policies pose to masculine-coded sectors and behaviors, including meat-eating and fossil fuel consumption and production (Krange, Kaltenborn and Hultman 2019; Remsö, Bäck and Renström 2024).

Building on these insights, we argue that hegemonic masculinity plays an important role in shaping mass assessments of pro-climate policies (see also Benegal and Holman 2021*b*). To be sure, all climate policymaking is viewed through a gendered lens. Pro-environmental actions, policies, and attitudes are generally associated with stereotypical femininity (Avery et al. 2025). However, climate policies can also be distinguished by the *degree* of threat they pose to traditional masculinity. Some policies, like purported bans on fossil fuel-burning vehicles, red meat consumption, and restrictions on the military, strike close to facets of the masculine cultural ideal. Other policies, like bans on plastic containers or tax incentives for adopting green agricultural practices, are more gender-neutral, or even potentially masculinity-affirming (Swim, Gillis and Hamaty 2020). In attacks against pro-climate policymaking in the United States, Republicans, many of whom have explicitly aired concerns about declining levels of masculinity, have tended to highlight masculinity-threatening climate policies (e.g., restrictions on meat-eating gas-powered cars, and the military) more frequently than gender-neutral or masculinity-affirming climate policies in their political

messaging (McDermott 2016).

There are two principal reasons we anticipate that masculinity-threatening climate policies are likely to elicit particular public blowback. First, prior evidence discussed above suggests threats to dominant paradigms, like masculinity in the contemporary US, often provoke negative reactions from individuals socialized into the status quo. Status threat and anxiety over the economic, psychological, and cultural impacts of policies that target behaviors and beliefs constitutive of traditional masculinity and national identity are especially likely to trigger emotionally-charged, reactive blowback (Faludi 1991; Yeung, Kay and Peach 2014; Remsö, Bäck and Renström 2024; Avery et al. 2025). Second, public support for masculinity-threatening climate policies (relative to policies that do not threaten masculinity) is likely to be low because the behaviors and beliefs masculinity-threatening policies target are generally quite popular. For instance, recent polling suggests 95% of Americans eat meat (Jones 2023). Likewise, 50% of Americans would never consider owning an electric vehicle, and 59% oppose the phase-out of gas-powered automobiles (Spencer, Ross and Tyson 2023). The popularity of these behaviors is partly a function of the fact that masculinity is hegemonic, which means masculinity-constitutive behaviors—like meat-eating and driving fossil fuel-powered vehicles—are widely practiced, conventional behaviors. Together, these expectations motivate the following pre-registered hypothesis:

H_1 : Support for masculinity-threatening climate policies will be lower than support for climate policies perceived as less masculinity-threatening.

The Interaction of Masculinity-Threatening Policies & Leader Sex

Numerous historical examples illustrate the paradoxical fact that substantial policy shifts are often taken by leaders and parties whose traditional issue positions would oppose the policy in question. For instance, it took the Hungarian Socialist Party to initiate neoliberal market reforms in the immediate post-Cold War period (Cho 2014). More famous is the adage

that “only Nixon could go to China,” which suggests hawkish leaders face fewer domestic political barriers than dovish leaders to pursuing conciliation with foreign adversaries. The logic is simple. Type-consistent policies (e.g., conciliation initiated by doves) are perceived as dispositional and rooted in those leaders’ personal, ideological preferences. By contrast, type-inconsistent policies (e.g., conciliation initiated by hawks) are perceived as situational and rooted in prudent evaluations of the circumstances at hand. When leaders pursue type-inconsistent policies—that is, when they “go-against-type”—publics perceive their policy proposals as more credible. If a leader as hawkish as Nixon was willing to buck his natural instinct and attempt rapprochement with China, then the policy must truly be in the national interest. If a dove had pursued the same policy, the public would be uncertain whether they were doing so for purely ideological reasons or because rapprochement was strategically optimal. Prior research offers robust evidence for these dynamics (Nincic 1988; Cukierman and Tommasi 1998; Kreps, Saunders and Schultz 2018; Saunders 2018; Mattes and Weeks 2019).

Especially relevant for our purposes, Blair and Schwartz (2023) theorize and find evidence that going-against-type dynamics can also apply specifically to leader sex. Because of gender stereotypes that men are stronger, tougher, and more aggressive in the realm of national security, it is more surprising when male leaders pursue peace with foreign adversaries than when women leaders do so. Consequently, the public is more skeptical when women leaders engage in type-consistent behavior by pursuing conciliation.

Our theoretical point of departure is to also consider whether a similar dynamic holds for leader sex in the realm of climate policymaking. Prescriptive gender stereotypes hold that men should behave in accordance with the characteristics of traditional masculinity and women should act in accordance with the elements of traditional femininity. When people engage in counter-stereotypical behavior, their type-inconsistent actions elicit surprise (Rudman and Glick 2010; Prati, Crisp and Rubini 2015) and support (Bauer 2017). We argue that

because climate is a feminized policy domain (Baturu and Gray 2018; Daggett 2018; Nagel and Lies 2022; Avery et al. 2025), women leaders proposing pro-climate policies—especially masculine-threatening ones—will be viewed as engaging in type-consistent behavior. Consequently, women’s masculinity-threatening climate policy proposals will be viewed as less surprising and less credible than identical policies proposed by male leaders. Since women leaders are expected to favor masculinity-threatening pro-climate policies for dispositional rather than situational reasons, their policy proposals will elicit less surprise and more opposition than those of male leaders. This motivates our second pre-registered hypothesis about the interaction of masculine-threatening policies and leader sex:

***H*₂: Support for masculinity-threatening climate policies will be lower when proposed by women leaders than male leaders.**

In the same vein, we anticipate that when political elites and pundits make *allegations* that a woman leader has proposed a masculinity-threatening climate policy, members of the public will be more likely to believe these accusations than similar ones leveled against male leaders. This argument follows from evidence that publics expect type-consistent behaviors, while type-inconsistent behaviors generate surprise (Prati, Crisp and Rubini 2015; Bauer 2017). This dynamic could help explain the anecdotal examples we highlight in the introduction, in which women policymakers are disproportionately and often baselessly criticized for supporting masculinity-threatening climate policies.

***H*₃: Accusations that a leader has proposed masculinity-threatening climate policies will be more likely to be believed when these accusations target women leaders than male leaders.**

To summarize, Table 1 maps our expectations. We distinguish masculinity-threatening versus non-threatening climate policy proposals and women versus male leaders. We anticipate low support for masculinity-threatening policies irrespective of leader sex (*H*₁). We

also hypothesize that relative to male leaders, women leaders will pay a penalty for proposing masculinity-threatening policies (H_2) and that allegations that leaders have proposed masculinity-threatening climate policies will adhere more to women than men (H_3).⁸

Table 1: Theoretical Predictions About Mass Climate Policy Support

		Type of Pro-Climate Policy	
		Masculinity-Threatening	Not Masculinity-Threatening
Leader Sex	Woman	Lowest Support	Higher Support
	Man	Second Lowest Support	Higher Support

Research Design

To test our theoretical expectations, we carried out three pre-registered survey experiments on members of the American public, including a pre-test validation study and two main experiments.

Our pre-test study aimed to assess the types of climate policies members of the public view as more or less threatening to traditional conceptions of masculinity. This exercise was critical because our experimental interventions in the main studies contrast masculinity-threatening climate policies (i.e., treatment) with control conditions defined by a lower degree of threat to masculinity. In order to ensure valid comparisons in these main studies, we had to establish that the policies we classify as masculine-threatening are indeed perceived as such. For this validation exercise we presented respondents with information about 12

⁸In the two right quadrants of Table 1 we are agnostic about whether women or male officeholders will generate more support for non-masculinity-threatening green proposals.

climate policies, all of which appear in our subsequent experiments. For each policy, we asked three principal questions: (1) to what extent would the policy threaten masculinity?; (2) to what degree would this policy hurt men more than women?; and (3) would women be more likely to support this policy than men?⁹ If our assumptions are valid, then the policies we categorize as masculinity-threatening should score higher on all three of these measures.

Our primary experiment (Study 1) was a 2×2 between-subjects design in which we exposed respondents to hypothetical climate policies that randomly varied in the degree of masculinity-threat they posed and whether they were proposed by a woman or male president. In this main study, we first asked respondents a battery of sociodemographic questions, including items designed to gauge baseline beliefs in climate change, sexism (Glick and Fiske 2001), and traditional masculinity (McDermott et al. 2019).¹⁰ We also included pre-treatment measures about whether subjects trust women or male policymakers more across issue areas like climate change, healthcare, and defense. To mitigate the negative effects of respondent inattention, we included a standard pre-treatment attention screener that doubled as a bot filter (Aronow, Baron and Pinson 2019).

Following the pre-treatment questionnaire, respondents were randomly assigned to one of four experimental cells.¹¹ The first treatment condition manipulated the sex of a hypothetical, future US president. Following work by Schwartz and Blair (2020) and Blair and Schwartz (2023), we operationalized this treatment by informing respondents that the president’s name was either Erica/Stephanie Richards or Eric/Stephen Richards.¹² To fur-

⁹Therefore, this study utilizes a within-subjects design. Clifford, Sheagley and Piston (2021) show that repeated-measure designs are valid tools of causal inference. In fact, they have several major advantages over between-subjects designs. Namely, within-subjects studies offer “dramatic” gains in statistical power.

¹⁰We measure masculinity using the Male Role Norms Inventory Very Brief (MRNI-VB) scale, which is a 5-item measure of masculinity drawn from the larger 21-item Male Role Norms Inventory-Short Form (MRNI-SF) scale developed by psychologists. The MRNI-VB has been validated as a measure by previous research (McDermott et al. 2019).

¹¹We block randomize on respondent gender and political identification since these factors are key determinants of climate policy preferences.

¹²These name combinations are similar to each other, but clearly prime sex. They should not, however, prime

ther amplify the treatment, we also used associated gender pronouns (i.e., “he” and “she”). Then, respondents were asked to imagine the year was 2030, and were told the president was a Democrat.¹³ Controlling for presidential partisanship enables us to avoid any potential lack of information equivalence across experimental conditions that could lead to confounding (Dafoe, Zhang and Caughey 2018).¹⁴

After being given information about the US president, respondents were then randomly assigned to the second treatment condition, which varied the nature of the president’s proposed climate policies. In the treatment group, respondents were shown a series of six masculinity-threatening climate policies proposed by President Richards. In the control condition, respondents were shown a set of six comparably costly and effective climate policy proposals less threatening to traditional conceptions of masculinity. As described above, our delineation between treatment and control policies was informed by the results of our pre-test validation survey. We included proposals across multiple climate policy domains to account for potential heterogeneous effects of masculinity-threat on attitudes across issue areas.

Our masculinity-threatening climate policies were divided into three categories: (1) meat-related policies, (2) vehicle-related policies, and (3) military-related policies. We choose these three categories because these are issue areas where Republicans have explicitly criticized Democrats for their (real or purported) climate proposals.¹⁵ These policies also vary in their salience to the public. This enables us to confirm that negative responses are not

any notable politician because no former US presidents or vice presidents share any of the names we employ.

¹³We control for, rather than manipulate, the president’s political affiliation because we were concerned respondents would not find it plausible that a Republican president proposed ambitious climate policies, especially ones that threaten traditional conceptions of masculinity. As the opening examples of this paper make clear, it is Republican politicians who are harshly criticizing these kinds of proposals in contemporary politics.

¹⁴Future work could explore whether manipulating the leader’s party identification impacts the results.

¹⁵For example, in the military realm, Ted Cruz commented that, “[p]erhaps a woke, emasculated military is not the best idea.” Project 2025 has also heavily criticized the military’s “wokeness” and focus on climate change as a “detriment to the Army’s core warfighting mission.”

simply driven by the unpopularity of proposals against widely-held consumer practices like meat-eating, but that effects hold for lower-salience issue areas that have little direct effect on respondents (e.g., climate justice policies in the US military). For each of these three masculinity-threatening policy categories, we asked respondents about their attitudes on related regulations and tax proposals.¹⁶ All policies were selected for plausibility to maximize external validity. For each policy we also informed respondents about expected policy costs and consequences, which we calculated using real-world climate models. Table 2 describes our treatment and control policies.

Table 2: Summary of Climate Policy Treatments

	Masculinity-Threatening Treatment	Equivalent Non-Threatening Control
Meat	(a) Meat Tax (b) Farmer Tax Incentives Not to Grow Meat	(a) Carbon Tax (b) Farmer Tax Incentives to Reduce Climate Change
Automobiles	(a) Banning Gas-Powered Cars (b) Banning Large Non-Commercial Cars	(a) Banning Gas-Powered Furnaces (b) Banning Large Plastic Bottles/Containers
Military	(a) DoD Clean Energy Use (b) DoD Environmental Justice Plan	(a) US Government Clean Energy Use (b) US Government Environmental Justice Plan

For the meat domain, we asked the extent to which respondents would support a tax on meat consumption and tax breaks to farmers switching from livestock to vegetable cultivation. These policies directly mirror ones proposed by climate activists (Funke et al. 2022; Klenert, Funke and Cai 2023). With respect to automobiles, we measured respondent support for banning the sale of gasoline-powered cars and non-commercial trucks and SUVs by 2035. Again, these policies are quite plausible—California has banned new gas-powered cars from being sold after 2035, and other states are following suit. These proposals also

¹⁶We assess each question individually in the appendix—in general, there were no substantive differences in responses between the proposals within policy domains. In the main text, we aggregate both questions within each policy domain.

fit with Republicans’ concerns—highlighted at the outset of the paper—that Democrats are going to “take away...the automobile as we know it.” In the military domain, respondents assigned to the masculinity-threatening treatment group were presented with policies mandating that the military use cleaner sources of energy to power their bases and vehicles, and that the military develop an environmental justice plan to minimize adverse environmental impacts on disadvantaged communities. These are real policies the Department of Defense has pursued, and they have been vigorously opposed by Republicans.

Respondents assigned to the non-masculinity-threatening control group were also presented with six climate policy proposals. Each of these control policies was designed to be directly comparable to the focal masculinity-threatening policies. The only difference is that our control policies do not implicate concerns about masculinity to as great a degree, a point we validate with the pre-test. Instead of taxes on meat consumption and tax incentives for farmers not to produce meat, our equivalent non-threatening climate policies include general carbon taxes and agricultural tax breaks to incentivize the adoption of pro-climate farming practices like soil management. Instead of bans on gas-powered vehicles and large automobiles, we examine proposals to ban gas-powered furnaces and large plastic containers. Instead of *military* mandates for clean energy and environmental justice, we examine more general *government* mandates for clean energy use and environmental justice. Critically, in both the masculinity-threatening and non-threatening groups, we hold constant the monetary cost of the policies (to consumers and the government), the impact of the proposed policies on climate change (e.g., expected emissions reductions), and the method of policy implementation (i.e., a tax, a tax break, or a ban). The key element that differs between the two treatments is whether the policy implicates masculinity or not.

Our primary dependent variable is support, measured on a 5-point scale, for the climate policies presented to each respondent. To reduce multiple comparisons concerns, we create

an index of support across these climate policies.¹⁷ We also consider a range of supplemental outcomes including support for the president, attitudes toward the importance of electing women, perceptions of the effects of proposed climate policies on key social groups, and feelings of surprise that the president proposed given climate policies.¹⁸

We also conducted a follow-up experimental study (Study 2) to assess the believability of allegations that a politician supports masculinity-threatening climate policies. This is important because most opposition claims about the gendered implications of climate policies—such as those we highlight above—are merely unfounded accusations of support. Understanding the political consequences of these allegations requires understanding the extent to which they are believed by the mass public. To this end, in Study 2 we introduced a hypothetical Democratic candidate who had previously served as a state-level representative and was now running for the US House of Representatives.¹⁹ As in Study 1, we randomly varied the sex of the candidate. Our Study 2 vignette went on to explain that the hypothetical candidate’s Republican opponent had accused them of supporting a series of three climate policies. Again, we randomize whether the focal Democratic candidate was accused of proposing three masculinity-threatening climate policies or three non-masculinity-threatening climate policies.²⁰ Respondents were then asked a series of outcome questions including the extent to which they believed that the candidate had proposed each policy, and a series of candidate evaluation questions. Finally, we ask respondents the extent to which they believe that Joe Biden and Kamala Harris have proposed the policies the Congressional candidate is accused of advocating for, which allows us to measure whether any effects are

¹⁷Results are robust if we separately analyze individual items.

¹⁸The full questionnaire is available in the appendix.

¹⁹Whereas the hypothetical politician was the president in Study 1, in Study 2 the hypothetical politician was instead running for Congress. We make this change because Congressional candidates receive less media coverage and are relatively more unknown compared to presidents, and therefore false accusations of support for masculinity-threatening climate policies may be more likely to be believed.

²⁰We use a subset of the same policies we asked about in our primary study.

robust to real politicians in addition to hypothetical ones.

All of our studies were conducted in partnership with Lucid, a popular online survey marketplace. We used quota sampling to match US census benchmarks on age, gender, race/ethnicity, and region.²¹ Our pre-test validation was fielded in April 2024 ($n \approx 600$), while Study 1 was conducted in June 2024 ($n \approx 780$) and Study 2 was fielded in November 2024 ($n \approx 1,330$).

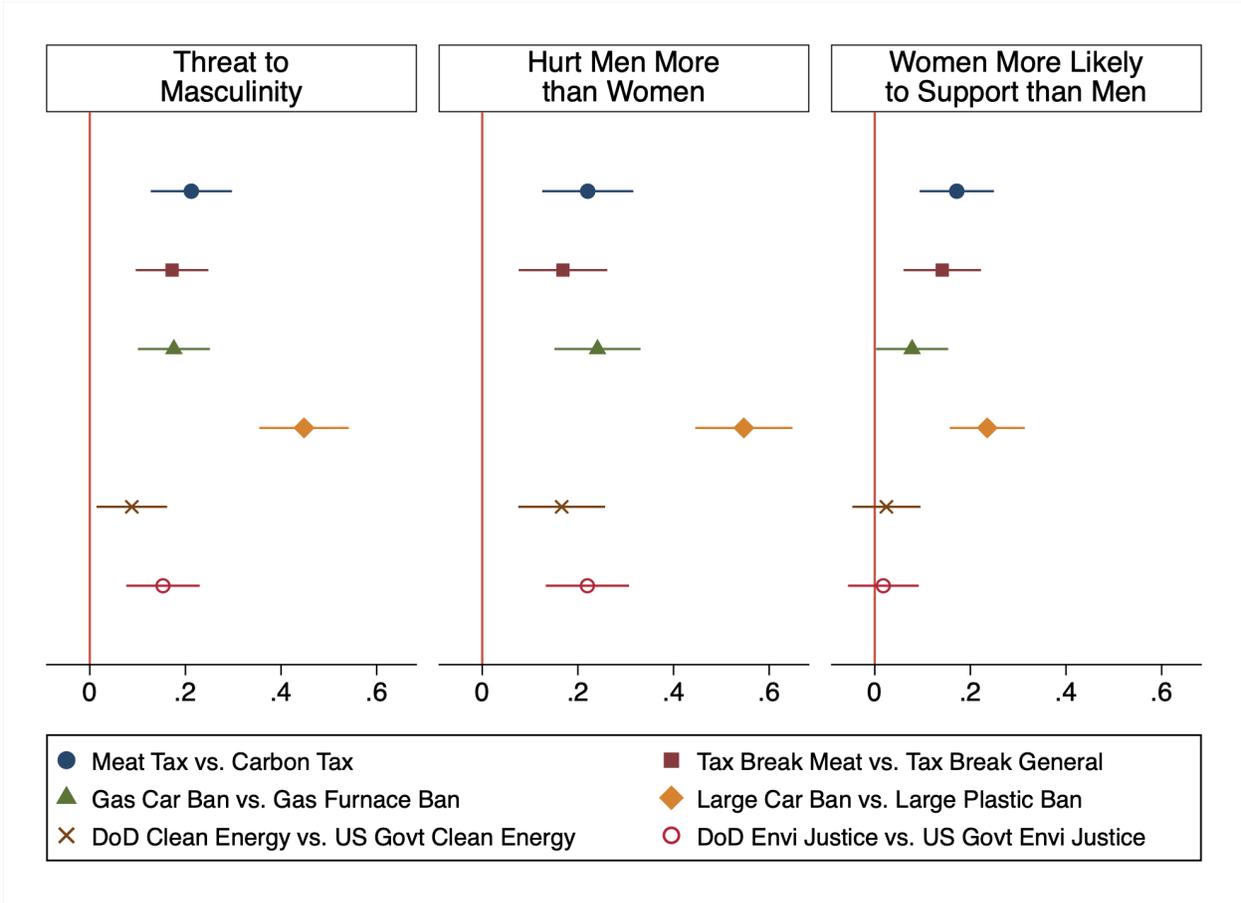
Validation Pre-Test

Our research design hinges on the assumption that the climate policies we categorize as masculinity-threatening are actually perceived as more disruptive to traditional conceptions of masculinity than control policies we characterize as more non-threatening. Our first survey was a pre-test designed to validate this central assumption. As illustrated in Figure 1, the climate policies we conceive of as more masculine-threatening are indeed viewed as more threatening to masculinity compared to the policies we assert are more neutral and less masculine-threatening. They are also seen as more likely to hurt men than women and more likely to be supported by women than men. Of the 18 paired differences we estimate, 16 are statistically significant at the 5% level in the expected direction. This includes all 6 of the differences we estimate for the perceived threat to masculinity outcome variable, which relates most directly to our argument.

Respondents also ranked which four of the policies they believed were *most* threatening to masculinity. Figure 2 demonstrates that the policies we expected to be more threatening to masculinity were significantly more likely to be ranked as such compared to our control policies. For example, a tax on meat was over 31 *percentage points* more likely to be ranked as most threatening to masculinity compared to a carbon tax.

²¹Only US adults 18 years or older are eligible to participate.

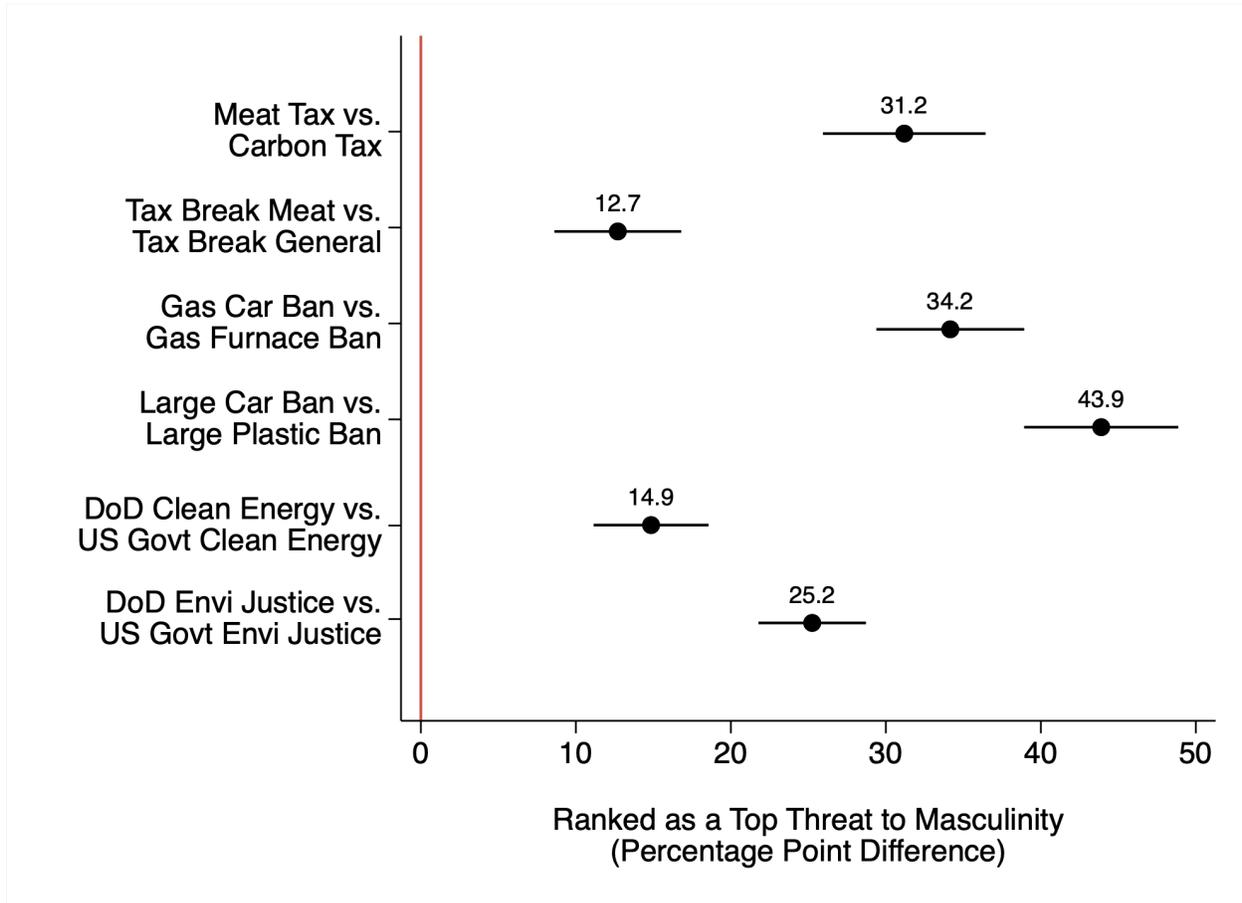
Figure 1: Pre-Test Validation



Note: Bars are 95% confidence intervals. Outcome variables are on a 5-point scale.

These findings are not just restricted to certain subgroups but hold more broadly. For example, they are robust among Democratic, Republican, independent, female, and male respondents, as well as anthropogenic climate change believers and skeptics or deniers (see appendix Figure A-3). As illustrated in the appendix (Tables A-1, A-2, and A-3), there is little consistent evidence that these effects are significantly moderated by factors like education, gender, belief in climate change, and sexism. In sum, our pre-test provides strong validation for the experimental design we utilize in our primary studies.

Figure 2: Ranking Climate Policies by Perceived Threat to Masculinity



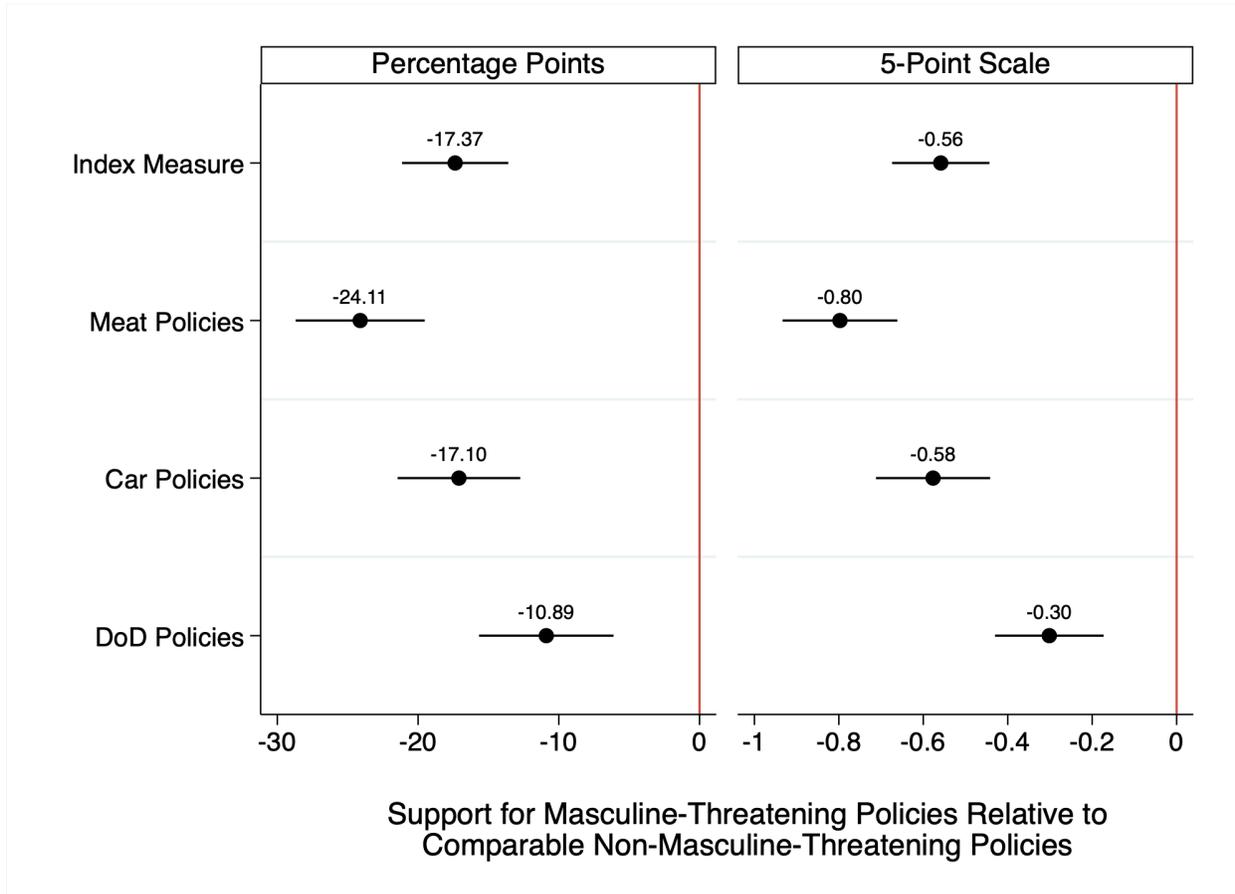
Note: Bars are 95% confidence intervals.

Study 1: Results

The Effect of Masculine-Threatening Climate Policies

In accordance with our principal hypothesis (H_1), we find strong evidence that masculine-threatening climate policy proposals obtain significantly less support than less masculine-threatening proposals. Figure 3 plots support for the masculine-threatening climate policies in each of our three issue areas relative to support for the comparable non-masculine-threatening policies. On average, masculine-threatening climate policies are over 17 per-

Figure 3: The Unpopularity of Masculine-Threatening Climate Policies



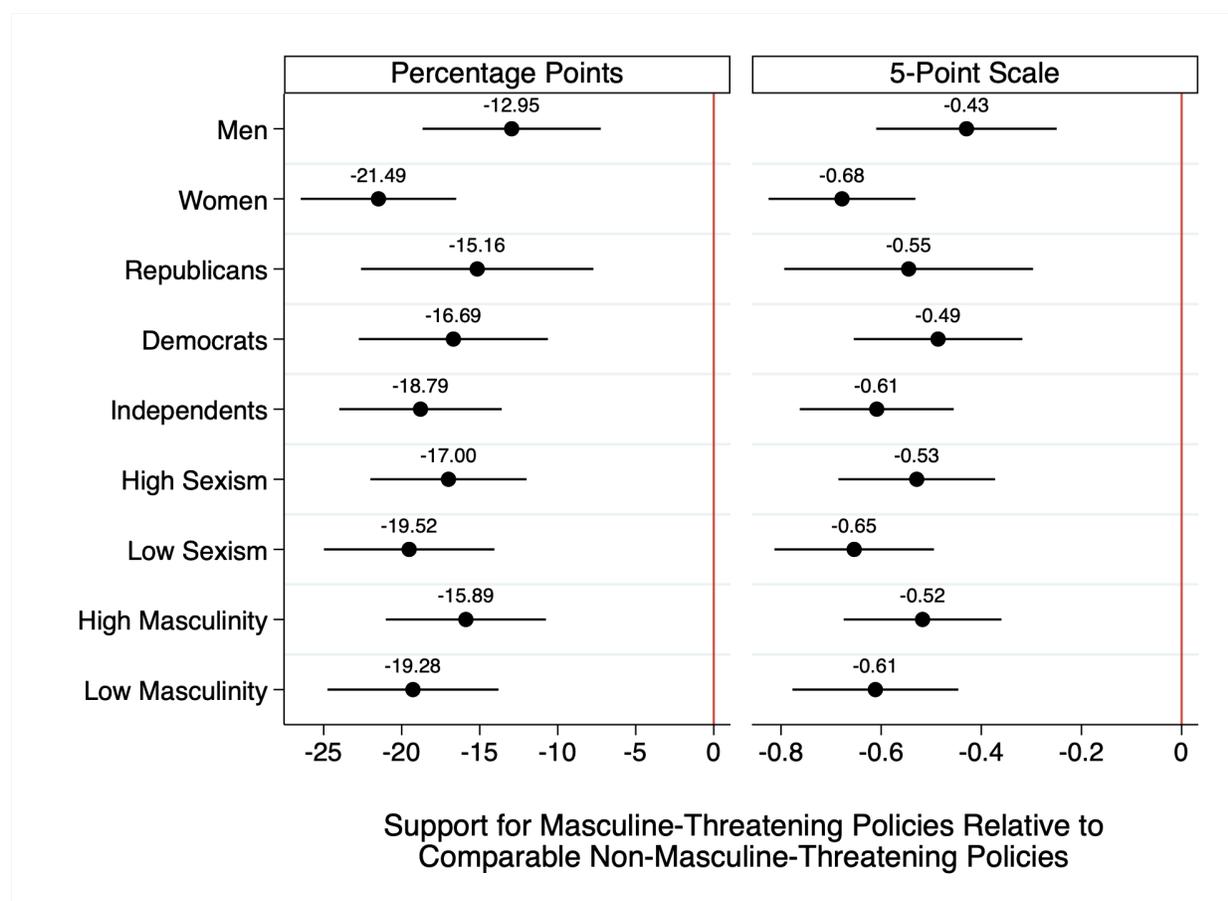
Note: Bars are 95% confidence intervals.

centage points less likely to be supported than comparable non-masculine-threatening policies. Importantly, masculine-threatening policies that are lower in political salience and their direct impact on the public—for example, environmental justice for the US military or government—are also less supported. This buttresses our claim that decreased support is driven by masculine threat rather than simple policy unpopularity (i.e., meat taxes are an extremely unpopular policy proposal that would be likely to have direct, salient impacts on many American consumers). The results are also robust when analyzing the six individual policy comparisons separately (appendix Table B-5), except for one instance: there is no statistically significant difference in support for the gas car ban and the gas furnace ban.

Both are very unpopular, averaging under 30% support.

The unpopularity of masculine-threatening climate policies also bleeds into views of President Richards (appendix Table B-6). For example, on average, respondents who randomly received the masculine-threatening climate policy proposals by President Richards were 13.4 *percentage points* less likely to support and 10.8 *percentage points* less likely to vote for President Richards relative to respondents that received the more neutral set of climate policy proposals from President Richards.

Figure 4: The Effects Among Key Demographics



Note: Bars are 95% confidence intervals.

As in the pre-test, the strong evidence for H_1 is not just present among certain subgroups, but holds more broadly. Figure 4 plots average support for masculine-threatening policies

compared to the more neutral policies for key subgroups. Strikingly, the findings hold among both men and women, Republicans and Democrats, respondents high and low in a measure of hostile sexism, and respondents high and low in a measure of masculinity. There are three potential (and possibly overlapping) mechanisms that can explain these findings.

The first—and perhaps most likely mechanism—is perceived threat to masculinity. As established in the pre-test, the policies we categorize as masculine-threatening are indeed perceived of as providing a greater challenge to traditional conceptions of masculinity. If masculinity is hegemonic, then we should expect policies that threaten it to be opposed by all subgroups, helping explain the results in Figure 4.

The second is that some of the masculine-threatening policies restrict access to things, such as meat and large cars, that many Americans value. After all, only a small minority of Americans are vegetarian and many Americans (irrespective of gender) value having a large car to transport their family. In accordance with this logic, the masculine-threatening policies are viewed by respondents as significantly more likely to affect them personally and the United States as a whole (appendix Table B-9). Vegetarians and vegans are also significantly more likely to support the meat-related policies compared to the control policies, and Americans who drive electric cars are more likely to support the automobile-related policies compared to the control policies, even when controlling for other factors (appendix Table B-11). In other words, respondents are more likely to oppose masculine-threatening policies when they would cause a greater disruption to their daily routines and status quo. However, the fact that the results also hold for policies that are less likely to directly affect individuals (e.g., increased clean energy usage or an environmental justice plan by the military or government as a whole) suggests this mechanism is unlikely to tell the full story of lower support for masculine-threatening policies.

The third possibility is that there could be a strategic element to some respondents' disapproval of masculine-threatening climate policies. For example, if they have second-order

beliefs that these kinds of proposals will be unpopular and hurt the climate change cause more broadly, then they may disapprove of them for that reason rather than because of their own first-order preferences (Mildenberger and Tingley 2019). Nevertheless, since women and respondents who score low in sexism/masculinity are also specifically more likely to believe that masculine-threatening policies will impact them personally than non-masculine-threatening policies, we doubt second-order beliefs are driving our results.

On balance, these findings suggest several practical implications, especially because the effect sizes are so large. It will be more politically challenging for policymakers and climate activists to gain public support for climate policy proposals that are viewed as anti-masculine. Therefore, even if there is a strong policy rationale for specifically targeting things like meat farming and consumption, it may make more sense from a political perspective to (a) pursue comparable non-masculine-threatening policies that have a similar substantive effect on climate change but do not arouse as much opposition, (b) to frame these policies in ways that minimize their perceived masculine-threat, and/or (c) to bundle them with other policies that offset such perceptions. In particular, masculine-threatening policies related to meat and cars are significantly less popular than those targeting the military, and thus policymakers should be especially cautious when legislating in those areas.²² On the other hand, and more optimistically for supporters of climate action, we find no statistically significant evidence that proposing masculine-threatening climate policies reduces the priority respondents put on addressing climate change more generally or how serious a problem they view climate change (appendix Table B-7). Proposing masculine-threatening climate policies will thus not necessarily tarnish all climate mitigation efforts.

To the extent Republicans can convince the public that Democrats actually do support masculine-threatening climate policies, their messaging approach has the potential to be

²²The within-subject difference between, for example, climate policies targeting meat and climate policies targeting the military is statistically significant.

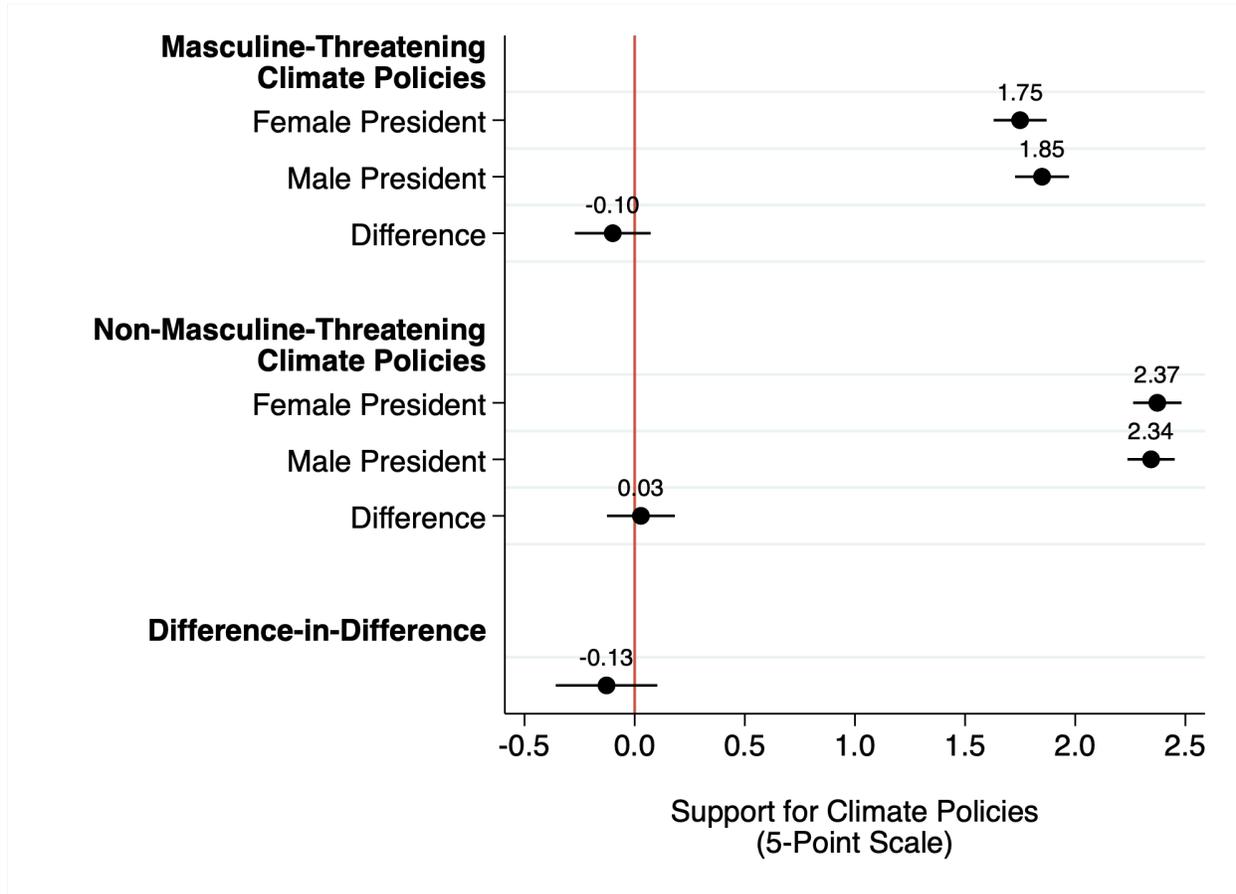
quite effective in generating public opposition. However, two caveats are in order. First, Republicans have often exaggerated what Democrats are proposing. For example, no major Democrat has actually proposed banning hamburgers. It may therefore be challenging for Republicans to convince the mass public that Democrats hold these policy positions. Data from our experiment provides suggestive evidence for this claim, as respondents were over 9 *percentage points* more surprised when President Richards proposed masculine-threatening policies compared to when he or she proposed more neutral policies. In other words, despite Republican messaging, the public has not fully internalized a belief that Democratic policy-makers actually support these kinds of policies. We assess these dynamics more directly in Study 2 discussed below, and provide further evidence buttressing these conclusions.

Second, we measured the extent to which respondents planned to vote for Republican candidates at multiple levels of government to assess whether Democrats proposing such plans would lead to general backlash effects electorally, in addition to specific backlash against the politician proposing these policies. We found no evidence that President Richards proposing masculine-threatening policies increased support for Republican candidates generally (appendix Table B-8). However, this null result could simply be due to the explicitly hypothetical nature of the study, which might prevent respondents from updating their vote choices in the real world. Given the reduction in President Richards' support for proposing these kinds of policies, Republicans may stand to gain politically if Democratic leaders in real life follow suit.

The Effect of Leader Sex

In contrast to our pre-registered theoretical expectations (H_2) and the logic of going against type, we do not find compelling evidence that support for masculine-threatening climate policies is lower when proposed by female leaders rather than male leaders. Our findings are summarized in Figure 5. Starting with an analysis of the masculine-threatening policies,

Figure 5: The Effect of Leader Sex on Support for Climate Policies



Note: Bars are 95% confidence intervals.

support for them is slightly lower when they are proposed by a woman president rather than a man, but the difference is not statistically significant. For non-masculine-threatening policies, support is actually a bit higher when proposed by a woman, but, again, the difference is not statistically significant. The key test of H_2 is the difference-in-difference estimate located at the bottom of Figure 5. Since one possibility is that support for policies proposed by women leaders is always lower no matter whether they threaten masculinity or not, it is necessary to compare support for masculine-threatening policies proposed by female leaders relative to male leaders to support for non-masculine-threatening policies proposed by female leaders relative to male leaders (Mattes and Weeks 2019; Blair and Schwartz 2023). The

difference-in-difference is in the expected direction, but is not close to statistical significance ($p = 0.277$). This null result also holds when utilizing a binary measure of support for the climate policies, assessing support for President Richards specifically rather than the climate policies more generally, and including control variables (appendix Table B-12). We also find no evidence of heterogeneous effects based on respondent political identification, gender, hostile sexism, or masculinity (appendix Table B-13). While masculine-threatening climate policies are unpopular, they appear to be no more or less unpopular when proposed by female leaders.

What explains this null result? In other words, why does the going against type logic not operate for female leaders in the case of climate policy when it does in other domains, such as foreign policy (Blair and Schwartz 2023)? All going against type arguments rest on the assumption that certain types of policy proposals (e.g., war or peace) are more or less surprising depending on the characteristics of the leader (e.g., a hawkish or dovish leader). It is these perceived out-of-character actions that can make policies either more or less credible to the public. For these conclusions to be drawn, however, a strong schema aligning expected policy proposals with identifiable characteristics must exist in the minds of the public. If such a schema is weak or non-existent, leader characteristics will not lead the public to generate expectations based on the logic of types.

If going against type logic applies to the domain of climate policy in the way we hypothesized, then masculine-threatening climate policies proposed by male leaders should be more surprising than masculine-threatening climate policies proposed by female leaders. That would mean that male leaders are acting against type when they propose these kinds of policies, which might increase their credibility. By contrast, female leaders would be acting according to type and so would have a harder time convincing the public that these policies are prudent. However, data from our experiment suggests this assumption was incorrect, and that the schema of type is weak or nonexistent when it comes to leader sex and climate

positions (appendix Table B-14). While respondents were more surprised that *any kind* of president proposed masculine-threatening policies relative to more neutral policies (ATE=9.3 *percentage points*; $p=0.009$), they were not less surprised that female presidents proposed these kinds of policies relative to male presidents (ATE=3.8 *percentage points*; $p=0.586$). Since proposing these kinds of policies was not viewed as more out-of-character for male presidents, going against type logic cannot operate.

Further explaining the null results, we find evidence that gender stereotypes in the realm of climate policy are lower than in other areas, such as defense and healthcare. Empirically, women leaders are more likely to hold policy portfolios related to “female”-oriented issues like healthcare, and less likely to be responsible for “male”-oriented policy portfolios like finance or security (Baturu and Gray 2018). Before respondents were presented with the treatments, we asked them the extent to which they trusted male or female policymakers more in various policy areas. For example, when it comes to military affairs, over 35% of respondents said they were more likely to trust a male leader and just 10% said they were more likely to trust a female leader—a 25 *percentage point* gap. In the realm of climate policy, about 20% of respondents indicated they would be more likely to trust a female leader and 10% said they would be more likely to trust a male leader—a 10 *percentage point* gap. Our respondent pool was thus more trusting of male leaders to handle military policy than of female leaders to handle climate policy ($p < 0.001$). This all suggests that gender stereotypes are lower in the realm of climate policy than foreign policy, which helps explain why going against type dynamics hold in the latter (Blair and Schwartz 2023) but not the former. Gender stereotypes are even stronger when it comes to healthcare than they are for climate policy. Over 32% of respondents said they were more likely to trust a female leader to deal with healthcare, and just 9% said they were more likely to trust a male leader—a 23 *percentage point* gap, which is larger than the gap for climate policy. Despite the fact that environmental protection aligns with traditionally feminine traits, there does not appear to

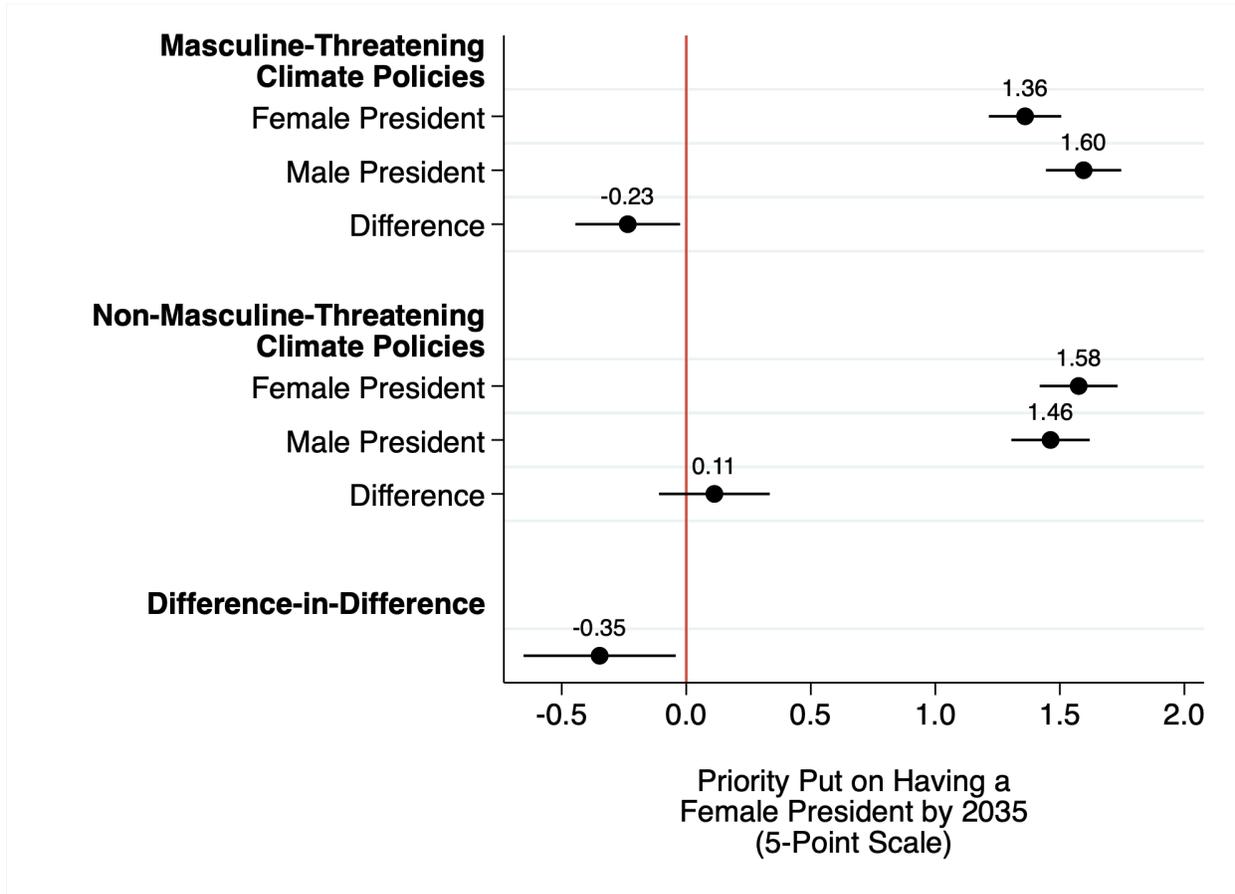
be as strong a “type” with respect to leader gender and climate.

Again, these findings indicate that while masculine-threatening climate policies are generally unpopular, they are not more unpopular when proposed by women leaders in the same way that peace proposals are more unpopular when proposed by women leaders (Blair and Schwartz 2023). Substantively, this suggests that female politicians—such as Kamala Harris—are not uniquely vulnerable to Republican criticisms about masculine-threatening climate policies relative to male politicians—such as Joe Biden. Instead, any politician who proposes these kinds of policies—man or woman—is at political risk.

With that being said, we do find evidence that masculine-threatening policies proposed specifically by female leaders have one negative consequence: they reduce the priority the American public puts on having a female president by 2035. The results are illustrated in Figure 6. The priority respondents put on having a female president by 2035 is significantly lower when female leaders propose masculine-threatening climate policies compared to when male leaders do ($p=0.029$). However, respondents are actually more likely to put a higher priority on having a female president by 2035 when female presidents propose non-masculine-threatening climate policies compared to when male presidents do, though the effect is not statistically significant ($p=0.319$). Thus, it is not the case that *any* type of climate policy proposed by female presidents reduces the US public’s support for a future female president. The key quantity of interest—the difference-in-difference—is negative and statistically significant, indicating that the priority put on having a female president is lower when women leaders propose masculine-threatening climate policies relative to when they push for non-masculine-threatening policies.

Why is there a significant effect of leader sex for this outcome variable but not for others, such as support for the policy itself or support for President Richards? It could be a false positive, but a logical explanation is that reducing the priority put on having a female president is less punitive than actually disapproving of a female president themselves.

Figure 6: The Effect of Leader Sex on Female President Priority



Note: Bars are 95% confidence intervals.

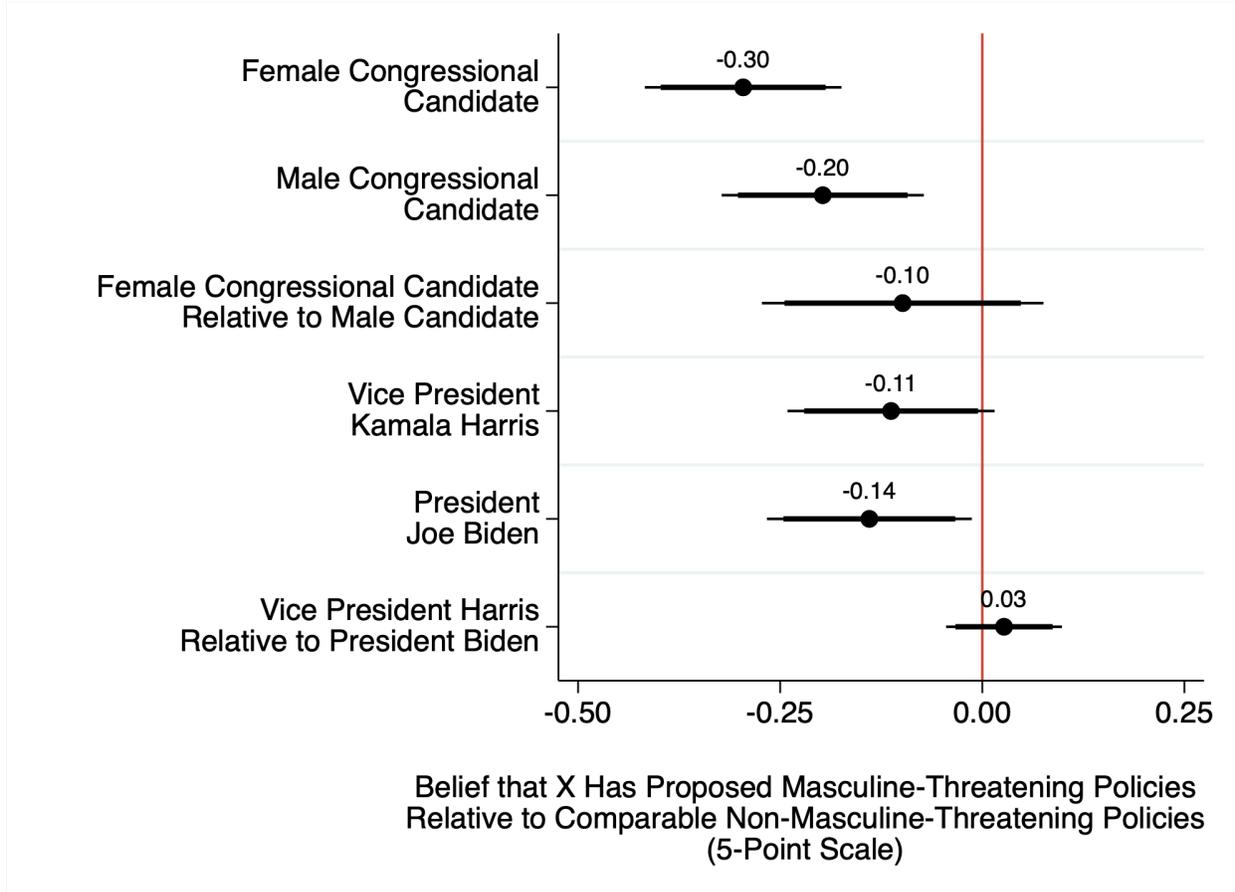
Respondents may not feel a greater need to vote female presidents out of office if they propose masculine-threatening policies compared to when male presidents do, but they may sour, at least to some extent, on *prioritizing* having a female president (relative to other qualifications, not in an absolute sense) if their expectation is that it will lead to these kinds of policies. Especially since the US has not yet had a female president, the first one will likely contribute a disproportionate amount to the public’s mental image of what a female presidency looks like. Much like how Margaret Thatcher set expectations in the public’s mind for what future female British prime ministers would be like and the kinds of policies they were likely to support.

Study 2: Results

Even if female politicians are not disproportionately punished for actually proposing masculine-threatening climate policies, perhaps *accusations* that they proposed masculine-threatening climate policies—such as the examples we highlighted in the introduction—are more likely to be believed than claims male leaders proposed identical policies. If this is the case, then Republican attacks against female policymakers specifically for proposing masculine-threatening climate policies may have a strong political logic. While in Study 1 we simply measured support for climate policies politicians had *actually* proposed, in Study 2 we measure support for policies politicians are *alleged* to have proposed.

In contrast to H_3 —but in line with the results in Study 1—we find no evidence that the American public is more likely to believe accusations that female leaders proposed masculine-threatening climate policies. As outlined in Figure 7, the public is generally less likely to believe any kind of politician—whether a hypothetical male or female Congressional candidate, or President Biden or Vice President Harris—proposed masculine-threatening climate policies relative to non-masculine-threatening policies. This echoes an aforementioned result from Study 1, which is that the public is more surprised when leaders propose masculine-threatening climate policies. Substantively, these findings suggest that Republican attacks against Democrats for proposing masculine-threatening climate policies will be less effective than if these accusations were less surprising and therefore more believable. As demonstrated in the appendix (Table C-18), accusations that a politician proposed masculine-threatening policies are more likely to be believed among Republican, sexist, and more masculine respondents. However, even among these subgroups, respondents are not more likely to believe a female Congressional candidate proposed masculine-threatening policies than a male candidate, or that Kamala Harris proposed masculine-threatening policies than Joe Biden. As with the null result for leader sex in Study 1, the explanation for the null result in Study 2 is

Figure 7: Believability of Accusations



Note: Bars are 90% & 95% confidence intervals.

that going against type dynamics appear to be relatively weak in the realm of climate policy. In other words, it is not viewed as significantly less surprising—and thus more believable—that a woman politician would propose masculine-threatening climate policies than a male politician.

In Study 2, we also find that politicians who are accused of proposing masculine-threatening climate policies are significantly less likely to be supported than politicians alleged to have proposed non-masculine-threatening policies (appendix Table C-19). This provides additional evidence for H_1 and replicates the key result of Study 1, increasing confidence in

the finding.²³ It further indicates that Republican attacks against Democrats for proposing masculine-threatening climate policies are politically effective, even if they are framed by the media as mere accusations (as they were in Study 2) rather than actual policies Democrats have definitively proposed (as they were in Study 1). In other words, even if Democratic policymakers are careful to avoid masculine-threatening policies in their proposed climate plans, they are likely to still be vulnerable to attacks that portray them as doing so.

Conclusion

This study sheds new light on the intersection of gender and climate policy, demonstrating the significant role that gendered perceptions play in shaping public support for climate action. Our findings reveal that climate policies perceived as threatening traditional masculine norms—such as those targeting meat consumption, the use of large automobiles, and the military—are met with notably higher levels of resistance from the public. This resistance transcends respondent gender, illustrating that such policies face broad opposition across different demographic groups.

While we show the general unpopularity of masculine-threatening climate policies, we do not find that female leaders face an additional penalty when advocating for these policies compared to their male counterparts, or that accusations that women leaders have proposed these kinds of policies are more believable. These null findings challenge the relevance of applying the “going against type” logic to the realm of climate policy, suggesting that gendered expectations for leaders may be weaker in this policy area compared to others, such as foreign policy. While type-based logic has generated strong results on issues related to defense and national security, future work should continue to test the conditions under which this logic is more or less likely to hold.

²³Congressional candidates accused of supporting masculine-threatening climate policies are also perceived of as more liberal.

This research provides a critical link between the literature on climate change and the growing body of work on gender in politics. It moves beyond the existing focus on how individual gender identities and sexist attitudes influence climate policy support to explore how the gendered nature of policymakers and policies themselves can drive public opinion. This novel approach opens up new avenues for research, particularly in understanding how other identity factors, such as race or socioeconomic status, might interact with gendered perceptions of climate policy, building on other recent studies on the relevance of such factors for individual climate attitudes (Benegal and Holman 2021a; Benegal, Azevedo and Holman 2022). Furthermore, while gendered political debates over climate policy have been documented across countries, as we observed in the introduction, our study is situated in the American political context, which is quite unique in the historical alignment of gender and climate attitudes with partisan identity. Future studies should explore the intersection of these factors in other contexts in which they vary more over time.

For policymakers and climate advocates, our findings offer a cautionary tale. While there is an urgent need to address climate change through comprehensive policy measures, the political feasibility of such actions may be undermined if they are perceived as attacking traditional masculine norms. As our study shows, even in the absence of actual proposals to ban meat or gasoline-powered cars, the mere accusation that politicians support these kinds of policies can be politically damaging. By avoiding language or policy proposals that could be construed as overly masculine-threatening, climate advocates may be able to build broader coalitions of support. For example, emphasizing the economic and health benefits of reducing meat consumption, rather than framing it as a moral imperative, might mitigate some of the backlash. Similarly, promoting electric vehicles as modern and efficient alternatives that can still be quite “manly”—such as the cyber truck—could help avoid the gendered backlash effects we document. Consequently, future work should test whether the effects we find here can be mitigated with effective policy framing and argumentation.

References

- Adams, Carol J. 1990. *The Sexual Politics of Meat: A Feminist-Vegetarian Critical Theory*. Continuum.
- Arias, Sabrina B. 2022. “Who Securitizes? Climate Change Discourse in the United Nations.” *International Studies Quarterly* 66(2):1–13.
- Arias, Sabrina B and Christopher W Blair. 2022. “Changing Tides: Public Attitudes on Climate Migration.” *The Journal of Politics* 84(1):560–567.
- Arias, Sabrina B and Christopher W Blair. 2024. “In the Eye of the Storm: Hurricanes, Climate Migration, and Climate Attitudes.” *American Political Science Review* pp. 1–21.
- Arias, Sabrina B and Joshua A Schwartz. 2024. “Think Globally, Act Locally: The Determinants of Local Policymakers’ Support for Climate Policy.”
- Aronow, Peter M, Jonathon Baron and Lauren Pinson. 2019. “A note on dropping experimental subjects who fail a manipulation check.” *Political Analysis* 27(4):572–589.
- Atchison, Amy L. and Ian Down. 2019. “The Effects of Women Officeholders on Environmental Policy.” *Review of Policy Research* 36(6):805–834.
- Avery, Robert A.T., Clara Kulich, Lumturie Thaqi, Aly M.A.M.K. Elbindary, Hind El Bouchrifi, Alexis N.J.L. Favre, Simon Gmür, Sydney Hauke, Chloé I.A. Huete, Si Young Lee, Jérémy Nelson Miranda, Zacharie Mizeret, Pablo Palle, Hédi Razgallah, Léo Theytaz and Fabrizio Butera. 2025. “Gendered attitudes towards pro-environmental change: The role of hegemonic masculinity endorsement, dominance and threat.” *British Journal of Social Psychology* 64(1):1–19.
- Barnes, Tiffany D. and Diana Z. O’Brien. 2025. “Gender and Leadership in Executive Branch Politics.” *Annual Review of Political Science* 28:1–26.
- Baturo, Alexander and Julia Gray. 2018. “When Do Family Ties Matter? The Duration of Female Suffrage and Women’s Path to High Political Office.” *Political Research Quarterly* 71(3):695–709.
- Bauer, Nichole M. 2017. “The Effects of Counterstereotypic Gender Strategies on Candidate Evaluations.” *Political Psychology* 38(2):279–295.
- Benegal, Salil D and Mirya R Holman. 2021a. “Racial prejudice, education, and views of climate change.” *Social Science Quarterly* 102(4):1907–1919.
- Benegal, Salil, Flávio Azevedo and Mirya R Holman. 2022. “Race, ethnicity, and support for climate policy.” *Environmental Research Letters* 17(11):114060.

- Benegal, Salil and Mirya R Holman. 2021b. “Understanding the importance of sexism in shaping climate denial and policy opposition.” *Climatic Change* 167(3-4):48.
- Bergquist, Parrish, Matto Mildenerger and Leah C Stokes. 2020. “Combining climate, economic, and social policy builds public support for climate action in the US.” *Environmental Research Letters* 15(5):054019.
- Bernauer, Thomas and Robert Gampfer. 2015. “How robust is public support for unilateral climate policy?” *Environmental Science & Policy* 54:316–330.
- Blair, Christopher W. and Joshua A. Schwartz. 2023. “The Gendered Peace Premium.” *International Studies Quarterly* 67(4):1–16.
- Blanchet, Ben. 2024. “Critics Cook Ted Cruz Over Kamala Harris Food Fixation: ‘Sure As Hell’ Not Taking That!” *Yahoo! News* .
- Bosson, Jennifer K., Joseph A. Vandello, Rochelle M. Burnaford, Jonathan R. Weaver and S. Arzu Wasti. 2009. “Precarious Manhood and Displays of Physical Aggression.” *Personality and Social Psychology Bulletin* 35(5):623–634.
- Brough, Aaron R., James E.B. Wilkie, Jingjing Ma, Mathew S. Isaac and David Gal. 2016. “Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption.” *Journal of Consumer Research* 43(4):567–582.
- Bump, Philip. 2019. “Why Tucker Carlson’s disparagement of Chris Hayes as a feminist ideal isn’t at all surprising.” *The Washington Post* .
- Bush, Sarah Sunn and Amanda Clayton. 2023. “Facing Change: Gender and Climate Change Attitudes Worldwide.” *American Political Science Review* 117(2):591–608.
- Carian, Emily K and Tagart Cain Sobotka. 2018. “Playing the Trump Card: Masculinity Threat and the U.S. 2016 Presidential Election.” *Socius* 4:1–6.
- Cho, Hye Jee. 2014. “Impact of IMF Programs on Perceived Creditworthiness of Emerging Market Countries: Is There a ‘Nixon-Goes-to-China’ Effect?” *International Studies Quarterly* 58(2):308–321.
- Clark, Richard, Roza Khoban and Noah Zucker. 2022. “Breadwinner Backlash: The Gendered Effects of Industrial Decline.”
- Clifford, Scott, Geoffrey Sheagley and Spencer Piston. 2021. “Increasing precision without altering treatment effects: Repeated measures designs in survey experiments.” *American Political Science Review* 115(3):1048–1065.
- Cohen, Dara Kay and Sabrina M Karim. 2022. “Does more equality for women mean less war? Rethinking sex and gender inequality and political violence.” *International organization* 76(2):414–444.

- Cukierman, Alex and Mariano Tommasi. 1998. "When Does It Take a Nixon to Go to China?" *American Economic Review* 88(1):180–197.
- Dafoe, Allan, Baobao Zhang and Devin Caughey. 2018. "Information equivalence in survey experiments." *Political Analysis* 26(4):399–416.
- Daggett, Cara. 2018. "Petro-masculinity: Fossil Fuels and Authoritarian Desire." *Millennium* 47(1):25–44.
- Drews, Stefan and Jeroen C.J.M. van den Bergh. 2016. "What Explains Public Support for Climate Policies? A Review of Empirical and Experimental Studies." *Climate Policy* 16(7):855–876.
- Ducat, Stephen. 2005. *The wimp factor: Gender gaps, holy wars, and the politics of anxious masculinity*. Beacon Press.
- Eagly, Alice H and Wendy Wood. 1999. "The origins of sex differences in human behavior: Evolved dispositions versus social roles." *American psychologist* 54(6):408.
- Egan, Patrick J and Megan Mullin. 2017. "Climate Change: US Public Opinion." *Annual Review of Political Science* 20:209–227.
- Ellemers, Naomi. 2018. "Gender Stereotypes." *Annual Review of Psychology* 69:275–298.
- Enloe, Cynthia. 1990. *Bananas, Beaches and Bases: Making Feminist Sense of International Politics*. University of California Press.
- Ergun, Selim Jürgen, Zehra D. Karadeniz and M. Fernanda Rivas. 2024. "Climate change risk perception in Europe: country-level factors and gender differences." *Humanities and Social Sciences Communications* 11(1573):1–13.
- Faludi, Susan. 1991. *Backlash: The Undeclared War Against Women*. Crown Publishers.
- Funke, Franziska, Linus Mattauch, Inge van den Bijgaart, H Charles J Godfray, Cameron Hepburn, David Klenert, Marco Springmann and Nicolas Treich. 2022. "Toward optimal meat pricing: Is it time to tax meat consumption?" *Review of Environmental Economics and Policy* 16(2):219–240.
- Geary, David C. 1998. *Male, female: The evolution of human sex differences*. American Psychological Association Washington, DC.
- Glick, Peter and Susan T. Fiske. 2001. "An Ambivalent Alliance: Hostile and Benevolent Sexism as Complementary Justifications for Gender Inequality." *American Psychologist* 56(2):109–118.
- Goldsmith, Rachel E., Irina Feygina and John T. Jost. 2013. *Research, Action and Policy: Addressing the Gendered Impacts of Climate Change*. Springer chapter The Gender Gap in Environmental Attitudes: A System Justification Perspective.

- Hamilton, Heather. 2023. “Hawley slams Left’s lies about manhood: ‘Get men to be strong again’.” *Washington Examiner* .
- Henderson, Nia-Malika. 2024. “Trump’s Campaign Against Harris Is Like Him: Old and Tired.” *Bloomberg* .
- Hooper, Charlotte. 2001. *Manly States: Masculinities, International Relations, and Gender Politics*. Columbia University Press.
- Hornsey, Matthew J., Emily A. Harris, Paul G. Bain and Kelly S. Fielding. 2016. “Meta-analyses of the determinants and outcomes of belief in climate change.” *Nature Climate Change* 6(6):622–626.
- Jakupcak, Matthew, Matthew T. Tull and Lizabeth Roemer. 2005. “Masculinity, Shame, and Fear of Emotions as Predictors of Men’s Expressions of Anger and Hostility.” *Psychology of Men & Masculinity* 6(4):275–284.
- Johnson, Bob. 2019. *Carbon Nation: Fossil Fuels in the Making of American Culture*. University Press of Kansas.
- Jones, Jeffrey M. 2023. “In U.S., 4% Identify as Vegetarian, 1
- Jost, John T. 2020. *A Theory of System Justification*. Harvard University Press.
- Kaul, Nitasha and Tom Buchanan. 2023. “Misogyny, authoritarianism, and climate change.” *Analyses of Social Issues and Public Policy* 23(2):308–333.
- Kertzer, Joshua D., Deborah Jordan Brooks and Stephen G. Brooks. 2021. “Do Partisan Types Stop at the Water’s Edge?” *The Journal of Politics* 83(4):1764–1782.
- Kimmel, Michael S. 2013. *Angry White Men: American Masculinity at the End of an Era*. PublicAffairs.
- Klenert, David, Franziska Funke and Mattia Cai. 2023. “Meat taxes in Europe can be designed to avoid overburdening low-income consumers.” *Nature Food* 4(10):894–901.
- Krange, Olve, Bjørn P. Kaltenborn and Martin Hultman. 2019. “Cool dudes in Norway: climate change denial among conservative Norwegian men.” *Environmental Sociology* 5(1):1–11.
- Kreps, Sarah E., Elizabeth N. Saunders and Kenneth A. Schultz. 2018. “The Ratification Premium: Hawks, Doves, and Arms Control.” *World Politics* 70(4):479–514.
- Landström, Catharina. 2006. “Gendered Economy of Pleasure: Representations of Cars and Humans in Motoring Magazines.” *Science & Technology Studies* 19(2):26–48.
- Leiserowitz, Anthony. 2006. “Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values.” *Climatic Change* 77(1-2):45–72.

- Lewis, Gregory B, Risa Palm and Bo Feng. 2019. "Cross-national variation in determinants of climate change concern." *Environmental Politics* 28(5):793–821.
- Mattes, Michaela and Jessica L.P. Weeks. 2019. "Hawks, Doves, and Peace: An Experimental Approach." *American Journal of Political Science* 63(1):53–66.
- McCright, Aaron M. 2010. "The effects of gender on climate change knowledge and concern in the American public." *Population and environment* 32:66–87.
- McCright, Aaron M. and Riley E. Dunlap. 2011. "The Politicization of Climate Change and Polarization in the American Public's Views of Global Warming, 2001–2010." *Sociological Quarterly* 52(2):155–194.
- McDermott, Monika L. 2016. *Masculinity, Femininity, and American Political Behavior*. Oxford University Press.
- McDermott, Ryon C., Ronald F. Levant, Joseph H. Hammer, Nicholas C. Borgogna and Daniel K. McKelvey. 2019. "Development and Validation of a Five-Item Male Role Norms Inventory Using Bifactor Modeling." *Psychology of Men & Masculinities* 20(4):467.
- Milbank, Dana. 2024. "Donald Trump's hysterical closing argument: Save the cows!" *The Washington Post* .
- Mildenberger, Matto and Dustin Tingley. 2019. "Beliefs about climate beliefs: the importance of second-order opinions for climate politics." *British Journal of Political Science* 49(4):1279–1307.
- Nagel, Joane and Trevor Scott Lies. 2022. "Re-gendering climate change: men and masculinity in climate research, policy, and practice." *Frontiers in Climate* 4:1–5.
- Nelson, Joshua. 2020. "Petro-masculinity and climate change denial among white, politically conservative American males." *International Journal of Applied Psychoanalytic Studies* 17(4):282–295.
- Nincic, Miroslav. 1988. "The United States, the Soviet Union, and the Politics of Opposites." *World Politics* 40(4):452–475.
- Paterson, Matthew. 2000. "Car culture and global environmental politics." *Review of International Studies* 26(2):253–270.
- Plananska, Jana, Rolf Wüstenhagen and Emanuel de Bellis. 2023. "Perceived lack of masculinity as a barrier to adoption of electric cars? An empirical investigation of gender associations with low-carbon vehicles." *Travel Behaviour and Society* 32(100593):1–12.
- Prati, Francesca, Richard J. Crisp and Monica Rubini. 2015. "Counter-stereotypes reduce emotional intergroup bias by eliciting surprise in the face of unexpected category combinations." *Journal of Experimental Social Psychology* 61:31–43.

- Remsö, Amanda, Hanna Bäck and Emma Aurora Renström. 2024. “Gender differences in climate change denial in Sweden: the role of threatened masculinity.” *Frontiers in Psychology* 15:1–12.
- Rothgerber, Hank. 2013. “Real Men Don’t Eat (Vegetable) Quiche: Masculinity and the Justification of Meat Consumption.” *Psychology of Men & Masculinity* 14(4):363.
- Rozin, Paul, Julia M. Hormes, Myles S. Faith and Brian Wansink. 2012. “Is Meat Male? A Quantitative Multimethod Framework to Establish Metaphoric Relationships.” *Journal of Consumer Research* 39(3):629–643.
- Rudman, Laurie A. and Peter Glick. 2010. *The Social Psychology of Gender: How Power and Intimacy Shape Gender Relations*. Guilford Publications.
- Saunders, Elizabeth N. 2018. “Leaders, Advisers, and the Political Origins of Elite Support for War.” *Journal of Conflict Resolution* 62(10):2118–2149.
- Schultz, Kenneth A. 2005. “The Politics of Risking Peace: Do Hawks or Doves Deliver the Olive Branch?” *International Organization* 59(1):1–38.
- Schwartz, Joshua A and Christopher W Blair. 2020. “Do women make more credible threats? Gender stereotypes, audience costs, and crisis bargaining.” *International Organization* 74(4):872–895.
- Simmons, Cécile. 2025. *CTRL HATE DELETE: The New Anti-Feminist Backlash and How We Fight It*. Bristol University Press.
- Singh, Mudit Kumar. 2025. “Men deny more than they believe about climate change on Twitter (X).” *PLoS One* 20(2):1–9.
- Specht, Bob. 2019. *Red Meat Republic: A Hoof-to-Table History of How Beef Changed America*. Princeton University Press.
- Spencer, Alison, Stephanie Ross and Alec Tyson. 2023. “How Americans view electric vehicles.” *Pew Research Center*.
- Swim, Janet K, Ash Gillis and Kaitlynn J Hamaty. 2020. “Gender bending and gender conformity: The social consequences of engaging in feminine and masculine pro-environmental behaviors.” *Sex Roles* 82(5):363–385.
- Swim, Janet K. and Nathaniel Geiger. 2018. “The gendered nature of stereotypes about climate change opinion groups.” *Group Processes & Intergroup Relations* 21(3):438–456.
- Tranter, Bruce and Kate Booth. 2015. “Scepticism in a changing climate: A cross-national study.” *Global Environmental Change* 33:154–164.

- Vandello, Joseph A., Jennifer K. Bosson, Dov Cohen, Rochelle M. Burnaford and Jonathan R. Weaver. 2008. "Precarious Manhood." *Journal of Personality and Social Psychology* 95(6):1325–1339.
- Voeten, Erik. 2023. "Is there a green policy backlash?" *Good Authority* .
- Vona, Francesco. 2019. "Job losses and political acceptability of climate policies: why the 'job-killing' argument is so persistent and how to overturn it." *Climate Policy* 19(4):524–532.
- Willer, Robb, Christabel L. Rogalin, Bridget Conlon and Michael T. Wojnowicz. 2013. "Overdoing Gender: A Test of the Masculine Overcompensation Thesis." *American Journal of Sociology* 118(4):980–1022.
- Wolton, Stephane. 2024. "White, Male, and Angry: A Reputation-Based Rationale for Backlash." *American Political Science Review* pp. 1–6.
- Yeung, Amy W.Y., Aaron C. Kay and Jennifer M. Peach. 2014. "Anti-feminist backlash: The role of system justification in the rejection of feminism." *Group Processes & Intergroup Relations* 17(4):474–484.