

When Civilians are Attacked: Gender Equality and Terrorist Targeting

Laura Huber
Ph.D Candidate
Emory University
lkhuber@emory.edu

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Abstract

While scholars demonstrate a consistent negative relationship between gender equality and violence, the effect of women's rights on the quality of terrorism and the type of victims targeted remains unexplored. This paper introduces a new model of terrorists' strategic targeting by examining the trade-off between the ease of a civilian-oriented attack and the negative public reaction these attacks invoke. Within this framework, gender equality increases the costs of civilian targeting by inducing public opinion costs. As gender equality increases, the costs of attacking civilians increases relatively more than government-oriented attacks. Using data on domestic terrorism between 1970 and 2007 and a sub-national examination of a randomly implemented gender quota in India, this study demonstrates that as gender equality increases, the ratio of civilian-oriented to government-oriented attacks decreases. Overall, this study refines our understanding of terrorists' strategic targeting and identifies heterogeneity in the Women, Peace, and Security theory.

Word Count: 10,998

In 2004, Chechen rebels took more than 1,000 children and adults hostage at a school in Beslan, Russia, leaving more than 300 people dead and 700 wounded.¹ This attack prompted shock and outrage as it targeted an elementary school and over half of those killed were children. Terrorist attacks resulting in civilian casualties often receive great amounts of media attention and condemnation. These “civilian-oriented” attacks, which target markets, airports, schools, weddings, parks, and office buildings, differ notably from terrorist attacks against government or security institutions both in their strategic value and their perceived legitimacy. What influences terrorist organizations’ decision to orchestrate “civilian-oriented” attacks or target the government more specifically?

While a rich body of literature has examined the causes of terrorism, including Women, Peace, and Security (WPS) scholars who find a consistent negative relationship between gender equality and the occurrence and intensity of terrorism, terrorists also make strategic calculations when selecting targets. This paper explores how national gender equality influences terrorist strategy, specifically the decision to attack civilian-oriented or government-oriented targets by introducing a unique theoretical framework that examines targeting decisions as a trade-off between the ease of civilian targeting and the potential loss of public support. As strategic organizations, terrorist groups select targets that will increase the likelihood of gaining concessions from the government while incurring the lowest cost to the group (Crenshaw 1981, 1985, Pape 2003, Piazza 2017, Polo and Gleditsch 2016). Since terrorist groups often depend on the public’s reaction, specifically, that they will impose audience costs on their government, and on the continued loyalty of their civilian support base, terrorist targeting decisions are constrained by the preferences of civilians (Nemeth 2010, Polo and Gleditsch 2016, Weinstein 2007). In other words, terrorist groups face a trade-off between the relative ease of civilian-oriented attacks and the potential public backlash and loss of civilian support these attacks may provoke. Although opinions on civilian targeting vary depending on a number of factors, women are generally less approving than men of targeting civilians (Afzal 2012, Eichenberg 2003, Herron and Jenkins-Smith 2006,

Saad 2011, Sever et al. 2008).² As gender equality and women's influence increase, their support for terrorist operations becomes more vital for the organization's success. Additionally, as state gender equality increases, both men and women may adopt increasingly negative attitudes toward civilian targeting. Therefore, terrorist groups operating in gender equitable states are more constrained by women's and society's condemnation of attacks against civilians and thus discount the utility of civilian-oriented attacks. Consequently, as gender equality increases, terrorist attacks against civilian-oriented targets should decrease more relative to government-oriented attacks. In other words, while terrorism may be less likely to occur in gender equitable societies, civilian-oriented terrorism should decrease more than government-oriented terrorism.

To test this theory, a cross-national and sub-national analysis are presented. First, using panel data between 1970 and 2007, this paper tests the influence of several measures of gender equality on the ratio of terrorist attacks that targeted areas, places, or individuals not directly tied to the government. The findings demonstrate a strong negative correlation between gender equality and the ratio of civilian-oriented attacks. Second, the theory is explored at the sub-national level in India by leveraging a relatively random implementation processes of a nationally-mandated gender quota to increase women's participation on local village councils between 1985 and 2007. The results demonstrate that shocks to women's rights is associated with a decreased civilian-to-government attack ratio.

This analysis deepens our understanding of the multifaceted influences on terrorists' strategic targeting decisions, improving predictions regarding which states and targets are the most susceptible to terrorism. Additionally, it contributes to terrorism literature by proposing a unique theory that terrorist organizations face a trade-off between the ease and lower logistical costs of targeting civilians and the loss of civilian support, which constrains their target selection. Further, it expands WPS theory by examining how gender equality may result in heterogeneous effects, decreasing support for some types of violence more than other types.

This paper begins with an overview of the strategic targeting decisions made by terrorists, followed by a discussion of how gender equality discourages attacks against civilians. Then, a cross-national research design is presented before a sub-national natural experiment is examined. The study concludes with the theoretical and policy implications.

The Strategy of Terrorist Targeting

Despite strong condemnations by the international community, the use of violence against civilians remains a common strategy for violent political groups. Noncombatants, who are often unarmed, relatively unprotected, and readily accessible, present an attractive target to make a political statement, demonstrate resolve, and impose costs on the state, while decreasing the direct costs to the terrorist group (Conrad and Greene 2016, De la Calle 2017, Nemeth 2010, Polo and Gleditsch 2016). Terrorist organizations choose targets that maximize the attention paid to the group's political grievances, potentially increasing their legitimacy, and that generate the highest costs for the government.³ These costs can be incurred by the government in two types of attacks. First, the terrorist organization can attack a government-oriented target, which attacks noncombatants that have a direct connection to the government, such as a government building, politician, or police station. In these attacks, the terrorist organization attempts to directly weaken the state by harming its agents or infrastructure to lessen the government's resolve. Importantly, government-oriented attacks are likely to be costlier to undertake due to higher levels of security surrounding state institutions and representatives compared to the relative vulnerability of the civilian population (Polo and Gleditsch 2016). However, the group may be willing to bear the costs of a government-oriented attack if they believe that these attacks are perceived as more legitimate, thus magnifying their political statement and demonstrating their commitment. Additionally, government-oriented attacks may be preferred if the government is unlikely to respond to public demand.

Second, terrorist groups can attack civilian-oriented targets, which consist of non-combatants not directly related to state activities. Noncombatants targeted in these attacks are the “general public” and have little to no direct influence on the relationship between the government and the terrorist group except through the imposition of audience costs. By attacking these targets, terrorist organizations hope to incite public fear and worsen perceptions of government capacity so that the public will pressure the government to grant concessions (Conrad and Greene 2016, De la Calle 2017). However, terrorist groups face a trade-off when choosing civilian-oriented targets. On one hand, these attacks are likely to successfully frighten and impose costs upon the public, which increases the likelihood that they will pressure for concessions. On the other hand, civilians may resist imposing audience costs if they do not perceive the terrorist organization to be legitimate. Therefore, since terrorist organizations often apply pressure to the government indirectly through the public, when larger numbers of the public are sympathetic towards the group, and by extension, its targeting choices, they may be more willing to apply the necessary audience costs (Conrad and Greene 2016, Crenshaw 1985, Polo and Gleditsch 2016). If an organization is perceived as using excessive or inappropriate violence against civilians, it may lose public sympathy or support, risking a loss of reputation or even elimination as a group (Bloom 2005, Cronin 2009). For example, Cronin (2009) argues that loss of popular support when an attack is viewed as repulsive and illegitimate due to target selection is a major cause of failure for terrorist organizations. For example, the 1997 attack against tourists by al-Gama’a al-Islamiyya (GAI) in Luxor destroyed the groups’ legitimacy and decreased the government’s willingness to negotiate. Thus, when attacking civilian-oriented targets, terrorist organizations must balance the amount of fear they incite with the threat of alienating the public if they are deemed illegitimate.

Additionally, terrorist groups may also be sensitive to public opinion regarding their legitimacy if the organization relies heavily on community support. Terrorist groups often operate as covert organizations and rely upon their supporters to provide protection, re-

sources, and recruits (Asal and Rethemeyer 2008, Nemeth 2010, 2014). Thus, similar to insurgent groups that engage in traditional combat with government security forces and often rely heavily on civilian populations, some terrorist organizations may also rely directly upon civilians for operational support, heightening their concern for public perceptions of their legitimacy. For example, Asal and Rethemeyer (2008) and Nemeth (2014) argue that leftist groups tend to be reliant upon public opinion for support and future recruitment and therefore, must maintain positive relationships with the public. Although many studies have often considered terrorism as a relatively separate phenomenon from traditional insurgency, insurgent and terrorist groups often share similar characteristics, goals, and support bases. Further, traditional insurgent groups may engage in terrorist tactics. Thus, theories of civilian public opinion that are more commonly applied to insurgent groups also apply to many terrorist organizations. Therefore, while there is a conceptual difference between terrorist and insurgent organizations, this theory applies both to organizations that only engage in terrorist attacks and insurgent groups that at times use terrorist tactics. Importantly, while groups that rely on direct public support are likely to be even more sensitive to public opinion, less dependent organizations, such as lone wolf groups or groups with external support, are still likely to be considerate of public reactions to their targeting decisions because they depend on the public to pressure the government for concessions (Cronin 2009).

Therefore, terrorist groups face a trade-off between the intensity of their violent attacks, the relative ease of targeting civilians, and their legitimacy. Even if the local population is sympathetic to the terrorist group's cause, civilians may not support tactics that jeopardize their safety (De la Calle 2017, Kalyvas and Cuenca 2005, Polo and Gleditsch 2016). Further, civilians may condemn certain types of attacks, such as attacks against civilian-oriented targets, as illegitimate, decreasing their support for the group and increasing the likelihood of backlash against the group (Cronin 2009, Nemeth 2014). Therefore, although attacks against civilian targets are relatively less costly from a logistical perspective, they can be very costly in terms of public opinion (Conrad and Greene 2016, Crenshaw

1985, de Burca 2014, Hoffman 2006).

While various factors influence terrorist targeting, the expected reaction among the public may influence this decision (De la Calle 2017, Polo and Gleditsch 2016). This reaction may vary depending on a number of factors, including how endangered the average civilian is by terrorist tactics, whether the government's reaction negatively effects the organization's support base, and the population's normative beliefs (Conrad and Greene 2016). Gender equality and the gender gap in acceptance of civilian casualties are an additional factor that impact public reactions to and opinion of civilian-oriented terrorism.

Gender Equality and Civilian-Oriented Terrorism

Gender equality decreases the occurrence and intensity inter- and intrastate conflict, including terrorism (Hudson et al. 2013, Melander 2005*a,b*). Harris and Milton (2016) argue that women's empowerment decreases radicalization and disincentivizes women from joining terrorist organizations. Their analysis demonstrates that increasing levels of women's rights have a negative association with the number of domestic terrorist attacks. Similarly, Saiya, Zaihra and Fidler (2017) also claim that women are less likely to pursue repressive policies that may result in terrorism and find that increases in gender equality decrease anti-American terrorism. Further, Robison, Crenshaw and Jenkins (2006) and Robison (2009) find that women's economic empowerment decreases terrorism. Interestingly, Younas and Sandler (2015) find that states that have more women than men experience more domestic terrorism. Finally, Piazza (2017) argues that right-wing terrorist organizations react to a perceived loss of white male dominance with increased terrorism. However, these previous studies have largely remained agnostic about what types of targets are attacked, focusing on the number of attacks. This study builds upon this previous work to investigate how gender equality alters the *character* of terrorism.

Gender equitable societies impose higher costs on terrorists that specifically target

civilian-oriented locations or individuals. These costs, suffered through decreased legitimacy and support, occur in two mutually reinforcing ways. First, as women gain more influence, their support for terrorist groups and their reaction to terrorism becomes more important for group success. As explored below, women are generally less approving of attacks against civilians than attacks against government-oriented targets. However, while women's and men's opinions on attacks against civilians diverge, these differences do not arise due to inherent characteristics, but because societal and cultural norms encourage women to be more sensitive to civilian suffering.⁴ Secondly, as gender equality transforms interpersonal relationships, both men and women may adopt negative views of civilian-oriented violence. Therefore, as gender equality increases, the number of terrorist attacks against civilian-oriented targets should decrease relatively more than terrorist attacks against government-oriented targets.

Scholars have long found a “gender gap” in support for war, civilian collateral damage, humanitarian crises, militancy, and defense spending as women appear less supportive of violence than men (Conover and Sapiro 1993, Eichenberg 2003, 2007, Eichenberg and Stoll 2017). This gap extends to terrorism as women are less supportive of terrorist tactics and less likely to participate in terrorism than men (Sillke 2010). Furthermore, women hold especially negative attitudes towards suicide bombings (Center 2006, Saad 2011, Speulda and McIntosh 2005). Moreover, Afzal (2012) finds that as women become more educated, they are less likely to support terrorism relative to similarly educated men. Women also report being more concerned about civilian casualties in warfare and humanitarian issues, indicating less tolerance of civilian suffering (Eichenberg 2003, Speulda and McIntosh 2005, Stokes 2013). For example, women disapprove of drones more than men, which is presumed to be caused by women's association of drones with civilian casualties (Stokes 2013). Additionally, women report greater negative health and psychological impacts from terrorism (Herron and Jenkins-Smith 2006, Saad 2011, Sever et al. 2008). Women suffer more psychological distress from terrorism despite being less at risk of physical harm because their social roles caring for the

sick, injured, and distressed leads to more indirect exposure to terrorism (Cohen-Louck 2016, Marie 2009, Sever et al. 2008, Wilcox et al. 2009).

However, while women strongly condemn attacks against civilians and are less likely to support terrorist groups, they are willing to condone violence against government or military targets and terrorist groups (Conover and Sapiro 1993, Eichenberg 2003, 2007). In other words, women’s particularly strong distaste for civilian targeting does not translate to an equal condemnation of all violence, but a preference for violence against individuals and institutions associated with combatants or politics. Finally, while the extent of the gender gap regarding support for terrorism often varies based on contextual factors, a common perception that women hold these beliefs may still drive terrorists to base their judgments on the most readily available information.⁵

Additionally, while most studies on the gender gap in public opinion focus on the differences between sexes, a few studies examine how support for gender equality or feminism affect opinions on terrorism. While women tend to be socialized to be less supportive of civilian targeting, as gender equality increases and traditional gender roles lose precedence, *both* men and women may condemn civilian-oriented attacks. Melander (2005*a*) and Hudson and Leidl (2015) argue that gender equality fundamentally changes interpersonal relations, which causes both men and women to respect the individual rights of others.⁶ Ciftci, ODonnell and Tanner (2017) find that individuals who hold “gender egalitarian” views are less likely to support al-Qaeda. Similarly, Barnes, Brown and Osterman (2012) demonstrate that men who hold masculine honor ideologies are more likely to respond to threats of terrorism in violent and militant ways. Therefore, gender equality not only gives women more influence in society, but as gender equality increases, men may also adopt a similar distaste for civilian-oriented attacks.

As shown by Harris and Milton (2016), terrorism in general decreases in gender equitable states, but gender equality may have heterogeneous effects on different types of terrorism. As gender equality decreases tolerance for violence against civilians relatively more than

government-oriented attacks, terrorist groups, which are partially reliant on public opinion, will accordingly adapt their strategic targeting. In other words, since terrorist groups rely on the public to pressure the government for concessions and as a result, groups which receive relatively more support may be more likely to gain concessions, they are sensitive to public approval of and reaction to their organization, their mission, *and* their tactics.

Terrorists appear to be sensitive to public opinion and often change their behavior to attract women. For example, in response to the frustration of many female supporters with their lack of inclusion, the Taliban sought to appeal to women by releasing a magazine that emphasized the importance of women within the organization.⁷ Similarly, terrorist groups have demonstrated that they believe women supporters are key to the continued ideological support of the group (Von Knop 2007). Additionally, terrorists have changed their tactics in reaction to public condemnation. For example, the IRA briefly engaged in a “proxy bomb campaign” in which civilians were coerced to participate and sometimes killed in bombings. This led to public outrage, forcing the IRA to retire this tactic (Bloom and Horgan 2008). While there have not been studies that examine whether terrorist groups knowingly react to gender equality, evidence that terrorists actively seek to appease female supporters indicate that the increased condemnation of civilian targeting in gender equitable societies should lead terrorists to refrain from this target selection.

Gender equality will increase the costs of targeting civilians in several ways.⁸ First, the most direct influence is reduced public support for the group as a result of worsened perceptions of the group’s legitimacy. As gender equality increases, the public may become more sensitive to and disapproving of civilian-oriented terrorist attacks, causing the community to cut off its flow of resources, leak information, or defect. Further, the public may be less likely to pressure the government to grant concessions if the group’s tactics are viewed as illegitimate. Second, it may lead to a backlash against the group and result in public pressure on the government not to grant concessions. In other words, the group may not simply lose support, but may incite resistance if it is viewed as violating societal norms. Therefore, as

gender equality increases the costs of civilian targeting disproportionately more compared other forms of violence, the number terrorist attacks against civilian-oriented targets should decrease more relative to government-oriented attacks.

Hypothesis 1 *As women's rights increase, the number of domestic terrorist attacks against civilian-oriented targets will decrease relatively more than government attacks.*

However, not all terrorist groups may react uniformly to gender equality. For example, some terrorists may believe that gender equitable states are more likely to be coerced into submission by civilian-oriented attacks. This may be especially likely with terrorist groups that do not rely on public support, have external sources of support, or hold fundamentalist ideologies. While this study does not examine group-level effects, future work should explore whether the effects of gender equality are heterogeneous across groups. However, on aggregate, societal gender equality should have a negative relationship with the ratio of civilian-to-government-oriented attacks as all terrorist groups to some degree depend on the civilian population's reaction in order to gain concessions.⁹

Finally, while this theory primarily argues that targeting decisions are strategic, terrorist organizations may also suffer from principal-agent problems in which the strategic calculations of leadership are not properly implemented by individual terrorists (Abrahms and Conrad 2017, Abrahms and Potter 2015, Salehyan, Siroky and Wood 2014). However, gender equality may influence individual agents and alter their behavior to reflect the strategic decisions made by leadership. For example, the agent of a domestic terrorist attack likely comes from the same society and may hold similar gendered beliefs. Thus, individual terrorists from gender equitable societies may hold a similar disapproval of civilian targeting as the broader population. Additionally, individual terrorists are likely highly sensitive to the continued support and opinion of their public base as their immediate needs for shelter, sustenance, and protection are often directly supplied by civilians. Therefore, while the prin-

cial agent problem may in some cases undermine the strategic relationship between gender equality and targeting decisions, individual agents may continue to be wary of targeting civilians, complementing the primary causal mechanism.

Research Design

To test this hypothesis, two sets of analyses are conducted. The first tests whether there is a correlation between gender equality and the ratio of civilian-to-government-oriented attacks cross-nationally using country-year data on all states with populations greater than 100,000 between 1970 and 2007. The second analysis tests the theory sub-nationally by using a relatively exogenous shock to women’s local political participation in India when a 1993 referendum required Indian states to institute gender quotas.

Country-Level Analysis

Dependent Variable

The main dependent variable is the proportion of domestic terrorist attacks within a state-year directed at “civilian-oriented” targets, henceforth referred to as the civilian-to-government ratio or proportion civilian. Data on domestic terrorist attacks comes from Enders, Sandler and Gaibullov (2011)’s data that identified domestic terror attacks within the Global Terrorism Database.¹⁰ Civilian-oriented attacks seek to harm individuals or property not directly considered to be representatives of the government. Specifically, attacks were coded as “civilian-oriented” if they attacked a private business, an abortion-related institution or person, airports or aircrafts (not military aircraft), educational institutions (excluding military schools), journalists or media outlets, civilian maritime institutions, non-governmental institutions, private citizens and property, or tourists.¹¹ “Government-oriented” targets were coded as attacks against the government (buildings, personnel, or political parties), the police, the military, international government sites, non-state militias or armed groups, violent

political parties, and government infrastructure. It is important to note that there are points of ambiguity. For example, attacks against government infrastructure may indirectly harm civilian lives. However, these errors would likely drive down the estimated effect and the results are robust to alternative codings.¹² Domestic Civilian Attacks are relatively rare with 4,630 state-years experiencing no such attacks. The greatest number of *Domestic Civilian Attacks* in one state-year is 427, but the mean number of attacks is 3.3.

Proportion Civilian Attacks was then calculated as the percentage of total terror attacks in the year that targeted a “civilian-oriented” target. In states experiencing terrorism, 47.7% of attacks within a state-year target civilians. As the dependent variable is a proportion, generalized linear modeling with a logit transformation is used (Wooldridge 2010). State clustered errors are included to account for between-country variance.¹³

Independent Variables

In this study, gender equality is conceptualized and measured in four ways: the national fertility rate, women’s secondary school attendance ratio, women’s legislative participation, and political gender quotas. There is no single measure of gender equality and several proxies are used. These three indicators are useful because they proxy for gender equality in multiple spheres and are less likely to have an endogenous relationship with civilian-oriented terrorism.¹⁴ Importantly, terrorist organizations may react to some forms of gender equality differently. For example, women’s participation in politics is highly observable and may be perceived by terrorists as an opportunity to leverage perceptions of individual women as weak to intimidate female politicians. In contrast, women’s social empowerment is less observable and instead may affect general societal attitudes towards civilian-oriented attacks. In other words, while women’s political participation may cause terrorist organizations to directly consider how individual female politicians will react to terrorism, women’s social equality may lead to a more indirect effect.

The first independent variable, *Fertility*, measures the fertility rate of the state-year.

Fertility rates indicate the strength of traditional norms of motherhood and reproductive rights. In general, as fertility rates increase, gender equality decreases and therefore, we should expect that the civilian-to-government ratio should increase. The average *Fertility* rate is 4.2 and ranges between 1 and 9.

Further, *Secondary Ratio* measures the percentage of secondary school aged females that are enrolled in secondary school. Secondary education enables women to increase their independence, influence, and presence in the public sphere. Girls and women are often withdrawn from secondary school to perform domestic duties, rear children, marry, or work in the informal economy. Higher rates of secondary school attendance may indicate that the society places more value on women's education and less on traditional gender norms. Additionally, it may also increase women's participation in the formal economy and politics. On average, 86% of the female cohort is enrolled in secondary school.

The third independent variable, *Female Legislature*, indicates the percentage of national legislators that are female. Previous studies have demonstrated a strong negative relationship between women's legislative representation and intrastate violence (Koch and Fulton 2011, Melander 2005*a*). Further, female legislators are often more sensitive to the needs and opinions of women.¹⁵ On average, women represent about 10.6% of the legislature and range between 0% and 49%. However, terrorists may believe that female legislators are more susceptible to emotional manipulation and pressure, which may lead them to strategically target civilians *even more* in response to women's representation. Thus, a further indicator of the state's commitment to women's political participation is included. *Gender Quota* indicates whether the state has a legislative gender quota establishing a minimum required level of representation.¹⁶ A government which has adopted a gender quota signals to its population and international actors that it prioritizes gender equality. On the other hand, when gender quotas are in place, women's representation may not accurately indicate the populace's true willingness to elect women in the absence of a quota.¹⁷

All three independent variables are lagged by one year to account for endogeneity

between civilian-oriented terrorism and gender equality (Berrebi and Ostwalds 2016). However, a check for endogeneity between the three independent variables and the civilian-to-government ratio was conducted and few statistically significant relationships were found.¹⁸ Therefore, it does not appear that the civilian-to-government ratio consistently influences gender equality.¹⁹

Several control variables are included. A fuller explanation of the justification of these controls, their measurement, and their sources is included in the Appendix. These include the national material capabilities of the state to account for state ability to prevent terrorism;²⁰ political and civil freedoms and liberties to account for the level of democratization in the state and liberal progressive values that are correlated with increased gender equality and decreased terrorism;²¹ the state gross domestic product to account for state wealth;²² the state population as states with larger populations have a greater risk of terrorism;²³ participation in a civil or interstate war as conflict may increase civilian-targeting and worsen women's rights;²⁴ the proportion of the population between the ages of 15 and 24 as youth bulges often increase terrorism;²⁵ primarily Muslim population as Muslim societies may react differently to rising gender equality and may be more likely to host domestic terrorist groups with fundamentalist gender ideologies;²⁶ the total number of terrorist attacks in the previous year to account for the overall prevalence of terrorism and instability; and a dummy variable for post-Cold War state-years as terrorism significantly decreased after the Cold War and gender equality also tended to increase. Additionally, in models with *Secondary Ratio*, a control for the secondary school enrollment ratio of the general population is included.²⁷

Two sets of results are shown. In the first, the controls above are included. The second includes a one year lag of the dependent variable to account for autocorrelation.²⁸

Results and Discussion

The results strongly support the theory that as gender equality increases, terrorists are less likely to target civilians relative to government-oriented targets.²⁹ Models 1 and 4 present a strong, positive correlation between increasing fertility rates and the civilian-to-government ratio. As women have more children, indicating traditional gender norms, the number of domestic terrorist attacks against civilian-oriented targets relative to government-oriented attacks significantly increases. Substantively, as the fertility rate increases from 1.1 to 8.7, the civilian-to-government ratio increases from 29% to 57% (Figure 1).³⁰ Similarly, Models 2 and 5 demonstrate a significant negative correlation between *Secondary Ratio* and *Proportion Civilian Attacks*. This demonstrates that as women's secondary school enrollment increases, the civilian-to-government ratio decreases from 43% to 22%.³¹

Models 3 and 6, which test the relationship between female legislative representation and the civilian-to-government ratio, present some interesting patterns. First, the percentage of the legislature that is female has a positive correlation with the civilian-to-government ratio.³² As *Legislature Female* increases by one standard deviation, an 8 percentage point increase, the ratio of attacks increases .025 percentage points. However, the presence of a legislative gender quota significantly decreases the civilian-to-government ratio. Substantively, the predicted ratio decreases from 40% to 36%.³³ One possible explanation is that terrorists may perceive female legislators to be more sensitive to civilian casualties and therefore, they may believe that by targeting civilians more, they can induce female legislators to grant concessions. In contrast, a gender quota is a signal sent by the government to its population, the international community, and terrorist organizations that it supports gender equality. Therefore, the presence of women alone in government may not be sufficient to decrease the civilian-to-government ratio, but that additional societal and governmental commitments to gender equality is necessary. It should be noted that *Legislature Female* does decrease the *number* of civilian-oriented attacks, as can be seen in the Appendix. This demonstrates that government attacks decrease relatively more than civilian attacks. This may indicate that

Table 1: Logistic Regression Results: Gender Equality and the Proportion of Civilian-Oriented Attacks (No Lagged Dependent Variable)

	<i>Dependent variable:</i>		
	Proportion Civilian-Oriented Attacks		
	(1)	(2)	(3)
Fertility	0.16*** (0.02)		
Secondary Ratio		-0.32** (0.14)	
Legislature Female			0.02*** (0.003)
Gender Quota			-0.17** (0.07)
Civil Liberties	-0.16*** (0.02)	0.13*** (0.04)	-0.14*** (0.02)
Political Rights	0.05*** (0.01)	-0.09*** (0.03)	0.05** (0.02)
GDP, Logged	0.14*** (0.02)	0.14*** (0.03)	0.11*** (0.02)
National Capabilities	-5.38*** (1.07)	-14.53*** (2.06)	-4.25*** (1.30)
Population, Logged	-0.09*** (0.02)	0.01 (0.04)	-0.06** (0.03)
War	-0.11*** (0.03)	0.04 (0.06)	-0.10*** (0.04)
Youth Bulge	-0.67*** (0.14)	-0.88*** (0.23)	-0.003 (0.12)
Muslim Majority	0.34*** (0.04)	0.16** (0.07)	0.43*** (0.05)
Cold War	-0.24*** (0.03)	-0.19*** (0.05)	-0.09** (0.04)
Total Terror Attacks	0.001*** (0.0001)	0.001 (0.0004)	0.001*** (0.0001)
Total Secondary Ratio		-0.004** (0.002)	
Constant	-1.40*** (0.38)	-2.51*** (0.58)	-1.66*** (0.39)
Observations	3,703	1,310	3,314
Log Likelihood	-3,937.21	-1,254.18	-3,615.26
Akaike Inf. Crit.	7,898.41	2,534.36	7,256.52

Note: *p<0.1; **p<0.05; ***p<0.01
State-clustered standard errors

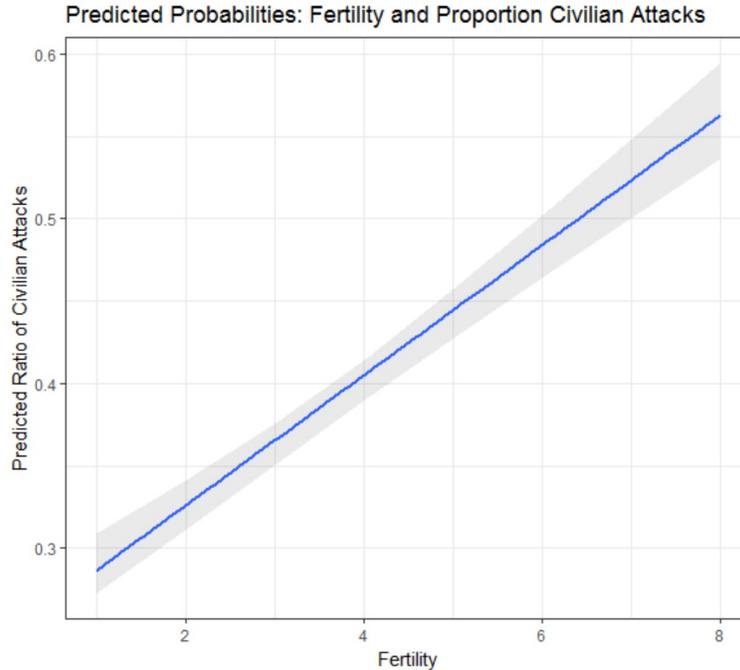


Figure 1: Predicted Probabilities Plot: Fertility Rates and Proportion of Civilian Attacks

female legislative representation uniquely decreases government-oriented attacks more than other types of gender equality. Future work should examine this relationship.

Overall, the cross-national results support the theory that as state gender equality increases, the proportion of domestic terrorist attacks aimed at civilian-oriented targets decreases. How can we interpret these civilian-to-government ratios substantively? Table 3 probes the substantive effects of fertility rates on the *number* of civilian- and government-oriented attacks with Negative Binomial Regression.³⁴ Model 7 tests the relationship between fertility rates and the *number* of civilian oriented attacks. Model 8 tests the relationship with government-oriented attacks and Model 9 examines the total number of attacks. Each model includes the same set of controls as those in Table 4 with state fixed effects.³⁵

While fertility rates have a positive and significant relationship with the number of domestic terrorist attacks aimed at civilian targets, no such relationship exists with government-oriented terrorist attacks. In other words, the positive relationship with terrorism overall found in Model 9 results largely from the increase in civilian-oriented attacks. Substantively,

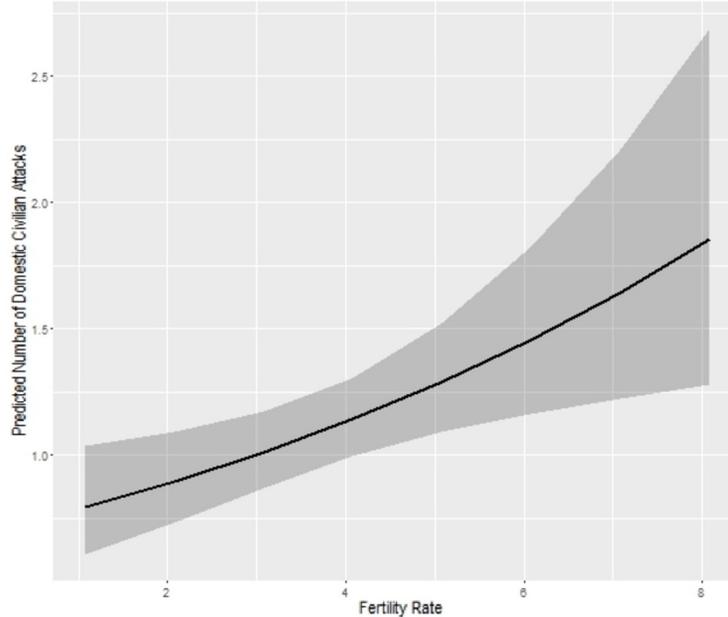
Table 2: Logistic Regression Results: Gender Equality and the Proportion of Civilian-Oriented Attacks (Lagged Dependent Variable)

	<i>Dependent variable:</i>		
	Proportion Civilian-Oriented Attacks		
	(4)	(5)	(6)
Fertility	0.13*** (0.02)		
Secondary Ratio		-0.42*** (0.13)	
Legislature Female			0.01*** (0.003)
Gender Quota			-0.14** (0.06)
Civil Liberties	-0.13*** (0.02)	0.10*** (0.03)	-0.11*** (0.02)
Political Rights	0.03** (0.01)	-0.07*** (0.02)	0.02 (0.02)
GDP, Logged	0.09*** (0.02)	0.10*** (0.03)	0.07*** (0.02)
National Capabilities	-4.80*** (1.11)	-13.09*** (2.19)	-3.87*** (1.36)
Population, Logged	-0.06*** (0.02)	0.02 (0.04)	-0.05* (0.02)
War	-0.12*** (0.03)	-0.04 (0.05)	-0.10*** (0.03)
Youth Bulge	-0.56*** (0.13)	-0.75*** (0.21)	-0.05 (0.11)
Muslim Majority	0.29*** (0.04)	0.09 (0.07)	0.35*** (0.04)
Cold War	-0.23*** (0.03)	-0.22*** (0.05)	-0.10*** (0.03)
Total Terror Attacks	0.001*** (0.0001)	0.001 (0.0004)	0.0004*** (0.0001)
Total Secondary Ratio		-0.002 (0.002)	
Proportion Civilian Attacks	0.97*** (0.06)	0.96*** (0.11)	0.99*** (0.06)
Constant	-1.01*** (0.36)	-2.05*** (0.57)	-1.24*** (0.37)
Observations	3,703	1,310	3,314
Log Likelihood	-3,788.40	-1,216.22	-3,472.10
Akaike Inf. Crit.	7,602.79	2,460.43	6,972.20

Note:

*p<0.1; **p<0.05; ***p<0.01
State-clustered standard errors

Figure 2: Probability of Domestic Civilian Attacks Given the Fertility Rate



as the fertility rate decreases, the state experiences 1.5 less attacks against civilians (Figure 2). Since the average number of attacks is 3.3, this means that states with low fertility rates have about half the number of attacks as high fertility states. This provides suggestive evidence that terrorists may be engaging in strategic switching in response to gender equality. In other words, terrorists may purposefully choose to attack civilians relatively less frequently than the government. This is especially interesting as gender equitable states also tend to be more developed, wealthy, and have stronger institutions, increasing the costs of government-oriented attacks. The results demonstrate that despite these costs and the relative “ease” of attacking civilians, terrorists engage in relatively fewer attacks against civilian-oriented targets.

It is important to note that the finding that gender equality has a negative relationship with the *civilian-to-government ratio* does not necessarily indicate that gender equality only decreases attacks against civilians and not government attacks. For example, civilian and government attacks may both decrease, but civilian attacks decrease at a faster rate. Similarly, as explained above, while the civilian-to-government ratio is positively correlated with legislative representation, the overall number of both civilian and government attacks

Table 3: Negative Binomial Results: Gender Equality and the Number of Terrorist Attacks

	<i>Dependent variable:</i>		
	Civilian Attacks	Government Attacks	Total Attacks
	(7)	(8)	(9)
Fertility	0.31*** (0.09)	0.13 (0.09)	0.29*** (0.09)
Capabilities	22.20** (9.78)	27.39*** (8.58)	28.17*** (8.78)
Civil Liberties	0.04 (0.06)	0.0003 (0.06)	0.04 (0.06)
Political Rights	0.13*** (0.05)	0.08* (0.05)	0.10** (0.04)
GDP, Logged	-0.68*** (0.11)	-0.61*** (0.11)	-0.65*** (0.10)
Population, Logged	0.90** (0.43)	-0.56 (0.44)	0.27 (0.39)
War	0.57*** (0.11)	0.58*** (0.11)	0.52*** (0.11)
Youth Bulge	0.97** (0.42)	0.82** (0.42)	1.10*** (0.38)
Muslim Majority	0.48 (0.45)	0.13 (0.42)	0.10 (0.39)
Cold War	-0.45*** (0.12)	-0.53*** (0.12)	-0.59*** (0.11)
Civilian Attacks, Lagged	0.03*** (0.002)		
Government, Attacks, Lagged		0.02*** (0.001)	
Total Attacks, Lagged			0.01*** (0.001)
Country Fixed Effects	X	X	X
Constant	0.81	23.07***	10.98
Observations	3,703	3,703	3,703
Log Likelihood	-4,910.50	-5,075.49	-6,515.33
θ	0.51*** (0.02)	0.53*** (0.02)	0.49*** (0.02)
Akaike Inf. Crit.	10,155.00	10,484.98	13,364.65

Note:

*p<0.1; **p<0.05; ***p<0.01
State-clustered standard errors

is negatively correlated with women’s legislative presence. This indicates that government-oriented attacks are decreasing at a faster rate relative to civilian attacks.

These results are generally robust to the use of two and five year lags of the independent variables, the Polity 2 score, the state’s respect for physical integrity rights, the presence of oil reserves, the number of ethnic groups, ethnic fractionalization, decade dummies, an Israel-Palestine dummy, and the interaction of the independent variables with *Muslim Majority*.³⁶ Also, the results remain robust when state-year fixed effects are included.³⁷ Finally, the results are robust to alternative codings of the dependent variable.³⁸

One factor that may influence both a state’s gender ideology and a terrorist organization’s perception of government sensitivity to civilian-oriented attacks is government partisanship. Traditionally, leftist governments are considered less likely to use force in response to a terrorist attack than right-leaning governments. Koch and Cranmer (2007) argue that left-oriented governments’ reputation as more peaceful, dovish, and more likely to compromise increases their likelihood of experiencing transnational terrorist attacks. Similarly, Berrebi and Klor (2008) find that terrorist attacks have polarizing effects on voters as voters prefer right-leaning parties after a terror attack. While previous studies have largely focused on the number or lethality of attacks, less considered is the attack’s target. It is possible that terrorist organizations believe that more dovish left-leaning parties may be even more willing to compromise when civilians are attacked. However, left-leaning governments also are more sensitive to humanitarian issues and thus, may be particularly sensitive to attacks against civilians compared to right-leaning governments, which may be more willing to bear the “collateral damage.” Further, terrorists may be more likely to target civilians in right-leaning governments to provoke a disproportionate violent response from the hawkish government that increases support for the terrorist group in the long-run (Kydd and Walter 2006).

Additionally, left-leaning governments also tend to be associated with more gender equitable values and thus may enact more policies that support women’s rights and elect

more women. However, relatively short-term changes in governments are unlikely to have significant impacts on the gender equality variables explored in this analysis as they are extremely slow changing. The most direct impact of government partisanship on women's rights is likely to be regarding women's political participation and the adoption of gender quotas. However, with respect to gender quotas, these quotas are rarely withdrawn and thus, once the quota has been adopted, both left- and right-leaning governments are likely to maintain it.

To test this alternative consideration, controls for government ideology were included. Using the strategy of Koch and Cranmer (2007), these models used data from the World Bank's Database on Political Institutions, which includes the ideology of the executive, the parliament, and a measure of government fractionalization. The data was further subset to democratic states. Several sets of models from Table 2 were replicated including controls for whether the executive was a member of a left-oriented party, whether the primary government party in the legislature was a left-oriented party, whether the executive was right or left, and the degree of government fractionalization. Generally, the results remain robust with these models. However, it is important to note that *Secondary Ratio* loses significance, but retains its sign. That said, alternative measures of gender equality, such as Maternal Mortality, remain robust and thus, it is possible that this is an idiosyncratic result that captures the increased concern of left-leaning governments for education overall. Additionally, *Legislature Female* falls below significance while *Gender Quota* remains robust. This may indicate that the relationship between *Legislature Female* in Tables 1 and 2 is partially driven by the increased presence of women in left-leaning governments. While left-leaning governments tend to have a negative relationship with the proportion of civilian attacks, it is not consistent. The results of these models can be found in the Online Appendix Tables 6-8.

Overall, the cross-national results strongly support the theory that state-level gender equality decreases the ratio of civilian-oriented domestic terrorist attacks. This may indicate

that as women gain greater influence in society and the society becomes less tolerant of civilian-oriented attacks, terrorists discount the utility of civilian-oriented targeting.

Sub-national Analysis

When studying the relationship between gender equality and terrorism, a primary concern is endogeneity as terrorism may decrease women's rights (Berrebi and Ostwalds 2016). While this endogeneity was addressed previously through the use of one year lags on the indicators of women's rights, the following analysis leverages relatively random differences among states (which henceforth refers to sub-national units) in the implementation of a nation-wide quota for women's participation in India.

Mandated Women's Reservation in Indian Village Councils

While India has had one of the few female heads of state, women remain disadvantaged politically, socially, and economically. To address this inequality, in April 1993, the Seventy-Third Amendment to the Indian Constitution came into effect, which had notable changes for local political organization and women's representation. First, it decentralized fiscal and service responsibilities, requiring each state to create village, intermediate, and district government bodies. Second, the Amendment reserved one third of council seats and chairperson positions at each of these levels of governance for women.³⁹ These reservations were applied on a rotating basis where during each election one-third of districts would have the reservation, which would differ in the next election.⁴⁰

Since the application of the reservation randomly rotated across villages, several studies have examined the causal effects of the quota on women's rights and community welfare. For example, the women's quota led to greater investment in public goods and development projects favored by women, such as water access, health, primary school education, and infrastructure (Bhalotra and Clots-Figueras 2011, Chattopadhyay and Duflo 2004, Pathak

and Macours 2017). Further, the quota improved attitudes towards gender equality, such as decreased bias towards female leaders, increased policy influence of women leaders, higher aspirations for girls, increased reporting of gendered crimes, and greater female participation in politics and entrepreneurship (Beaman et al. 2012, 2010, 2009, Ghani, Kerr and O’Connell 2014, Iyer et al. 2012, Pathak and Macours 2017). Finally, the positive impacts of the quota continue after the quota has been removed (Beaman et al. 2009). While some studies dispute that the reservation had ubiquitous positive effects, they also often find that as women gained more political experience, the positive effects become apparent (Afridi, Iversen and Sharan 2013, Ban and Rao 2008, Deininger et al. 2015). In general, the empirical evidence finds that the reservation of seats for women in local governance bodies increased women’s influence in politics and promoted gender equality, especially as more time passed. As a result, in line with the theory above, after the implementation of the women’s reservation policy in local elections, terrorist groups should be less likely to target civilians.

Sub-National Research Design

Although all states were required to conform their electoral laws with the mandated quota, the timing of the first election with the quota implemented varied for relatively exogenous reasons to both women’s rights and terrorism. As Iyer et al. (2012) explain, there are three main reasons why the first election with the reservation implemented varied. First, states which already had systems of local governance before the 73rd Amendment did not necessarily immediately hold new village elections. Instead, they waited until the next regularly scheduled election and then applied the quota. Additionally, some already decentralized states implemented the quota before the amendment was passed. Because of this, several states instituted the quota before 1993. Second, in other states the implementation of the women’s quota was delayed due to legal challenges to various aspects of decentralization not directly related to the women’s reservation.⁴¹ Finally, in some states quota implementation was delayed for other reasons, such as budgetary constraints.⁴²

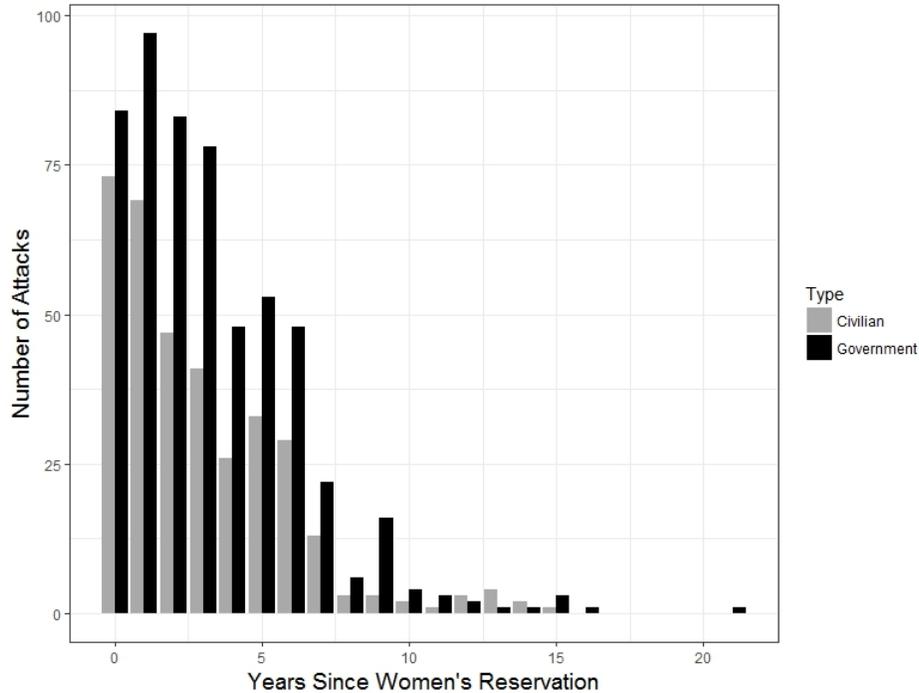


Figure 3: Number of Civilian- and Government-Oriented Attacks in India as Years Since Women’s Reservation Increased

In other words, although the 73rd Amendment mandated that states adopt laws in compliance with the women’s reservation clause by 1994, the year of the first election with the quota implemented ranged between 1987 and 2010 (Iyer et al. 2012). While this variation is not perfectly exogenous to state characteristics, it is relatively exogenous to women’s rights within the state and to terrorism.⁴³ Therefore, the main independent variable is a count of the number of years since the first election with the women’s quota. The count of years is used instead of a dichotomous indicator of whether the state-year was before or after the first election for two reasons. First, women’s rights and gender equality tend to be slow changing and therefore, it is likely that as more time passed after the quota’s implementation, more tangible differences in gender relations would arise, making it more likely that terrorist groups would consider women’s opinions. Additionally, several studies found that the positive effects of the quota were delayed until female leaders gained greater experience (Afridi, Iversen and Sharan 2013, Deininger et al. 2015). Therefore, the negative effects of the quota on civilian targeting may increase each year as female leaders gain more

experience and as their constituents have time to change biased gendered opinions. Second, as the quota only applies to one-third of villages at any time, the more years that the quota is in effect, the greater number of villages exposed to women's political participation.

The dependent variable remains the proportion of total terrorist attacks that were directed against civilians within the state as described above between 1985 and 2007. Both domestic and transnational attacks are included due to difficulty establishing the origin of the attack.⁴⁴ While over 83 groups participated in terrorist attacks in the sample, the most common sources of attacks were the CPI-Maoists (and other Maoist groups), Sikh Extremists, the United Liberation Front of Assam, and the National Democratic Front of Bodoland. At least one terror attack occurred in every state included.⁴⁵ The maximum number of attacks in a single-state year was 73, however, the average state experienced 3.4 attacks per year. Several controls are included, such as the state's population, the state's GDP, the number of government-oriented attacks, and whether the state was experiencing an armed conflict (Gleditsch et al. 2002, Iyer et al. 2012). These controls are all lagged by one year. Additionally, a control was added for the number of elections which have been held since the quota to account for the increasing number of village councils exposed to the women's reservation.⁴⁶ The dataset covers the 17 largest Indian states and 97 percent of the Indian population.⁴⁷

Models 10 and 11 are logistic regression models with state clustered errors with full controls and a one-year lag of the dependent variable, respectively. Additionally, Models 12 and 13 are Negative Binomial models with the dependent variable as the count of civilian attacks, a control for the number of government-oriented attacks, and full controls with and without a lagged dependent variable.

Sub-National Results

According the theory, we should expect that after each state held its first election with the quota, there should be relatively less attacks against civilian targets. The results shown in

Table 4 support that hypothesis. In Models 10 and 11, the number of years since the state implemented the gender quota has a significant, negative relationship with the civilian-to-government ratio, decreasing it from about 50% to 20%. Substantively, the state is likely to experience about one less attack per year, which is a significant decrease considering that the average number of attacks is 3.4.

Table 4: Sub-National Results: Years Since Gender Quota and Proportion Civilian Terrorist Attacks

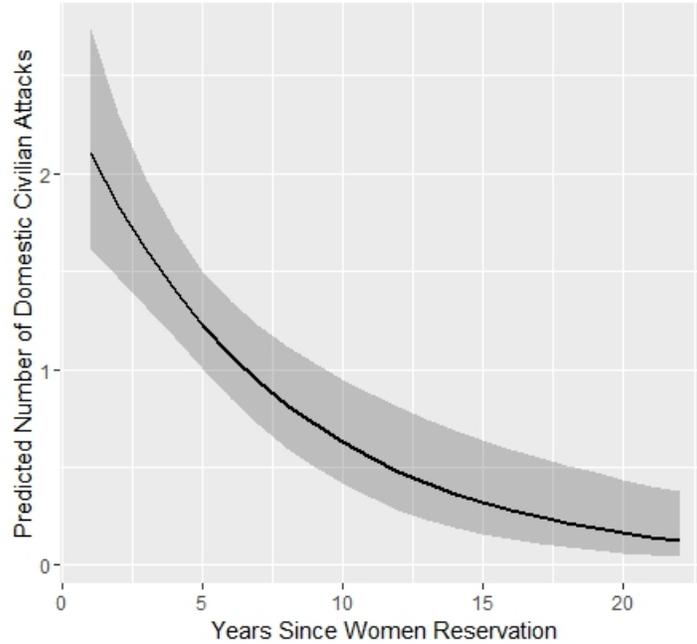
	Logistic Regression:		Negative Binomial:	
	Proportion Civilian Attacks		Number Civilian Attacks	
	(10)	(11)	(12)	(13)
Reservation Years	-0.04*	-0.04**	-0.06	-0.07**
	(0.02)	(0.02)	(0.04)	(0.03)
Population	0.00	0.00**	-0.0000	-0.0000*
	(0.00)	(0.00)	(0.0000)	(0.0000)
GDP	-0.00	-0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Insurgency	-0.17*	-0.16	0.53	0.49
	(0.09)	(0.12)	(0.33)	(0.34)
Number of Elections	0.10	0.09**	0.04	0.05
	(0.06)	(0.04)	(0.08)	(0.08)
Total Attacks	-0.001	-0.001	0.05***	0.05***
	(0.001)	(0.001)	(0.01)	(0.01)
Proportion Civilian Attacks, Lagged		0.14		0.003
		(0.21)		(0.01)
State Fixed Effects			X	X
Constant	-0.18*	-0.22	1.21	1.48*
	(0.09)	(0.14)	(0.77)	(0.77)
Observations	353	353	356	353
Log Likelihood	-390.82	-390.522	-540.710	-531.843
Akaike Inf. Crit.	795.64	797.043	1,127.420	1,111.685

Note:

*p<0.1; **p<0.05; ***p<0.01
State-clustered Standard Errors

These results remain robust to several alternative model specifications, including the addition of controls, such as rural population, the female-to-male population ratio, a female chairperson, women’s representation in the state legislature, and the murder rate.⁴⁸ Lastly, one main concern in this analysis is that several other political reforms were also instituted

Figure 4: Predicted Probabilities Following Women’s Reservation



in the 73rd Amendment, including decentralization and minority and disadvantaged group quotas. Unfortunately, due to lack of data, it is not possible to directly test whether these reforms also play a role in the decrease in civilian attacks. However, given previous studies that demonstrate that the women’s reservation requirement in particular alters village spending and attitudes, it is difficult to ignore the likelihood that the women’s quota played at least some role in the reduction in civilian attacks.

While the first election with the reservation cannot be assumed to be entirely exogenous, this analysis provides additional evidence that shocks to women’s political participation can alter terrorist targeting to dissuade attacks against civilians.

Conclusion

In 2016, the U.S. Under Secretary for Civilian Security, Democracy, and Human Rights declared that “[Countering Violent Extremism] is a feminist agenda,” following a growing belief that national security is intricately tied with gender equality.⁴⁹ This article con-

tributes to scholarship on terrorism and Women, Peace, and Security by expanding beyond the influence of gender equality on *whether* terrorism occurs to examine whether it influences types of targets chosen. When choosing a targeting profile, terrorists consider the relative costs and benefits of that target, namely whether it will increase the group's level of support and probability of gaining concessions from the government, and decrease the costs incurred by the group. Since gender equality leads to greater condemnation of attacks against civilians and provides women, who tend to have an especially strong disapproval of these attacks, with greater influence, terrorist groups may discount the utility of attacking civilian-oriented targets. The empirical analyses supports this theory by providing both cross-national and sub-national evidence that there is a negative relationship between women's rights and civilian-oriented terrorism.

Moving forward, several factors must be clarified. First, the direct relationship between gender equality and terrorist decision-making must be explored to determine whether terrorists knowingly and purposefully consider gender equality when deciding their targets. Further, future studies could examine whether other types of shocks to gender equality, such as the introduction of birth control, change terrorist targeting. Moreover, while on average gender equality decreases civilian targeting, it may have heterogeneous effects depending on group characteristics, such as internal gendered beliefs, ideology, size, and external support. Finally, clearer information is needed regarding the gender gap on terrorist targeting decisions. While gender gaps in public opinion have been difficult to ascertain (Eichenberg 2007), women and feminists appear to have differing opinions regarding the use of political violence, its prevalence, its threat, and its acceptability. Further, even if the gender gap is not as ubiquitous as once believed, the common perception that women condemn these attacks more than men is important itself. Future studies may investigate whether *perceptions* of how men and women react to terrorism differ. Further, more work must be done to determine how opinions on political violence adapt as gender equality increases.

Overall, this study presents an initial analysis into the relationship between gender

equality and terrorist activity by categorizing terrorist attacks based on the primary target: the government or civilians. By considering how targeting decisions themselves are important, this study makes several contributions. First, the theory and analysis contribute more evidence that terrorist organizations are instrumental, strategic, and rational and that they adjust their tactics to fit their strategic environments, including gender equality and other societal characteristics that may decrease tolerance for civilian targeting. Second, this theory advances literature on terrorism to further explore not just how terrorist groups choose to engage in terrorism, but the character of the attacks and which targets are chosen by developing a unique trade-off model of strategic terrorist target selection. Third, this study adds further clarification and multidimensionality to WPS theory by differentiating between women's support for peace and their support for selective forms of violence by demonstrating that women, rather than rejecting all violence outright, may be willing to condone violence in some forms and under certain circumstances. Thus, this study suggests that women can act as agents in support of *only* "legitimate violence." Further, it demonstrates that perceptions of legitimacy and what types of targets are viewed as legitimate by civilians and terrorist organizations is relative to the society. Additionally, this study provides important policy implications by demonstrating a correlation between a relatively observable factor and which types of targets are most vulnerable.

Notes

¹Nikolay Korzhov and Andrey Kovalenko, “In Pictures: The Beslan massacre, 10 years on. *Al Jazeera*

²The gender gap in public opinion is socially constructed, not an inherent characteristic of men and women. In this study, the terms women and men refer not to sex, but to gender, which includes the social roles and norms placed upon individuals because of their sex.

³Terrorism refers to “the threatened or actual use of illegal force and violence by a non-state actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation,” as defined by the Global Terrorism Database.

⁴This theory refers to patterns of public opinion, but recognizes that there will be a wide range among women and men regarding support for terrorism. Additionally, the theory largely pertains to civilian women and therefore, does not necessarily reflect the beliefs of female terrorists.

⁵While some studies find that gendered differences are dependent upon national context (Center 2006, Ciftci, ODonnell and Tanner 2017, Speulda and McIntosh 2005), this does not invalidate the argument that gender equality may reduce support for terrorism as levels of gender equality may itself influence the gender gap (Afzal 2012).

⁶See also Bjarnegrd, Brounus and Melander (2017).

⁷Eliza Mackintosh, “As the caliphate crumbles, Taliban steals ISIS tactics to target women,” 2017, CNN.

⁸The effects of gender equality at this point refer to both the increased influence of women and the realigning of societal attitudes.

⁹It is important to note that the scope of this theory is limited to domestic terrorism seeking government concessions.

¹⁰Transnational terrorism may not be similarly affected by public opinion and therefore is excluded.

¹¹Target details come from Enders, Sandler and Gaibulloev (2011) which includes a variable recording the type of target.

¹²Further information on the coding is in the Appendix.

¹³State and Year fixed effects cannot be used with the logit transformation for fear of introducing bias, however, the results are robust to their inclusion.

¹⁴Labor force participation and female-to-male life expectancy ratios were not chosen as they could be directly affected by civilian-oriented terrorist attacks.

¹⁵Data on this variable comes from the World Bank and Paxton, Green and Hughes (2008).

¹⁶This excludes voluntary party quotas.

¹⁷As a robustness check, *Legislature Female* and *Gender Quota* are interacted.

¹⁸See the Appendix. The checks were done using OLS regression with the women's rights indicators as the dependent variable and *Proportion Civilian Attacks* as the independent variable. One exception is *Female Legislature*, but the inclusion of *Gender Quota* helps address this.

¹⁹The results are robust to two and five year lags.

²⁰Singer, Bremer and Stuckey (1972)

²¹Freedom House

²²World Bank

²³World Bank

²⁴Reiter, Stam and Horowitz (2016)

²⁵World Bank

²⁶Maoz and Henderson (2013)

²⁷World Bank

²⁸While lagged dependent variables may cause bias, there is a strong theoretical basis to assume that the tactic portfolio of the previous year directly affects the types of targets chosen, and therefore any bias induced would be less severe than the bias of excluding time dependency.

²⁹Marginal Effects can be found in the Appendix.

³⁰Figure 1 was calculated based on Model 1.

³¹It is important to note that this variable suffers from a large amount of missing data and therefore these results should be interpreted with caution. However, this finding is confirmed by other similar measurements of women's social equality, such as maternal mortality rates and secondary school gender ratios among enrolled students.

³²This result is robust to the inclusion of a control for Rwanda.

³³Although not shown here, in the combined model which includes all of independent variables, *Legislature Female* falls below significance, while the other variables remain significant.

³⁴Models with the other independent variables can be found in the Appendix.

³⁵Country fixed effects were added to control for heterogeneity across states.

³⁶Cingranelli, Richards and Clay (2014), Marshall and Gurr (2013), Singer, Bremer and Stuckey (1972)

³⁷It is important to note that *Secondary Ratio* is not robust to the inclusion of state and state-year fixed effects.

³⁸This includes coding utilities, telecommunication, transportation, and food and water infrastructure targets from as "civilian oriented" and coding media and private citizens as noncivilian.

³⁹Additional seats were also reserved for Schedule Caste (SC) or Scheduled Tribe (ST) communities.

⁴⁰However, it should be noted that the rotation of villages is not guaranteed to be entirely random, which may lead to some bias. However, this study’s design does not rely on random rotation among villages.

⁴¹It should be noted that some states, such as Nagaland, did see resistance to the women’s reservation, which delayed implementation. These states are not included in the dataset.

⁴²This final reason for variation is the most concerning in terms of endogeneity as it is possible that states with lower capacity delayed elections longer and lower capacity may also be correlated with terrorism. However, none of the states included in this analysis directly cited delayed elections due to terrorism to the author’s knowledge.

⁴³While it is possible that the timing of the election cycle could be affected by fighting or resistance to the reservation, there is no direct evidence of this. Further, the results generally remain consistent when each state individually is removed. Contact author to see these results.

⁴⁴However, this would likely decrease the estimated effect since transnational terrorism is less likely to be affected by gender equality.

⁴⁵The number of attacks within each district varied between 1,848 (Jammu and Kashmir) and 10 (Himachal Pradesh).

⁴⁶Data on quota and state-level control variables comes primarily from Iyer et al. (2012).

⁴⁷Three states created after 2001 continue to be merged with their original state.

⁴⁸Lack of sub-national data on other common controls prevent further robustness checks. It is also important to note that the results are not robust to the conclusion of state and year fixed effects. However, this may occur due to the small sample size and degrees of freedom problem.

⁴⁹Sarah Sewall. “Women and Countering Violent Extremism.” *U.S. State Department* <https://2009-2017.state.gov/j/remarks/254868.htm>

References

Abrahms, Max and Justin Conrad. 2017. “The Strategic Logic of Credit Claiming: A New Theory for Anonymous Terrorist Attacks.” *Security Studies* 26(2):279–304.

Abrahms, Max and Philip B.K. Potter. 2015. “Explaining Terrorism: Leadership Deficits and Militant Group Tactics.” *International Organization* 69:311–342.

Afridi, Farzana, Vegard Iversen and M.R. Sharan. 2013. “Women Political Leaders, Corrup-

- tion and Learning: Evidence from a Large Public Program in India.” *Discussion Paper 13-02 Indian Statistical Institute* .
- Afzal, Madiha. 2012. “Are the Better Educated Less Likely to Support Militancy and Terrorism? Women Are.” *Center for International and Security Studies at Maryland*. Working Paper.
- Asal, Victor and R. Karl Rethemeyer. 2008. “The Nature of the Beast: Organizational Structures and the Lethality of Terrorist Attacks.” *The Journal of Politics* 70.
- Ban, Radu and Vijayendra Rao. 2008. “Tokenism or Agency? The Impact of Womens Reservations on Village Democracies in South India.” *Economic Development and Cultural Change* 56:501–530.
- Barnes, Collin D., Ryan P. Brown and Lindsey L. Osterman. 2012. “Don’t Tread on Me: Masculine Honor Ideology in the U.S and Militant Responses to Terrorism.” *Personality and Social Psychology Bulletin* 38:1018–1029.
- Beaman, Lori, Esther Duflo, Rohini Pande and Petia Topalava. 2012. “Female Leadership Raises Aspirations and Educational Attainment for Girls: A Policy Experiment in India.” *Science* 335:582–586.
- Beaman, Lori, Esther Duflo, Rohini Pande and Petia Topalova. 2010. “Political Reservation and Substantive Representation: Evidence from Indian Village Councils.” *India Policy Forum* .
- Beaman, Lori, Raghavendra Chattopadhyay, Esther Duflo, Rohini Pande and Petia Topalova. 2009. “Powerful Women: Does exposure reduce bias.” *The Quarterly Journal of Economics* 124:1497–1540.
- Berrebi, Claude and Esteban F Klor. 2008. “Are voters sensitive to terrorism? Direct evidence from the Israeli electorate.” *American Political Science Review* 102(3):279–301.

- Berrebi, Claude and Jordan Ostwalds. 2016. "Terrorism and the Labor Force: Evidence of an Effect on Female Labor Force Participation and the Labor Gender Gap." *Journal of Conflict Resolution* 60:32–60.
- Bhalotra, Sonia and Irma Clots-Figueras. 2011. "Health and the Political Agency of Women." *American Economic Journal: Economic Policy* 6:164–207.
- Bjarnegrd, Elin, Karen Brounus and Erik Melander. 2017. "Honor and political violence Micro-level findings from a survey in Thailand." *Journal of Peace Research* 54(6):748–761.
- Bloom, Mia. 2005. *Dying to Kill The Allure of Suicide Terror*. Columbia University Press.
- Bloom, Mia and John Horgan. 2008. "Missing their mark: The IRA's proxy bomb campaign." *social research* pp. 579–614.
- Center, Pew Research. 2006. "Where Terrorism Finds Support in the Muslim World." <http://www.pewglobal.org/2006/05/23/where-terrorism-finds-support-in-the-muslim-world/>.
- Chattopadhyay, Raghavendra and Esther Duflo. 2004. "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India." *Econometrica* 72:1409–1443.
- Ciftci, Sabri, Becky J. O'Donnell and Allison Tanner. 2017. "Who Favors al-Qaeda? Anti-Americanism, Religious Outlooks, and Favorable Attitudes toward Terrorist Organizations." *Political Research Quarterly* 70:480–494.
- Cingranelli, David, David Richards and Chad Clay. 2014. "The CIRI Human Rights Dataset."
- Cohen-Louck, Keren. 2016. "Perception of the Threat of Terrorism." *Journal of Interpersonal Violence* .
- Conover, Pamela Johnston and Virginia Sapiro. 1993. "Gender, Feminist Consciousness, and War." *American Journal of Political Science* 37.

- Conrad, Justin and Kevin Greene. 2016. "Competition, Differentiation, and the Severity of Terrorist Attacks." *The Journal of Politics* 77.
- Crenshaw, Martha. 1981. "The Causes of Terrorism." *Comparative Politics* 13:379–399.
- Crenshaw, Martha. 1985. "An Organizational Approach to the Analysis of Political Terrorism." *Orbis* 29:465–489.
- Cronin, Audrey Kurth. 2009. *How Terrorism Ends: Understanding the Decline and Demise of Terrorist Campaigns*. Princeton, NJ: Princeton University Press.
- de Burca, Aibhi. 2014. *Preventing Political Violence Against Civilians Nationalist Militant Conflict in Northern Ireland, Israel and Palestine*. Palgrave Macmillan.
- De la Calle, Luis. 2017. "Compliance vs constraints: A theory of rebel targeting in civil war." *Journal of Peace Research* 54:427–441.
- Deininger, Klaus, Songqing Jin, Hari Nagarajan and Xia Fang. 2015. "Does Female Reservation Affect Long-Term Political Outcomes? Evidence from Rural India." *Journal of Development Studies* 51:32–49.
- Eichenberg, Richard. 2003. "Gender Differences in Public Attitudes toward the Use of Force by the United States, 1990-2003." *International Security* 28:110–140.
- Eichenberg, Richard. 2007. "Gender Difference or Parallel Publics? The Dynamics of Defense Spending Opinions in the United States, 1965-2007." *Journal of Conflict Resolution* 56:331–348.
- Eichenberg, Richard C. and Richard J. Stoll. 2017. "The Acceptability of War and Support for Defense Spending: Evidence from Fourteen Democracies, 2004-2013." *Journal of Conflict Resolution* 61:788–813.
- Enders, Waalter, Todd Sandler and Khusrav Gaibulloev. 2011. "Domestic versus transna-

- tional terrorism: Data, decomposition, and dynamics.” *Journal of Peace Research* 48:319–337.
- Ghani, Ejaz, William R. Kerr and Stephen D. O’Connell. 2014. “Political reservations and women’s entrepreneurship in India.” *Journal of Development Economics* 108:138–153.
- Gleditsch, Peter Nils Petter, Mikael Eriksson Wallensteen, Margareta Sollenberg and Havard Strand. 2002. “Armed Conflict 1946–2001: A New Dataset.” *Journal of Peace Research* 39:615–637.
- Harris, Cameron and Daniel James Milton. 2016. “Is Standing for Women a Stand Against Terrorism? Exploring the Connection.” *Journal of Human Rights* 15:60–78.
- Herron, Kerry and Hank Jenkins-Smith. 2006. *Critical Masses and Critical Choices: Evolving Public Opinion on Nuclear Weapons, Terrorism, and Security*. University of Pittsburgh Press.
- Hoffman, Bruce. 2006. *Inside Terrorism*. Columbia University Press.
- Hudson, Valerie M, Bonnie Ballif-Spanvill, Mary Caprioli and Chad F. Emmett. 2013. *Sex and World Peace*. Columbia University Press.
- Hudson, Valerie M and Patricia Leidl. 2015. *The Hillary Doctrine: Sex and American Foreign Policy*. Columbia University Press.
- Iyer, Lakshmi, Anandi Mani, Prachi Mishra and Petia Topalova. 2012. “The Power of Political Voice: Women’s Political Representation and Crime in India.” *American Economic Journal: Applied Economics* 4:165–193.
- Kalyvas, Stathis and Ignacio Sanchez Cuenca. 2005. *Making Sense of Suicide Missions*. Oxford University Press.
- Koch, Michael T. and Sarah A. Fulton. 2011. “In the Defense of Women: Gender, Of-

- rice Holding, and National Security Policy in Established Democracies.” *The Journal of Politics* 73(1):1–16.
- Koch, Michael T and Skyler Cranmer. 2007. “Testing the Dick Cheney hypothesis: do governments of the left attract more terrorism than governments of the right?” *Conflict Management and Peace Science* 24(4):311–326.
- Kydd, Andrew H and Barbara F Walter. 2006. “The strategies of terrorism.” *International Security* 31(1):49–80.
- Maoz, Zeev and Errol A. Henderson. 2013. “The World Religion Dataset, 1945-2010: Logic, Estimates, and Trends.” *International Interactions* 39:265–291.
- Marie, Nellis Ashely. 2009. “Gender Differences in Fear of Terrorism.” *Journal of Contemporary Criminal Justice* 25:322–340.
- Marshall, Monty G. and Ted Robert Gurr. 2013. *Polity IV Project: Political Regime Characteristics and Transitions, 1800-2013*.
- Melander, Erik. 2005a. “Gender Equality and Intrastate Armed Conflict.” *International Studies Quarterly* 49(4):695–714.
- Melander, Erik. 2005b. “Political Gender Equality and State Human Rights Abuse.” *Journal of Peace Research* 42(2):149–166.
- Nemeth, Stephen. 2010. “A Rationalist explanation of terrorist targeting.” *University of Iowa* Ph.D Dissertation.
- Nemeth, Stephen. 2014. “The Effect of Competition on Terrorist Group Operations.” *Journal of Conflict Resolution* 58:336–362.
- Pape, Robert. 2003. “The Strategic Logic of Suicide Terrorism.” *American Political Science Review* 97:343–361.

- Pathak, Yuvraj and Karen Macours. 2017. "Women's Political Reservation, Early Childhood Development, and Learning in India." *Economic Development and Cultural Change* 65.
- Paxton, Pamela, Jennifer Green and Melanie Hughes. 2008. "Women in Parliament, 1945-2003: Cross-National Dataset." ICPSR24340-v1.
- Piazza, James A. 2017. "The determinants fo domestic right-wing terrorism in the USA: Economic grievance, societal change and political resentment." *Conflict Management and Peace Science* 34:52–80.
- Polo, Sara MT and Kristian Skrede Gleditsch. 2016. "Twisting arms and sending messages: Terrorist tactics in civil war." *Journal of Peace Research* 53:815–829.
- Reiter, Dan, Allan C. Stam and Michael C. Horowitz. 2016. "A deeper look at interstate war data: Interstate War Data version 1.1." *Research & Politics* 3.
- Robison, Kristopher K. 2009. "Unpacking the Social Origins of Terrorism: The Role of Women's Empowerment in Reducing Terrorism." *Studies in Conflict & Terrorism* 33:735–756.
- Robison, Kristopher K., Edward M. Crenshaw and J. Craig Jenkins. 2006. "Ideologies of Violence: The Social Origins of Islamist and Leftist Transnational Terrorism." *Social Forces* 84:2009–2026.
- Saad, Lydia. 2011. "Americans' Fear of Terrorism in U.S. Is Near Low Point." <http://www.gallup.com/poll/149315/americans-fear-terrorism-near-low-point.aspx>.
- Saiya, Nilay, Tasneem Zaihra and Joshua Fidler. 2017. "Testing the Hillary Doctrine: Womens Rights and Anti-American Terrorism." *Political Research Quarterly* 70:421–432.
- Salehyan, Idean, David Siroky and Reed M. Wood. 2014. "External Rebel Sponsorship and Civilian Abuse: A Principal-Agent Analysis of Wartime Atrocities." *International Organization* 68(3):633–661.

- Sever, Ilana, Eli Somer, Ayalla Rubio and Erez Soref. 2008. "Gender, Distress, and coping in Response to Terrorism." *Affilia: Journal of Women and Social Work* 23:156–166.
- Sillke, Andrew. 2010. *The Psychology of Counter-Terrorism*. Taylor & Francis.
- Singer, J. David, Stuart Bremer and John Stuckey. 1972. "Capability Distribution, Uncertainty, and Major Power War, 1820-1965."
- Speulda, Nicole and Mary McIntosh. 2005. "Global Gender Gaps." <http://www.peoplepress.org/2004/05/13/global-gender-gaps-2/>.
- Stokes, Bruce. 2013. "Big gender gap in global public opinion about use of drones." *Pew Research Center* .
- Von Knop, Katharina. 2007. "The Female Jihad: Al Qaeda's Women." *Studies in Conflict & Terrorism* .
- Weinstein, Jeremy M. 2007. *Inside Rebellion: The Politics of Insurgent Violence*. Cambridge University Press.
- Wilcox, Pamela, M. Murat Ozer, Murat Gunbeyi and Tarkan Gudogdu. 2009. "Gender and Fear of Terrorism in Turkey." *Journal of Contemporary Criminal Justice* 25:341–357.
- Wooldridge, Jeffrey M. 2010. *Econometric Analysis of Cross Section and Panel Data*. MIT Press.
- Younas, Javed and Todd Sandler. 2015. "Gender Imbalance and Terrorism in Developing Countries." *Journal of Conflict Resolution* pp. 1–28.