

Guardians of the State: How Physical Insecurity Drives Women's Participation in Pro-Government Militias

Michael J. Soules, Ph.D.

University of Houston

msoules@uh.edu

Shelby Davis

University of Houston

Olayinka Otesanya

University of Houston

Brandon Bolte, Ph.D.

University of Illinois Springfield

Abstract:

What drives women's participation in pro-government militias? Anecdotal examples of women's participation in militias in places like Indonesia and Iran is particularly puzzling, as it involves female militia members violently repressing other women. This is puzzling both because to uphold traditional gender norms, regimes and their militias violate traditional gender norms by recruiting women; and because women in these militias are contributing to the maintenance of a status quo that largely makes society unsafe for women. In response to these puzzles, we argue that high levels of physical insecurity for women increase both the demand militias have for women, and the supply of women willing to join. Regimes and their militias in such societies can recruit women to (1) mitigate the reputational costs of poor women's security; (2) uphold traditional gender norms; and (3) more effectively police other women. Such physical insecurity can also drive women to join militias for protection. To evaluate this argument, we collect novel data on 504 pro-government militias that were active across the world at some point between 1981 and 2014. We find evidence that women's participation in pro-government militias is much more likely in societies with very low levels of physical security for women.

Following the death of Mahsa Amini, a 22-year-old who was arrested in Iran for improperly wearing her hijab, massive protests, largely led by women, arose across the country (Vohra 2022). Women have continued leading this resistance, despite significant repression from the state (Vohra 2022). Female members of the Basij, an Iranian civilian militia that engages in both morality policing (e.g., enforcing an Islamic dress code) and repression of dissidents, has been instrumental in both repressing recent women's protests, as well as enforcing a social order that disproportionately affects women (e.g., Golkar 2013; Vohra 2022). Women's perpetration of repression against other women is not idiosyncratic in Iran, as some estimates indicate that upwards of 40% of Basij members are women (Vohra 2022) and female Basij have been a central tool of the regime's efforts to repress women (e.g., Golkar 2013).

The Basij is far from the only pro-government militia that is used to repress and police women and women's movements. These militias are not part of governments' regular forces but have been instrumental in undermining women's movements and enforcing traditional gender norms (e.g., Golkar 2013; Sadeghi 2009). Such militias include the Komiteh (Islamic Revolutionary Committees) in Iran (Marlowe 2000); Wilayatul Hisbah in Indonesia (Hasni 2020); the Kadyrovtsy in Chechnya (Human Rights Watch 2011), the Young Pioneers in Malawi (Mwanjawala 2020); the Supreme Security Committee in Libya (Wehrey 2014); the Committee for the Promotion of Virtue and the Prevention of Vice in Saudi Arabia (Takao 2021); and the People's Police in Sudan (Human Rights Watch 1996), among others. Like the Basij, some (but not all) of these militias also recruit women. These types of militias often engage in numerous abuses against women, including killings, sexual violence, beatings, and imprisonment (e.g., Golkar 2013; Hasni 2020; Human Rights Watch 2011, 2013).

The subset of these militias that recruit women raise a couple of interesting puzzles. First, why do pro-government militias (henceforth PGMs), who often contribute to maintaining a status quo that represses women, recruit women to engage in violence, when doing so defies traditional gender norms that they are trying to uphold (e.g., Bloom 2011; Davis 2013)? Second, why are some women willing to participate in the repression of women and the maintenance of a status quo that largely disadvantages them and makes women unsafe?

To address these puzzles, we argue that low levels of physical security for women both increases the demand that PGMs have for women and increases the supply of women who are willing to join these organizations. We borrow Karim and Hill's (2018, p. 15) definition of women's security, which is:

“safety from chronic threats such as hunger, disease and repression and it means protection from sudden and hurtful disruptions in daily life whether in homes, in jobs or in communities. It means freedom from pervasive threats to women's safety or lives, or protection for women from threats to survival, daily life, and dignity.”

We expect that high levels of women's *insecurity* increase PGM's demand for female combatants for at least three reasons. First, the incorporation of women into PGMs can be used to help offset the reputational costs associated with regimes and their militias failing to protect and/or actively degrading women's security. Second, female combatants can be used by PGMs to enforce traditional gender norms and highlight how they believe “ideal women” are supposed to behave. Third, PGMs can use women to expand their access to social networks to more effectively monitor and punish women. We also posit that threats to women's physical security increases the supply of women willing to join PGMs in combat roles. This is because membership in PGMs can serve a source of protection for women, who are particularly

vulnerable when overall physical security for women is low. Furthermore, it is possible that as women's physical security degrades, the probability they are incorporated into PGMs increases in a substantial, non-linear fashion, as the incentives to recruit women, and for them to join, increase substantially.

To evaluate these arguments, we gathered data on women's incorporation into PGMs. Specifically, using the sample of groups from the Pro-Government Militia Database, version 2.0 (PGMD 2.0), we built variables capturing women's participation in non-combat, combat, and leadership roles in 504 PGMs, that were active across the world, at least at some point between 1981 and 2014. We combine these data with Karim and Hill's (2018) measure of women's security. We find a statistically significant, non-linear association between women's physical security and the incorporation of women into combat roles. Specifically, we find that the probability that women are recruited into combat roles increases substantially at very low levels of women's physical security, but that this probability begins to flatten out as women's security improves.

We seek to make at least two major contributions with this manuscript. First, we make a theoretical contribution by discussing the ways in which lower levels of some types of women's status (i.e., physical security) can actually promote women's participation in certain forms of political violence (i.e., PGMs). This is in contrast to much of the existing literature which examines how higher levels of women's empowerment tend to be associated with more significant involvement of women in terrorist organizations, rebel groups, and militaries of countries (Bloom 2011; Cunningham 2003; Dalton and Asal 2011; Fitriani et al. 2016; Loken and Matfess 2024; Thomas and Wood 2017).

Second, we make an empirical contribution by gathering novel data on a variety of forms of women's participation in PGMs. High quality datasets exist on other forms of women's participation in political violence, but capture women's incorporation into other types of armed actors, including terrorist organizations (Dalton and Asal 2011); rebel movements (Loken and Matfess 2024; Thomas and Wood 2017); and women in the official armed forces of countries (Fitriani et al. 2016). Thomas and Bond (2015) provide high quality data on women's participation in violent political organizations (VPOs), which includes some militias aligned with governments. However, only some of the groups in their data are pro-government militias and the dataset covers just 19 African countries. Thus, our dataset can serve as a resource for scholars who are interested in studying the causes and consequences of women's participation for a large number of PGMs that are active across the world. Furthermore, many of these aforementioned datasets cover armed groups that are opposed to the state. However, because such groups fight to change the status quo, while PGMs largely serve to maintain the status quo, women's participation might not be the same across these different types of organizations (Alison 2004). Thus, it is important to also have data that capture women's engagement in PGMs.

Relatedly, our data show the prevalence of women's participation in militias. Indeed, of the 504 militias in our dataset, we found evidence of 186 (36.9%) recruiting women into at least some role. **Figure 1** displays the global distribution of PGMs that recruit women. Specifically, it shows the proportion of PGMs in a country (ranging from 0 to 1) that recruit women into at least some role, with countries in gray having no PGMs in the sample. As the figure shows, the extent to which women participate in PGMs varies significantly across the world. Thus, given the prevalence of women in PGMs, as well as the cross-national variation in their participation, it is important for scholars to understand this phenomenon.

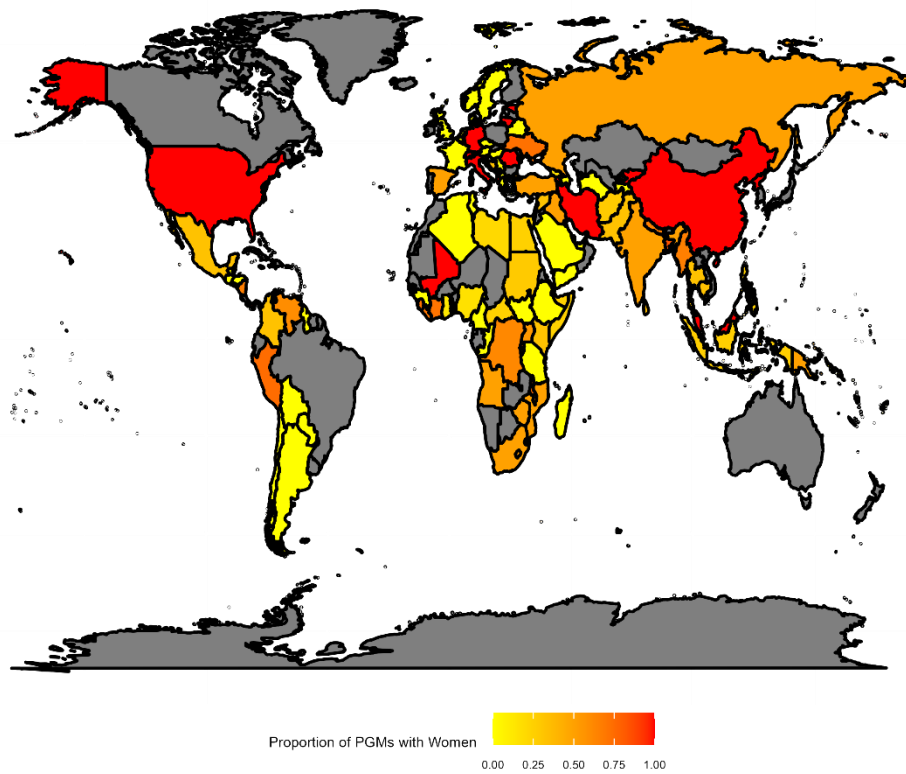


Figure 1: Global Variation in Women’s Participation in PGMs

The rest of the manuscript is laid out as follows: first, we review the literature on women’s participation in political violence and the organizing of PGMs to further highlight the gaps in existing research we are filling. We then develop a theory about how women’s physical security affects the demand for, and supply of, female combatants. Next, we discuss the novel data collected and the research design. This is followed by a presentation of their results and discussion of their implications. We also conduct a variety of alternative tests to assess the robustness of the findings. We conclude by discussing potential avenues for future research.

Literature Review

Women's Participation in Political Violence

An extensive literature examines women's participation in political violence. This includes both demand-side dynamics, which are the factors that affect armed groups' desire to incorporate women, as well as supply-side dynamics, which are factors that drive women to want to join armed movements (e.g., Thomas and Bond 2015). Both dynamics have been studied at the country/societal and armed group-level.

At the societal-level, scholars are particularly interested in how women's empowerment affects the supply of, and demand for, women in combat roles. This is largely based on the premise that armed groups often replicate gender hierarchies that are present when their societies are in peacetime (e.g., Reif 1986; Thomas and Wood 2018). Given that women's participation in combat defies traditional gender roles, we should be more likely to observe this phenomena in more gender egalitarian countries, where deviations from traditional gender roles are more accepted (Thomas and Wood 2018).

Building off this premise, Thomas and Wood (2018) identify three mechanisms by which higher levels of women's status lead to greater incorporation of women into combat roles. First, the economic and educational opportunities afforded to women in egalitarian societies means that they are more likely to have the types of skill sets that armed group desire when seeking recruits. Indeed, militant groups often attempt to recruit individuals based on their perceived qualifications, such as level of education (Bueno de Mesquita 2005).

A second mechanism identified by Thomas and Wood is the willingness of men to accept female combatants. In more egalitarian countries, both male supporters and male members are less likely to push back against women's incorporation into non-traditional roles, such as combat

positions (e.g., O'Rourke 2009). Finally, when women are better integrated into political and economic institutions, they are more likely to be exposed to political networks connected to rebel organizations (Thomas and Wood 2018). These networks, which women often play a significant role in, are vital in militant groups' efforts to mobilize members (Kampwirth 2002; Parkinson 2013). Relatedly, Thomas and Wood (2018) also posit that higher levels of women's status increases the supply of female combatants because greater access to political and economic institutions grants women skills and knowledge, which increases their willingness to engage in political activities, including armed activities.

Characteristics of armed groups also affect the probability that they recruit women. For instance, ideologies that focus on gender equality, such as Marxist and other left-wing ideologies, are more likely to facilitate the recruitment of women. In contrast, ideologies that promote strict gender roles, such as radical Islamist ideologies, will be associated with a decreased probability of the recruitment of women into roles that defy traditional gender norms (e.g., Henshaw 2016; Wood and Thomas 2017). Similarly, women might be more motivated to join an armed group that fights for gender equality than one that does not (i.e., increasing the supply of female combatants) (Thomas and Bond 2015).

Armed groups that are more desperate and struggling against opposition forces are also more likely to recruit women. Indeed, female combatants can be conceptualized as a "tactical innovation," for armed organizations, as gender stereotypes about who participates in political violence often lead security forces to not take the threat of female militants seriously, providing them better access to targets (e.g., Bloom 2011; Cunningham 2003; Thomas 2021). Even groups with ideologies that are opposed to women filling non-traditional gender roles are more likely to accept women in combat roles later in these groups' lifespans when they are more desperate

(O'Rourke 2009). As a final example, militant groups can recruit women for propaganda purposes. This is because female militants tend to receive far more media attention than their male counterparts because the former is more surprising to the general public (e.g., Bloom 2011; Davis 2013). Furthermore, propaganda about female combatants can inspire other women, and shame men, into joining (e.g., Bloom 2011; Davis 2013). External audiences are also more likely to perceive rebels as legitimate when they recruit women (Mankein and Wood 2020).

The supply of women willing to join militant organizations can also be studied at the individual level. This includes research on women taking up arms for a variety of reasons, such as the desire for political change, personal motives like revenge, and the desire for safety (Bloom 2011; Kampwirth 2002; Nacos 2005; Thomas and Bond 2015; Viterna 2006, 2013). Scholars note that while there are some important differences, male and female militants often have similar motivations to each other (Thomas and Bond 2015; Loken and Zelenz 2018).

Although research on women's participation in armed groups that oppose a regime is proliferating, women often also join non-state militia organizations that *support* the government, either against insurgent forces during a civil war or as part of the unofficial repressive apparatus of the state. Again, scholars expect that women's participation in pro and anti-status quo groups might be distinctly different (Alison 2004). We now turn to discussing how militias organize.

The Organizing of PGMs

Pro-government militias (PGMs) have recently attracted the attention of scholars because of the widespread recognition of their essential role in conflicts (e.g., Stanton 2015; Bolte 2021), the threats they can represent to national state-building (e.g., Bates 2008; Reno 2011; Steinert, et

al. 2019; Voller 2022), and their complicity in human rights violations in democracies and autocracies alike (Mitchell et al. 2014). The term “militia” has been used in both academic and colloquial discourse to mean any non-state armed group (e.g., Bates 2008; Raleigh 2016), while some distinguish militias as those that fundamentally oppose rebels (Jentszsch, et al. 2015). The latter conceptualization is useful in civil war settings, but it leaves little room for militias that operate outside the context of conflict but nevertheless support a government that also supports them (politically, materially, or both). Our focus is on pro-government militias as defined by Carey et al. (2013, p. 250): non-state armed groups that are “pro-government or sponsored by the government (national or subnational),” are “identified as not being part of the regular security apparatus,” and have “some level of organization.”

PGMs vary considerably in their origins and relationship with the state. Some groups are created by the government by decree or in the shadows, whereas others are organized grassroots initiatives to protect citizens from insurgents or criminals (Carey and Mitchell 2017). Some PGMs are well-equipped, professionalized paramilitaries that often support dictatorial regimes (Carey and Mitchell 2017), other “civil defense forces” only operate locally and defensively (Clayton and Thomson 2016), and still others take the form of secretive death squads that instill fear and are meant to deter criminal behavior or political action by the opposition (Mason and Krane 1989).

Variation in PGM organizations is often a result of their purpose, but evidence suggests that states often employ PGMs as cheap force multipliers during civil conflicts, to increase access to local information in counterinsurgent operations, demonstrate national or ethnic support for the government (Jentszsch, et al. 2015; Lyall 2010; Carey and Mitchell 2016), or counterbalance against the official military to protect dictatorial regimes from coup threats (De Bruin 2020; Ash

2016). Governments will also sometimes deny any association with PGMs (i.e., “informal” relationship, as opposed to “semiofficial”) and delegate the responsibility of severely repressive or egregious behavior and thus keep the government’s hands “clean” (Carey, Colaresi, and Mitchell 2015). For this reason, PGMs are often associated with increased sexual violence (Cohen and Nordhas 2015), violence against civilians (Stanton 2015), and mass killing (Koren 2017).

Scholars frequently utilize a principal-agent framework to describe and theorize about PGMs, and this has yielded important insights into the strategic “use” of these groups by political elites to achieve the goals of those “principals” (Mitchell 2004; Mitchell et al. 2014; Carey et al. 2015). Although this literature on PGMs also explores how “agency problems” can manifest, such as through defection and side-switching (Otto 2018; Staniland 2015; Seymour 2014), spoiling peace negotiations (Steinert et al. 2019), or undermining state-building projects (Staniland 2015; Bolte 2021), PGMs are often thought of as passive tools of state interests that may be unruly but not otherwise strategic in their own right. In other words, much of the literature treats PGM *behaviors* as a function of state interests (e.g., following orders from the principal), indiscipline, or greed. In reality, militia groups are deliberately and strategically organized, either by the state or organically in local communities, and this organization may not only reflect the independent interests of the leadership of the group, but also similar ideological beliefs, social structures, and strategic needs that shape the recruitment practices of other non-state armed groups (Gates 2002; Eck 2014; Weinstein 2007; Hegghammer 2013; Thomas and Bond 2015). Thus, the membership of PGM organizations is neither invariable nor random.

Indeed, just like rebel groups, militias use a variety of techniques for recruitment and have rules for who can, must, or cannot participate. Some research has explored how governments use

militias to socialize locals into a national identity and force civilians to “choose a side” in a conflict (Bateson 2017), while others have observed how selective incentives, screening, and coercive recruitment have played a role in the recruitment of PGM members (Humphreys and Weinstein 2008; Forney 2015). We know very little, however, about the gendered makeup of PGMs, why some PGMs recruit women at all, and the roles women fill in these groups.

Answering these questions is necessary to better understand how militias organize, the degree to which state interests and ideology are built into their “agents,” how membership affects organizational behavior, and the broader social structures that shape organized violence.

Women’s Physical Security and Participation in PGMs

We expect that low levels of women’s physical security will increase both the demand that PGMs have for women, as well as the supply of women willing to join.

Demand-Side Explanations

We expect that low levels of women’s physical security increases the demand that PGMs have for women in combat roles for at least three reasons. First, governments will integrate women into these roles to offset the domestic and international reputational costs associated with the poor treatment of women in their countries. Indeed, the incorporation of women into militias can be used to signal that governments are making an effort to incorporate women into the public sphere. These nominal steps can be used by governments that seek to avoid pushing for more systematic reforms to women’s security. Second and relatedly, the incorporation of women can be used as a tool to justify and maintain traditional gender roles. Specifically, governments and their aligned militias sometimes use women in these public facing roles to present them as ideal

women and members of society. They do so to enforce traditional gender roles. Third, militias can use women to more effectively monitor and police other women in civilian spaces. We discuss each of these mechanisms below.

Offsetting Reputational Costs

As noted above, many different pro-government militias have been used to police women and repress female dissenters. However, governments can suffer significant reputational consequences for violating and/or failing to protect women's physical security. Such repression can lead to both domestic and international backlash. For instance, the use of the Basij in Iran to repress and police women led to the massive "Woman Life Freedom" uprising, which began in 2022 (Amnesty International 2024). Violations of women's physical security can also spark international backlash. Governments across the world, for example, publicly supported the Woman Life Freedom movement, and in December of 2022, the United Nations removed Iran from the Commission on the Status of Women (Parsa 2023).

Governments that engage in high levels of violent repression of women therefore sometimes attempt to take steps to mitigate these reputational costs. Indeed, international pressures can drive autocratic governments to pass legislative measures aimed at improving women's rights and security (Donno et al. 2022). However, such governments often implement these legislative measures to signal their compliance with international norms, while avoiding making substantive reforms, such as decreasing their use of violent repression (Donno et al. 2022). Said differently, governments accused of failing to protect women's security might make nominal, surface-level changes to try to mitigate the backlash they face, without making more systematic reforms that actually improve women's physical security. Indeed, greater inclusion of women in state institutions does not necessarily lead to greater representation of women's interests (Htun 2016).

One strategy governments engage in to mitigate the backlash associated with violating women's physical security is to incorporate women into pro-government militias. This can be done to mitigate backlash to the militia's use of violence against women and/or to improve the image of regimes in countries with low levels of physical security for women. Existing research highlights how mobilizing civilians into PGMs from the same populations that insurgents recruit from can be used to signal the legitimacy of governments (Carey et al. 2016). This strategy is used in an attempt to win the "hearts and minds" of the populations that insurgents also recruit from and to subsequently undercut the cause of the rebels, who are claiming to fight on behalf of populations who are aligning with the government through such militias (Carey et al. 2016; Enterline et al. 2013). Just as such recruitment strategies are used to try to signal ethnic and local support for governments (e.g., Carey et al. 2016; Lyall 2010), we expect that PGMs will also incorporate women to demonstrate support for the ruling regime among women. This should be particularly true when women's physical security is low, as governments in these countries have a greater need to signal that they have the support of women to try to offset the reputational costs.

Existing literature on women's participation in rebellion highlights the reputational benefits that rebel movements can garner from mobilizing women. The logic underpinning the reputational benefits of women in rebel groups is useful to extend to pro-government militias. Specifically, we posit that the recruit of women can help rebel groups send interrelated signals of (1) their broad popularity; (2) their legitimacy and moral prerogative; and (3) trustworthiness and competence. First, the recruitment of women can help militias signal that they have widespread, popular support. Specifically, recruiting women helps rebel groups' signal that they are popular across broader segments of society, not just with men (e.g., Loken 2018). Militias and their

associated governments that are struggling with legitimacy problems stemming from their abuses of women can thus try to present themselves as having broad appeal by recruiting women.

Second, PGMs can incorporate women to signal that their cause is morally justified and legitimate. Using experimental evidence, Manekin and Wood (2020) find that the incorporation of women enhances public perceptions of legitimacy of such rebel groups. They argue that this is driven, in part, by the perception that female combatants have more altruistic motives than their male counterparts. This perception of female combatants as being particularly sincere is rooted in the belief that women are more passive than men, and thus, are only willing to take up arms when the conflict is severe and morally justified (Manekin and Wood 2020). Thus, when regimes and their militias could suffer reputational backlash for their repression of women, they can attempt to incorporate women into their ranks to signal that they have a legitimate, morally justified cause.

Third and relatedly, militias can incorporate women in an effort to increase the public's confidence and trust in these organizations. Karim (2019) shows that people who have had contact with female security personnel have more confidence in the domestic security sector of their country. Specifically, Karim finds both that people often prefer that female officers respond to violent events because they are perceived to be more restrained than their male counterparts, and female security officers are believed to address previously neglected issues that disproportionately affect women, including rape and domestic violence. Karim also notes that these findings are largely driven by women in the general public having increased trust and confidence in the security sector when there are more women involved.

In the same way, PGMs that are active in countries with low levels of women's physical security, including those that directly engage in the repression of women, could benefit from the

incorporation of women. Specifically, having female members who are perceived to be more restrained in their behavior, and to care more about women's issues, are crucial to groups that are otherwise viewed as unrestrained and actively working against women's interests. Said differently, PGMs that actively repress women and/or those who operate in countries with low levels of protections for women, might be able to offset some of the associated reputational costs by recruiting women, as they are perceived to be less violent and more interested in protecting women's interests.

In Iran, the Basij highlights how the incorporation of women can be used in an attempt to improve the perceived legitimacy of militias. The Basij provide a variety of functions, including repressing dissidents and serving as morality police (Golkar 2011, 2012). The Basij includes the Women's Basij Organization (WBO), which recruits thousands of women to fulfill a variety of roles, including to help violently repress female dissidents and women's movements in the country (Golkar 2013). The incorporation of women into the WBO is used, in part, to signal the broad popularity of the regime in light of the Basij's extensive use of repression against women (Golkar 2013).

In Indonesia, Wilayatul Hisbah (a.k.a. the Shariah Police; another actor in the PGMD 2.0) is used in the Aceh region to enforce Sharia law. This includes enforcing a dress code for women and prohibiting the fraternization of men and women who are not married or related to each other (Human Rights Watch 2021; Sagolj 2014). While the stated purpose of the militia was to enforce Sharia law for both men and women living in the Aceh region, it disproportionately targets women in many of its policing actions (Human Rights Watch 2021; Sagolj 2014). Indeed, the militia abuses women in a variety of ways during police raids, including through sexual assaults, beatings, and jailings (Hasni 2020).

Wilayatul Hisbah recruits women, including using them in policing operations (Human Rights Watch 2010; Pedroletti 2023). This includes an all-women flogging squad that has been increasingly used to flog women accused of violating Sharia law in the region (Pundir 2022; Purwaningsih 2020). Members of the all-women flogging squad provided justifications for their participation, such as religious justifications of the need for women to be the ones to physically punish other women (Purwaningsih 2020) and that men whipped women too hard, and thus, women were better suited to dole out punishments to other women (Pundir 2022). Thus, Wilayatul Hisbah also incorporates women, in part, to justify their use of violence against other women.

In Libya, we saw an example of a PGM incorporating women not because the militia itself directly cracks down on women, but rather, because it was used by the Gaddafi regime to try to bolster its reputation, despite limited protections for women in the country. Mummar Gaddafi claimed that one of his primary motivations for leading the coup against King Idris was to fight for greater women's equality (Rogers 2016). Gaddafi made multiple reforms, including creating the Women's General Union, the creation of a woman-oriented military academy, and the creation of an all female bodyguard corps (Rogers 2016). This included the creation of the Amazonian Guards, an all-female bodyguard unit that is an actor in the aforementioned PGMD 2.0 (Carey et al. 2022).

However, Rogers (2016) argues that Gaddafi largely supported the maintenance of traditional gender roles and that women's rights did not substantially improve under his rule. Indeed, women's sexual and reproductive rights were severely limited by Gaddafi (Morgan 2024, p. 358). For instance, many women who were victims of sexual assault were sent to "social rehabilitation facilities" (which were essentially detention centers), as they were accused of

harming their families honor (Morgan 2024, p. 359). Rogers (2016) posits that Gaddafi's incorporation of women into certain government roles, including into militias, was to try to solidify his support, rather than to systematically improve protections for women. Thus, the militias such as the Basij, the Amazonian Guards, and Wilayatul Hisbah, incorporate women, in part, to offset the reputational costs associated with violence against women.

Maintenance of Traditional Gender Roles

The incorporation of women into PGMs can also be used to help uphold traditional gender roles, including those that threaten women's physical security. Once again, it is useful to draw parallels between women's incorporation into rebel organizations and into PGMs. Specifically, while women's participation in rebellion, especially in combat roles, defies many gender stereotypes, rebel organizations can take steps to ensure their supporters that they are not too radically altering existing gender roles (Loken 2021). Indeed, Loken (2021) argues that rebel organizations that recruit women often emphasize traditional gender roles in their propaganda (e.g., highlighting the motherhood of some of their female members) to ensure their followers that while they recruit women due to wartime necessity, societal gender roles will remain largely the same once the conflict concludes.

Similarly, we expect that militias and their corresponding regimes sometimes incorporate women to signal their commitment to upholding the gender status quo and highlighting what makes an "ideal woman." This can take at least a couple different forms. First, the incorporation of women into militias can be leveraged to gain women's support in the domestic sphere, which is an effective tool for promoting desired norms. Specifically, if regimes can garner support among women by incorporating some women into PGMs, then this could contribute to growth in

support for the regime, as women have substantial influence in the domestic sphere. Golkar (2013), for instance, argues that the thousands of women that have been recruited into the Basij have aided the government's efforts to penetrate families in the country to reinforce the values promoted by the regime and help maintain social control. Relatedly, McEvoy (2009) notes that women in loyalist militias in Northern Ireland were very influential in society, and the failure to incorporate women into the peace process caused problems during negotiations to end the conflict. Thus, regimes that seek to uphold traditional gender roles can attempt to incorporate women to try to increase their popularity through gaining influence in the domestic sphere.

Second, women in militias can be used in public campaigns to promote traditional gender norms. In addition to using women to repress female dissidents, the Basij also used women in campaigns to promote specific social goals. For instance, starting in 2009, the Basij claimed to train tens of thousands of women as teachers of modesty. These women were used to publicly promote and enforce modesty laws, especially against women (Golkar 2013). Indeed, during this time, women became a central tool of conservative hardliners of Mahmoud Ahmadinejad's regime to repress women's movements (Golkar 2013).

Furthermore, as noted above, the Wilayatul Hisbah in Indonesia also recruits women to serve as public enforcers of traditional gender roles, in part, to try to justify their promotion of these norms (Pundir 2022; Purwaningsih 2020). In Colombia, women in the United Self Defense Forces of Colombia (AUC) that were mothers were portrayed as the "ideal AUC female combatant" (Méndez 2012, p. 4). These militias use women to promote what "ideal women" are supposed to be. Thus, women can also be incorporated into militias to serve as public symbols and promoters of ideal gender roles.

Policing Other Women

Militias also sometimes incorporate women to increase their effectiveness at policing women who are civilians. A parallel exists with governments' use of militias that recruit from the same ethnic groups as insurgents. Indeed, militias that mobilize the same ethnic groups as rebels have a "co-ethnic advantage," as they are more embedded in dense ethnic social networks that help them identify and track insurgents. Shared language and familiarity with the local terrain also gives co-ethnic militias an advantage over other types of government forces in fighting insurgents (e.g., Lyall 2010).

In the same way, we expect that women have a comparative advantage over men in policing and repressing other women. Specifically, we expect that the incorporation of women can help militias expand their access to different social networks, especially networks of female activists, that they did not previously have access to. For instance, Golkar (2013, p. 34) explains that "female Basij help the government keep a close eye on society. By organizing this cluster of people-driven networks, the regime is able to penetrate, manipulate, and control increasing share of the public lives of its citizens." Indeed, the Basij has used a large network of female spies to help maintain social control (Vohra 2022). Golkar (2013) further discusses how women in the Basij were given even more power following the 2009 election because they served as such effective monitors of dissidents during the Green Movement. Thus, in societies in which women are violently repressed, regimes can maintain this lack of physical security by using women to monitor and repress other women.

Supply-Side Explanations

It is also important to consider how women's physical security affects the incentives and abilities of women to join PGMs (i.e., supply-side explanations). Again, supply-side explanations of women's participation in armed groups tend to focus on women's motives to fight for greater gender equality, as well as other political and personal motives (e.g., Bloom 2011; Thomas and Wood 2018; Viterna 2013). Thomas and Wood (2018) argue that higher levels of gender equality increase women's agency and political efficacy, as well as willingness to eschew traditional gender norms, all of which make women more willing to participate in armed rebellion.

However, we expect that women's physical security will have the opposite effect on their willingness to participate in PGMs. Again, we draw parallels to the literature on rebel recruitment. Specifically, Kalyvas and Kocher (2007) posit that non-participation in conflict is not necessarily costless, as previous literature on collective action in civil wars had suggested. Instead, they point out that civilians are often subjected to extremely high levels of indiscriminate violence. Kalyvas and Kocher thus argue that in certain contexts, civilians might actually be safer participating in conflicts because armed groups can provide them with a certain degree of protection. Relatedly, Viterna (2006) also argues that violent government repression against women can drive them to join rebel organizations.

In the same way, we expect that when women face a high degree of insecurity, they might sometimes turn to militias for protection. This can include trying to escape a variety of forms of violence that disproportionately affect women, including political violence, criminal violence, and domestic violence. Thus, while certain forms of women's empowerment might increase the supply of female combatants by increasing their agency and desire for political participation, their level of security also affects their need to seek physical protection.

Indeed, women's insecurity appears to have motivated their participation in at least some militias. Golkar (2013, p. 32-33) argues that widowed and divorced women are particularly unsafe in Iran because of the high crime rate, and thus, some join the Basij for protection. In Mozambique, women joined the Naparama for protection as well (Boothby 2011). Salih (2015) argues that many women join the Peshmerga in Iraq to escape abusive marriages and other forms of repression faced by women in the region.

Testable Implications

Again, we expect that low levels of physical security for women both increase the demand that PGMs have for women, and the supply of women who want to join. In terms of the demand militias have, incorporating women into PGMs can help militias and their corresponding regimes (1) improve their reputations; (2) more effectively enforce traditional gender norms; and (3) more efficiently police and repress female dissidents. The countries in which there is the highest utility for recruiting women into PGMs are those in which women's physical security is low, as these are the societies in which regimes have the most incentive to try to offset associated reputational costs and who have the strongest desire to continue repressing women. In terms of supply, women are more likely to seek incorporation into militias when women's physical security is low, because they are seeking protection.

We expect this to be particularly true for militias that recruit women to use violence. From the demand side, recruiting women into combat roles might better address reputational concerns, as these are roles that more clearly defy gender stereotypes than logistical support roles. Recruiting women into combat roles can also help justify, and make efficient, militias' use of violent repression against women. From the supply side, filling roles that allow them to be armed

can provide women with even more protections in societies in which their physical security is generally low. This leads to our first hypothesis that:

H1a: Pro-government militias will be more likely to incorporate women into roles that involve the use of violence in societies in which women's physical security is low.

However, it is possible that there are diminishing returns to incorporating women into combat roles as their physical security improves. Indeed, as women's physical security improves, regimes and their militias are less likely to be involved in extensive violence against women. Thus, if there is less systematic, violent repression of women, then the incentive to recruit women as agents of this repression substantially declines. Improvements to women's physical security could also substantially affect their willingness to participate in violent militias. Specifically, as women's physical security improves, it not only becomes less necessary for them to join PGMs for safety, but joining PGMs becomes riskier for them, relative to remaining a civilian. Said differently, rather than there being a linear relationship between women's physical security and their incorporation into combat roles in PGMs, there is potentially an exponential relationship, because while the demand for, and supply of, female combatants might be very high at the lowest levels of women's physical security, the incentives that drive the demand and supply might rapidly decline as women's physical security improves. This leads to our other hypothesis that:

H1b: Pro-government militias will become exponentially more likely to incorporate women into roles that involve the use of violence in societies in which women's physical security is low.

Data on Women's Participation in PGMs

Sample

We gather data on women's participation in the 504 pro-government militias contained in version 2.0 of the Pro-Government Militias Database (PGMD) (Carey et al. 2022). The PGMD includes militias that were active across the world at least at some point between 1981 and 2014. Groups in the PGMD share key characteristics, including that they are (1) sponsored by the government or are pro-government; (2) armed; (3) have at least some degree of organization; and (4) are *not* part of a government's regular security forces (Carey et al. 2013, 2022). The PGMD 2.0 was built using a variety of sources, including news reports, existing academic research, Wikipedia, Human Rights Watch, and Amnesty International (Carey et al. 2022).

We use the time-invariant, cross-sectional sample of the 504 militias in the PGMD 2.0. This is because many of the group-level variables constructed by the creators of the dataset are time invariant (Carey et al. 2022). Furthermore, due to resource constraints and information availability, we were unable to code within-militia temporal variation in the incorporation of women. This is a limitation of our dataset, as the timing of recruitment of women into armed groups can vary significantly (e.g., Israelsen 2020). However, we still expect there to be significant differences between militias that never recruit women and those that incorporate them at least at some point. Furthermore, due to similar constraints, prominent datasets on women's involvement in rebel organizations also employ time invariant measures (Henshaw 2016; Loken and Matfess 2024; Thomas and Bond 2015; Wood and Thomas 2017).

Data Collection Procedure

For the first stage of our data collection, we constructed detailed, qualitative narratives about women's involvement for each of the 504 militias. All the authors followed the same written guide for building the narratives, which included instructions on the type of information to look for, as well as the sources to consult for this information. In particular, we looked for information on the various roles that women filled in PGMs, including roles that involved (1) combat or other uses of physical force; (2) non-combat support roles; and (3) leadership roles. We discuss how these roles are operationalized later in the manuscript.

To identify this information, we consulted a variety of sources. We conducted queries in Nexis-Uni to find news stories about these militias. Additionally, we used Google Scholar to find information about these militias in existing academic studies. Queries in the regular Google search engine were also conducted to obtain evidence from news stories and government and think tank reports. We also consulted the online narratives that the creators of the PGMD 2.0 constructed for each group in the dataset (Carey et al. 2022). Finally, we also utilized existing dataset on women's participation in armed groups that have overlap with the PGMD 2.0. Specifically, we built off data from Thomas and Bond (2015), whose sample of violent political organizations includes some PGMs, as well as the Women's Activities in Armed Rebellion dataset (Loken and Matfess 2024), which contains information on women's participation in rebel organizations, some of which are also actors in the PGMD 2.0. We will make these narratives publicly available, along with the dataset.

Measuring Women's Participation

Women serve in a variety of roles, including combat, non-combat, and leadership positions, in both state and non-state armed forces (e.g., Fitriani et al. 2016; Huber and Karim 2018; Loken and Matfess 2024; Wood and Thomas 2017). Thus, we sought not only to measure whether PGMs recruited women, but the variation in the roles into which they incorporate women. Based on both existing datasets on women's participation in political violence (e.g., Loken and Matfess 2024), as well as information availability, we collected information on the following forms of participation: (1) roles involving the use of force; (2) roles involving non-combat support; and (3) leadership roles. We further distinguish between combat and non-combat leadership roles. None of these roles are coded as being mutually exclusive, and indeed, many PGMs recruit women into multiple roles.

As an important note, all the measures of women's incorporation into PGMs are dichotomous. This is despite the fact that, even among armed groups that recruit women, there is substantial variation in the percentage of women that fill these roles across organizations (e.g., Loken and Matfess 2024; Wood and Thomas 2017). Despite this, due to limited information available on many of these organizations, and because of time and resource constraints associated with our effort to collect these data, we were unable to collect ordinal or continuous measures of women's participation in PGMs. However, we still expect there to be significant differences between militias that do, and do *not*, incorporate women. Thus, we are still capturing important variation in the behavior of PGMs.

Combat Roles

The first variable is a binary indicator that captures whether women and/or girls are involved in any role that involves the use of physical force. This includes, but is not limited to, their participation in (1) combat operations against rebels, insurgents, and/or terrorists; (2) engagement in armed community defense and/or patrols; (3) policing operations against (accused) criminals; and (4) provision of armed security for individuals, groups, and/or institutions.¹ For instance, The Amuka/Rhino Defence Force in Uganda, the Anti-Terrorist Unit in Liberia, the Peshmerga in Iraq, among others, recruited women to help fight rebels. In Peru, armed women in the Rondas Campesinas participated in community defense efforts and went out on patrol. The Wilayatul Hisbah (Sharia Police) in Indonesia have female officers who engage in policing operations. Armed women participated in PGMs that essentially served as bodyguards for leaders like Hun Sen in Cambodia and Muammar Gaddafi in Libya.

Datasets covering women's participation in combat roles in rebel organizations tend to focus on roles that involve the use of violence against civilian and government targets in the context of civil wars or insurgencies (Henshaw 2016; Loken and Matfess 2024; Wood and Thomas 2017). While many PGMs operate in the context of civil wars and insurgencies, many serve functions unrelated to these types of conflicts as well (Carey et al. 2022). Thus, our sample cover groups that engage in forms of violence that might not always be referred to as combat operations, such as policing activities. Instead, we are more generally interested in PGMs that use women in roles that involve the use of physical force, as women's participation in violence defies traditional

¹ In the WAAR dataset, a group must recruit at least some adult women to be coded as incorporating female members. If the only female members in a group are girls, then it is not coded as recruiting women (Loken and Matfess 2024). We do not make such a distinction in our main measures of each type of women's participation in various roles. However, to account for this dynamic, we create alternative versions of each variable that code groups as 0 on specific dimensions if they recruit girls into a role but *not* women.

gender roles (e.g., Bloom 2005; Nacos 2005; Thomas 2021). For simplicity, we refer to these forms of involvement as “combat roles.” Of the 504 militias in our sample, we found evidence of 102 (20.24%) incorporating women into combat roles.

Non-Combat Roles

The second variable is a dichotomous measure of whether a PGM incorporates women into non-combat roles. These roles include, but are not limited to, cooks, medics, porters, propagandists, recruiters, spies, and various other non-combat, logistical support roles. Loken and Matfess (2024) use a similar metric for classifying groups as recruiting women into non-combat positions. For instance, in our dataset, women in the Civilian Joint Task Force in Nigeria gathered intelligence. The Naparama in Mozambique and the Mai-Mai in the Democratic Republic for the Congo incorporate women to engage in magical practices intended to protect and indoctrinate recruits. In Colombia, in addition to recruiting women into combat roles, the AUC also used women as cooks. Women also served in a variety of other types of non-combat roles in many other PGMs. 111 groups (22.02% of the sample) incorporate women into these roles.

Leadership Roles

Following the precedent of Loken and Matfess (2024), we code women as holding leadership roles in PGMs when they are incorporated into roles that involve direct control and oversight of other participants, ideology, strategies, and/or policies. We create a binary measure of whether women hold any type of leadership role in a militia. We also create binary indicators of whether women hold combat leadership roles and whether they hold non-combat leadership. Combat leadership roles include oversight and decision-making powers over combat operations, while

non-combat leadership roles include such responsibilities for any type of non-combat operations. These latter two variables are *not* mutually exclusive. We found evidence of women holding any type of leadership positions in 42 organizations (8.33% of the sample). 18 militias (3.57%) incorporated women into combat leadership roles, while 34 (6.75) featured women in non-combat leadership roles. Again, these latter two categorizations are *not* mutually exclusive, and indeed, we found evidence of 10 PGMs recruiting women into both roles.

Any Roles

Finally, we developed a binary indicator of whether a militia recruits women into *any* role. This variable captures whether we found evidence that the group recruited women into any of the aforementioned roles (combat, non-combat, and/or leadership) or whether there is general evidence of women's involvement, even if we could not find more specific evidence of the roles they filled. Specifically, of the 186 militias we identified as incorporating women, we were unable to determine the specific roles women filled in 35 of them. **Figure 2** displays the distribution of these four variables capturing the different types of women's participation.

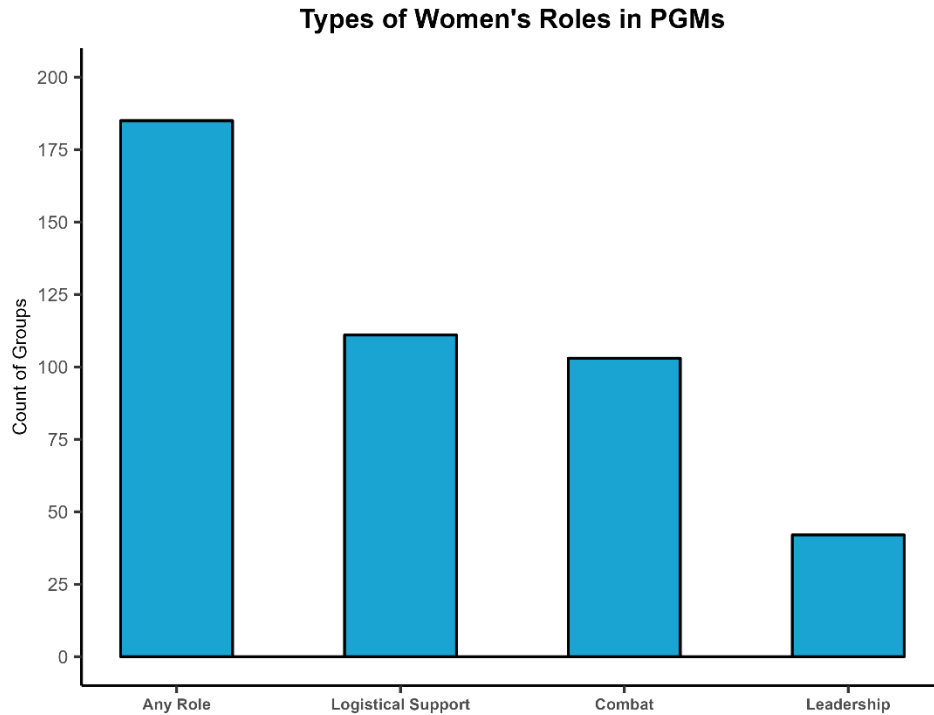


Figure 2: Distribution of Women's Participation in Different PGM Roles

Research Design

Dependent Variable and Estimation Strategy

Our central hypotheses focus on women's participation in roles that involve the use of violence. Thus, in the main analysis, we employ the aforementioned binary indicator of whether women and/or girls are recruited into any role that involves the use of violence. Again, our expectation is that militias often use women in violent operations against other women. However, in subsequent analyses, we also examine how women's physical security affects women's participation in other roles in PGMs. In the main analysis, we employ logistic regression analysis because the outcome variable is dichotomous. The unit of analysis is the PGM because we are interested in group-specific outcomes. The standard errors are clustered by country.

Independent Variable

As mentioned previously, we use the measure of women's security developed by Karim and Hill (2018a). They note that this concept captures the extent to which women do, or do not, experience a variety of forms of *harm to their bodily security*. This includes protection from a diversity of forms of harm that threaten women's dignity, safety, and/or survival. The latent measurement is based on just over four dozen individual indicators from existing data sources. These individual measures capture a variety of dynamics including the rape, murder, and genital mutilation of women; several measures of economic security; and women's expectations and protections as mothers (e.g., fertility rates, maternal mortality rate; maternity protections, such as maternity leave); various indicators of women's health; and several other components (Karim and Hill 2018b). Higher values indicate greater security for women. To evaluate H1a, we first examine the linear relationship between women's physical security and their incorporation into combat roles in PGMs. To test H1b, which examines the possibility of a non-linear relationship between the two primary variables of interest, we include the squared term for women's physical security. To account for the possibility of reverse causality, we take the value of women's physical security one year before the militia forms.²

² We conduct additional analyses in which we take the value of women's security five years before the militia forms. The results remain very similar to those of the main analysis.

Control Variables

We also account for a variety of possible confounders. First, we wanted to account for militias' use of forced recruitment. While women's participation in political violence is often voluntary, prior research has still found a significant association between armed groups' use of forced recruitment and their incorporation of women (Wood and Thomas 2017). Women might also be more likely to be forced into PGMs when women's security in society is low overall.

We built a binary indicator of whether a militia uses pressganging, conscription, and/or abduction to force at least some individuals to join the group against their will. This includes forced recruitment into any type of role, combat or non-combat. The PGMD 2.0 contains a dichotomous indicator of whether membership in the organization was coerced. However, the dataset only records 59 militias (11.71%) as having definite evidence of coercive recruitment. Our systematic research revealed evidence of at least some members being recruited into 130 organizations (25.79%) in the sample. To construct this variable, we built off information from the online narratives accompanying the PGMD; Google Scholar and regular Google searches; and queries of Nexis-Uni.³ For militias that were also former rebel organizations, we also looked for information in the Rebel Human Rights Violations Dataset (Walsh et al. 2024).

The ideologies of militias are also important to account for, as such belief systems affect the willingness of armed groups to incorporate women (e.g., Henshaw 2016; Wood and Thomas 2017). Women's security is also associated with different types of ideologically driven political violence (Kattelman and Burns 2023). Specifically, we built three separate binary indicators capturing different types of ideologies. *Religious* militias are those that seek to enforce religious moral codes and/or laws or that have other religious-based goals. *Left-wing* groups are those that

³ The search string is available in the appendix.

seek to achieve or protect left-wing goals and policies, such as guarding a left-wing revolution. Right-wing militias include anti-communist organizations, white supremacist organizations, and militias with other right-wing goals and beliefs. In our sample, 85 militias were coded as religious (16.87%); 30 as left-wing (5.95%); and 68 as right-wing (13.49%). We based this coding on information in the PGMD online narratives as well as a variety of secondary sources.

Scholars also distinguish between semi-official militias, who governments formally or legally recognize their connections to, and unofficial militias, who governments do not formally acknowledge a link to (Carey et al. 2013). To bolster their own legitimacy, governments sometimes officially acknowledge their linkages to militias (Carey et al. 2016). This is relevant as governments' reputation might be related to both whether women are integrated into PGMs and the extent to which women's rights are respected. Thus, we include a binary indicator of whether a group is categorized as semi-official (1) or unofficial (0), using data from the PGMD 2.0 (Carey et al. 2022).

It is also important to account for variation in the purposes that PGMs serve. Specifically, using data from the PGMD 2.0 (Carey et al. 2022) we include a binary indicator of whether the primary purpose of the group is to fight insurgents. We do this because women's rights can erode in countries with high levels of political violence (Berrebi and Ostwald 2016) and because fighting insurgents might place significant resource constraints on governments, incentivizing them to recruit women (Dalton and Asal 2011). Relatedly, PGMs also vary in *how* they were formed. To account for this, we include a binary indicator from the PGMD 2.0 of whether the militia was formerly a rebel organization (Carey et al. 2022). We include this measure because rebels tend to recruit women at higher rates than government forces (Wood and Thomas 2017) and because women's participation in rebellion affects women's status in society (Thomas

2024). As a final group-level characteristic, we control for the lifespan, in years, of the militias. To do this, we use information in the PGMD 2.0 to account for the difference between the year a militia was terminated, or the last year it was active in the dataset (whichever comes later), and the year the group was formed. Longer lasting militias might be more desperate for recruits, driving them to recruit women (e.g., Israelsen 2020). The persistence of such groups could also lead to a breakdown in women's security over time.

We also control for multiple country-level factors. Secure leaders in high capacity, democratic states are less likely to violate personal integrity rights (Young 2009). Democracy also affects the strength of women's engagement in society, including in political institutions (Tremblay 2007). Thus, we first control for how democratic a country is, using the Varieties of Democracy (V-Dem) dataset's measure of Electoral Democracy (Coppedge et al. 2022). Using data from Fariss et al. (2022), we also control for the logged per capita GDP of the country. Next, to ensure that we are capturing repression of women with our main explanatory variable, and not just human rights repression more generally, we also include Fariss's (2014) human rights protection scores. Finally, with data from the UCDP/PRIO Armed Conflict Dataset (version 22.1, Davies et al. 2022; Gleditsch et al. 2002), we include a dichotomous indicator of whether a country experienced a civil conflict in a given year. We do this because the presence of a conflict might increase the demand militias have for soldiers (making them more willing to recruit women) and because political violence can decrease women's status (Berrebi and Ostwald 2016). As with the measure of women's physical security, we take the value for each of the country-level variables one year before the militia formed.

Results

Table 1 contains the results of the tests examining the linear association between women's physical security and the incorporation of women into combat roles in PGMs, while **Table 2** shows the results for the tests for a non-linear relationship between the variables. To better understand the nature of the non-linear relationship, we also plot the marginal effects (**Figure 3**) when we square the measure of women's physical security and include the full set of control variables (**Model 8**) (Brambor et al. 2006). We gradually add control variables to each model to ensure that the results are not driven by the estimated effects being increased through the control variables (Lenz and Sahn 2021). Again, the standard errors by the country in every model.

Table 1: Linear Association Between Women's Physical Security and Women in Combat Roles in PGMs

	(1)	(2)	(3)	(4)
Women's Physical Security _(t-1)	-0.181 (0.199)	-0.0954 (0.206)	-0.435 (0.265)	-0.442 (0.270)
Forced Recruitment		0.964*** (0.274)		1.156*** (0.262)
Religious		0.287 (0.391)		0.385 (0.430)
Left-Wing		0.556 (0.438)		0.661 (0.441)
Right-Wing		-0.0341 (0.490)		-0.0185 (0.502)
Semi-Official		0.808** (0.250)		0.764** (0.265)
Fights Insurgents		0.212 (0.303)		0.282 (0.313)
Former Rebel Group		0.807* (0.330)		0.952** (0.340)
Militia Age		0.00844 (0.0125)		0.00921 (0.0130)
Electoral Democracy _(t-1)			1.736** (0.601)	2.162*** (0.637)
Logged per capita GDP _(t-1)			0.234 (0.223)	0.293 (0.193)
Human Rights Protections _(t-1)			-0.0380 (0.211)	0.110 (0.228)
Civil Conflict _(t-1)			0.0457 (0.374)	-0.0999 (0.388)
Constant	-1.422*** (0.173)	-2.406*** (0.209)	-2.395*** (0.549)	-3.460*** (0.553)
Observations	471	471	468	468
Chi ²	0.830	57.92***	9.305+	93.64***
Log Likelihood	-237.1	-218.9	-232.5	-211.5
Pseudo R-squared	0.00460	0.0808	0.0210	0.110

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

Table 2: Non-Linear Association Between Women's Physical Security and Women in Combat Roles in PGMs

	(5)	(6)	(7)	(8)
Women's Physical Security _(t-1)	0.185 (0.228)	0.357 (0.226)	0.00139 (0.319)	0.0717 (0.295)
Women's Physical Security Squared _(t-1)	0.339** (0.114)	0.410*** (0.108)	0.336** (0.118)	0.397*** (0.110)
Forced Recruitment		1.058*** (0.278)		1.217*** (0.269)
Religious		0.255 (0.391)		0.379 (0.418)
Left-Wing		0.629 (0.423)		0.734+ (0.411)
Right-Wing		-0.00856 (0.468)		0.00701 (0.485)
Semi-Official		0.768** (0.244)		0.753** (0.253)
Fights Insurgents		0.264 (0.309)		0.314 (0.311)
Former Rebel Group		0.659+ (0.367)		0.807* (0.374)
Militia Age		0.0170 (0.0115)		0.0176 (0.0120)
Electoral Democracy _(t-1)			1.811** (0.628)	2.253*** (0.605)
Logged per capita GDP _(t-1)			0.136 (0.228)	0.183 (0.182)
Human Rights Protections _(t-1)			-0.0945 (0.206)	0.0477 (0.222)
Civil Conflict _(t-1)			-0.0479 (0.358)	-0.201 (0.376)
Constant	-1.657*** (0.178)	-2.785*** (0.229)	-2.523*** (0.506)	-3.713*** (0.535)
Observations	471	471	468	468
Chi ²	14.37***	81.60***	25.94***	114.9***
Log Likelihood	-232.5	-213.4	-228.3	-206.7
Pseudo R-squared	0.0238	0.104	0.0385	0.130

Robust standard errors in parentheses

*** p<0.001, ** p<0.01, * p<0.05, + p<0.1

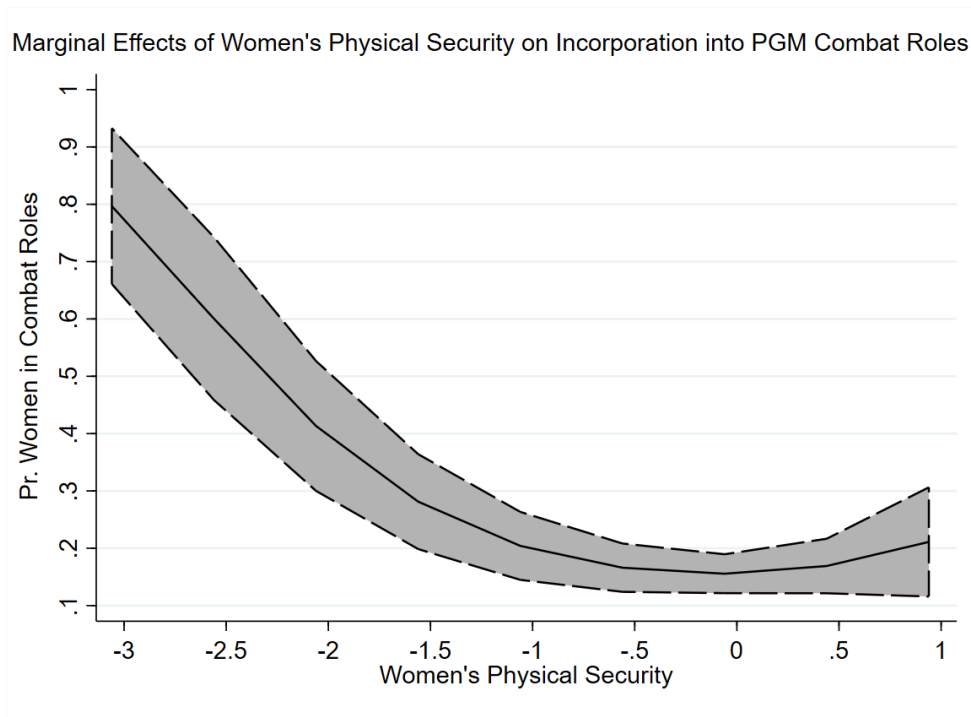


Figure 3: Marginal Effects of Women’s Physical Security on Incorporation into Combat Roles in Pro-Government Militias

The results in **Table 1** show inconsistent support for Hypothesis 1a, that there is a negative and linear relationship between women’s physical security and women’s participation in combat roles. While the association is negative across all models, the association only reaches borderline statistical significance in two of them ($p < 0.1$). Moving to **Table 2**, there is much stronger evidence of a nonlinear relationship, as the squared term for women’s physical security has a positive and statistically significant association with the outcome variable in every model.

Figure 3 displays the marginal effects of women’s security for the model with the full set of control variables. The figure shows that when women’s physical security is at very low levels, the probability that women are integrated into combat roles is very high. However, as women’s security increases, this probability flattens out. Thus, in line with our previous discussion, the

utility of recruiting women into combat roles is far higher in societies with very poor levels of women's security but is not as high in other societies.

Robustness Checks

We conduct a battery of alternative checks to assess the robustness of the findings. These tests are detailed below.

Alternative Measures of Women's Rights

It is also important to consider how other dimensions of women's rights affect women's participation in combat roles in PGMs. Indeed, a diversity of measures of women's rights have been used in quantitative studies on gender and political violence (see Karim and Hill 2018). However, from a theoretical standpoint, we do not expect that other forms of women's rights will have the same effect on women joining combat roles in PGMs.

Specifically, if regimes want to continue excluding women from political and/or economic power, recruiting women into PGMs does not necessarily help achieve this goal in a straightforward manner. Additionally, governments can make nominal legislative changes that increase women's participation in such institutions, without substantially improving the representation of their interests (Htun 2016). Indeed, as noted above, the Gaddafi regime in Libya made multiple reforms that resulted in increased inclusion of women in state institutions, but women's physical security remained very low (Rogers 2016). In Iran, the Basij provided economic opportunities to women that were often not available to them, while also engaging in violent repression against women (Golkar 2013). Thus, other aspects of women's rights might not be as strongly associated with their participation in combat roles in PGMs.

In response, we examine the associations between other commonly used indicators of women's rights and their incorporation into combat roles. First, in addition to the measure of physical security used in the main analysis, Karim and Hill (2018) also developed two additional composite measures of women's status. The first is women's *inclusion*, which, in this context, is women's parity (relative to men) and visibility in the public sphere. Karim and Hill note that inclusion in the public sphere does not mean women have actual power. The components of this indicator include multiple measures of women's participation in the labor force, education attainment, and inclusion in various government offices.

The second composite measure developed by Karim and Hill (2018) captures women's *rights*, which they define as the degree of legal protections for women. They note that this does not capture the actual conditions women face in practice. Component measures include indicators of legislation about domestic abuse, legislation about sexual assault, inheritance rights for women, rights for unmarried and married women, and other indicators. We conduct tests that examine whether there are linear or nonlinear associations between both women's inclusion and rights and the incorporation of women into combat roles. We do not find any evidence of such associations.

We also use multiple measures of women's status from the aforementioned V-Dem dataset. First, we use V-Dem's measure of women's political participation, which includes the prevalence of women in the legislature, as well as the extent to which political power is distributed between women and men (Sundström et al. 2017). We find no evidence of a linear or nonlinear association between this variable and women's participation in combat roles. Second, we employ V-Dem's measure of women's civil liberties, which includes the right to private property, freedom of domestic movement, freedom from forced labor, and access to justice for

women (Sundström et al. 2017). We find no evidence of a non-linear relationship with the main outcome variable. Women's civil liberties have a positive association with participation in combat roles in all the models testing for a linear relationship, but this association is only statistically significant in a single model.

Finally, we use V-Dem's measure of women's civil society participation, which captures freedom of discussion for women, the prevalence of female journalists, and women's participation in civil society organizations. There is mixed evidence of a positive and linear association between women's civil society participation and combat participation, and no evidence of a nonlinear relationship. Thus, alternative measures of women's rights have either no evidence of an association with participation in combat roles, or evidence of a positive relationship. This supports our argument that there is a unique relationship between women's physical security and their participation in combat roles in PGMs.

Alternative Forms of Women's Participation

As noted earlier, we also constructed measures that capture women's incorporation into non-combat support and leadership roles in PGMs. We conduct additional analysis examining the association between women's security and these types of participation. We test for both linear and nonlinear associations. Interestingly, across all models, we find strong, *linear*, and statistically significant association between women's security and incorporation of women into both non-combat support and leadership roles. We do *not* find consistent evidence of *nonlinear* associations. These findings suggest that women's physical security has a somewhat different effect on women's incorporation into combat positions than it does other roles in PGMs. We plan to explore these differences more in future drafts.

Alternative Measure of Combat Participation

The measure of the main outcome variable does not distinguish between women's and girls' participation. However, different factors sometimes drive the participation of women and girls in armed movements (Haer and Böhmelt 2018). Indeed, in their measure of women's participation in rebel organizations, Loken and Matfess (2024) do not code groups as recruiting women when they recruit girls but *not* adult women (though such groups are coded as recruiting women if they mobilize girls *and* adult women). In response, we created an alternative version of women's participation in combat roles that codes groups as 0 if they recruit girls but *not* adult women. Doing so excludes only four groups that are coded as recruiting women in the main version of the variable. We rerun the main analysis and produce the same results; we continue to find evidence of non-linear association between women's physical security and their participation in combat roles.

Application to Rebel Organizations

Finally, another possibility is that the effects of women's physical security are not unique and could apply to other types of armed organizations. In response, we replicate analysis conducted by Loken and Matfess (2024), who examine how female labor force participation affects a variety of types of women's participation in rebel organizations. We rerun their analysis, substituting women's physical security for female labor force participation. We test for both linear and nonlinear associations. We find no consistent evidence of an association between women's physical security and their incorporation into a variety of roles in rebel organizations. This reinforces the idea that different factors might drive women's incorporation into rebel organizations, which attempt to change the status quo, and PGMs, which largely seek to maintain the status quo (Alison 2004).

Conclusion

The recruitment of women into pro-government militias often appears, at least on the surface, puzzling. To maintain traditional, repressive gender roles for women, regimes and their associated militias are sometimes willing to incorporate women into combat roles, which defy traditional gender roles that they are trying to uphold. Furthermore, women are sometimes willing to join these organizations, even though these organizations are tools used to further perpetuate the repression of women.

To address these puzzles, we argue that low levels of physical security in countries both increases the demand that militias have for women and increases the supply of women willing to join these organizations. PGMs operating in such countries can recruit women into combat roles to (1) help offset the reputational costs associated with the repression of women; (2) enforce traditional gender norms; and (3) to more effectively monitor other women. High levels of insecurity can also drive women to join PGMs for protection. To evaluate this argument, we collected novel data on women's participation in PGMs. We find strong evidence that while the probability of women's participation in PGMs is very high in countries with very low levels of physical security for women, this probability substantially declines and flattens out as women's security improves.

There are several potential avenues for future research. First, using the data we have collected, scholars could examine the *consequences* of women's participation in PGMs. This includes how PGMs recruitment of women affect their treatment of civilians, including perpetration of sexual violence (e.g., Cohen and Nordås 2015; Wood 2008). Scholars could also examine how the recruitment of women affects the longevity and success of militias (Braithwaite and Ruiz 2018; Wood and Allemang 2022). Second, scholars could also examine other factors

that drive the incorporation of women into PGMs. This could include factors such as tactical needs (Thomas and Bond 2015); ideology (Thomas and Wood 2017); and competition from other armed actors (Henshaw 2020).

Scholars of pro-government militias should take women's participation in these organizations seriously. Not only is women's involvement in these groups extensive, but it is consequential, as demonstrated by cases like women's activities in the Basij in Iran. This study also highlights the variation in women's participation in political violence as well as how states use their security apparatuses to maintain physical control over women.

References

- Alison, Miranda. 2004. "Women as agents of political violence: Gendering security." *Security Dialogue* 35 (4): 447-463.
- Amnesty International. 2024. "Iran: Two years after 'Woman Life Freedom' uprising, impunity for crimes reigns supreme." Sep 11. Available At: <https://www.amnesty.org/en/latest/news/2024/09/iran-two-years-after-woman-life-freedom-uprising-impunity-for-crimes-reigns-supreme/>
- Ash, Konstantin. 2016. "Threats to Leaders' Political Survival and Pro-Government Militia Formation." *International Interactions* 42(5): 703-728.
- Bates, Robert. 2008. *When Things Fell Apart: State Failure in Late-Century Africa*. New York: Cambridge University Press.
- Bateson, Regina. 2017. "The Socialization of Civilians and Militia Members." *Journal of Peace Research* 54(5): 634-47.
- Belford, Aubrey. 2010. "Group Calls on Indonesia to Overturn Shariah Laws." *The New York Times*. Dec 1. Available At: <https://www.nytimes.com/2010/12/02/world/asia/02indo.html>
- Berrebi, Claude, and Jordan Ostwald. 2016. "Terrorism and the labor force: Evidence of an effect on female labor force participation and the labor gender gap." *Journal of Conflict Resolution* 60(1): 32-60.
- Bloom, Mia. 2011. *Bombshell: The many faces of women terrorists*. Penguin Canada.
- Bolte, Brandon. 2021. "The Puzzle of Militia Containment in Civil Wars." *International Studies Quarterly* 65(1): 250-261.
- Braithwaite, Alex. And Luna B. Ruiz. 2018. "Female combatants, forced recruitment, and civil conflict outcomes." *Research & Politics*, 5(2), 2053168018770559.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding interaction models: Improving empirical analyses." *Political Analysis* 14(1): 63-82.
- Bueno de Mesquita, Ethan. 2005. "The quality of terror." *American journal of political science*, 49(3): 515-530.
- Carey, Sabine C., Neil J. Mitchell, and Katrin Paula. 2022. "The life, death and diversity of pro-government militias: The fully revised pro-government militias database version 2.0." *Research & Politics* 9 (1): 20531680211062772.

- Carey, Sabine C., Neil J. Mitchell, and Adam Scharpf. 2016. "Pro-Government Militias and Conflict." Oxford Research Encyclopedia of Politics. Accessed 5 January 2025. <https://oxfordre.com/politics/display/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-33>
- Carey, Sabine C., and Neil J. Mitchell. 2017. "Progovernment Militias." *Annual Review of Political Science* 20: 127-147.
- Carey, Sabine C., Michael P. Colaresi, and Neil J. Mitchell. 2015. "Governments, Informal Links to Militias, and Accountability." *Journal of Conflict Resolution* 59(5): 850-76.
- Carey, Sabine C., Neil J. Mitchell, and Will Lowe. 2013. "States, the Security Sector, and the Monopoly of Violence." *Journal of Peace Research* 50(2): 249-58.
- Clayton, Govinda, and Andrew Thomson. 2016. "Civilianizing Civil Conflict." *International Studies Quarterly* 60(3): 499-510.
- Cohen, Dara Kay, and Ragnhild Nordas. 2015. "Do States Delegate Shameful Violence to Militias? Patterns of Sexual Violence in Recent Armed Conflicts." *Journal of Conflict Resolution* 59(5): 877-898.
- Coppedge, Michael, John Gerring, Carl Henrik Knutsen, Staffan I. Lindberg, Jan Teorell, David Altman, Fabio Angiolillo, Michael Bernhard, Cecilia Borella, Agnes Cornell, M. Steven Fish, Linnea Fox, Lisa Gastaldi, Haakon Gjerløw, Adam Glynn, Ana Good God, Sandra Grahn, Allen Hicken, Katrin Kinzelbach, Kyle L. Marquardt, Kelly McMann, Valeriya Mechkova, Anja Neundorf, Pamela Paxton, Daniel Pemstein, Oskar Rydén, Johannes von Römer, Brigitte Seim, Rachel Sigman, Svend-Erik Skaaning, Jeffrey Staton, Aksel Sundström, Eitan Tzelgov, Luca Uberti, Yi-ting Wang, Tore Wig, and Daniel Ziblatt. 2024. "V-Dem Codebook v14" Varieties of Democracy (V-Dem) Project.
- Cunningham, Karla J. 2003. "Cross-regional trends in female terrorism." *Studies in conflict and terrorism* 26 (3): 171-195.
- Dalton, Angela, and Victor Asal. 2011. "Is it ideology or desperation: why do organizations deploy women in violent terrorist attacks?." *Studies in Conflict & Terrorism* 34(10): 802-819.
- Davis, Jessica. 2013. "Evolution of the global Jihad: Female suicide bombers in Iraq." *Studies in Conflict & Terrorism* 36 (4): 279-291.
- De Bruin, Erica. 2020. *How to Prevent Coups d'Etat: Counterbalancing and Regime Survival*. Ithaca, NY: Cornell University Press.
- Donno, Daniela, Sara Fox, and Joshua Kaasik. 2022. "International incentives for women's rights in dictatorships." *Comparative Political Studies* 55 (3): 451-492.

- Eck, Kristine. 2014. "Coercion in Rebel Recruitment." *Security Studies* 23(2): 364-398.
- Enterline, Andrew J., Emily Stull, and Joseph Magagnoli. 2013. "Reversal of fortune? Strategy change and counterinsurgency success by foreign powers in the twentieth century." *International Studies Perspectives* 14(2): 176-198.
- Fariss, Christopher J. 2014. "Respect for human rights has improved over time: Modeling the changing standard of accountability." *American Political Science Review* 108(2): 297-318.
- Fariss, Christopher J., Therese Anders, Jonathan N. Markowitz, and Miriam Barnum. 2022. "New estimates of over 500 years of historic GDP and population data." *Journal of Conflict Resolution* 66 (3): 553-591.
- Fitriani, Randolph GS Cooper, and Ron Matthews. 2016. "Women in ground close combat." *The RUSI journal* 161 (1): 14-24.
- Forney, Jonathan Filip. 2015. "Who Can We Trust with a Gun? Information Networks and Adverse Selection in Militia Recruitment." *Journal of Conflict Resolution* 59(5): 824-849.
- Gates, Scott. 2002. "Recruitment and Allegiance: The Microfoundations of Rebellion." *Journal of Conflict Resolution* 46(1): 111-130.
- Golkar, Saeid. 2011. "Politics of piety: The Basij and moral control of Iranian society." *The Journal of the Middle East and Africa* 2(2): 207-219.
- Golkar, Saeid. 2012. "Organization of the oppressed or organization for oppressing: analysing the role of the Basij Militia of Iran." *Politics, Religion & Ideology* 13 (4): 455-471.
- Golkar, Saeid. 2013. "The feminization of control: Female militia and social order in Iran." *Hawwa* 11 (1): 16-40.
- Haer, Roos, and Tobias Böhmelt. 2018. "Girl soldiering in rebel groups, 1989–2013: Introducing a new dataset." *Journal of Peace Research* 55(3): 395-403.
- Hasni, Khairul. 2020. "Sharia Police: Gender Discrimination and Elite Politics in Aceh." *Al_Hayat: Journal of Islamic Education*.
- Hegghammer, Thomas. 2012. "The Recruiter's Dilemma: Signalling and Rebel Recruitment Tactics." *Journal of Peace Research* 50(1): 3-16.
- Henshaw, Alexis Leanna. 2016. "Why women rebel: Greed, grievance, and women in armed rebel groups." *Journal of Global Security Studies* 1 (3): 204-219.

- Henshaw, Alexis. 2020. "Outbidding and gender: dynamics in the Colombian civil war." In *Terrorism, Gender and Women* (pp. 99-117). Routledge.
- Htun, Mala. 2016. *Inclusion without representation in Latin America: Gender quotas and ethnic reservations*. Cambridge University Press.
- Huber, Laura, and Sabrina Karim. 2018. "The internationalization of security sector gender reforms in post-conflict countries." *Conflict Management and Peace Science* 35 (3): 263-279.
- Human Rights Watch. 1996. "Behind the Red Line: Political Repression in Sudan." Available At: <https://www.refworld.org/reference/countryrep/hrw/1996/en/97534>
- Human Rights Watch. 2011. "You Dress According to Their Rules." Available At: <https://www.hrw.org/report/2011/03/10/you-dress-according-their-rules/enforcement-islamic-dress-code-women-chechnya>
- Human Rights Watch. 2021. "I wanted to runaway: Abusive Dress Codes for Women and Girls in Indonesia." Available At: <https://www.hrw.org/report/2021/03/18/i-wanted-run-away/abusive-dress-codes-women-and-girls-indonesia>
- Humphreys, Macartan, and Jeremy M. Weinstein. 2008. "Who Fights? The Determinants of Participation in Civil Wars." *American Journal of Political Science* 52(2): 436-455.
- Israelsen, Shelli. 2020. "Why now? Timing rebel recruitment of female combatants." *Studies in Conflict & Terrorism*, 43(2): 123-144.
- Jentzsch, Corinna, Stathis Kalyvas, and Livia Schubiger. 2015. "Militias in Civil Wars." *Journal of Conflict Resolution* 59(5): 755-69.
- Kalyvas, Stathis N., and Matthew Adam Kocher. 2007. "How "free" is free riding in civil wars?: Violence, insurgency, and the collective action problem." *World politics* 59(2): 177-216.
- Kampwirth, Karen. 2002. *Women and Guerrilla Movements: Nicaragua, El Salvador, Chiapas, Cuba*. Penn State Press.
- Karim, Sabrina. 2019. "Restoring confidence in post-conflict security sectors: Survey evidence from Liberia on female ratio balancing reforms." *British Journal of Political Science* 49(3): 799-821.
- 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. 2023. "Unpacking the concepts: Examining the link between women's status and terrorism." *Journal of peace research* 60(5): 792-806.

- Koren, Ore. 2017. "Means to an End: Pro-government Militias as a Predictive Indicator of Strategic Mass Killing." *Conflict Management and Peace Science* 34(5): 461-484.
- Loken, Meredith. 2018. *Women in war: Militancy, legitimacy, and rebel success*. Doctoral Dissertation.
- Loken, Meredith. 2021. "'Both needed and threatened': Armed mothers in militant visuals." *Security Dialogue* 52 (1): 21-44.
- Loken, Meredith, and Hilary Matfess. 2024. "Introducing the women's activities in armed rebellion (WAAR) project, 1946–2015." *Journal of Peace Research* 61(3): 489-499.
- Loken, Meredith, and Anna Zelenz. 2018. "Explaining extremism: Western women in Daesh." *European Journal of International Security* 3(1): 45-68.
- Lyall, Jason. 2010. "Are Coethnics More Effective Counterinsurgents?" *American Political Science Review* 104(1): 1-20.
- Manekin, Devorah, and Reed M. Wood. 2020. "Framing the narrative: Female fighters, external audience attitudes, and transnational support for armed rebellions." *Journal of Conflict Resolution* 64 (9): 1638-1665.
- Marlowe, Laura. 2000. "Behind closed doors Meeting friends of the opposite sex, going to techno raves, taking drugs - Iran's 'Khatami generation' is gradually finding ways to subvert the strict control of the vigilantes." *The Irish Times*. Feb 26.
- Mason, T. David, and Dale A. Krane. 1989. "The Political Economy of Death Squads: Toward a Theory of the Impact of State-Sanctioned Terror." *International Studies Quarterly* 33(2): 175-198.
- McEvoy, Sandra. 2009. "Loyalist women paramilitaries in Northern Ireland: Beginning a feminist conversation about conflict resolution." *Security Studies* 18 (2): 262-286.
- Méndez, Andrea. 2012. "Militarized Gender Performativity: Women and Demobilization in Colombia's FARC and AUC." Phd diss, Queen's University, Kingston, Ontario, Canada. Available at: <https://qspace.library.queensu.ca/server/api/core/bitstreams/61c61310-148d-4d34-8c02-58a57d214b35/content>
- Mitchell, Neil J. 2004. *Agents of Atrocity: Leaders, Followers, and the Violation of Human Rights in Civil War*. New York: Palgrave Macmillan.
- Mitchell, Neil J., Sabine C. Carey, and Christopher K. Butler. 2014. "The Impact of Pro-government Militias on Human Rights Violations." *International Interactions* 40(5): 812-836.

- Morgan, Alaina M. 2024. "A Revolutionary Bromance: Masculinity, Performance, and Religion in Diplomacy." *Diplomatic History* 48 (3): 339-365.
- Mwanjawala, Patrick Enson. 2020. *The Invented Tradition: Hastings Kamuzu Banda and the Marginalization of Women in Malawi, 1964-1994* (Master's thesis, Miami University). Available At: https://etd.ohiolink.edu/acprod/odb_etd/ws/send_file/send?accession=miami1596206291826625&disposition=inline
- Nacos, Brigitte L. 2005. "The portrayal of female terrorists in the media: Similar framing patterns in the news coverage of women in politics and in terrorism." *Studies in conflict & terrorism* 28 (5): 435-451.
- O'Rourke, Lindsey A. 2009. "What's special about female suicide terrorism?." *Security Studies* 18 (4): 681-718.
- Otto, Sabine. 2018. "The Grass is Always Greener? Armed Group Side Switching in Civil Wars." *Journal of Conflict Resolution* 62(7): 1459-1488.
- Parkinson, Sarah E. 2013. "Organizing rebellion: Rethinking high-risk mobilization and social networks in war." *American Political Science Review* 107(3): 418-432.
- Parsa, Fariba. 2023. "Mahsa Amini's Legacy: A New Movement for Iranian Women." *Carnegie Endowment*. Available At: <https://carnegieendowment.org/sada/2023/09/mahsa-aminis-legacy-a-new-movement-for-iranian-women?lang=en>
- Pedroletti, Brice. 2003. "Life under Sharia law in Banda Aceh, Indonesia." *Le Monde*. Nov 11. Available At: https://www.lemonde.fr/en/international/article/2023/11/11/life-under-sharia-law-in-banda-aceh-indonesia_6246452_4.html#
- Pundir, Pallavi. 2022. "We Met an All-Women Flogging Squad in Indonesia." *Vice*. Dec. 27. Available At: <https://www.vice.com/en/article/aceh-indonesia-women-floggers-sharia-police/>
- Purwaningsih, Ayu. 2020. "All-female flogging squad enforces Shariah law in Indonesia." *Deutsche Welle*. Feb 3. Available At: <https://www.dw.com/en/indonesias-aceh-enlists-an-all-female-flogging-squad-to-enforce-shariah-law/a-52244910>
- Raleigh, Clionadh. 2016. "Pragmatic and Promiscuous: Explaining the Rise of Competitive Political Militias Across Africa." *Journal of Conflict Resolution* 60(2): 283-310.
- Reif, Linda L. 1986. "Women in Latin American guerrilla movements: A comparative perspective." *Comparative Politics* 18(2): 147-169.
- Reno, William. 2011. *Warfare in Independent Africa*. New York: Cambridge University Press.

- Rogers, Amanda. 2016. "Revolutionary Nuns or Totalitarian Pawns: Evaluating Libyan State Feminism After Mu'ammar al-Gaddafi." *Women's Movements in Post-"Arab Spring" North Africa*, 177-193.
- Sadeghi, Fatemeh. 2009. "Foot Soldiers of the Islamic Republic's 'Culture of Modesty'." *Middle East Report* (250): 50-55.
- Sagolj, Damir. 2014. "Life under Sharia." Sep 22. *Reuters*. Available At: <https://widerimage.reuters.com/story/life-under-sharia>
- Salih, Cale. 2015. "The Kurdish women fighting ISIS." *CNN*. Mar 12. Available At: <https://www.cnn.com/2015/03/12/world/cnnphotos-female-peshmerga-fighters/index.html>
- Seymour, Lee J.M. 2014. "Why Factions Switch Sides in Civil Wars." *International Security* 39(2): 92-131.
- Staniland, Paul. 2015. "Militias, Ideology, and the State." *Journal of Conflict Resolution* 59(5): 770-93.
- Stanton, Jessica. "Regulating Militias." *Journal of Conflict Resolution* 59(5): 899-923.
- Steinert, Christoph, Janina Steinert, and Sabine Carey. 2019. "Spoilers of Peace: Pro-government Militias as Risk Factors for Conflict Recurrence." *Journal of Peace Research* 56(2): 249-63.
- 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.
- Takao, Kenichiro. 2021. "Women in the Promotion of Virtue and Prevention of Vice Through the Case of "Religious Police" in Saudi Arabia." *Orient* 56: 141-155.
- Tremblay, Manon. 2007. "Democracy, representation, and women: A comparative analysis." *Democratization* 14(4): 533-553.
- Thomas, Jakana L. 2021. "Wolves in sheep's clothing: assessing the effect of gender norms on the lethality of female suicide terrorism." *International Organization* 75 (3): 769-802.
- Thomas, Jakana L., and Kanisha D. Bond. 2015. "Women's Participation in Violent Political Organizations." *American Political Science Review* 109(3): 488-506.
- Thomas, Jakana L., and Reed M. Wood. 2018. "The social origins of female combatants." *Conflict Management and Peace Science*, 35(3): 215-232.

- Viterna, Jocelyn S. 2006. "Pulled, pushed, and persuaded: Explaining women's mobilization into the Salvadoran guerrilla army." *American Journal of Sociology* 112(1): 1-45.
- Viterna, Jocelyn S. 2013. *Women in war: The micro-processes of mobilization in El Salvador*. Oxford University Press.
- Vohra, Anchal. 2022. "It's Woman vs. Woman in Iran's Protests." *Foreign Policy*. Nov 7. Available At: <https://foreignpolicy.com/2022/11/07/its-woman-vs-woman-in-irans-protests/>
- Voller, Yaniv. 2022. "Rethinking armed groups and order: Syria and the rise of militiocracies." *International Affairs* 98(3): 853-871.
- Walsh, James Igoe, Justin M. Conrad, and Beth Elise Whitaker. 2024. "Rebel human rights abuses during civil wars: Introducing the rebel human rights violations dataset." *Journal of Peace Research* 61 (3): 477-488.
- Wehrey, Fredrick. 2014. "Ending Libya's Civil War: Reconciling Politics, Rebuilding Security." *Carnegie Endowment for International Peace*. Sep 24. Available At: <https://carnegieendowment.org/2014/09/24/ending-libya-s-civil-war-reconciling-politics-rebuilding-security-pub-56741>
- Weinstein, Jeremy M. 2007. *Inside Rebellion: The Politics of Insurgent Violence*. New York: Cambridge University Press.
- Wood, Elizabeth J. 2008. "Sexual Violence during War: Toward an Understanding of Variation," in *Order, Conflict, and Violence*, ed. Ian Shapiro et al. (Cambridge: Cambridge University Press).
- Wood, Reed M., and Lindsey Allemang. 2022. "Female fighters and the fates of rebellions: How mobilizing women influences conflict duration." *Conflict Management and Peace Science*, 39(5), 565-586.
- Wood, Reed M., and Jakana L. Thomas. 2017. "Women on the frontline: Rebel group ideology and women's participation in violent rebellion." *Journal of Peace Research* 54(1): 31-46.
- Young, Joseph K. 2009. "State capacity, democracy, and the violation of personal integrity rights." *Journal of Human Rights* 8 (4): 283-300.