Women's Status and the Sex Gap in Support for Political Violence

Abstract:

An extensive body of literature investigates the sex gap in support for political violence, examining why women, on average, are less supportive of political violence than men. One strand of research posits that higher levels of societal sex equality will reduce the gap in support for political violence between women and men. However, other scholarship discusses how men sometimes become more supportive of political violence to curtail increasing women's empowerment. Thus, the effects of sex equality on the sex gap in support for political violence are disputed. To assess these competing hypotheses, I employ data from the World Values Survey to examine how the interaction of individuals' sex and the levels of sex equality in the countries in which they reside affect their support for political violence. I find that the gap in support for political violence between women and men widens as women's overall status in society increases.

An extensive body of literature examines the "gender gap" in support for political violence, providing substantial evidence that women, on average, are less supportive of (political) violence than men (see Cohen and Karim 2022 for a comprehensive review). This phenomenon can be more accurately described as the "sex gap" (and will be henceforth) as much of the research is concerned with sex (men and women) rather than gender, which can be thought of as "a continuum of masculinity and femininity" (Cohen and Karim, p. 417).

While there is substantial evidence of the sex gap in support for political violence in prior research, the effect of women's empowerment is driving variation in the size of this gap across different societies is less clear. One strand of literature maintains that higher levels of women's status decrease the sex gap in support for political violence, as men are less likely to be socialized to value violence as a tool to solve disputes, while also learning to value equality more (e.g., Huber 2019; Melander 2005; Wood and Ramirez 2018).

 In contrast, another segment of the literature focuses on how women's empowerment generates backlash, overall, from men, who fear losing their privileged place in society, are resentful of their changing social roles, and seek to continue the subordination of women. As a result, some scholars expect that men will be more likely to support and engage in political violence as a response to growing women's rights (e.g., Kattelman and Burns 2023; Matfess et al. 2023; Mills et al. 2020). Similar to the framing used by Mills et al. (2020), these sides of the debate can be classified as the "ameliorative hypothesis" and "backlash hypothesis" respectively. The empirical record is divided on whether greater women's empowerment narrows or widens that gap in support for violence between men and women.

In this study, I evaluate these competing hypotheses with data from World Values Survey to examine how the interaction of individuals' sex and the levels of sex equality in the countries in

which they reside affect their support for political violence. Across the 63 countries included in the sample, I find that as country-level indicators of women's empowerment increase, men become more supportive of political violence than women, providing support for the "backlash hypothesis." These findings are consistent across a variety of alternative model specifications, including various measures of women's status.

This paper makes several contributions. First, while prior quantitative work has extensively examined differences between men's and women's support for political violence, as well as how sex equality affects the prevalence of political violence, fewer quantitative studies have examined the intersection of the two. Wood and Ramirez (2018) provide an important exception, as they analyze how the interaction of an individual's sex and their beliefs about sex equality affect their support for the use of military force. While making a valuable contribution, Wood and Ramirez did not analyze the interaction between an individual's sex and women's status in the society in which they reside.

To more accurately account for the possibility of backlash, we must assess how broader levels of sex equality affect men's and women's support for political violence, as theories of backlash are concerned with how individuals respond to broader societal trends, not their own individual beliefs about sex equality. Thus, I make a contribution by examining the effects of the interaction between an individual's sex and broader societal sex equality on individual support for political violence.

Second, this study also makes a contribution by providing individual-level evidence of backlash to women's empowerment and support for political violence. While important, studies that find support for the backlash hypothesis tend to analyze the frequency and severity of political violence events, but do not capture the actual attitudes of individuals. Indeed,

individual-level evidence is crucial to furthering our understanding of the relationship between women's empowerment and political violence (Cohen and Karim 2022). Thus, this study provides another layer of evidence by showing that individual men become more supportive of political violence in more sex egalitarian societies.

Third, this study contributes to our understanding of the mechanisms that could drive the relationship between sex equality and the prevalence and severity of political violence. Specifically, an extensive literature finds that political violence is less common in more sex egalitarian societies (Caprioli 2005; Harris and Milton 2016; Huber 2019; Hudson and Hodgson 2022; Hudson and Matfess 2017; Melander 2005; Saiya et al. 2017; Salman 2015). One commonly proposed mechanism is that when women, who tend to be less supportive of violence, are in power, there is a greater chance that conflicts are resolved peaceful (e.g., Caprioli 2000). However, other scholars argue that higher levels of sex equality also change men's attitudes, making them less support of political violence (e.g., Melander 2005). While these mechanisms are not mutually exclusive, it is still important to evaluate whether evidence supports them. The findings of my study provide evidence against the idea that men, on average, will become less supportive of political violence in more egalitarian societies.

As discussed above, an important scope condition to establish for this study is that I am focusing more directly on sex rather than gender. Indeed, Cohen and Karim (2022) categorize the existing relevant literature, in part, based on whether the central theory of these studies is concerned more with sex or gender. As Cohen and Karim note, much of the positivist (particularly quantitative) work on attitudes and patterns of political violence tends to focus more on sex (e.g., the sex gap in support for political violence; sex equality and the prevalence of political violence, etc.) than on gender. Given that I am most directly addressing the

phenomenon that Cohen and Karim refer to as the "sex gap" in support for political violence, I center my theoretical discussion and empirical analysis primarily on sex-based dynamics.

In terms of the plan for the rest of the paper, I begin by reviewing the existing literature on sex equality and political violence. I then present the ameliorative and backlash hypotheses. This is followed by a discussion of the research design and presentation of the results. I also conduct a variety of robustness checks to assess the strength of these findings. I conclude with a discussion of the implications of the findings.

Sex Equality and Political Violence

Many studies find that various forms of violent political conflict are less common, and less severe, in more sex equitable societies, including international conflict (Caprioli 2000, 2003; Caprioli and Boyer 2001); civil wars (Caprioli 2005; Hudson and Matfess 2017; Melander 2005); and terrorism (Harris and Milton 2016; Huber 2019; Hudson and Hodgson 2022; Saiya et al. 2017; Salman 2015). Multiple causal mechanisms have been proposed that link higher levels of sex equality to lower levels of political violence.

First, scholars argue that women are more likely to be socialized towards cooperative behavior and rewarded for peacefully resolving personal conflicts. They are also more likely to be socialized to value and promote egalitarianism. In contrast, men are more likely to be socialized to be aggressive and solve conflicts with violence (e.g., Caprioli 2000). Relatedly, on average, men are raised to act as warriors or protectors, while women are expected to act as caregivers. Such socialization also promotes the subordination of women (Goldstein 2001; Melander 2005; Tickner 1992, 2001). A second, related but less supported mechanism is the claim that women are inherently more peaceful than men for biological reasons.

According to some scholars, for both mechanisms, in more sex egalitarian societies, where women hold more (political) power and influence (e.g., parliaments have a higher percentage of female members), disputes will be more likely to be resolved peacefully because more women (who are more opposed to the use of violence) are involved in decision-making processes. Relatedly, men in power will be more likely to pursue peace over violence to gain and/or maintain the support of women, who, on average, have greater levels of political influence in these societies (e.g., Cohen and Karim 2022).

There is a vast body of literature that supports the claim that there is a sex in support for violence, or that women are less tolerant than men of a variety of forms of violence, including military force, terrorism, and other forms of civilian targeting (Eichenberg 2003, 2016; Eichenberg and Stoll 2017; Fite et al. 1990; Gallagher 1993; Lizotte 2019; Mueller 1973; Welch and Thomas 1988; Wilcox et al. 1996).

A third possible mechanism, which is strongly tied to the socialization mechanism (e.g., Melander 2005), is that, as sex equality in a society increases, both men and women become less supportive of political violence. Said differently, as women's status increases in a society, some scholars expect that the sex gap in support for violence will narrow. We examine this argument in the next section.

Ameliorative Hypothesis

The "ameliorative hypothesis" maintains that the sex gap in support for political violence will shrink as women's empowerment increases. In less egalitarian societies, there is an expectation that men will be more likely to have been socialized into masculine beliefs that emphasize the honor of using violence to serve as protector of individuals and groups. In this context, honor has the dimensions of both (1) controlling women's sexuality and independence

and (2) an emphasis on toughness, or the use of violence to preserve one's social status. Thus, men in these societies are more incentivized to use violence and violence is viewed as a more acceptable tool for addressing disputes (Cohen and Karim 2022; Melander 2005). Sex equality also promotes norms of respect and equality in other areas, leading both women and men, on average, to support cooperation over violent conflict (Goldstein 2001; Tickner 1992, 2001).

There is some evidence to support the idea that belief in sex equality reduces the gap between men and women in support for political violence. Wood and Rameriz (2018) find that beliefs in sex equality close the gap in support for the use of military force between men and women. Tessler and Warriner (1997), using survey data from the Middle East, do not find a significant difference between men and women's support for peacefully resolving the Arab-Israeli conflict, but they do find that individuals who believe more in sex equality are more supportive of its peaceful resolution. Survey evidence also reveals that men with misogynist views are more likely to participate in political violence than other men (Bjarnegård et al. 2017, 2022). Huber (2019) argues that as sex equality increases, both men and women increasingly oppose violence against civilians.

Thus, there is some evidence to suggest that higher levels of societal sex equality narrow the sex gap in support for violence, as men are socialized to value violence less and equality and cooperation more. Similarly, Rameriz and Wood (2018) examine how the interaction of an individual's sex and their beliefs about sex equality affect their support for the use of military force. It is possible that this relationship might also translate, and that when men live in more sex egalitarian societies, where they are exposed both to more social support for women's empowerment and women in more positions of power and influence, they become more supportive of sex equality. This could also lead them to become less supportive of political

violence, narrowing the sex gap in support for violence. This leads to the first competing hypothesis that:

H1: As women's status increases, the gap in support for political violence between men and women will decrease.

Backlash Hypothesis

However, increased women's empowerment is often met with significant backlash, in a variety of forms, ranging from electoral support for candidates who resist such changes, to intimate partner violence (e.g., Anduiza and Rico 2022; Berry 2017; Faludi 1992; Krook 2015; Krook and Restrepo Sanín 2016a, 2016b; Mansbridge and Shames 2008; Restrepo Sanín 2020). This includes significant violent political backlash in response to such increased opportunities for women (Kattelman and Burns 2023; Matfess et al. 2023; Mills et al. 2020; Perliger 2012; Piazza 2017). Said differently, the expansion of women's rights in one area sometimes makes them more vulnerable in another (Matfess et al. 2023). Relatedly, misogyny is a central component of many violent extremist ideologies, and thus, militant groups often respond to women's empowerment with violence (Díaz and Valji 2019; Kattelman and Burns 2023; Robison et al. 2006). Scholars expect that this backlash is driven by a few interrelated dynamics.

First, violence is often employed to halt and/or reverse the expansion of women's rights to maintain the status quo, including the distribution of political power, which privileges men's dominance (Matfess et al. 2023). This violence is often targeted at women and the threat is more severe the more power women hold, as their presence in historically male-dominated spaces becomes more visible (Håkansson 2021).

Consequently, women who hold elected office are frequently targets of political violence (e.g., Krook and Restrepo Sanín 2016a, 2016b, 2019). Håkansson (2021) shows that powerful or high-ranking politicians who are women in Sweden (i.e., mayors) faced significantly more political violence than men in the same positions. However, this violent backlash targets more women than just those in power. For instance, Matfess et al. (2023) find that political violence against women (not in the government) in Kenya increased with the share of seats held by women in the lower chamber of the legislature.

Similarly, gains in women's economic participation and power might make some men, who previously enjoyed (or at least expected to enjoy) a privileged economic position, resentful at the perception that their economic opportunities are being taken away. Indeed, Piazza (2017) finds that, in the United States, increases in women's labor force participation are associated with increases in right-wing terrorism. Relatedly, Mills et al. (2020) find that far-right extremists perpetrate fewer homicides in areas in which men disproportionately benefit from sex-based inequalities in income and occupation.

Thus, increases in women's integration into some segments of society, has led to (mostly) men perpetrating political violence against even larger segments of women in the general population, even those who have not as directly benefited from increases in women's empowerment. This is because the perpetrators perceive gains made by women to come at the cost of the perpetrators own political and economic power.

Second and relatedly, changing social roles and expectations that come with advancements in women's status can lead men to be resentful or angry at such changes, increasing the propensity of some of them to support, and participate in, political violence (Kattelman and Burns 2023). Challenges to social expectations related to men's supremacy can generate grievances that lead

to increased political violence (Mills et al. 2020). Said differently, the perception that "things aren't like they use to be," and that such changes are negative, makes some individuals more willing to turn to political violence.

Third, Kattelman and Burns (2023) explain that some violent political extremists, particularly those with religious and/or nationalist ideologies, prioritize the subordination and policing of women's lives. They note that such extremists are often particularly interested in controlling women's bodies, with a focus on controlling their sexual and reproductive rights. Improvements to women's security challenge the ability of such actors to continue controlling women. Consequently, Kattelman and Burns expect that violent political extremists, who prioritize such subjugation, will meet efforts to expand protections for women with violent backlash.

Thus, as detailed in prior work (e.g., Kattelman and Burns 2023; Mills et al. 2020), higher levels of women's rights can lead to violent backlash because of (1) efforts to preserve that status quo that centers on men's domination; (2) resentment about changing social roles and expectations; and (3) the desire to maintain control over women.

As discussed above, this backlash primarily stems from men who are resentful of their perceived loss of status and power, and in some contexts, control over women. Thus, increases in women's empowerment might make men more likely to support political violence, as they seek to maintain the status quo that benefits them. Relatedly, Harris and Milton (2016) argue that higher levels of sex equality reduce radicalization, making women less likely to engage in political violence. This leads to the second competing hypothesis that:

H2: As women's status increases, men, relative to women, will become more supportive of the use of political violence.

Research Design

To understand how societal level sex equality affects men and women's support for political violence, data are needed on individual attitudes about such violence. Thus, I employ data from the seventh wave of the World Values Survey (WVS), which contains information on a variety of political attitudes of individuals, including beliefs about the justifiability of political violence (Haerpfer et al. 2022). The seventh wave of the WVS contains information on over 94,000 respondents, across 64 countries/territories. The survey occurred worldwide from 2017-2022.

Dependent Variable

One of the questions on the WVS asks respondents, on a 10-point scale, if political violence is never justified (1), always justified (10), or somewhere in between. This is a helpful measure as it allows users to assess support for political violence across a variety of cultural and political contexts. While social desirability bias affects some individuals' willingness to express their true preferences about political violence, including in conflict zones (e.g., Leshem et al. 2020), the WVS still provides, to the best of my knowledge, the most comprehensive data on support for political violence across a relatively large number of countries.

At least some respondents in 63 of the 64 countries in the survey answered this question, while no answers to this question are available for any respondents in Turkey. In total, 89,604 respondents provided an answer that fell on the 10-point scale. The median response was that political violence is never justified, with approximately 68.43% of respondents answering this way. The mean response was about 1.99. **Figure 1** below shows the distribution of this variable.
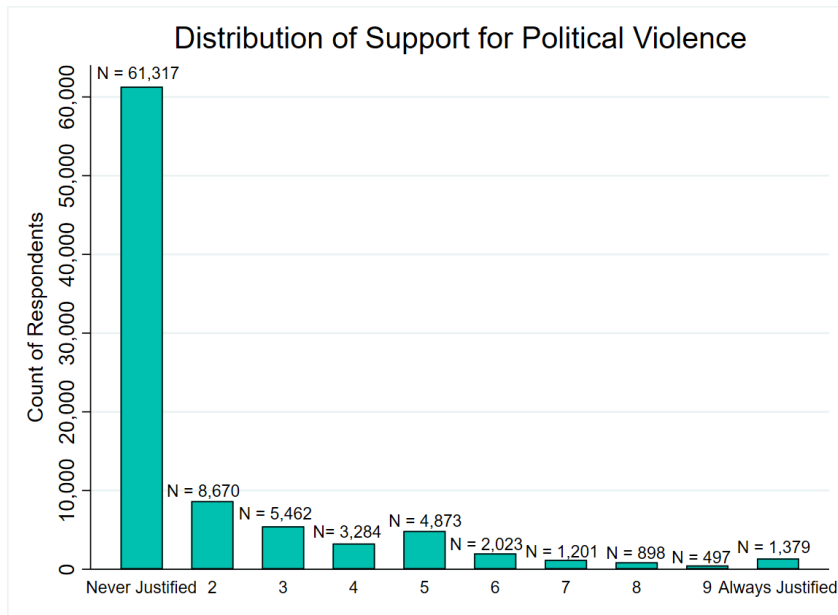
Figure 1: Distribution of Extent to Which Individuals Believe Political Violence is Justified

For the first few models, I employ the untransformed, 10-point ordinal measure of support for political violence as the dependent variable. I employ ordered logistic regression analysis for these models because the dependent variable is ordinal. However, similar to other studies that analyze survey data on support for political violence (e.g., Fair and Patel 2022; Fair and Sheperd 2006; Piazza 2021;), I also create a binary measure of whether respondents believe that political violence is *at least* sometimes justified (1) or is never justified (0). I do this because the distribution of the untransformed ordinal measure is heavily skewed and it allows me to compare individuals who never support political violence to those who at least sometimes do. I employ logistic regression analysis for these models because the dependent variable is dichotomous.

Independent Variables

The core, competing hypotheses are concerned with how the intersection of an individual's sex, and the level of sex equality of the society in which they live, affect their support for political violence. The Master Survey Questionnaire for the seventh wave of the WVS indicates

that enumerators were instructed to code respondents' sex by observation and that they were to *not* ask the respondents about it. Thus, using information from the WVS, I first create a binary measure of whether the respondent is coded as male, with female being the reference category (male and female is the language used in the WVS questionnaire). Approximately 47.15% of the sample were coded as male and 52.85% as female. I structure the variable this way because I am primarily interested in how societal sex equality affects men's support for political violence.

Second, I also need a measure of women's status in the countries in which the respondents reside. Specifically, I employ a measure of *women's political empowerment*, taken from the Variety of Democracy (V-Dem) dataset, and created by Sundström et al. (2017). Specifically, the creators of the variable define women's political empowerment as the "process of increasing capacity for women, leading to greater choice, agency, and participation in societal decision-making" (Sundström et al. 2017, p. 4).

This is an index measure, ranging from 0 to 1, which incorporate three equally weighted components: women's (1) civil liberties; (2) participation in civil society organization and open political discussions; and (3) representation of women in formal political positions (Coppedge et al. 2022; Sundström et al. 2017). Thus, this measure captures a variety of dimensions of women's empowerment in society, including political and civil society participation, making it a useful measure to evaluate the hypotheses with. Specifically, this variable measures women's political and social influence in society, which, as discussed above, are central concepts in much of the literature on sex equality and political violence.

There are many existing measures of women's status and there can be ambiguity as to which operationalizations are most theoretically appropriate to employ (Karim and Hill 2018; Cohen and Karim 2022). Again, the above measure captures a variety of aspects of women's integration

and influence in society, which is relevant to the argument that men's attitudes towards political violence will shift as norms about women's roles in society change. However, as will be discussed later, I employ a variety of alternative measures of women's status to assess the robustness of the findings.

The WVS contains many questions about respondents' attitudes towards women's participation in private and public political, social, and economic spheres. However, I do not employ any of these measures for the interactions because theoretically, I am primarily interested in how societal level sex equality affects men's and women's attitudes towards political violence differently (if at all). However, as a robust check, I employ measures of individual attitudes about women's empowerment for the interactions instead.

In every model, I examine the association between the interaction of an individual's sex and the level of women's empowerment in the country in which they live, with the extent to which they believe political violence is justified. To more accurately evaluate the conditional effect that women's status has on men's and women's support for political violence, I also plot the marginal effects (Brambor, Clark, and Golder 2006).

Control Variables

I also control for a variety of potentially confounding factors. I gradually add control variables to every model to ensure that missing data on certain variables are not driving the results. I begin by analyzing simple, bivariate associations. I then add in variables capturing key demographic characteristics of respondents and then other country-level indicators. In some models, I also include measures of several other individual-level indicators of political and social indicators. While these measures might also be endogenous with attitudes about political violence, I include them in some models to ensure that they do not confound the primary

14

relationship of interest. All the variables about attitudes and demographic characteristics were collected for the WVS. The country-level variables were collected by other sources but made directly available in the WVS dataset.

Following the precedent of previous studies (e.g., Fair and Shepherd 2006), I control for the continuous measure of the age of the respondent, as younger people are expected to be more likely to support political violence, and people might respondent to norms about sex equality differently, based partly on their age. I also include a 10-point ordinal measure of an individual's income, as income has been linked to support for political violence (e.g., Blair et al. 2013) and because of systematic income inequalities between men and women, which in turn, could also affect their support for political violence. I also control for an ordinal measure of an individual's educational attainment, as education is connected to engagement in political violence (e.g., Krueger and Maleckova 2002) and beliefs about sex equality (Kane 1995). I control for the religious beliefs of respondents, as they affect attitudes about political violence (e.g., Fair et al. 2012) and sex equality (Schnabel 2016). I include two separate, binary indicators. One measures whether the respondent identifies as a Christian and the other if they identify as a Muslim.

I also include country-level control variables in some of the models. First, I include a measure of the per capita GDP in the country of the respondent, which the WVS survey derives from the World Bank. I include the natural log of this variable. As noted above, economic development is associated with both attitudes about political violence as well as broader levels of sex equality. Second, I include the ordinal measure of how democratic or autocratic a country is, which the WVS takes from the Polity V dataset.

In two of the models, I include measures of individual attitudes about a variety of political and social issues that I expect to be associated with beliefs about sex equality and political

violence. All the following variables are taken from the WVS. I control for the extent to which

respondents believe that "men make better political leaders than women do," to separate the

effects of societal and individual-level beliefs about sex equality. Higher values of this variable

indicate greater *disagreement* with this statement. Thus, higher values correspond to greater

support for sex equality. Next, I include a binary indicator of whether respondents agree with

that sentiment "that most people can be trusted," as social trust is shaped by both individuals' sex

and their experiences with political violence (Phayal 2022).

Sex equality positively affects trust in government (Lee 2019) as well as individuals' beliefs

that they can pursue non-violence to foster political change. Thus, I control for the extent to

which individuals trust the government. I also control for individuals' views on immigrants'

effects on national development, as anti-immigrant attitudes are correlated with both sex equality

(Dancygier 2020) and political violence (McAlexander 2020). Democracy is also linked to both

sex equality (Inglehart et al. 2004) and political violence (see Chenoweth 2013). In response, we

include a measure of respondents' attitudes towards democracy. I include summary statistics in

the online appendix.

Results

The results for the tests with the ordinal dependent variable are displayed in **Table 1**, while

the results for the logistic regression models are presented in **Table 2**. In every model, I weight

the survey responses by demographic characteristics of the respondents. Specifically, I employ

the weight variable built into the WVS, which is based on the marginal distribution of the age,

sex, education, and region of the respondents.

Table 1: Conditional Effects of Women's Political Empowerment on Men's Support for Political Violence (Ordinal DV)

	(1)	(2)	(3)	(4)
Male	-0.499***	-0.442***	-0.595***	-0.701***
	(0.0836)	(0.0874)	(0.0960)	(0.102)
Women's Political Empowerment	0.330***	0.473***	0.262**	-0.0798
	(0.0745)	(0.0900)	(0.120)	(0.129)
Male*Women's Political Empowerment	0.812***	0.732***	0.909***	1.010***
	(0.107)	(0.112)	(0.122)	(0.130)
Age		-0.0117***	-0.0111***	-0.00982***
		(0.000529)	(0.000574)	(0.000607)
Income Level		0.0350***	0.0392***	0.0439***
		(0.00408)	(0.00428)	(0.00457)
Educational Attainment		-0.0209***	-0.0132***	0.000127
		(0.00435)	(0.00470)	(0.00499)
Christian		-0.212***	-0.220***	-0.147***
		(0.0187)	(0.0209)	(0.0223)
Muslim		-0.236***	-0.154***	-0.134***
		(0.0244)	(0.0248)	(0.0270)
per capita GDP (Logged)			-0.0370***	0.0246
			(0.0142)	(0.0154)
Polity			0.000261	0.00163
			(0.00175)	(0.00191)
Prefers Male Leaders				-0.108***
				(0.0106)
Trusts People				0.0385*
				(0.0222)
Confidence in Government				-0.0701***
				(0.0102)
Feelings Towards Immigrants				0.0409***
				(0.00881)
Support for Democracy				0.369***
				(0.0109)
Observations	85,946	82,375	74,394	66,808

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2: Conditional Effects of Women's Political Empowerment on Men's Support for Political Violence (Binary DV)

	(1)	(2)	(3)	(4)
Male	-0.506***	-0.453***	-0.603***	-0.714***
	(0.0907)	(0.0941)	(0.107)	(0.116)
Women's Political Empowerment	0.206**	0.340***	-0.284**	-0.771***
	(0.0808)	(0.0959)	(0.129)	(0.140)
Male*Women's Political Empowerment	0.825***	0.746***	0.919***	1.028***
	(0.115)	(0.120)	(0.135)	(0.146)
Age		-0.0104***	-0.0101***	-0.00877***
		(0.000545)	(0.000592)	(0.000629)
Income Level		0.0364***	0.0407***	0.0447***
		(0.00406)	(0.00428)	(0.00456)
Educational Attainment		-0.0122***	-0.00532	0.00792
		(0.00441)	(0.00478)	(0.00510)
Christian		-0.242***	-0.219***	-0.149***
		(0.0192)	(0.0212)	(0.0226)
Muslim		-0.227***	-0.122***	-0.0883***
		(0.0249)	(0.0253)	(0.0276)
per capita GDP (Logged)			0.0224	0.0924***
			(0.0143)	(0.0157)
Polity			-0.000268	0.000770
			(0.00182)	(0.00199)
Prefers Male Leaders				-0.101***
				(0.0106)
Trusts People				0.0431*
				(0.0230)
Confidence in Government				-0.0670***
				(0.0101)
Feelings Towards Immigrants				0.0496***
				(0.00898)
Support for Democracy				0.351***
				(0.0111)
Constant	-0.994***	-0.629***	-0.428***	-1.161***
	(0.0636)	(0.0794)	(0.119)	(0.131)
Observations	85,946	82,375	74,394	66,808

Standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

As the tables show, across all models using both the ordinal and dichotomous measures of political violence, the interaction between the respondent's sex and the level of women's empowerment in the country in which they reside has a positive and statistically significant association with support for political violence. I plot the marginal effects below so that the nature of the association can be more effectively interpreted (Brambor, Clark, and Golder 2006). Each figure is based on models with the full set of covariates, with all control variables held at their mean values, and with 90% confidence intervals.

Beginning with the results from the ordered logistic regression analysis, I plot the marginal effects for the outcomes representing both the lowest level of support for political violence (never justified) in **Figure 2** and the highest level (always justified) in **Figure 3**. Finally, **Figure 4** shows the marginal effects of the interaction for the logistic regression analysis.
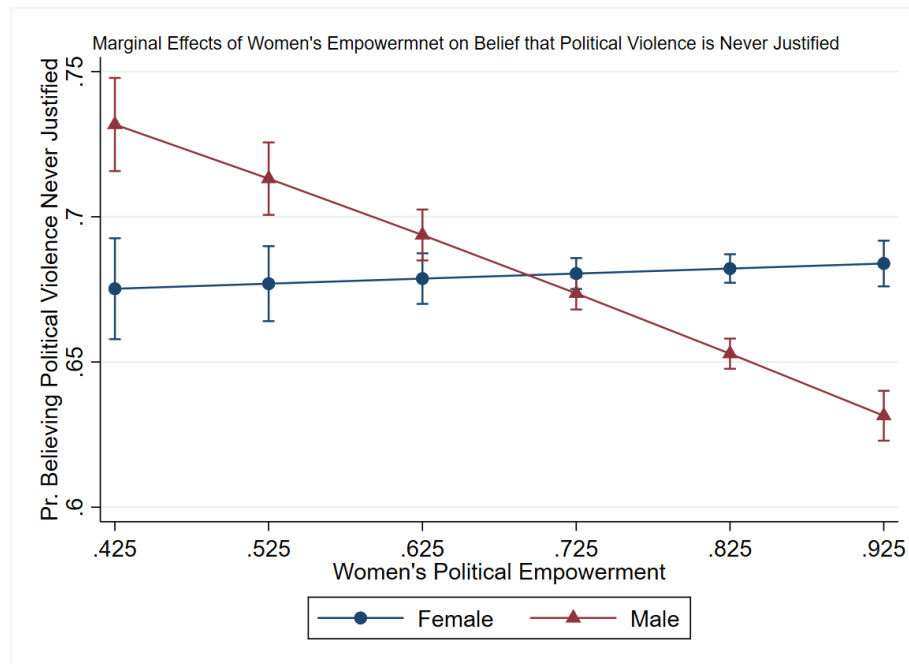

Figure 2: Marginal Effects of Women's Empowerment on the Probability of Believing that Political Violence is Never Justified
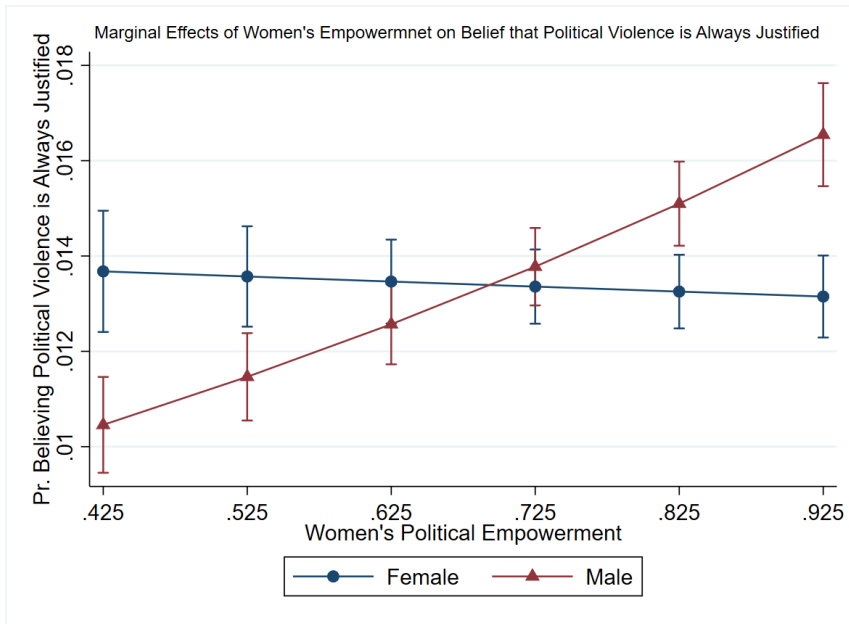
Figure 3: Marginal Effects of Women's Empowerment on the Probability of Believing that Political Violence is Always Justified
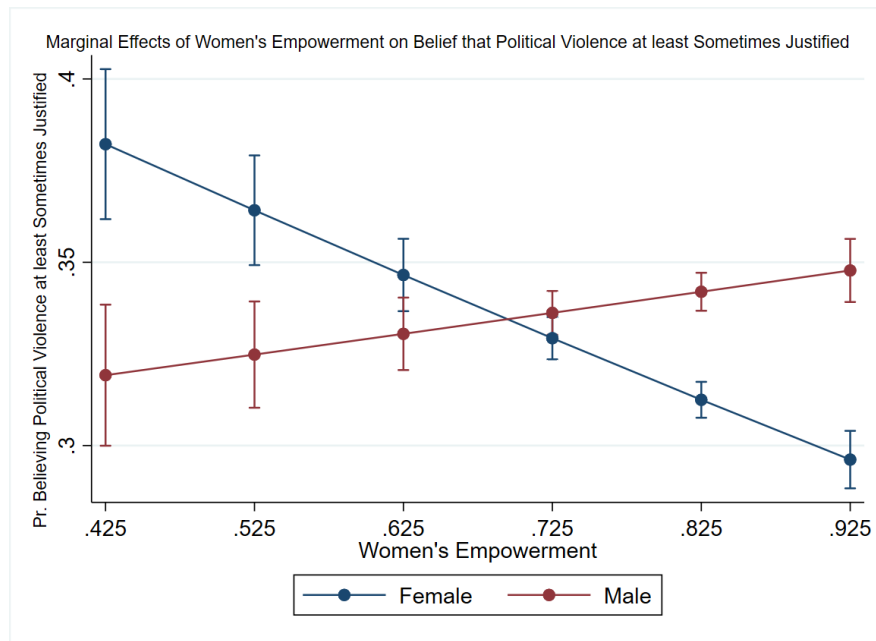

Figure 4: Marginal Effects of Women's Empowerment on the Probability of Believing that Political Violence is at least Sometimes Justified

The marginal effects plots highlight a few striking features of the relationship between an individual's sex and societal levels of sex equality. First, as sex equality in a country increases, men actually become more supportive of political violence. Indeed, the marginal effects plots show that as women's political empowerment increases, men are less likely to believe that political violence is never justified (**Figure 2**), and correspondingly, are more likely to believe that political violence is always justified (**Figure 3**), and at least sometimes justified (**Figure 4**). This provides support for the argument that increases in women's empowerment will lead to backlash from men, including men's higher support of political violence.

Second, the marginal effects plots also reveal interesting differences in the effects that sex equality has on women's and men's support for political violence. Across all the figures, we see that at lower levels of sex equality, women are more tolerant of the use of political violence than men. However, as sex equality increases, and women become less supportive of political violence in general, the sex gap in support for political violence flips. Indeed, at higher levels of women's empowerment, we see that men become more accepting of the use of political violence than women. This provides further support for the backlash hypothesis, as it shows the sex gap in support for political violence increases as women's empowerment increases.

Third, the marginal effects across all three figures are fairly small. Said differently, the substantive impact of societal sex equality on individuals is somewhat minimal. This might be driven, in part, by the fact that support for political violence is low among most respondents. However, given the emphasis placed on the relationship between sex equality and political violence in the literature, it is important to understand the substantive impact of women's empowerment on individual attitudes about political violence.

These findings provide an additional layer of evidence to existing work that finds increases in political violence following increases in women's status. Specifically, the results hopefully provide insight into how differences in societal sex equality affect individual preferences for political violence, including broader differences in the preferences of women and men. Relatedly, these results can help us better understand the mechanisms that drive the relationship between sex equality and political violence. For instance, these findings provide evidence against the argument that we (sometimes) observe less political violence in more sex egalitarian countries because men are less tolerant of such violence in these types of societies than men are in less egalitarian countries (e.g., Melander 2005).

Robustness Checks

I also conduct a series of alternative tests to assess the robustness of the findings. Specifically, I (1) examine the interaction between an individual's sex and their own beliefs about sex equality; (2) rerun the main analysis, employing several other country-level measures of women's status; (3) reconduct the main analysis, using support for terrorism and the dependent variable; (4) rerun the main analysis without weighting the responses by demographic characteristics of the respondents. The results are available in the online appendix.

Individual Attitudes About Sex Equality

I also consider the interaction between an individual's sex and their personal beliefs about sex equality. Again, in the main analysis, I instead look at the intersection of an individual's sex and sex equality in the society in which they live because this is a more theoretically appropriate test of the backlash hypothesis. However, here I examine how the interaction of an individual's sex, and their beliefs about sex equality, affect their tolerance of political violence, to try to parse

out whether men who hold more sex egalitarian views are still more supportive of political violence than women.

Specifically, using data from the WVS, I employ three different indicators of individual attitudes towards sex equality. The first question, which I use to try to measure beliefs about women's political rights, asks respondents the extent to which they agree with the sentiment that men make better political leaders than women, with higher values indicating greater disagreement. To capture attitudes towards women's economic rights, I employ data on responses about the extent to which individuals agree with the idea that when jobs are scarce, men are more deserving of them than women. Higher values of this variable also indicate stronger disagreement. Finally, to capture beliefs about women's social rights, I utilize the question about the degree of confidence respondents' have in women's organizations. To be consistent with the other measures, I invert the original scale so that higher values correspond to more confidence in the women's movement. Thus, higher values of these variables all capture greater support for women's rights.

I rerun the main analysis but examine the effects of the interaction between an individual's sex and their beliefs about sex equality. The full results are available in the appendix, but for the sake of space, I present marginal effects plots for the logistic regression models, with the full set of control variables, for reach of the three dependent variables (**Figures 5 – 7**).

The marginal effects plots reveal interesting aspects of the interaction between an individual's sex and their beliefs about sex equality. As they disagree more with the sentiments that men make better political leaders than woman (**Figure 5**), and that men are more deserving of scarce jobs than women (**Figure 6**), both men and women become less likely to believe that political violence is ever justifiable. However, as beliefs become more egalitarian on these

dimensions, women's tolerance for political violence declines more sharply than men's. Thus, attitudes about sex equality appear to have a greater effect on women's tolerance for political violence than they do for men.

However, individual confidence in women's organizations appears to have a different effect on men's and women's attitudes towards political violence. As **Figure 7** shows, when they have little confidence in women's organizations, men appear much more tolerant of political violence than women. However, as confidence in women's organizations increases, not only does support for political violence by both men and women decline, but the gap in their support also decreases. Thus, there is some evidence that at least some types of individual beliefs about sex equality might be associated with a narrowing of the sex gap in support for political violence.
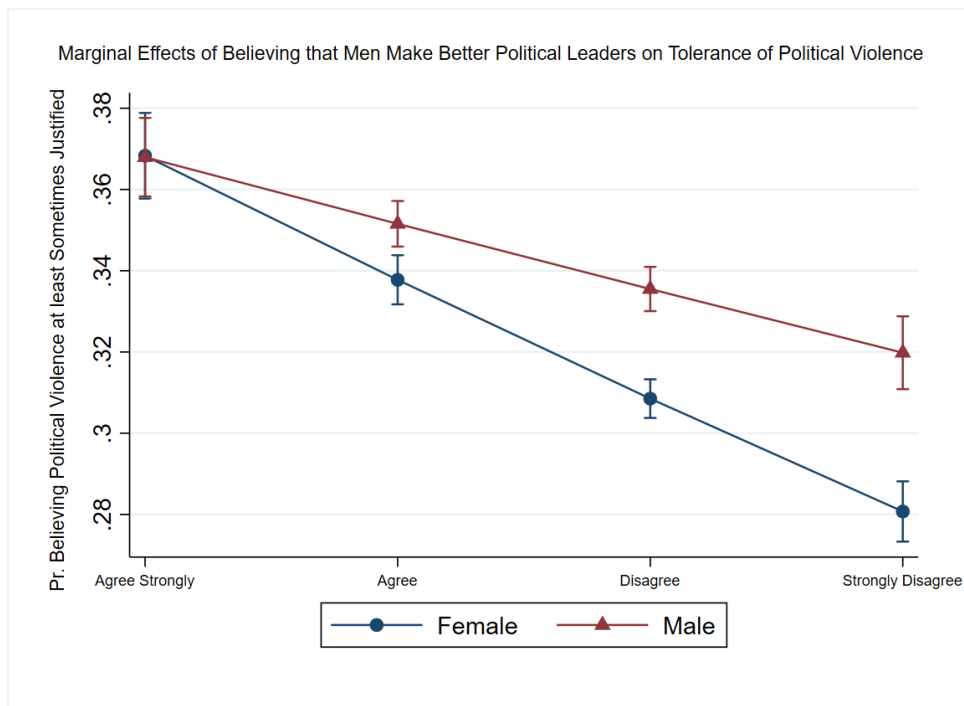

Figure 5: Marginal Effects of Believing that Men Make Better Political Leaders than Women on the Probability of Believing that Political Violence is at least Sometimes Justified
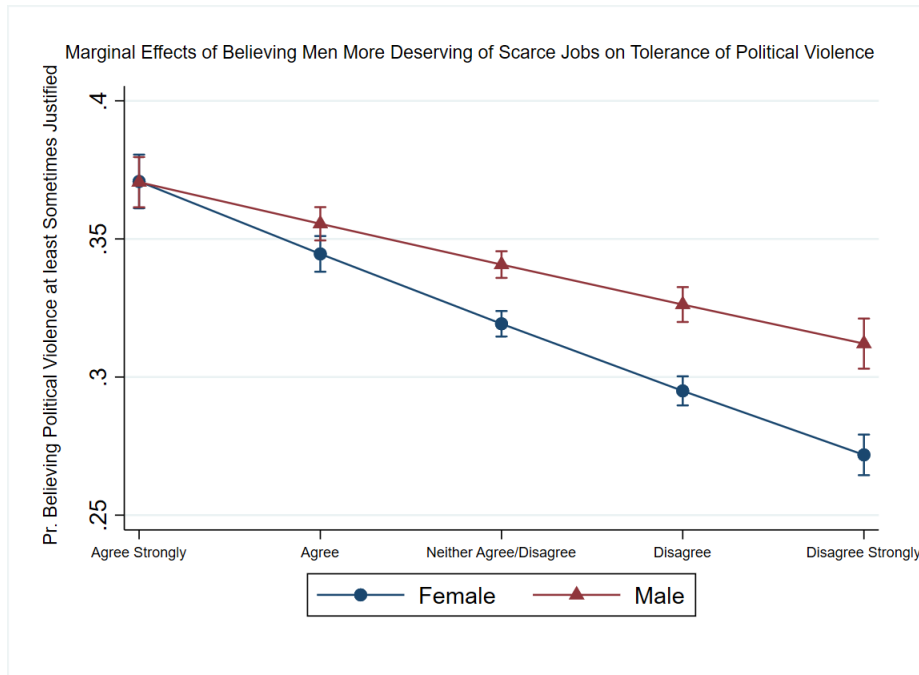
Figure 6: Marginal Effects of Believing that Men Make are More Deserving of Scarce Jobs than Women on the Probability of Believing that Political Violence is at least Sometimes Justified
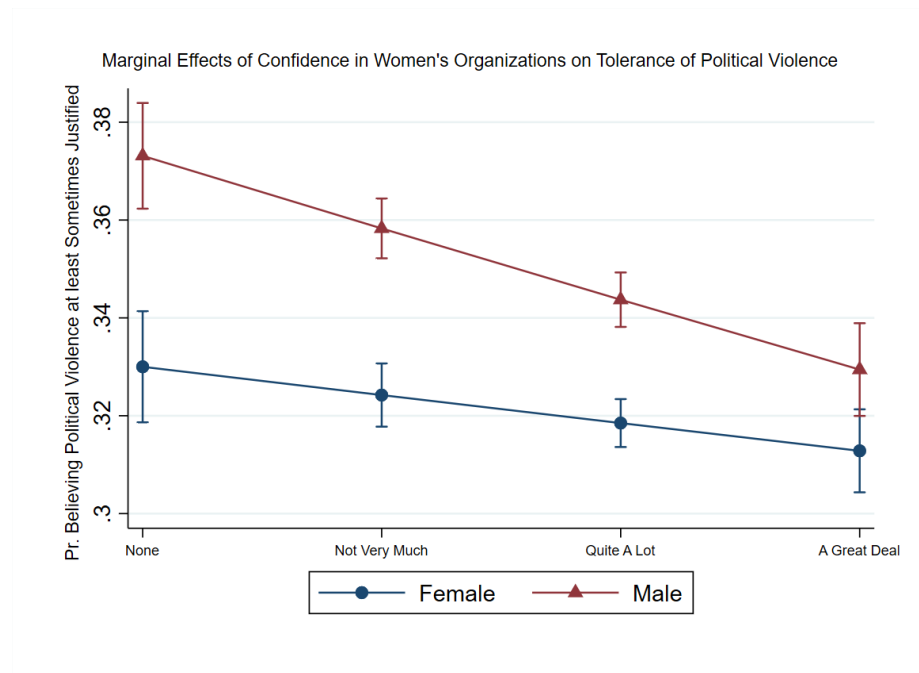

Figure 7: Marginal Effects of Confidence in Women's Organizations on the Probability of Believing that Political Violence is at least Sometimes Justified

Alternative Measures of Women's Empowerment

I employ a variety of alternative measures of women's status, given the aforementioned discussion that the large number of existing operationalizations capture very different aspects of women's status, and thus, might produce differing results (Karim and Hill 2018; Cohen and Karim 2022). These measures include the proportion of seats women hold in national parliaments, taken from the World Bank; sex parity in enrollment in primary and secondary school from the World Bank; and the Gender Development Index and Gender Inequality Index measures, created by the United Nations Development Programme. All these variables are originally derived from various sources but are all available in the seventh wave of the WVS.

Across all models, I continue to find support for the backlash hypothesis. Specifically, the evidence continues to suggest that men become more tolerant of political violence than women as sex equality increases. Of note, however, there is less consistent evidence of women being significantly more tolerant of political violence at lower levels of sex equality, as the sex gap is not always significant at these lower levels of equality. However, I still find consistent evidence that men's tolerance of political violence, overall, and relative to women, increases with growing levels of societal sex equality.

Support for Terrorism

The WVS also asks respondents if terrorism as a political, ideological, or religious mean is never justifiable, always justifiable, or somewhere in between. It is useful to assess whether the interaction between an individual's sex and sex equality in the society in which they reside has a similar effect on support for terrorism as it does support for political violence. I rerun the main analysis, using both the untransformed, 10-point ordinal indicator of the extent to which individuals believe terrorism is justified, as well as a binary indicator of whether they think it is

at least sometimes justified (1) or never justified (0). All other aspects of the model specification from the main analysis remain the same. The results remain consistent. Men not only become more supportive of terrorism as societal levels of sex equality increase, but they only become more supportive of such violence, *relative* to women, at higher levels of sex equality. Thus, the results do not appear to be driven by differences in perceptions of political violence and terrorism.

Unweighted Responses

As a final robustness check, I rerun the main analysis, without weighing the survey responses by the demographic characteristics of the respondents to ensure that this choice was not driving the results. The results remain consistent with the findings from the main analysis. Thus, I continue to find strong support for the backlash hypothesis.

Discussion

What dynamics are driving there to be more support for the backlash hypothesis than the ameliorative hypothesis? Relatedly, why is the prior literature divided on this issue? There are several factors to consider, many of which revolve around the interplay between broader societal levels of sex equality and individual attitudes about sex equality.

While men might be more likely to hold egalitarian views in societies with higher levels of women's empowerment, other men in these countries will still harbor more sexist views, and consequently, will be quite resistant to such changes in women's status, driving them to be more likely to endorse political violence. Another way to think of this is that men with misogynistic views might be more supportive of violence in more sex egalitarian countries, than men with such views in countries with lower women's status, because the former feels more threatened

than the latter. Thus, rather than men with sexist beliefs being adamantly opposed to violence in more traditional societies, it is likely the case that men with more sexist attitudes simply, on average, endorse violence more strongly in contexts in which they perceive their power to be eroding (i.e., in societies with higher levels of sex equality).

Relatedly, it is also worth considering the value of violence to men with differing views of sex equality in more sex egalitarian societies. Specifically, men with more sexist views might have stronger overall feelings about political violence than men with more egalitarian views. In more egalitarian societies, men with sexist attitudes might have much stronger feeling about political violence than men with more sex egalitarian views, as the former perceive their identities and livelihoods to be under threat. In contrast, men with more sex egalitarian views might be less supportive of violence, but their feelings on the subject are less intense because their perceived stakes are not as high. Put differently, higher levels of sex equality might increase some men's support for political violence and lower it for others, but those who view women's empowerment as a threat react more strongly because they believe there is more at stake. Furthermore, men with sexist attitudes benefit more from the status quo in less egalitarian societies, and thus, have less reason to endorse political violence.

In sum, men who are more resistant to increases in women's empowerment (i.e., men with more sexist views) have greater incentive to endorse political violence in countries with higher sex equality, than men with sexist views in less egalitarian societies. This is because the former feels like they have more to lose than the latter. Furthermore, when comparing men within in more sex egalitarian societies, those who oppose women's empowerment might have stronger beliefs about violence than those that support women's empowerment. This is because those opposed to women's empowerment feel that their core identities and material privileges are

being challenged, while men in these countries that supporter greater women's rights have less at stake. Said differently, men who oppose women's empowerment have greater incentive to use and/or endorse violence than men with different beliefs about sex equality and men in less egalitarian societies.

Given these results, why do some studies still find robust evidence that higher levels of sex equality are associated with political violence? One possibility is that a variety of mechanisms proposed in the prior literature are driving these previous findings, rather than it being the case that men in more egalitarian societies are less likely to support violence.

As noted above, in more sex egalitarian countries, women are more likely to both hold political office and have greater overall political influence, resulting in these societies become more pacific. This means both that there will be more women directly making policy and that men with political power will be more responsive to the political power of women, who are more likely to advocate for peaceful solutions to disputes (e.g., Caprioli 2000, 2003). Future work should continue to critically examine the mechanisms linking women's status to political violence (Cohen and Karim 2022).

Conclusion

Decades of research have shown that there is a significant gap in men's and women's support for political violence. However, scholars are more divided on the question of how societal levels of women's empowerment affect the size of this gap. Adherents of the ameliorative hypothesis argue that men are socialized differently in more egalitarian societies, causing them to be less supportive of political violence, which narrows the sex gap in support for such violence.

However, advocates of the backlash hypothesis posit that as women's status increases, men become more supportive of the use of political violence because they fear losing their dominance in society, they resent changing social roles, and they want to maintain the subordination of women. The empirical record concerning these competing hypotheses is divided.

Using data on over 89,000 respondents, across 63 countries, from the World Values Survey, I examine how the interaction between an individual's sex and women's status in the countries they reside in, affect their support for political violence. I find that sex gap increases in more sex egalitarian societies, as men become more supportive of political violence, providing evidence for the backlash hypothesis. Such evidence allows us to better understand how men's and women's individual attitudes about political violence are shaped by the societies they live in.

These findings have important implications for both our understanding of the factors that drive the sex gap in support for political violence, as well the mechanisms that drive the relationship between sex equality and overall patterns of political violence. As scholars have noted before, there are significant policy implications based on the evidence of backlash to women's empowerment, as it suggests that as important progress continues to be made towards women's status in some areas, they become more vulnerable in others, necessitating further policy responses (Matfess et al. 2023). Thus, it unfortunately appears that women's empowerment is associated with a widening of the sex gap in support for political violence.

References

Anduiza, Eva and Guillem Rico. 2022. "Sexism and the Far-Right Vote: The Individual Dynamics of Gender Backlash." *American Journal of Political Science*, DOI: 10.1111/ajps.12759

Berry, Marie E. 2017. "Barriers to women's progress after atrocity: Evidence from Rwanda and Bosnia-Herzegovina." *Gender & Society 31* (6): 830-853.

Bjarnegård, Elin, Karen Brounéus, and Erik Melander. 2017. "Honor and political violence: Micro-level findings from a survey in Thailand." *Journal of Peace Research 54* (6): 748-761.

Bjarnegård, Elin, Anders Engvall, Srisompob Jitpiromsri, and Erik Melander. 2023. "Armed Violence and Patriarchal Values: A Survey of Young Men in Thailand and Their Military Experiences." *American Political Science Review 117* (2): 439-453.

Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding interaction models: Improving empirical analyses." *Political Analysis 14* (1): 63-82.

Caprioli, Mary. 2000. "Gendered conflict." *Journal of Peace Research 37* (1): 51-68.

Caprioli, Mary. 2003. "Gender equality and state aggression: The impact of domestic gender equality on state first use of force." *International Interactions 29* (3): 195-214.

Caprioli, Mary. 2005. "Primed for violence: The role of gender inequality in predicting internal conflict." *International Studies Quarterly 49* (2): 161-178.

Caprioli, Mary and Mark A. Boyer. 2001. "Gender, violence, and international crisis." *Journal of Conflict Resolution 45* (4): 503-518.

Chenoweth, Erica. 2013. "Terrorism and democracy. *Annual Review of Political Science 16*: 355-378.

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.

Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Michael Bernhard, Agnes Cornell, M. Steven Fish, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Sandra Grahn, Allen Hicken, Katrin Kinzelbach, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Pamela Paxton, Daniel Pemstein, Johannes von Römer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Eitan Tzelgov, Luca Uberti, Yi-ting Wang, Tore Wig, and Daniel Ziblatt. 2022. "V-Dem Codebook v12" Varieties of Democracy (V-Dem) Project.

Dancygier, Rafaela. 2020. "Another Progressive's Dilemma: Immigration, the Radical Right & Threats to Gender Equality. *Daedalus 149* (1): 56-71.

Díaz, Pablo Castillo and Nahla Valji. 2019. "Symbiosis of misogyny and violent extremism." *Journal of International Affairs 72* (2): 37-56.

Eichenberg, Richard C. 2003. "Gender differences in public attitudes toward the use of force by the United States, 1990-2003." *International Security 28* (1): 110-141.

Eichenberg, Richard C. 2016. "Gender difference in American public opinion on the use of military force, 1982–2013." *International Studies Quarterly 60* (1): 138-148.

Eichenberg, Richard C. and Richard J. Stoll. 2017. "The acceptability of war and support for defense spending: Evidence from fourteen democracies, 2004–2013." *Journal of Conflict Resolution 61* (4): 788-813.

Fair, C. Christine and Bryan Shepherd. 2006. "Who supports terrorism? Evidence from fourteen Muslim countries." *Studies in Conflict and Terrorism 29* (1): 51-74.

Fair, C. Christine, Neil Malhotra, and Jacob N. Shapiro. 2012. "Faith or doctrine? Religion and support for political violence in Pakistan." *Public Opinion Quarterly 76* (4): 688-720.

Fair, C. Christine and Parina Patel. 2022. "Support for domestic Islamist terrorism in Bangladesh: insights from a novel survey." *Politics and Religion 15* (4): 673-699.

Faludi, Susan. 1992. *Backlash: The undeclared war against American women*. London: Vintage.

Fite, David, Marc Genest, and Clyde Wilcox. 1990. "Gender differences in foreign policy attitudes: A longitudinal analysis." *American Politics Quarterly 18* (4): 492-513.

Gallagher, Nancy. 1993. "The gender gap in popular attitudes toward the use of force." In *Women and the use of military force*, edited by Ruth H. Howes and Michael R. Stevenson, 23-27. Boulder, CO: Lynne Rienner.

Goldstein, Joshua S. 2003. *War and gender: How gender shapes the war system and vice versa*. Cambridge: Cambridge University Press.

Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano J., M. Lagos, P. Norris, E. Ponarin & B. Puranen (eds.). 2022. World Values Survey: Round Seven - Country-Pooled Datafile Version 5.0. Madrid, Spain & Vienna, Austria: JD Systems Institute & WVSA Secretariat. doi:10.14281/18241.20

Håkansson, Sandra. 2021. "Do women pay a higher price for power? Gender bias in political violence in Sweden." *The Journal of Politics 83* (2): 515-531.

Harris, Cameron and Daniel James Milton. 2016. "Is standing for women a stand against terrorism? Exploring the connection between women's rights and terrorism." *Journal of Human Rights 15* (1): 60-78.

Inglehart, Ronald, Pippa Norris, and Christian Welzel. 2003. Gender equality and democracy. In *Human values and social change* (pp. 91-115). Brill.

Huber, Laura. 2019. "When civilians are attacked: gender equality and terrorist targeting." *Journal of Conflict Resolution 63* (10): 2289-2318.

Hudson, Valerie M., Mary Caprioli, Bonnie Ballif-Spanvill, Rose McDermott, and Chad F. Emmett. 2009. "The heart of the matter: The security of women and the security of states." *International Security 33* (3): 7-45.

Hudson, Valerie M. and Hilary Matfess. 2017. "In plain sight: The neglected linkage between brideprice and violent conflict." *International Security 42* (1): 7-40.

Hudson, Valerie M., and Kaylee B. Hodgson. 2022. "Sex and terror: Is the subordination of women associated with the use of terror?." *Terrorism and Political Violence 34* (3): 605-632.

Kane, Emily W. 1995. "Education and beliefs about gender inequality." *Social Problems 42* (1): 74-90.

Karim, Sabrina, and Daniel Hill. 2018. "The study of gender and women in cross-national political science research: Rethinking concepts and measurement." In *Working paper presented at the Annual Convention of the International Studies Association*.

Kattelman, Kyle and Courtney Burns. 2022. "Unpacking the concepts: Examining the link between women's status and terrorism." *Journal of Peace Research*, DOI: 00223433221095886.

Krueger, Alan B. and Jitka Maleckova. 2002. "Education, poverty, political violence and terrorism: Is there a causal connection?." *National Bureau of Economic Research*.

Krook, Mona Lena. 2015. "Empowerment versus backlash: gender quotas and critical mass theory." *Politics, Groups, and Identities 3* (1): 184-188.

Krook, Mona Lena, and Juliana Restrepo Sanín. 2016a. "Gender and political violence in Latin America. Concepts, debates and solutions." *Política y gobierno 23* (1): 127-162.

Krook, Mona Lena, and Juliana Restrepo Sanín. 2016b. "Violence against women in politics. A defense of the concept." *Política y gobierno 23* (2): 459-490.

Krook, Mona Lena, and Juliana Restrepo Sanín. 2020. "The cost of doing politics? Analyzing violence and harassment against female politicians." *Perspectives on Politics 18* (3): 740-755.

Lee, Yunsoo. 2019. "Gender equity and trust in government: Evidence from South `Korea." *Sexuality, Gender & Policy 2* (2): 132-142.

Leshem, Oded Adomi, Ismail Nooraddini, and James C. Witte. 2020. "Surveying societies mired in conflict: Evidence of social desirability bias in Palestine." *International Journal of Public Opinion Research 32* (1): 132-142.

Lizotte, Mary-Kate. 2019. "Investigating the origins of the gender gap in support for war." *Political Studies Review 17* (2): 124-135.

Mansbridge, Jane, and Shauna L. Shames. 2008. "Toward a theory of backlash: Dynamic resistance and the central role of power." *Politics & Gender 4* (4): 623-634.

Matfess, Hilary, Roudabeh Kishi, and Marie E. Berry. 2023. "No safety in numbers: political representation and political violence targeting women in Kenya." *International Feminist Journal of Politics 25* (3): 506-528.

McAlexander, Richard J. 2020. "How are immigration and terrorism related? An analysis of right-and left-wing terrorism in Western Europe, 1980–2004." *Journal of Global Security Studies 5* (1): 179-195.

Melander, Erik. 2005. "Gender equality and intrastate armed conflict." *International Studies Quarterly 49* (4): 695-714.

Mills, Colleen E., Margaret Schmuhl, and Joel A. Capellan. 2020. "Far-right violence as backlash against gender equality: A county-level analysis of structural and ideological gender inequality and homicides committed by far-right extremists." *Journal of Crime and Justice 43* (5): 568-584.

Mueller, John E. 1973. *War, presidents, and public opinion*. New York: John Wiley.

Perliger, Arie. 2012. "Challengers from the Sidelines." *West Point, NY: Combating Terrorism Center*.

Phayal, Anup. 2022. "Should I Signal Trust? Effect of Terrorism on Interpersonal Trust in Post-Conflict and Non-Post-Conflict Countries." *Terrorism and Political Violence*, 1-19.

Piazza, James A. 2017. "The determinants of domestic right-wing terrorism in the USA: Economic grievance, societal change and political resentment." *Conflict Management and Peace Science 34* (1): 52-80.

Piazza, James A. 2021. "'Nondemocratic Islamists' and support for ISIS in the Arab World." *Behavioral Sciences of Terrorism and Political Aggression 13* (2): 95-114.

Robison, Kristopher K., Edward M. Crenshaw, and J. Craig Jenkins. 2006. "Ideologies of violence: The social origins of Islamist and leftist transnational terrorism." *Social Forces 84* (4): 2009-2026.

Saiya, Nilay, Tasneem Zaihra, and Joshua Fidler. 2017. "Testing the Hillary doctrine: Women's rights and anti-American terrorism." *Political Research Quarterly 70* (2): 421-432.

Salman, Aneela. 2015. "Green houses for terrorism: measuring the impact of gender equality attitudes and outcomes as deterrents of terrorism." *International Journal of Comparative and Applied Criminal Justice 39* (4): 281-306.

Sanín, Juliana Restrepo. 2020. "Violence against women in politics: Latin America in an era of backlash." *Signs: Journal of Women in Culture and Society 45* (2): 302-310.

Schnabel, Landon. 2016. "Religion and gender equality worldwide: A country-level analysis." *Social Indicators Research 129*: 893-907.

Sundström, Aksel, Pamela Paxton, Yi-ting Wang, and Staffan I. Lindberg. 2017. "Women's political empowerment: A new global index, 1900–2012." *World Development 94*: 321-335.

Tessler, Mark and Ina Warriner. 1997. "Gender, feminism, and attitudes toward international conflict: Exploring relationships with survey data from the Middle East." *World Politics 49* (2): 250-281.

Tickner, J. Ann. 1992. *Gender in International Relations*. New York: Columbia University Press.

Tickner, J. Ann. 2001. *Gendering World Politics*. New York: Columbia University Press.

Welch, Susan and Sue Thomas. 1988. "Explaining the gender gap in British public opinion." *Women & Politics 8* (3-4): 25-44.

Wilcox, Clyde, Lara Hewitt, and Dee Allsop. 1996. "The gender gap in attitudes toward the Gulf War: A cross-national perspective." *Journal of Peace Research 33* (1): 67-82.

Wood, Reed and Mark D. Ramirez. 2018. "Exploring the microfoundations of the gender equality peace hypothesis." *International Studies Review 20* (3): 345-367.