Changing public opinion about gender activates group threat and opposition to feminist social movements among men

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Adrian Rivera-Rodriguez, 10 Greg Larsen^{1,2} and Nilanjana Dasgupta¹

Abstract

Two studies examined whether men's perception of the declining value of traditional masculinity activates social status, realistic, and symbolic threat, and in turn motivates opposition to feminist social movements. In Study 1, men's perception that their ingroup is losing value across several social spheres was associated with social status and realistic threat, both of which were associated with opposition to feminist movements. Study 2, an experiment, presented men with public opinion data showing a 30-year decline in the degree to which Americans value traditional masculinity or no decline. Information about the declining value of masculinity activated status threat, which motivated less support for feminist movements. Among men who highly identified as masculine, this same information reduced support for feminist movements through symbolic threat. In sum, perceived decline in the social value of traditional masculinity creates status anxiety about the ingroup's future and motivates compensatory reactions against gender equality.

Keywords

feminism, masculine identity, prejudice, realistic threat, social status threat, symbolic threat

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Throughout history, societies have developed social hierarchies to create order, predictability, and systemize the allocation of resources based on categories such as race, gender, social class, and national origin (Halevy et al., 2011; Henrich & McElreath, 2003; Sapolsky, 2005). Within these social hierarchies, limited resources are distributed in ways that disproportionately benefit higher status groups at the cost of lower status groups (Koski et al., 2015). Because individuals at the top of the hierarchy enjoy greater access to limited resources, they are often motivated to

preserve the hierarchy by supporting institutions and policies that allocate resources in their favor (Mitchell & Sidanius, 1995; Pratto et al., 1997, 1998), and by engaging in interpersonal resource

¹University of Massachusetts Amherst, USA ²Smith College, USA

Corresponding author:

Adrian Rivera-Rodriguez, Department of Psychology and Brain Sciences, University of Massachusetts Amherst, 135 Hicks Way/Tobin Hall, Amherst, MA 01003, USA. Email: ariverarodri@umass.edu allocations that favor high-status ingroup members over lower status outgroup members (Pratto et al., 1999; Sidanius & Pratto, 2004; Sidanius et al., 2004). Furthermore, motivation to preserve social hierarchy often increases when external events challenge the status quo in the form of changing national demographics, political events, and changing social norms (Craig & Richeson, 2014; Danbold & Huo, 2015; Outten et al., 2012; Stephan & Stephan, 2000; van Dyke & Soule, 2002).

Within the United States, long-standing social hierarchies exist along several social identities such as race, gender, social class, religion, sexual orientation, and immigration status (Rothenberg, 2004). In the current research, we focus on gender-based hierarchy, and investigate the consequences of contextual events that challenge it. Like in many nations, the cultural default in the US is patriarchy, with cisgender men traditionally holding greater political and economic power over women (Lorber, 2010). In response, women have actively challenged the gender hierarchy through collective action, notably since 1848, when the first wave of feminism began, demanding legislative and social reform to ensure women get equal rights to property, wages, education, jobs, and the right to vote (Ginzberg, 2002; Lorber, 2010). Since then, several waves of feminist social movements have continued to challenge the gender hierarchy, resulting in changing gender roles and social norms, along with changes in laws, policies, and organizational practices in the direction of greater gender equality (Evans, 2002; Lorber, 2010). Feminist movements in the US have been met with a variety of responses from American men, with some embracing sociopolitical changes toward gender equality, while others adopting antifeminist positions in attempts to reaffirm the gender hierarchy (Edley & Wetherell, 2001). The present research examines the conditions under which societal trends challenging the gender hierarchy elicit opposition from men, psychological mechanisms driving such opposition, and social identity characteristics differentiating men who support versus oppose feminist social movements.

Challenges to Social Hierarchies Activate Threat and Motivate Prejudice

According to the integrated threat theory of prejudice (Stephan & Stephan, 2000), perceived threat from an outgroup can motivate prejudice and opposition to outgroup rights. We apply integrated threat theory to investigate challenges to the gender hierarchy and hypothesize that men will support or oppose feminist social movements based on two factors: (a) the degree to which men perceive these movements as threatening their privileged access to resources, symbolic power, and social status; and (b) the degree to which masculinity is central to their identity. We examine three types of group-related threats-realistic threat, symbolic threat, and social status threat—comparing the extent to which each threat motivates men's support for, or opposition to, feminist movements.1 We also examine the extent to which masculine identity influences men's response to external events that challenge the social hierarchy. In the following section, we review past research identifying situations that prime group-related threats as well as their impact on outgroup attitudes, particularly among individuals strongly identified with their ingroup. We then extend past work on intergroup relations to gender, and derive hypotheses about the role that gender-related threats have in men's reactions to feminist social movements.

Realistic Threat

Realistic threat refers to perceptions that an outgroup poses a threat to the well-being of one's ingroup by restricting, or competing for, access to limited resources (Stephan & Stephan, 2000). Information or narratives that lead individuals to believe that an outgroup impacts their ingroup's access to tangible resources like jobs, income, and wealth have been shown to induce realistic threat and outgroup prejudice (Morrison et al., 2009; Morrison & Ybarra, 2008; Xiao & van Bavel, 2012). For example, past research found that priming White Americans to believe that Asian

Americans "take the good jobs" induced economic threat among Whites, which in turn anti-Asian prejudice Yogeeswaran, 2011; Morrison & Ybarra, 2008). Similarly, when college students were led to believe that a lower status rival school's graduates had greater job opportunities and starting salaries, they were more likely to support group-based inequality and existing social hierarchies (i.e., reported greater social dominance orientation; Morrison et al., 2009). Even perceived threat from a fictitious immigrant group's competitiveness in the job market induced prejudice towards immigrants and opposition to policies that empower immigrants to become self-sufficient (Esses et al., 1998, 1999). In sum, information that an outgroup threatens ingroup access to tangible resources induces realistic threat and motivates outgroup prejudice and/or support for policies restricting the outgroup's access to resources.

Symbolic Threat

Symbolic threat refers to the perception that an outgroup threatens the core beliefs, values, and worldviews of one's ingroup. Extant research shows symbolic threat was activated among Austrians exposed to symbols associated with Muslim immigrants that emphasized cultural differences between Islamic and Western values (Moss et al., 2019; Schmuck & Matthes, 2017). Similarly, symbolic threat was induced among American Democrats and Republicans when party differences on issues such as same-sex civil unions, stem cell research, and affirmative action were highlighted. Like realistic threat, symbolic threat motivates prejudice towards outgroup members (Stephan et al., 2005), and increases support for inequality through endorsement of social hierarchies (Morrison & Ybarra, 2009).

Social Status Threat

While much of the integrated threat theory literature has focused on realistic and symbolic threat, more recent research has identified a different type of group-related threat termed social status threat (Craig & Richeson, 2014; Outten et al., 2012). Social status threat is the perceived decline of an ingroup's influence and privileged standing comparing the present to the past, and the additional decline anticipated when comparing the present to the future. Social status threat has a temporal element that is unique compared to realistic and symbolic threat. Only a few published studies have examined the impacts of social status threat on intergroup relations. These have been specific to the context of changing racial demographic trends in two nations-Canada and the US-where immigration and differential birth rates are reducing the numeric advantage of White majority groups relative to racial/ethnic minority groups (Craig & Richeson, 2014; Outten et al., 2012). Outten, Craig, and their colleagues found that reminding White Americans and Canadians about these demographic trends creates worry that their racial group confronts a future loss of social status as they get reduced to a numeric minority as early as 2024 in the US and 2058 in Canada. Specifically, exposure to this demographic information: (a) increased social status threat among White Canadians, which in turn predicted anger, fear, and prejudice towards racial/ethnic outgroups (Outten et al., 2012); and (b) predicted a conservative shift in political ideology among White Americans (Craig & Richeson, 2014). Together, these findings demonstrate that perceptions that one's ingroup might lose social status in terms of its relative position within the broader social hierarchy motivates racial prejudice and increases support for policies that preserve the racial hierarchy.

Distinguishing Between Group-Related Threats

As discussed, realistic, symbolic, and social status threat can motivate prejudice towards outgroup members. Which type of threat is elicited, however, is context-dependent (Rios et al., 2018). Realistic threat is likely induced when group members feel an outgroup poses a threat to tangible resources, whereas symbolic threat is

induced when group members feel an outgroup threatens their core beliefs, values, or worldviews. Alternatively, social status threat includes a temporal element; it is induced by people's perception of the declining positionality of their ingroup, projected into the future as compared to the past and present (Craig & Richeson, 2014; Outten et al., 2012).

Individual Differences in Masculine Identity and Responses to the Changing Gender Hierarchy

People's experience of group threat and its impact on outgroup prejudice often varies as a function of both their ingroup's status and individual differences in the extent to which group identity matters to them. Strength of ingroup identification, for example, has been found to increase the salience of both realistic and symbolic threat (Stephan & Stephan, 2000). A metaanalytic review examining the relation between intergroup threat and outgroup attitudes found that group identification positively correlated with realistic threat and symbolic threat across 23 studies (Riek et al., 2006). Beyond correlations, experimental research also indicates that ingroup identification moderates the effect of group threat on support for inequality (Morrison et al., 2009; Morrison & Ybarra, 2009). Specifically, Morrison and colleagues found that high-status group members were more likely to endorse social dominance beliefs in response to realistic threat manipulations if they strongly identified with the ingroup.

Other research rooted in the social identity framework examined the effect of identity-related threats and masculinity on prejudice towards women (Maass et al., 2003). This study examined the effect of threats to masculinity on men's behavior towards women. Findings showed that masculinity threat motivated greater sexism, especially among highly masculine identifying men. These findings suggest that masculinity threat motivates prejudice towards women,

particularly among men who are highly invested in their masculine identity. Whereas this research focused on personal threat, it does not speak to the impact of group threat elicited by questioning men's collective status, privileged access to tangible resources, and the value accorded to masculine cultural norms.

Threats to the Gender Hierarchy and Their Impact on Social Movements for Gender Equality

We extend prior research by examining whether and when three types of threat-realistic, symbolic, and social status threat-get activated in response to challenges to the gender hierarchy. Given that feminism challenges multiple aspects of the gender hierarchy, including the distribution of tangible resources (e.g., equal access to job opportunities, equal pay for equal work among genders, etc.), as well as beliefs and values regarding traditional gender roles (e.g., gender-based division of labor at home and work, traditional family structure, stereotypical beliefs about traditionally masculine and feminine traits, etc.), it remains unclear whether men feel realistic threat, symbolic threat, or both when confronted with social changes that feminism has brought to the US. To the extent that some men perceive feminism to be a zero-sum game that advances women's position within the social hierarchy at the cost of men's, we predict that they would experience social status threat. To investigate these issues, we examine three research questions. First, when faced with changing norms challenging the gender hierarchy, do men experience group threat-social status, realistic, and symbolic threat? Second, which of these threats motivate opposition to social movements that advocate gender equality? Third, are highly masculine identifying men at greater risk of feeling threatened by challenges to the gender hierarchy and, if so, does threat motivate them to oppose gender-based social movements more strongly compared to men who identify less with masculinity?

Goals of the Present Research

Across two studies, we examined whether men's perceptions that American society values men less today as compared to past decades would trigger gender-related threats, and in turn motivate less support for feminist movements like the #MeToo movement and the Women's March. In Study 1, we hypothesized that perceived decline in men's representation across several spheres of social life would signal a loss of men's social status within the gender hierarchy. In Study 2, we hypothesized that experimentally manipulated shifts in public opinion about the value of traditionally masculine traits would similarly signal a loss of men's social status within the gender hierarchy. In both studies, these external events (perceived changes in representation or information provided about public opinion) were expected to trigger greater concern for men's future standing in society (social status threat).

We also hypothesized the role of realistic and threat be context-dependent. symbolic to Specifically, in Study 1, we explored whether the perceived loss of men's representation in several spheres of social life would signal less access to tangible resources, and thus be associated with greater realistic threat, but not symbolic threat. Conversely, in Study 2, we explored whether experimentally manipulated changes in public opinion about the value of traditionally masculine traits would conflict with men's beliefs about the value of masculinity and arouse greater symbolic, but not realistic threat.

Finally, in Study 2, we examined whether stronger masculine identity amplifies the extent to which men feel threatened (both in terms of status threat and symbolic threat), eliciting less support for feminist social movements. In other words, we hypothesize that men who strongly identify as masculine will be the most likely to experience group-related threat in response to changing public opinion about traditionally masculine traits, and in turn report less support for feminist social movements.

Study 1

Using a correlational research design, Study 1 aimed to test the hypothesis that perceived loss

of representation across several social spheres is associated with three types of threat (social status threat, realistic threat, and symbolic threat) and less support for feminist social movements (e.g., the #MeToo movement and the Women's March) among American men. Furthermore, Study 1 tested each of these types of threat as mediators of opposition to feminist social movements.

Method

Participants and procedures. Data were collected from 273 self-identified American men via Amazon Mechanical Turk.² Thirty-seven participants requested to withdraw from the study and their data were deleted. An additional 17 participants were excluded for participating multiple times from the same IP address (29 cases) or because they did not self-identify as male (two cases). This left a trimmed sample of 219 men ($M_{\rm age} = 39.20$, SD = 13.12).

After providing informed consent, participants indicated the extent to which they perceived that traditional men are valued less in American society today as compared to 30 years ago across several domains of social life. Next, they indicated the extent to which they experienced social status, realistic, and symbolic threat. Measures of each threat were presented in randomized order. Finally, participants indicated the extent to which they supported feminist movements (i.e., general support for feminism and specific support for the #MeToo movement and the Women's March). Outcome measures assessing support for feminist movements were presented in randomized order.

Measures

Perceived decline of traditional masculinity. Participants indicated the extent to which they perceived traditional masculinity to be valued in American society today as compared to 30 years ago across 10 domains of social life: politics, school, workplace, romantic relationships, television, movies, news media, in the participant's town, among participants' social networks, and in America overall, on a scale from -3 (valued much less) to 3

(valued much more), with a midpoint of 0 (valued about the same). Exploratory factor analysis revealed that participants' responses to all domains converged on one factor ($\alpha=.89$), and were thus averaged together, reverse-coding where relevant such that higher scores indicated stronger perception that the value of traditional masculinity has declined in American society.

Social status threat. Three items were used to measure the extent to which participants believed that men would lose social status in the near future: "I fear that, in 30 years, manhood will be valued less in America," "I believe that there will always be a place for traditional men in American society" (reverse-coded), "I fear that, in 30 years, many Americans won't acknowledge differences between men and women anymore." Participants indicated their agreement with each statement on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Cronbach's alpha indicated that one reverse-coded item did not hang well with the other two ($\alpha = .65$). Removing this item ("I believe that there will always be a place for traditional men in American society") improved reliability ($\alpha = .82$). Thus, only Items 1 and 3 were averaged together to create a composite score for social status threat in Study 1, with higher scores indicating greater social status threat.

Symbolic threat. Three items were adapted from Stephan et al. (1999) to measure symbolic threat from feminism: "Feminism is undermining American masculinity," "Feminist beliefs about how to raise children are not compatible with most men's beliefs," "Feminist moral values aren't compatible with most men's moral values." Items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together, with higher scores indicating greater symbolic threat ($\alpha = .93$).

Realistic threat. Three items were adapted from Stephan et al. (1999) to measure perceptions that men's access to economic resources and romantic partners was jeopardized: "It is harder for men to get good jobs than it used to be," "It is harder for

men to find good romantic partners than it used to be," "It is harder for men to provide for their families than it used to be." Items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together, with higher scores indicating greater realistic threat ($\alpha = .81$).³

Support for feminist social movements

General support for feminism. Participants responded to six items designed to measure their general support for feminism: "I consider myself a feminist," "I support feminism," "Feminists want equal rights for men and women," "Feminists hate men" (reverse-coded), "Feminists do more harm than good" (reverse-coded), "Feminists' opinions matter to me." Items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together, with higher scores indicating greater general support for feminism ($\alpha = .88$).

Support for the #MeToo movement. Five items were used to measure participants' support for the #MeToo movement: "I am glad that women are coming forward with their personal stories of being targets of sexual harassment by some men," "On the whole, I believe women who accuse public figures of sexual abuse," "Powerful men who are accused of sexual misconduct should be investigated," "Many women who publicly accuse famous men of sexual misconduct have gone too far" (reverse-coded), and "Many people who have been accused of sexual misconduct by members of the #MeToo movement didn't do anything wrong" (reversecoded). Items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together, with higher scores indicating greater support for the #MeToo movement ($\alpha = .93$).

Support for the Women's March. Four items were used to measure participants' support for the Women's March: "I support the mission of the Women's March," "The Women's March was bad for America" (reverse-coded), "I would consider

Table 1. Correlations between perceived loss of value, support for feminism, and group threat.

M	SD	1.	2.	3.	4.	5.	6.	7.
0.32	1.15							
4.00	1.72	24**						
4.80	1.35	23**	.71**					
4.07	1.65	32**	.79**	.69**				
3.73	1.43	.26**	57**	50**	56**			
4.50	1.50	.21**	46**	44**	41**	.53**		
4.04	1.81	.12	79**	66**	42**	.66**	.56**	
	0.32 4.00 4.80 4.07 3.73 4.50	0.32 1.15 4.00 1.72 4.80 1.35 4.07 1.65 3.73 1.43 4.50 1.50	0.32 1.15 4.00 1.7224** 4.80 1.3523** 4.07 1.6532** 3.73 1.43 .26** 4.50 1.50 .21**	0.32 1.15 4.00 1.7224** 4.80 1.3523** .71** 4.07 1.6532** .79** 3.73 1.43 .26**57** 4.50 1.50 .21**46**	0.32 1.15 4.00 1.7224** 4.80 1.3523** .71** 4.07 1.6532** .79** .69** 3.73 1.43 .26**57**50** 4.50 1.50 .21**46**44**	0.32 1.15 4.00 1.7224** 4.80 1.3523** .71** 4.07 1.6532** .79** .69** 3.73 1.43 .26**57**50**56** 4.50 1.50 .21**46**44**41**	0.32 1.15 4.00 1.7224** 4.80 1.3523** .71** 4.07 1.6532** .79** .69** 3.73 1.43 .26**57**50**56** 4.50 1.50 .21**46**44**41** .53**	0.32 1.15 4.00 1.7224** 4.80 1.3523** .71** 4.07 1.6532** .79** .69** 3.73 1.43 .26**57**50**56**

Note. * $p \le .05$. ** $p \le .001$.

attending a future Women's March event," and "Protestors at the Women's March are too sensitive" (reverse-coded). Items were answered on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together, with higher scores indicating greater support for the Women's March (α = .87).

Results and Discussion

Correlations. As shown in Table 1, bivariate correlations showed that social status threat was significantly correlated with stronger perceptions that traditional masculinity is valued less in American society compared to 30 years ago (r = .26, p < .001), and less support for feminist social movements (general support: r = -.57, p < .001; #MeToo: r = -.50, p < .001; Women's March: r = -.56, p < .001). Social status threat was significantly correlated with realistic (r = .53, p < .001) and symbolic threat (r = .66, p < .001), suggesting that these three types of threat are interrelated.

Realistic threat was significantly correlated with stronger perceptions that traditional masculinity is valued less in American society compared to 30 years ago (r = .21, p < .001), and less support for feminist social movements (general support: r = -.46, p < .001; #MeToo: r = -.44, p < .001). Women's March: r = -.41, p < .001). Realistic threat was strongly correlated with symbolic threat (r = .56, p < .001).

Symbolic threat was not correlated with perceptions that men are valued less in American society compared to 30 years ago (r=.12, p>.05). However, it was correlated with less support for feminist movements (general support: r=-.79, p<.001; #MeToo: r=-.66, p<.001; Women's March: r=-.42, p<.001).

Mediation analysis: Perceived lower value of traditional masculinity in contemporary American society is associated with less support for feminist social movements through social status and realistic threat. We tested a parallel mediation model assessing whether the association between the perceived value of men in American society (predictor variable) and reduced support for feminist social movements (outcome variable) is simultaneously explained by social status and realistic threat (mediators; see Figure 1). Given that symbolic threat was uncorrelated with the predictor variable, it was not used in this parallel mediation. Because mediations using each of the three outcome variables yielded similar results, we aggregated all three outcome variables into a combined index (#MeToo, Women's March, general support for feminism; $\alpha =$.89) to simplify our report. Separate mediations using individual outcome variables are reported in the supplemental material.⁴ Mediational analyses were run with the PROCESS Version 3.4 macro for SPSS (Hayes, 2017). Significant mediation was determined through the interpretation of each indirect effect (IE) using a bootstrap

Figure 1. Parallel mediation model illustrating the association between the perceived lower value accorded to traditional masculinity in social spheres and lower support for feminist social movements, simultaneously through social status threat and realistic threat.

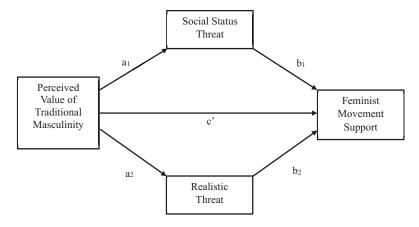


Table 2. Model coefficients for parallel mediation through social status threat and realistic threat.

Mediational pathway		Coefficients	Indirect effect		
	a_1	b_1	c'	IE	95% CI
Loss of value→ Soc. status threat → Feminist movement support	.40 (0.10)**	36 (0.05)**	15 (0.07)*	14 (0.04)	[-0.23, -0.06]
_	a_2	b_2	c'		
Loss of value → Realistic threat → Feminist movement support	.31 (0.09)**	20 (0.07)**	15 (0.07)*	06 (0.02)	[-0.13, -0.01]

Note. Standard errors in parentheses. 95% CI for indirect effects that do not include zero are significant. * $p \le .05$. ** $p \le .001$.

approach (5,000 iterations) to obtain 95% confidence intervals (CIs). As hypothesized, both social status and realistic threat significantly mediated the association between men's perception that traditional masculinity is valued less in American society today and lower support for feminist movements (social status threat: IE = -.14, 95% CI [-0.31, -0.09]; realistic threat: IE = -.06, 95% CI [-0.13, -0.01]). Specifically, the more men believed that traditional masculinity is devalued in American society today compared to 30 years ago, the more they reported that their ingroup's future social status and access to tangible resources are threatened, each of which, in turn, was associated with less support for

feminist movements. All path coefficients are reported in Table 2.

Summary

As hypothesized, men's perception that contemporary Americans value traditional masculinity less across several social spheres was associated with less general support for feminism, the #MeToo movement, and the Women's March. Furthermore, this association was mediated through both social status threat and realistic threat. While these findings support our hypotheses, the correlational nature of these data prevents claims about the direction of causation. To

provide direct causal evidence, Study 2 used an experimental paradigm.

Study 2

Study 2 replicated and extended the findings from Study 1 in three ways. First, we experimentally manipulated men's exposure to information indicating that over the past few decades, American public opinion has shifted away from valuing traditionally masculine traits (such as physical strength and competitiveness) toward valuing traditionally feminine traits (such as empathy), and assessed if information would trigger group-related threat (social status, realistic, and/or symbolic threat). Second, we tested whether these threats, in turn, reduced men's support for feminist social movements. Third, we tested whether increased threat and reduced support for feminist movements would emerge most robustly among men who strongly identify with masculinity.

Method

Participants and procedure. Data were collected in two waves from self-identified American men via Amazon Mechanical Turk. Wave 1 occurred in March 2019 (n=273) and Wave 2 occurred in June and July 2019 (n=375), resulting in a total sample of 648.⁵ Eighteen percent voluntarily withdrew their data (n=120), 1.5% were excluded after indicating that they did not identify as men (n=37), 15% came from duplicate IP addresses (n=92), and 3% were excluded for completing the survey in an unreasonably short amount of time (under 4 minutes; n=21). This left a trimmed sample of 476 participants ($M_{\rm age}=37.77$, SD=0.57).⁶

At the start of the study, participants were given information indicating that American public opinion about masculinity had changed substantially over the last 30 years, or stayed the same (i.e., public opinion manipulation). After reading this information, we assessed participants' experiences of social status threat, realistic threat, and symbolic threat in randomized order. Next,

participants indicated the extent to which they identified with masculinity. Finally, we measured the extent to which they supported feminist movements (i.e., general support for feminism, the #MeToo movement, and the Women's March) presented in randomized order.

Manipulating public opinion about masculinity over time. Participants were told that they were participating in a study on people's attitudes toward current social issues and their ability to interpret data visualizations of public opinion change over time. Participants were randomly assigned to one of two conditions—public opinion change in the value associated with traditionally masculine traits or no public opinion change. Participants in both conditions were told that over the past 30 years, a national survey company had periodically conducted polls to track which qualities Americans value most in men and women. In 30 years, they had sampled data from approximately 2,500 Americans. Participants were shown a graph depicting what proportion of survey respondents believed that it was important for men to be strong, competitive, and empathetic over the last 30 years, from 1987 through 2017.

Participants in the no-change condition were shown a graph depicting little to no change in public opinion about the personality traits that Americans allegedly valued in men over the past 30 years, with traits like strength and competitiveness being valued in men significantly more than traits like empathy. This graph was accompanied by the statement: "A clear pattern: Americans value traditionally masculine men about as much as they used to 30 years ago."

Participants in the public opinion change condition were shown a graph depicting visually noticeable change in public opinion trends over the past 30 years, with traits like strength and competitiveness being valued less, and empathy being valued more over time. This graph was accompanied by the statement: "A clear pattern: Americans value traditionally masculine men less than they used to 30 years ago." Both the nochange and change manipulations can be found in the supplemental material.

1				,					
	M	SD	1.	2.	3.	4.	5.	6.	7.
Individual difference								-	
1. Masculine identity	4.59	1.44							
Support for feminist cau	ises								
2. General support	4.31	1.75	42**						
3. #MeToo	4.98	1.27	37**	.70**					
4. Women's March	4.34	1.62	45**	.83**	.70**				
Threat									
5. Social status threat	3.75	1.59	.31**	44**	38**	44**			
6. Realistic threat	4.42	1.46	.25**	40**	31**	38**	.39**		
7. Symbolic threat	3.74	1.79	.47**	74**	63**	70**	.54**	.48**	

Table 3. Descriptive statistics and correlations for Study 2 variables.

Note. * $p \le .05$. ** $p \le .001$.

Identification with masculinity. Four items were adapted from Glick et al. (2015) to measure the extent to which participants identified with masculinity: "I identify strongly with masculinity," "Being masculine is an important part of who I am," "I feel strong ties with other men," "I feel a sense of solidarity with other men." Participants indicated the extent to which they agreed with each item on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together to create a composite masculine identity score, with higher scores indicating stronger identification with masculinity ($\alpha = .91$).

Mediators and dependent variables. Social status threat was measured with two of the same items from Study 1 ("I fear that, in 30 years, manhood will be valued less in America" and "I fear that, in 30 years, many Americans won't acknowledge difference between men and women anymore") and a third new item ("There may not always be a place for traditional men in American society"). Participants indicated the extent to which they agreed with each item on a 7-point scale (1 = strongly disagree, 7 = strongly agree). Responses were averaged together to create a composite social status threat score ($\alpha = .77$), with higher scores indicating greater social status threat. The same items from Study 1 were used to measure realistic threat ($\alpha = .81$), symbolic threat ($\alpha = .92$), support for feminism ($\alpha = .94$), support for the

#MeToo movement (α = .86), and the Women's March (α = .86).

Results

Descriptive statistics and correlations between Study 2 variables are reported in Table 3. As in Study 1, all three forms of perceived threat were significantly associated with support for feminist movements, such that greater perceived threat was linked to less support. Furthermore, masculine identity was positively associated with perceived threat, and negatively associated with support for feminist movements, such that greater identification with masculinity was linked to greater perceptions of threat and less support for feminist movements.

Effect of public opinion change regarding traditional masculinity on perceived threats. A series of independent sample t tests examined whether manipulating public opinion about masculinity over time (i.e., change vs. no-change) had any effect on men's perceptions of threat (i.e., social status threat, realistic threat, symbolic threat). As hypothesized, men in the change condition perceived significantly greater social status threat (M = 3.96, SE = 0.10) compared to men in the no-change condition (M = 3.54, SE = 0.10), t(474) = -2.86, p = .004. In other words, men were more concerned about a future loss of social status when

Mediational pathway		Coefficients	Indirect effect		
	a	b	c'	IE	95% CI
Change in public opinion \rightarrow Soc. status	.41 (0.14)*	41 (0.04)**	01 (0.12)	17 (0.06)	[-0.30, -0.05]

Table 4. Model coefficients for significant mediational pathway through social status threat.

Note. Standard error in parentheses. 95% CI for indirect effects that do not include zero are significant. $*p \le .05$. $**p \le .001$.

led to believe that Americans value traditionally masculine traits less today than in earlier decades, compared to men who were led to believe that the value Americans accord to traditionally masculine traits has not changed.

threat → Feminist movement support

Contrary to results from Study 1, men in the change condition did not significantly differ on their perceptions of realistic threat (M=4.47, SE=0.10) compared to men in the no-change condition (M=4.36, SE=0.09), t(474)=-0.90, p=.369. Likewise, men in the change condition did not significantly differ on their perceptions of symbolic threat (M=3.84, SE=0.12) compared to men in the no-change condition (M=3.65, SE=0.11), t(474)=-1.15, t=0.249.

Effect of public opinion change regarding traditional masculinity on support for feminist movements. A series of independent sample t tests examined whether manipulating public opinion change about masculinity over time had any effect on men's support for feminist movements (i.e., #MeToo support, Women's March support, general support for feminism). Results indicated that the change manipulation had no effect on men's support for the #MeToo movement, t(474) = 0.20, p = .845; the Women's March, t(474) = 1.40, p =.162; or general support for feminism, t(474) =1.67, p = .096. In other words, information leading men to believe that the American public values traditionally masculine traits less today than in earlier decades did not decrease support for feminist movements, compared to information leading men to believe that American public values regarding masculine traits have not changed.

Mediation analysis: Social status threat mediates the link between public opinion about traditional masculinity and support for feminist social movements. We ran a simple mediation model with PROCESS Model 4 (Hayes, 2017) to test the hypothesis that framing American values regarding traditionally masculine traits as changing would increase social status threat, which in turn would predict less support for feminist social movements. Consistent with Study 1, all three outcome variables capturing support for feminist social movements were aggregated to create a combined index, given the convergence among these three measures (#MeToo, Women's March, general support for feminism; $\alpha = .89$). Symbolic and realistic threat were not included as parallel mediators in this model because independent sample t tests reported earlier did not indicate greater symbolic or realistic threat in response to our public opinion manipulation. As hypothesized, mediational analysis showed that the public opinion change condition induced greater social status threat, which in turn predicted less support for feminist social movements (IE = -.17, 95% CI [-0.30, -0.05]). Model coefficients can be found in Table 4.

Individual differences in masculine identity moderate the effect of public opinion change on perceived threat. A series of multiple regression analyses examined whether individual differences in masculine identity moderated the effect of manipulated public opinion change on perceived threat. Three regressions were conducted using each of the three types of perceived threat as outcome variables (i.e., social status threat, realistic threat, and symbolic threat). Predictor variables were alleged public opinion change regarding traditional masculinity (dummy coded: 0 = no change, 1 = change), individual differences in masculine identity (mean centered), and the Condition x Masculine Identity interaction.

	Social status threat		Realistic	threat	Symbolic threat		
	b (SE)	Þ	b (SE)	Þ	b (SE)	Þ	
Intercept	3.54 (0.10)	< .001	4.35 (0.09)	< .001	3.64 (0.10)	< .001	
Condition	0.43 (0.14)	.002	0.13 (0.13)	.312	0.22 (0.14)	.134	
Masculine ID	0.24 (0.07)	< .001	0.22 (0.06)	< .001	0.47 (0.07)	< .001	
Condition x Masculine ID	0.24 (0.10)	.013	0.06 (0.09)	.484	0.26 (0.10)	.010	

Table 5. Regression model coefficients for perceived threats.

Note. Standard error in parentheses.

Unstandardized regression coefficients for each model are reported next and can be found in Table 5.

Effect of public opinion change condition and masculine identity on social status threat. Public opinion change (compared to no change) predicted greater social status threat (b = 0.43, SE = 0.14, p = .002). Masculine identity (b = 0.24, SE = 0.07, p < .001) also significantly predicted greater social status threat in the baseline no-change condition. More importantly, and relevant to our hypothesis, the Condition x Masculine Identity interaction was significant (b = 0.24, SE = 0.10, p = .010). When the interaction effect was disaggregated, simple slopes revealed that masculine identity was a stronger predictor of social status threat in the public opinion change condition (b = 0.48, SE = 0.07, p < .001) compared to the no-change condition (b = 0.23, SE = 0.07, p < .001). In other words, men who identified more strongly with masculinity experienced greater social status threat when faced with public opinion information indicating the declining societal value of traditionally masculine traits across the past 30 years, compared to information indicating that public opinion had not changed.

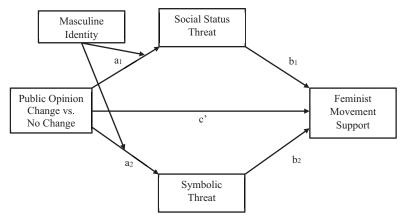
Effect of public opinion change condition and masculine identity on symbolic threat. Public opinion change (compared to no change) had a nonsignificant effect on symbolic threat (b = 0.26, SE = 0.10, p = .134). Masculine identity significantly predicted symbolic threat (b = 0.47, SE = 0.07, p < .001), such that increases in masculine identity predicted greater symbolic threat among men in the no-change condition. However, this

first-order effect was qualified by a significant Condition x Masculine Identity interaction (b = 0.26, SE = 0.10, p = .010). Simple slope analyses revealed that masculine identity was a stronger predictor of symbolic threat in the public opinion change condition (b = 0.73, SE = 0.07, p < .001) compared to the no-change condition (b = 0.47, SE = 0.07, p < .001). In other words, men who identified more strongly with masculinity experienced more symbolic threat when faced with public opinion information indicating the declining value of traditionally masculine traits across the past 3 decades, compared to information that traditional masculinity continued to be highly valued.

Effect of public opinion change condition and masculine identity on realistic threat. Public opinion change (compared to no change) had a nonsignificant effect on realistic threat (b = 0.13, SE = 0.13, p = .312). Masculine identity significantly predicted realistic threat in the no-change condition (b = 0.22, SE = 0.06, p = .001), such that increase in masculine identity predicted greater realistic threat. The interaction between public opinion change and masculine identity was nonsignificant (b = 0.06, SE = 0.09, p = .484), indicating that the public opinion manipulation had no differential effect on the association between masculine identity and experiences of realistic threat.

Moderated mediation: Individual differences in masculine identity moderate the effect of public opinion change on support for feminist social movements via threat. To test whether individual differences in masculine identity moderate the effect of the public

Figure 2. Moderated parallel mediation model illustrating the effect of perceived change in public opinion about masculinity (vs. no change) on feminist movement support, simultaneously through social status threat and symbolic threat.



Note. Individual differences in masculine identity moderate the a₁ and a₂ paths.

opinion change manipulation on support for feminist social movements through threat, we ran a moderated parallel mediation model (see Figure 2) with the PROCESS Version 3.4 macro for SPSS (Hayes, 2017). Social status threat and symbolic threat were used as parallel mediators. Realistic threat was not, given the nonsignificant interaction effect of condition by masculine identity on realistic threat reported earlier. Significant moderated mediation was determined through the interpretation of the index of moderated mediation on the indirect effects (IE) using a bootstrap approach (5,000 iterations) to obtain 95% CIs. Significant moderation was further probed by examining the IE at low (-1 SD), moderate (mean), and high (+1 SD) levels of masculine identity, again using a bootstrap approach (5,000 iterations) to obtain 95% CIs.

Results indicate that masculine identity significantly moderated the effect of public opinion change on support for feminist movements through symbolic threat (index of moderated mediation = -0.15, 95% CI [-0.27, -0.03]), but not social status threat (index of moderated mediation = -0.02, 95% CI [-0.01, 0.00]). Further probing of the significant moderated mediation through symbolic threat showed that exposure to the public opinion change condition

(compared to the no-change condition) induced greater symbolic threat, which in turn predicted significantly less support for feminist movements among high masculine identifiers (+1 SD: IE = -.34, 95% CI [-0.57, -0.10]), but not among moderate (Mean: IE = -.12, 95% CI [-0.28, 0.04]) or low masculine identifiers (-1 SD: IE = .09, 95% CI [-0.14, 0.33]). Model coefficients for all pathways can be found in Table 6.

Summary

Three primary results emerged from Study 2. First, Study 2 showed that before accounting for masculine identity, exposing men to information indicating that American public opinion has shifted away from valuing traditionally masculine traits over the last few decades activated social status threat but not realistic or symbolic threat. Second, as hypothesized, social status threat elicited by the public opinion manipulation mediated to predict less support for feminist social movements. Third, Study 2 explored whether and how individual differences in men's masculine identity would influence their responses to changing gender norms. Results indicated that among highly masculine men, information about public opinion change reduced support for

Masculine identification	Mediational pathway										
	Chang		tatus thre	eat → Sup. for ents	Change → Sym. threat → Sup. for feminist movements						
	a_1	b_1	c'	IE	a_1	b ₁	c'	IE			
Low (-1 <i>SD</i>)	.09	07*	05	01 [-0.03, 0.02]	16	57**	05	.09 [-0.14, 0.33]			
Moderate (mean)	.43*	07*	05	03 [-0.07, 0.00]	.21	57**	05	12 [-0.29, 0.04]			
High (+1 <i>SD</i>)	.77**	07*	05	05 [-0.13, 0.00]	.59*	57**	05	33 [-0.58, -0.10]			

Table 6. Parallel mediational process through social status threat and symbolic threat, moderated by masculine identity.

Note. Coefficients displayed for all pathways in the moderated parallel mediation model for high (+1 SD), moderate (mean), and low (-1 SD) masculine identifying men. 95% confidence intervals in square brackets. 95% confidence intervals that do not include zero are significant.

 $p \le .01. *p \le .05. **p \le .001.$

feminist movements through symbolic threat; but symbolic threat did not play a mediational role for men who were moderate identifiers or low identifiers with masculinity. We speculate about possible reasons for this unexpected effect in the General Discussion.

General Discussion

Three overarching questions guided our research. First, to what extent do men's perceptions that American society values traditional masculinity less today as compared to past decades elicit compensatory opposition to feminist social movements? Second, what type of gender-related threats explain such opposition, with specific focus on the threat of losing social status over time as well as realistic and symbolic threat, and in what contexts? Finally, does stronger masculine identity amplify the feeling of threat and further reduce support for feminist social movements?

Perceptions of Societal Changes in Gender Roles in Response to Contextual Factors and Individual Beliefs

The present research examined whether different types of group threat are activated in response to social changes related to valued gender roles. Consistent with our hypotheses, perceptions that men are valued less across several social spheres predicted realistic, but not symbolic, threat (Study Conversely, experimentally manipulated changes in public opinion regarding traditional masculine traits activated symbolic, but not realistic, threat among highly masculine men (Study 2). We interpret these findings to suggest that valuing men less across social spheres (i.e., politics, workplace, education, pop culture, romantic relationships, and in the community) activates men's concerns that they have less access to tangible resources that are political, economic, educational, as well as access to romantic partners, increasing realistic threat salience (as shown in Study 1), but not symbolic threat. In contrast, experimentally reducing the value assigned to masculine traits through alleged changes in public opinion has no effects on realistic threat because the manipulation does not speak to the group's access to tangible resources, but it does activate symbolic threat among highly masculine men who care strongly about the role of masculinity in their lives (as shown in Study 2).

Even though activation of realistic and symbolic threat differed across the two studies, social status threat was activated by both individual

differences in the perception that men are valued less in American society (Study 1) and experimentally induced information suggesting that the American public values traditionally masculine traits less today compared to 30 years ago (Study 2). While these findings support our hypotheses, it is important to note that not all men reported feeling social status threat in response to societal changes in gender roles. It is unclear whether men who reported less social status threat did so because they truly were not afraid of losing their social status as the gender hierarchy changed, or because they believed that the gender hierarchy would remain impervious to changes in public opinion. Future studies should aim to discern between these two reasons as to why some men reported low social status threat.

These findings make an important novel contribution by distinguishing social status threat as a unique form of group threat activated by information signaling the impending loss of the ingroup's position within an existing social hierarchy. Of course, social status threat is partially correlated with realistic and symbolic threat because threats to tangible resources and core values of the ingroup both signal a potential loss of status relative to other groups in the social hierarchy. But beyond the conceptual overlap, social status threat has a unique distinguishing feature, namely the anticipation of future losses to one's ingroup. While previous research has examined the role of social status threat in the context of the changing racial demography of the US and Canada (Craig & Richeson, 2014; Outten et al., 2012), to the best of our knowledge, the role of social status threat has not been extended beyond race. Our findings are the first to show the impact of social status threat to another type of social hierarchy, namely gender hierarchy, by highlighting temporal changes in men's status in American society.

Group Threat Mediates the Link Between Perceived Loss of Status and Opposition to Gender Equality

In support of our hypothesis, group threats activated by men's perceived loss of status within the

gender hierarchy motivated reduced support for feminist movements. This was true for social status threat and realistic threat, both of which were associated with the perceived loss of men's representation in several social spheres (Study 1). Social status threat was also aroused in response to experimentally manipulated information about the alleged declining value of traditionally masculine traits in the eyes of the American public (Study 2).

While we did not have any a priori hypotheses regarding the differential links between specific threats and opposition to specific feminist movements like the #MeToo movement or the Women's March, we nonetheless explored whether the activation of different threats was uniquely associated with opposition to each feminist movement (results are reported in the supplemental material). For example, because the Women's March advocates political change through representation and public policy, realistic threat might more strongly predict opposition to this specific movement. Conversely, symbolic threat might predict less support for the #MeToo movement, given its mission to "out" sexual abuse and violence against women perpetrated by men. Finally, because the platforms of both movements challenge the gender status quo, social status threat might predict less support for both movements. Our results showed that realistic, symbolic, and social status threat equally motivated reduced support for the Women's March and the #MeToo movement. This suggests that any group threat (regardless of the type) may be sufficient to motivate opposition to feminist movements to the extent that people perceive these movements as threatening men's privilege in terms of resources, status, and symbolism. Alternatively, this finding may result from participants' unfamiliarity with the specific issue platforms of the Women's March and the #MeToo movement. Future research could disentangle specific mediational pathways connecting different group threats and opposition to different types of social movements and policy outcomes.

Masculine Identity and Responses to Changing Gender Norms

As hypothesized, we found that the centrality of masculine identity influenced how men reacted to a changing gender hierarchy. Specifically, when presented with a change in public opinion about the importance of traditional masculine traits, men who strongly identified as masculine experienced both social status and symbolic threat. However, contrary to our prediction, among men for whom masculinity was central to identity (high masculine identifiers), present-focused symbolic threat (but not future-focused social status threat) mediated opposition to gender-based social movements. One speculative explanation for this unexpected finding is that perhaps men who identify strongly with masculinity believe they have already lost their privileged position within the gender hierarchy; in their eyes, the threat may be here and now, destabilizing the cultural norms on which their world is built in the present. In contrast, for men who are moderate or low in masculinity, the threat of losing social status may be a future possibility to guard against. That said, for the full sample of male participants, our data showed that future-oriented social status threat played a mediating role.

This speculation, however, should be interpreted with caution given that symbolic threat and less support for feminist movements were highly correlated in both studies. This high degree of overlap between these measures is likely the result of the symbolic threat scale making specific reference to feminism as the source of such a threat, which may have activated participants' general attitudes towards feminism. This limitation in our study design may have inadvertently increased the likelihood of a Type I error. Nonetheless, an interesting direction for future research would be attempting to replicate this finding and additionally probing when and why masculine identity influences the experience of varying types of threat, and its downstream consequences.

Implications and Future Directions

Our findings suggest that many men (particularly men who strongly identify as masculine) may view social change from feminism through a zero-sum lens, with gender equality progressing at the cost of men's privileged status within the gender hierarchy. These perceptions activate group threat, which in turn motivate less support for feminist movements. This interpretation is consistent with past research on race, particularly White Americans' reactions to affirmative action and other public policies designed to promote racial equality (Lowery et al., 2006). Specifically, in examining the role of White identity and responses to affirmative action, Lowery et al.'s research found that White Americans who were highly identified with their racial group were particularly opposed to affirmative action policies when they were perceived in zero-sum terms (Lowery et al., 2006).

If highly masculine identifying men view feminist movements and the social change these movements advocate as a zero-sum game, then reframing feminism as "lifting all boats" rather than benefiting women at the cost of men may alleviate group-related threats and increase support for feminist movements and public policies. Consistent with this conjecture, past research on race has shown that assuring White Americans that their relative social status will remain unchanged despite predicted demographic shifts in the US towards a "majority minority nation" attenuated social status threat and conservative shifts in ideology (Craig & Richeson, 2014). In the context of gender, future research should extend the same principles to explore whether men's perceptions of social change from feminism can be reappraised to assure them that gender equality does not come at the cost of men's social status in America.

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ORCID iD

Adrian Rivera-Rodriguez https://orcid.org/0000 -0002-3607-2108

Supplemental material

Supplemental material for this article is available online. In keeping with open practices and data sharing, all

data, study materials, variable codes, and analysis syntax can be found on the Open Science Framework (https://osf.io/s9yda/?view_only=83a1d21768bf43568f7e5bcd93a93f6e).

Notes

- Integrated threat theory also identifies interpersonal anxiety and negative stereotypes as forms of threat. In the present research, we did not include interpersonal threat given our focus on a group-level phenomenon; we also did not include stereotypes which we view as attributes associated with groups rather than a form of threat.
- Participants in both Studies 1 and 2 were paid \$0.50 for participating.
- 3. All threat items were subject to a principal component analysis (PCA). Two factors were extracted based on eigenvalues greater than 1. The first factor consisted of items from both the social status and symbolic threat scales, and the second consisted of items from the realistic threat scale. Because we had a theory-driven reason to make a distinction between future-oriented social status threat and present-oriented symbolic threat, an additional PCA forcing a three-factor solution was run. This analysis yielded factor loadings consistent with our theoretical framework drawing distinctions between symbolic, realistic, and social status threat; these are the factors reported in the main manuscript. Results for both PCAs can be found in the supplemental material (with the following OSF link: https://osf.io/s9yda/?view_onl y=dab9a1134a49402982fe0e5862c51971).
- See supplemental material (OSF link: https://osf. io/s9yda/?view_only=dab9a1134a49402982fe0e 5862c51971).
- All statistical effects reported in the results remain the same when accounting for the two separate data collection waves.
- Some participants were excluded for more than one reason (e.g., duplicate IP address and not identifying as male).
- 7. Given that the moderating variable (i.e., masculine identity) was measured after participants were exposed to the public opinion change manipulation, we tested whether the manipulation influenced self-reported masculine identity to guard against a potential confound. An independent samples t test indicated that self-reported masculine identity did not differ across treatment conditions

(i.e., public opinion change vs. no change), t(474) = 0.34, p = .734, making it reasonable to include masculine identity as a moderating variable.

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