

# Examining Gender Inequality and Armed Conflict at the Subnational Level

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## Abstract

A growing body of quantitative research points to a robust relationship between gender inequality and armed conflict. In order to progress our understanding of this relationship, we make two contributions. First, we identify three potential explanations as to why gender inequality can be associated with conflict—gender inequality norms, societal capacity, and gendered socioeconomic development—and suggest an empirical strategy to gauge the explanatory leverage of each explanation. Second, we offer a more nuanced treatment of the dependent variable at the subnational level, moving beyond a dichotomized view of armed conflict to accounting for both its level and type. We test our hypotheses using district-level data on gender inequality and conflicts in India, covering the 1989–2014 period. Our findings show that the three explanations do not produce the same outcomes in the data. We argue that this speaks to the need to adjudicate between different forms of mechanisms that can connect gender inequality to conflict. Our results show support for women’s status being important for understanding a society’s capacity to handle conflict nonviolently. On the negative side, gendered socioeconomic developments resulting in a male surplus create conditions conducive for armed conflict, particularly in urban areas. A more surprising finding is that the gender inequality norm, in and of itself, does not appear to have a strong effect on the risk of armed conflict. This does not mean that we can disregard the explanation, but it underlines that there can be inherent problems with this commonly used argument.

**Keywords:** civil war, armed conflict, gender inequality, recruitment, India

## Introduction

Building on key assumptions in feminist research, Mary Caprioli’s groundbreaking article *Gendered conflict* (Caprioli 2000) spurred a growing body of quantitative research examining the relationship between gender inequality and armed conflict. The results all point in the same direction: Countries that display high levels of gender inequality are more likely to be associated with both intrastate and interstate armed conflict, and peace established under more gender equal conditions is more likely to hold (Caprioli 2000, 2005; Caprioli and Boyer 2001; Hudson and den Boer 2002; Melander 2005a; Hudson et al. 2008/2009; Gizelis 2009; Bjarnegård and Melander

2011; Demeritt, Nichols, and Kelly 2014). While this finding is considered robust at the country level, findings in recent civil war literature suggest that patterns of political violence, as well as most of their determinants, vary substantially within countries (see, for instance, Buhaug et al. 2011). Taking that insight as its starting point, this article is the first to hypothesize and systematically test the relationship between gender inequality and armed conflict at the subnational level.<sup>1</sup> To test our hypothe-

<sup>1</sup> An important first contribution on the role of gender equality at subnational level is Gizelis (2011) but then in the context of conflict resolution, examining subnational

ses, we use district-level data on gender inequality and armed conflicts in India, covering the 1989–2014 period. This data is well suited because India has substantial variation on different gender inequality indicators at the subnational level, although, as we will discuss, indicators must be selected carefully to avoid generalizing from context-specific traits.<sup>2</sup> Furthermore, the country has a considerable within-country variation in terms of insurgencies and other types of localized armed conflicts enabling in-depth analysis.

We seek to make two important contributions. First, we identify and operationalize different explanations for how gender inequality relates to violence. Previous research often implicitly or indirectly suggests varying forms of explanations for why gender inequality can affect the risk of armed conflict. Examining the relationship at the subnational level allows us to begin to identify and tease out these different mechanisms. In our reading of the literature, there are at least three separate clusters of explanations: (1) *Norms*, which suggests that high levels of conflict in areas dominated by severe forms of gender inequality norms are a result of violence being considered a legitimate tool to address conflict; (2) *Societal capacity*, where the explanation is that gender equality implies a higher investment in women, which entails higher levels of social networks and resources, which enables the society to handle conflicts more peacefully; and (3) *Gendered socioeconomic development*, which suggests that certain socioeconomic developments make more young men available for recruitment into armed groups, therefore explaining why we see more armed conflict in some areas compared to others. Although all three explanations revolve around gender inequality, they propose different mechanisms for how it can be related to violent conflict. Further, these different mechanisms underscore the argument by Goldstein (2001) that gender should not be considered as synonymous with women, but rather as an interactive concept in which men and masculine roles also play a key role. To successfully investigate the explanatory power of each of these mechanisms, it must be possible to effectively differentiate between them by identifying which indicators are associated with which mech-

variation in levels of cooperation and conflict during the UN peacebuilding missions in Sierra Leone and Liberia.

<sup>2</sup> Whereas India does display some gender inequality traits that are more uncommon, such as the issue of unbalanced sex ratios in some geographical areas, many gender inequality indicators follow quite similar trends as in many other countries. Focusing on these traits, we find this case to be useful for improving our understanding of gender inequality and the risk of political violence.

anism. This means that while earlier research has relied on various combinations of the same indicators—such as women in parliament, fertility rates, access to education, and women’s participation in the labor force—regardless of what mechanism they have put forward, we make an additional contribution by suggesting indicators for each of the mechanisms.

Second, we offer a more nuanced treatment of the dependent variable, moving beyond a dichotomized view of armed conflict. Nuancing the armed conflict variable can further improve our ability to differentiate between the mechanisms at play. In this study, we differentiate between both the type of subnational conflict and the magnitude of violence. Data from the [Uppsala Conflict Data Program \(UCDP; 2018\)](#) show that there is substantial variation in what form armed conflict takes at the subnational level. It can be either state based, i.e., involving the state military and at least one other organized armed group where the incompatibility is government or territory; or it can be non-state based, involving at least two organized armed groups, neither of which is the government of a state (Pettersson and Eck 2018). The latter category is somewhat broader, additionally capturing conflicts and organized violence that are less costly and require a lower degree of organization, for example, riots (Sundberg, Eck, and Kreutz 2012).<sup>3</sup>

The article proceeds in the following manner: We begin by teasing out the three clusters of explanations for the correlation between gender inequality and armed conflict—identifying the mechanisms proposed by each cluster, and formulating specific hypotheses based on each mechanism. Then, we present our approach to finding valid indicators to test each hypothesis, including the use of the nuanced dependent variable. We then proceed to test them on the district-level data on India. This test shows strong support for both the societal capacity and socioeconomic development explanations. Surprisingly, however, we do not find that the gender inequality norm, in and of itself, has an effect on the risk of armed conflict. This does not mean that we can disregard the explanation, or that it is not interacting with the other mechanisms, but it underlines that there might be inherent problems with how this argument is most commonly understood and used in research today. The article then concludes with suggestions for how the three explanations could be further investigated and some observations on the implications for future research.

<sup>3</sup> UCDP also collects data on a third type of violence— one-sided violence against civilians. In this article, however, we focus on how gender equality may increase the risk of violent conflict *between* actors.

## Teasing out the Three Explanations

In starting to identify why gender inequality can affect armed conflict, we take as our starting point Melander's (2005a) observation that we need to "disentangle" the complex content of gender inequality in order to progress our understanding. One key element is the presence of *gender norms* that assign different values and stereotypical expectations to men (masculinity) and women (femininity), and where masculinity and male roles are generally given a higher value. In much previous research, the norm is assumed to have an explanatory capacity in and of itself on the risk of armed conflict (for a discussion, see Melander 2005a; Bjarnegård, Brounéus, and Melander 2017). However, some studies appear to rather focus on key elements of gender inequality that entail an unequal distribution (to men's advantage) of power and other material and immaterial resources. In previous research, a more equal distribution is seen as a sign of a higher *societal capacity* that can explain a more peaceful society (Regan and Paskeviciute 2003; Gizelis 2009, 2011). This distribution can follow from the value assigned to men compared to women, but it could also be the result of political or socioeconomic developments that have different effects for men and women. Moreover, certain *gendered socioeconomic developments* could potentially explain an increased conflict risk through affecting the opportunity for military organizations to recruit by creating a male surplus (Hudson and den Boer 2002). For instance, balanced sex ratios in a region can result from the absence of the son preference norm, or an active policy of banning and punishing sex determination tests, and hence indicate relative equal gender norms. However, balanced sex ratios in a region could potentially just as well result from a lower development in the area, i.e., that sex determination is either not offered or that most people cannot afford such tests, even under conditions of gender unequal norms. Finally, the sex ratio balance in a region could be the effect of men migrating to urban centers to find work due to altered economic conditions while women remain in the rural areas (Hudson et al. 2008/2009). Thus, we identify three main clusters of explanations—gender inequality norms, societal capacity, and gendered socioeconomic development—that appear to be the more dominant in previous research. Let us now look closer at these in order to identify and refine them into explanations that can be hypothesized.

### Hypothesizing Gender Inequality Norms

The gender norm cluster of explanations is quite prevalent in existing research and suggests that the more

unequal the gender norms, the greater the likelihood of armed conflict. This explanation is one of the most cohesive, focusing on one central pathway. As gender is one of the most dominant organizing principles in all societies and the level of inequality varies greatly in this relationship, it has been argued that the treatment of women in highly unequal societies may serve as a blueprint for how grievances by other "outgroups" are perceived (see, for example, Peterson 1992; Tickner 1992; Reardon 1996; Caprioli 2000, 2005; Caprioli and Boyer 2001; Goldstein 2001; Hudson and den Boer 2002, 2012; Den Boer and Hudson 2004; Melander 2005a, 2005b; Hudson et al. 2008/2009; Gizelis 2009, 2011). As noted by Caprioli (2005, 163), "norms of intolerance and inequality should have an incendiary impact on domestic and international behavior by legitimizing violence as a tool of conflict resolution." Using the psychological concept of othering, Hudson and colleagues (Hudson and den Boer 2002, 2012; Hudson et al. 2008/2009) suggest that in highly patriarchal societies, where children grow up seeing women being dominated and controlled by men, they are provided with a template where violence and domination is considered normal. A cornerstone of this line of thinking originates in feminist research—that these norms build on patriarchal structures and standpoints. In its most extreme form, patriarchy entails "a fundamental dichotomization between "us" and "them," namely between men and women, and a hierarchical power relationship privileging men. The othering of women means that they are devalued, deprived of privileges, and controlled, relative to men" (Bjarnegård, Brounéus, and Melander 2017, 751).

Evidence also suggests that norms of intolerance correlate; for example, survey-based studies at the individual level show a correlation between sexist and racist attitudes (see, for example, Henley and Pincus 1978) and between supporting masculine violence and war violence (Sundberg 2014). In contrast, Schaftenaar (2017) finds support for her test of the hypothesis that more gender equal norms rather seem to result in more peaceful manners to address conflict, arguing that this is because more gender equal norms tend to coincide with more nonviolent norms also at the social level (see also Best, Shair-Rosenfield, and Wood 2019). Hence, the level of gender inequality can be considered as capturing how a society deals with existing grievances, that is, how elites deal with horizontal differences between groups. This would be a relevant explanation also for localized conflict where the acceptance of the use of violence to resolve local disputes is even more salient than in other parts of the country or external to the state.

**H1:** *Areas with more unequal gender norms are more likely to experience armed conflict.*

### Hypothesizing Societal Capacity

At its basis, the societal capacity cluster proposes that a higher investment in women entails higher levels of networks and resources, which enables a society to handle existing conflicts more peacefully. This cluster suggests two potential pathways in which gender inequality can affect armed conflict, both relating to investments in women resulting in broader positive effects for society. The first is based on the original inspiration for the argument that comes from the related field of conflict relapse. [Gizelis \(2009, 2011\)](#) argues that preventing the relapse to war is easier under conditions where the degree of women's empowerment is higher as this entails a higher degree of societal capacity that international peacebuilding efforts can tap into to strengthen the probability for success. The main argument is that higher levels of investment in women through education and they having access to more resources result in a greater societal capacity to influence, create and uphold networks—both vertical and horizontal—among a larger part of society. She argues that these capacities can be used to forward peace and create other means to resolve conflict. Hence, rather than excluding competent individuals by upholding patriarchal structures, the higher status of women indicates that there is more competence to draw from in a society. Relatedly, [Regan and Paskeviciute \(2003\)](#) argue that, in a society with higher levels of gender equality, power is going to be more diffused. This can play out at the grass-roots level where networks of women can constitute a positive resource for peace ([Gizelis 2011](#)). Liberia serves as an example where women organized across warring lines in order to influence and pressure the warring parties ([Gizelis 2011](#)). On a similar note, recent work finds that increased female representation in national legislature makes it more likely that ongoing conflicts terminate by negotiated settlement. The reason is that a diverse political elite supposedly has a larger capacity to address the needs of excluded groups and represents a broader set of finding nonviolent solutions ([Best, Shair-Rosenfield, and Wood 2019](#)). Conversely, a situation of gender inequality, [Schaftenaar](#) argues, means that public space might be restricted for women, which also influences the access to information and ability to form networks ([Schaftenaar 2017](#)).<sup>4</sup> To clarify, this explanation

<sup>4</sup> Her argument refers to women's ability to participate in mass protests but we argue that it can also be relevant for understanding aspects of societal capacity.

tion does not necessarily essentialize women as being inherently more peaceful than men. Women can be mobilized both for peace and as armed combatants ([Wood and Thomas 2017](#)). Rather, this explanation suggests that investing in more than just half of the population means that society will be strengthened.

The second pathway, as noted by a growing number of research articles, suggests that women's mobilization and organizations can directly affect state behavior ([Dahlum and Wig 2018](#)). That is, that the link between gender inequality and armed conflict may be, in part, indirect or conditioned upon the strengthening of societal institutions. [Bussmann \(2007\)](#) notes that a higher engagement of women in various societal sectors including politics, due to higher education levels and activity in the labor force, will work to constrain government behavior and strengthen state capacity and governance. Strengthened state capacity and governance are in turn associated with peace. Similarly, several researchers find interaction effects with democracy, suggesting that democracies are more peaceful than non-democracies only when interacted with gender equality ([Bjarnegård and Melander 2011](#); [Dahlum and Wig 2018](#)). While it is possible that such variations in part can be related to variation in norms, this explanation still indicates a separate role of capacity for conflict risk and how investment in women plays into such scenarios. Based on the above, we hence suggest that higher levels of investment in women are associated with less armed conflict.

**H2:** *Areas with higher levels of investment in women are less likely to experience armed conflict.*

### Hypothesizing Gendered Socioeconomic Development

The gendered socioeconomic explanation suggests that certain forms of development can result in an improved recruitment pool for military organizations. Although some rebel groups involve women in fighting capacity (for an overview, see [Wood and Thomas 2017](#)), men do constitute the absolute majority of those who fight in armed conflict ([Goldstein 2001](#); [Bjarnegård et al. 2015](#); [Melander 2015](#)). That said, it is crucial to acknowledge that this number constitutes a very small minority. The majority of men are not willing to use violence, even in areas affected by armed conflict. Hence, ever since [Gurr \(1970\)](#) asked why some men rebel (and implied why the majority do not), systematic research has considered questions concerning recruitment as critical. The gendered socioeconomic development explanation here suggests a pathway where it is central to

understand under what conditions some, particularly young, men still decide to join a military organization (Bjarnegård et al. 2015; Bjarnegård, Brounéus, and Melander 2017).

More specifically, Eck (2009) argues that while access to men constitutes a primary resource for a potential rebel group's ability to fight, recruitment remains a key strain on their very limited resources. Identifying likely candidates for recruitment is difficult and time consuming, making factors that can facilitate it central. This explanation for the connection between gender and armed conflict therefore zooms in on the fact that certain socioeconomic trends have different average effects for men and women due to their different roles in society. If placed in the context of research on recruitment, these trends can be considered as conducive to military groups obtaining and maintaining sufficient access to manpower resources. Most notably, Hudson et al. (2008/2009) have argued that a society characterized by gender inequality in the form of a persistent and strong son preference may end up with a large male surplus conducive to easing recruitment. This is supported empirically by Urdal (2008) who finds that Indian states with large youth bulges are increasingly prone to armed conflict, particularly so when coupled with a large male population. The mere size of the cohort of young men in an area means a potentially larger recruitment pool. Moreover, it is likely that a large surplus of young men also means that there are more individuals with low opportunity costs for joining an armed group. We therefore propose that an excess of young men will be associated with more armed conflict.

**H3a:** *Areas with severe demographic imbalances in the form of a surplus of young men are more likely to experience armed conflict.*

Previous research suggests that the effect of a young male surplus may be even more pronounced under certain circumstances, proposing two potential pathways through urban proportion and unemployment. According to Hudson et al. (2008/2009), recruitment can be facilitated in conditions where men have left rural areas and live in cities. There, they can be easier to identify and target in recruitment campaigns. Early research focusing on migration, urbanization, and armed conflict more broadly also suggested that particularly migrating men could be more vulnerable to recruitment due to risk of economic marginalization and problems of adapting to an urban setting (Gizewski and Homer-Dixon 1995). If so, this could further decrease the cost for recruitment for military groups. While previous research has found the

opposite result in that urban environments can arguably be places of more tolerant and cosmopolitan values (Buhaug and Urdal 2013), under conditions where many men are not able to find a spouse or a job, Hudson et al. (2008/2009) suggest that the likelihood of men joining armed groups could increase as they have few viable alternatives to raising income (again, lower opportunity costs). For example, it could imply that young men gather and organize into groups or "gangs" through which information campaigns can be directed. This can be particularly so if men are unable to fulfill traditional gender roles, i.e., are unable to marry as they exist outside of traditional networks that could enable such connections, or are too poor to be able to afford marriage (Hudson et al. 2008/2009; Urdal 2008; Mokuwa et al. 2011). Hence, it could speak to the potential role of masculinity. A similar argument to that of Urdal was raised by Toft (2003), studying ethnic groups, who suggested that in urban centers, groups will also have greater access to media, economic resources, and networks, which will allow them to be more effective in terms of mobilizing and organizing for conflict. In other words, these socioeconomic effects could create conditions where a larger number of men with low opportunity costs are easier to recruit. Following these lines of thought, we propose two conditions where a young male surplus may be particularly conducive to violence: in urban areas (Hypothesis 3b) and when coupled with high male unemployment (Hypothesis 3c).

**H3b:** *Areas with severe demographic imbalances in the form of a young male surplus are more likely to experience armed conflict, especially in highly urbanized areas.*

**H3c:** *Areas with severe demographic imbalances in the form of a young male surplus are more likely to experience armed conflict, especially in areas with high male unemployment.*

## Research Design and Identifying Indicators

For the purpose of this article, we have compiled a time series dataset composed of all districts in India for the time period 1989–2014. In order to test the explanations at the subnational level, we then proceed to identify indicators that can differentiate between the three explanations. In order to better understand the dynamics, our design also allows us to test the hypothesis on both state-based and non-state-based conflicts and on magnitude of violence.

### Testing Gender Inequality and Armed Conflict at the Subnational Level in India

Information for the dataset is drawn primarily from two data sources: (1) the three most recent *Census of India* (1991, 2001, 2011) are used for measures of gender inequality and for some of the confounders, and (2) the UCDP Georeferenced Events Dataset (GED) is used for measures of armed conflict (Sundberg and Melander 2013). All districts in India are included with separate observations for each year in the time period 1989–2014.<sup>5</sup> The unit of analysis is the district-year, and, in total, 670 districts are analyzed (N: 12,838).<sup>6</sup> Robust standard errors are reported, adjusted for clustering on the district.<sup>7</sup> The district is used as the unit of analysis because the districts are small (on average ca. 5000 square km), yet politically relevant because they form the second-order administrative unit in India, and data is often collected down to this level.<sup>8</sup>

District-level data from India provide a fruitful point of departure for this analysis as there is substantial subnational variation on not only gender inequality indicators but also levels and types of armed conflict. In the post-Cold War period, India has experienced a number of insurgencies, most of which are highly localized. The Northeast corner has been, and continues to be, the arena for the most protracted secessionist insurgencies. The first insurrection started in Nagaland, followed by violence erupting in Mizoram, Manipur, and Tripura in the 1960s, which intensified during the 1970s and also spread to Assam. From the late 1980s and onward, smaller ethnically based insurgencies have erupted, involving e.g.,

Bodos, Dimasas, and Hmars (Bhaumik 2009). Another conflict over territory, and which also has an international dimension with its links to Pakistan, is the conflict over Kashmir, which after a peak in the early 2000s has decreased in intensity but remains unsolved (Uppsala Conflict Data Program). In addition to these separatist conflicts, the Naxalite conflict is affecting the central parts of India, such as the states of Chhattisgarh and Andhra Pradesh. There are also a number of non-state conflicts in India, both along the Hindu–Muslim divide, between tribal groups in the Northeast, and between rivaling rebel factions (Uppsala Conflict Data Program). Although conflicts are numerous and in some cases of high intensity, there are many areas of India that are not significantly, or at all, affected by armed conflict, such as most of the southern states. Figure 1 here displays the location of armed conflict in India for the time period 1989–2014, according to data from the UCDP GED (Sundberg and Melander 2013).<sup>9</sup> State-based events are represented by white dots and non-state events by black dots.

In terms of gender inequality, there are sharp contrasts in the variations between different levels of society and between different geographical areas. While India has seen a woman in the position of Prime Minister for 15 years and women were largely active in mobilization for independence, women in many places and matters hold very inferior positions. Notably, some regions have some of the world's most imbalanced sex ratios at birth to boys' advantage due to highly prevalent sex selection (Guha 2007; Jayal 2008). The subnational variation is significant regardless of which indicator is explored. Moreover, there are no easily identified patterns of co-variation. The level of disaggregation and understanding the complexity clearly matter. As an example, let us look closer at sex ratios. In India, sex ratios, an underlying component to a young male surplus, are measured for both the whole population and children aged 0–6 years. Subnational variations across India are enormous, ranging from well below 900 to over 1800 men per 1000 women. A number of districts, most of which are located in either the Northeast or South India, have balanced sex ratios. At the other extreme there are some districts with quite large distortions, including most of the Northwest and Central states, such as Haryana, Jammu and Kashmir, Punjab, and Rajasthan, states known for having a strong son preference (Hesketh and Xing 2006). Evidence does suggest that strong son preference is the main driver of the male surplus in India (Clark 2000;

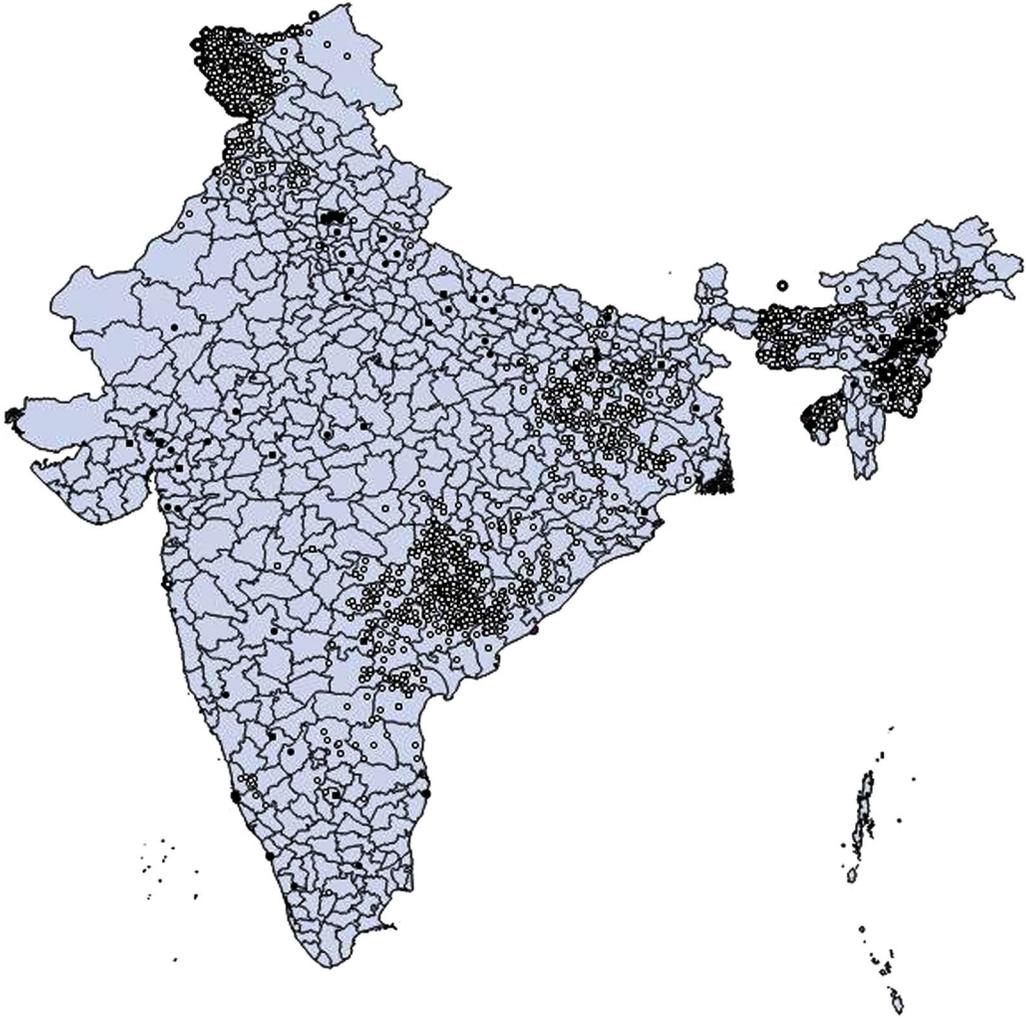
<sup>5</sup> Most of the districts' panels cover the years 1989–2014. However, some districts are included for a shorter time period since they were formed after 1989 or ceased to exist prior to 2014, due to splits and mergers of administrative units. Information on changes in districts is retrieved from <http://www.statoids.com/yin.html>.

<sup>6</sup> Except in table 1, where the data on literacy reduces the sample slightly (N: 12,835).

<sup>7</sup> The results are substantially the same if clustering on the state. These re-estimations are reported in the Supplementary Information.

<sup>8</sup> An alternative design would be a grid-based approach. However, most data used in this paper's analysis are district-level. Using a GIS-based analysis, one would in most cases be forced to assign rules for deciding how much of the cell that belongs to a given district should be coded according to this district's data. In addition, many of the conflict events can be assigned geographically to the level of a district, but for many of them it has not been possible to assign the within-district location.

<sup>9</sup> A list of all conflicts and actors is found in the Supplementary Information.



**Figure 1.** State-based and non-state conflict events in India, 1989–2014

Hesketh and Xing 2006). On the subnational level, this indicator can additionally capture gendered patterns of migration, especially rural-to-urban flows of young men. For instance, in the Union Territory of Daman and Diu, the very uneven sex ratio is to a large extent a consequence of migratory labor. Interestingly, there are studies that suggest that women in areas where many men have left to seek work elsewhere (e.g., Uttarakhand) actually become more empowered politically (in the *panchayats*, India’s form of local self-government) and redefine their social roles (Jayal 2008). This demonstrates the need to carefully select indicators that capture the core of the theoretical arguments and avoid ones that are too context specific.

#### Dependent Variables: State-Based and Non-State-Based Armed Conflict

The dependent variables are coded based on data from the UCDP GED (Sundberg and Melander 2013). An event is defined as “the use of armed force by an organized actor against another organized actor, or against civilians, resulting in at least 1 direct death [...] at a specific location and a specific temporal duration” (Sundberg and Melander 2013).<sup>10</sup> In this study, we explore two forms of armed conflict: state-based conflicts

<sup>10</sup> For specific coding criteria regarding each element of this definition, please consult the codebook (Croicu and Sundberg 2017).

between the government of a state and an organized opposition group, and non-state conflicts between two organized groups.<sup>11</sup>

Both the incidence of events in a given district and the number of fatalities are relevant to this study; thus, two different sets of dependent variables are constructed, requiring different estimation techniques. The first set is dichotomous measures, simply indicating whether one or several events, as defined earlier, took place within a given district-year and generated at least five fatalities. The second set is intended to capture the magnitude of such violent events, and thus indicates the number of fatalities georeferenced to a district in a given year. Note that although some rebel groups have a clear link to a specific territory, in particular the separatist groups in North-east India, their activity has often transcended into proximate areas. Therefore, also districts without a coherent rebel presence may be the location of violent events. First, *State-based conflict* is a dichotomous measure coded as 1 if clashes between rebel groups and the government generated at least five fatalities in a district in a given year; otherwise it is coded as 0. Second, a measure called *State-based fatalities* provides the total number of fatalities resulting from such violence in a district in a given year. Third, the incidence of at least five deaths in a district-year resulting from so-called non-state conflict is coded as 1 on the variable *Non-state conflict*. Fourth, the variable *Non-state fatalities* provides the total number of fatalities from non-state conflicts in a given district-year.

### Identifying Indicators for the Independent Variables

In creating the dataset, data from the Indian censuses (1991, 2001, 2011) are inter- and extrapolated to allow for annual observations for the period 1989–2014. The extrapolations are bounded by the lowest and highest observed levels in the data, for each measure.<sup>12</sup> All independent variables are lagged 1 year to account for temporal order.<sup>13</sup>

While all explanations revolve around gender inequality, it is central to identify indicators that can differentiate between the three suggested mechanisms. The most basic explanation, the gender inequality norms hypothesis, suggests that areas characterized by more unequal gender norms are increasingly associated with violent outcomes. Armed conflict could potentially also be of larger magnitude under such circumstances. However, capturing (essentially unobservable) norms through empirically observable indicators is no straightforward task. We argue that a fundamental value situation where the gender inequality norm can be measurable is in that all families make key decisions on who should get an education. If sons are valued higher, then they are more likely to receive education than the daughters. A likely proxy for inequality norms is therefore the gender ratio in literacy rates, that is, the gap in access to education between men and women. The variable *Female-to-male literacy rate* shows the extent to which the literacy rate deviates, typically to the benefit of men; many families prioritize schooling for their sons compared to their daughters. This is the main indicator used to test Hypothesis 1.<sup>14</sup>

The societal capacity (Hypothesis 2) examines whether districts with higher investments in women are associated with less violence. Should violent conflict still occur, we expect it to be of a less magnitude. To capture this, we again focus on access to education that we argue could be considered as a fundamental resource for contributing to societal capacity. However, now, the focus is on the degree of women's education as an indicator of societal capacity. Thus, we expect districts where more women have received basic education levels to experience less conflict. In the statistical analysis, we therefore use *Female education* in absolute terms as the main measurement of investment in women as societal capacity. Importantly, while this indicator could be presumed to be quite similar to that of female-to-male literacy rates, deviations in literacy rates consider the gap as significant for measuring value norms whereas the degree of women's education speaks to the capacity in the female population. In other words, these two measures represent different

an instrumental variable design. The primary suggested instruments of gender inequality relate to agricultural factors, such as the soil's suitability for plough use (see, for example, [Alesina, Giuliano, and Nunn 2013](#)). These instruments are unfortunately not easily adapted in our study as these types of data lack the subnational specificity required for our analysis.

<sup>14</sup> As described in footnote 19, we also test a number of alternative indicators to proxy norms.

<sup>11</sup> For full definitions of these forms of violence, see [Pettersson and Eck \(2018\)](#) and [Sundberg, Eck, and Kreutz \(2012\)](#).

<sup>12</sup> As an example, the urban proportion of the districts ranges from 0 to 1. Linear extrapolation may generate (incorrect) values below 0 and above 1, which are remedied by bounding the range between 0 and 1.

<sup>13</sup> Lagging independent variables 1 year cannot fully account for potential reversed causality, an issue that is present in almost all explanations for armed conflict. In some studies, reversed causality can be addressed by

explanations for how gender inequality can be connected to armed conflict.<sup>15</sup>

The gendered socioeconomic development hypotheses revolve around demographic changes that can result in conditions beneficial for recruitment opportunities for military organizations. Hypothesis 3a tests whether a young male surplus in itself is associated with an increased risk of armed conflict. The variable *Young male surplus* estimates each district's proportion of men in the age group 15–24 relative to the whole district population.<sup>16</sup> Hypothesis 3b considers interaction with factors capturing the conditions under which these men live. We thus add a variable interacting *Young male surplus* with each district's *Urban proportion*. Last, Hypothesis 3c suggests that the effect of a young male surplus may be conditioned on *Male unemployment*, measured as the proportion of men aged 15–59 years without work and interacted with the variable on *Young male surplus*. This could indicate if these men can fulfill traditional male roles, of marriage and providing for their families.

### Control Variables

In selecting control variables, we considered what previous statistical research using country data to test the link between gender inequality and civil war (e.g., Caprioli 2005; Melander 2005a) controlled for, such as population size and poverty levels. As some of these control variables relate to factors that do not vary within a country, such as regime type, we also drew from studies that seek to explain local variations in civil war. This includes, for instance, the geographical location within a country, such as distance to the capital, and local conflict spillover. As these studies have not studied gender inequality, we looked for control variables in that they may have an impact on *both* the local conflict propensity and our measures of gender inequality.

<sup>15</sup> More specifically, while there is certain overlap with the indicator used to test Hypothesis 1, there are two important differences. First, while female-to-male literacy focused on the gender gap in literacy, female education focuses on absolute levels (not relative to men). Second, education measures the additional component of schooling as investment and access to education institutions. While literacy levels to a large extent also pick up on this, it is possible that some women are literate without having had access to schooling.

<sup>16</sup> In exploratory factor analysis with a battery of gender inequality indicators, it is found that *Young male surplus* has a high uniqueness score (0.59), supporting our suggestion that it may be an important component on its own.

Our final selection is as follows: First, we control for the local income level of the district. A low level of income may both create grievances and lower the opportunity cost of joining an insurgent movement. It may also proxy the more general level of development of an area, which may correlate with measures of gender inequality. The gross domestic product data was retrieved from the Open Government Data Platform of India. The data is district-level, but unfortunately covers a rather short time series, from 1999 to 2005. Data for the other years are extrapolated.<sup>17</sup> The variable is transformed using its natural log, lagged 1 year, and reported as *Ln income*. Second, we control for the population size of each district. The data are transformed using their natural log, lagged 1 year, and reported as *Ln population*. Third, we include the *Urban proportion* of a district as a potential confounder. Urban areas may attract young men looking for employment and may also be related to primarily communal non-state confrontations. Fourth, we include the dummy variable *Capital*, indicating whether the state capital is located in the district. Fifth, we control for a potential relationship between religion, gender, and conflict that may be present in the case of India, as religion (and to some extent ethnicity) may be linked to both levels of gender inequality and local conflicts and riots. We hence add indicators for the district's *Hindu proportion* and *Muslim proportion* in all main models.

Lastly, we include measures to account for potential autocorrelation. It is highly likely that the probability and magnitude of violence are partly conditioned upon similar events in nearby districts and previously in the same district. To account for spatial spillovers of violence, a spatial lag for the number of fatalities in the bordering districts is included in all models and reported as *Proximate state-based/non-state*.<sup>18</sup> A variable indicating whether or not the district experienced violent events in the previous year is incorporated in all statistical models to handle temporal autocorrelation and is reported as *State-based/non-state t-1*.

### Findings

What is then the outcome when we test these hypotheses on the subnational data on India? In the following we will assess each of the three sets of explanations, with separate

<sup>17</sup> See <https://data.gov.in/catalog/district-wise-gdp-and-growth-rate-current-price1999-2000>.

<sup>18</sup> When the dependent variable is state-based conflict, such conflict fatalities in other districts of the state are included; and when we estimate non-state conflicts, such fatalities are included.

**Table 1.** Gender inequality norms and subnational armed conflict

	State-based violence		Non-state violence	
	Model 1 Incidence (logit)	Model 2 # of fatalities (NBRM)	Model 3 Incidence (logit)	Model 4 # of fatalities (NBRM)
Female-to-male literacy rate	-0.567 (0.618)	-0.854 (0.742)	-1.642 (1.195)	-6.287** (2.470)
Ln population	0.270** (0.132)	0.587*** (0.191)	0.276 (0.216)	0.793* (0.416)
Urban proportion	-0.551 (0.630)	-0.472 (0.796)	1.823** (0.823)	1.439 (1.661)
Capital	0.816*** (0.308)	1.279** (0.556)	0.538 (0.492)	2.344** (1.062)
Ln income	-0.235*** (0.076)	-0.205* (0.121)	-0.370*** (0.109)	-0.741*** (0.276)
Hindu proportion	-0.164 (0.451)	-1.459** (0.727)	-2.909*** (0.970)	-6.364*** (1.263)
Muslim proportion	-0.077 (0.552)	-1.176 (1.080)	1.576* (0.924)	3.550* (0.935)
State-based t-1	1.919*** (0.164)	2.031*** (0.165)		
Proximate state-based	0.948*** (0.048)	1.101*** (0.060)		
Non-state t-1			3.105*** (0.443)	3.550*** (0.934)
Proximate non-state			0.002** (0.001)	0.246* (0.126)
Constant	-6.568*** (1.413)	-7.807*** (1.884)	-4.513** (2.098)	-1.551 (5.096)
Pseudo R <sup>2</sup>	0.375	0.127	0.162	0.055
Observations	12,835	12,835	12,835	12,835

Notes: (1) Robust standard errors in parentheses, adjusted for clustering on the district. (2) \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

models for the different specifications of the dependent variable.

### Gender Inequality Norms

In the normative explanation, we expect that more unequal gender norms will result in higher prevalence and greater magnitude of violence. To test this, we looked at the *Female-to-male literacy rate*. So, are areas dominated by more unequal norms more violent?

As shown in [table 1](#), we unexpectedly find limited support for the normative explanation. *Female-to-male literacy rate* is not significantly associated with state-based armed conflict. We also re-estimated the models with several other alternative indicators that could arguably proxy the gender inequality norm—but the result was the same.<sup>19</sup> There is only some weak support

for a relationship to non-state-based conflicts when it comes to their magnitude (in Model 4). This does not mean to say that we can disregard the explanation, but the result highlights the need for discussing the theoretical fundamentals of the arguments. Previous research suggests that these norms build on male-dominated structures of patriarchal values. However, it is not entirely clear how this explanation of omnipresent patriarchal structures in its current state can fully capture why we see substantial variations in armed conflict over time and space. Moreover, in [Bjarnegård, Brounéus, and Melander \(2017\)](#), patriarchal norms are found to be

ceptance levels of wife-beating, and gender deviations in education, none of which supported the hypothesis. The indicator for gender deviations among children in some models even indicated a reversed relationship. For more discussion, consult the Supplementary Information.

<sup>19</sup> This included gender deviations among children (0–6 years), fertility rates, survey-based data measuring ac-

**Table 2.** Societal capacity and subnational armed conflict

	<i>State-based violence</i>		<i>Non-state violence</i>	
	<i>Model 1</i> <i>Incidence (logit)</i>	<i>Model 2</i> <i># of fatalities (NBRM)</i>	<i>Model 3</i> <i>Incidence (logit)</i>	<i>Model 4</i> <i># of fatalities (NBRM)</i>
Female education	-1.191** (0.518)	-1.251* (0.643)	-1.961* (1.050)	-6.664*** (1.694)
Ln population	0.207 (0.134)	0.522*** (0.191)	0.218 (0.212)	0.739** (0.360)
Urban proportion	-0.380 (0.639)	-0.275 (0.791)	2.098** (0.835)	1.942 (1.456)
Capital	0.921*** (0.312)	1.308** (0.554)	0.524 (0.504)	1.770* (0.987)
Ln income	-0.180** (0.077)	-0.149 (0.123)	-0.317*** (0.115)	-0.452** (0.206)
Hindu proportion	-0.148 (0.416)	-1.376** (0.689)	-2.790*** (0.801)	-6.496*** (1.189)
Muslim proportion	-0.034 (0.548)	-1.191 (1.047)	1.507* (0.892)	6.667* (3.470)
State-based t-1	1.942*** (0.165)	2.038*** (0.161)		
Proximate state-based	0.947*** (0.048)	1.108*** (0.059)		
Non-state t-1			3.069*** (0.457)	3.816*** (1.025)
Proximate non-state			0.002** (0.001)	0.260* (0.131)
Constant	-6.004*** (1.420)	-7.423*** (1.842)	-4.461** (2.161)	-4.348 (4.181)
Pseudo R <sup>2</sup>	0.377	0.128	0.166	0.063
Observations	12,838	12,838	12,838	12,838

Notes: (1) Robust standard errors in parentheses, adjusted for clustering on the district. (2) \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

insufficient as an explanation for participation in political violence at the individual level. However, it is relevant if it is combined with ideological ideas about male toughness. Hence, gender inequality norms can still play an indirect role, but it can be other dimensions of the concept of gender inequality that explains the relationship to armed conflict.

### Societal Capacity

The second mechanism relates to societal capacity. Here, we would expect that higher rates of female education would correlate with a reduced likelihood of armed conflict. As we see in Models 1–4 in table 2, the analysis supports the capacity explanation.

The findings from table 2 suggest that both state-based and non-state-based conflicts are less likely in districts with higher degrees of investments in women's education and also linked to fewer fatalities in both

types of conflict on the rare occasion that conflict occurs. In substantial terms, the results from Model 1 and 2 indicate that with a standard deviation increase in the proportion of women that has undergone basic education (which corresponds to approximately 19 percentage points), the predicted probability of state-based violence in the district decreases by over 20 percent and the predicted count of fatalities by about 22 percent. These results could indicate that if public space is open for both women and men, this influences the access to information and ability to form networks for both groups rather than limiting it to men. Hence, this supports the idea that, indirectly, a higher status of women speaks to the strength of a society, and an explanation that relates more specifically to women's role in societies where they can be a resource to mobilize for more peaceful ways to resolve conflict or put pressure on warring parties. Relatedly, a higher engagement of women in various societal sectors—including politics—as a result of higher

education levels and activity in the labor force will work to constrain government behavior and strengthen state capacity and governance. Strengthened state capacity and governance are, as supported by several studies, in turn associated with peace.

The results from [table 2](#) are robust to alternative model estimations, such as trimmed models omitting nonsignificant control variables, and when capacity is measured with alternative indicators.<sup>20</sup>

### Gendered Socioeconomic Developments

The gendered socioeconomic development explanation postulates that certain demographic processes can result in increased access to young men, i.e., an improved recruitment pool for military organizations. If so, and in line with Hypothesis 3a, then we would expect to see more armed conflict in areas with a surplus of young men.

When looking at the potential role of surplus, the results from [table 3](#) are mixed. On the one hand, as shown in Models 1 and 2, a large number of young men in a district do not make it significantly more prone to state-based violence. In fact, it has a marginally significant negative relationship with the expected number of fatalities in state-based conflict. One potential explanation can be that, as observed by Hudson et al., that for an insurgency to take off, this requires not only the existence of manpower but also networks in order to reach potential recruits. Hence, an increased number of young men in a district can therefore be insufficient, particularly in the case of India that has a robust armed force and police to counteract potential outreach campaigns and organized opposition to the state ([Government of India 2017](#)).<sup>21</sup> A substantial young male surplus is, however, strongly and significantly associated with more non-state violence, as shown in Models 3 and 4. In substantial terms, a standard deviation increase in the proportion of young men in a district predicts an increased probability of non-state violence with 34 percent. Or, moving from the 10th to the 90th percentile more than doubles the predicted probability of non-state violence in the district-year. Given that there can be lower costs of recruitment involved in such often more low-scale, and often localized, conflicts, such

as riots, non-state-based groups might potentially be able to overcome recruitment problems by drawing on kin ties or family networks in these settings.

While only a very small minority of all men are interested in joining a military organization, research still suggests that there can be conditions that facilitate recruitment. We therefore test whether the effect of a young male surplus can hinge on (1) urban proportion (i.e., the higher the risk of violence, the more urban the setting) and (2) male unemployment (i.e., the higher the risk of violence, the higher the level of male unemployment). These hypotheses are explored in [tables 4](#) and [5](#).

First, in line with Hypothesis 3b, we propose that the effect of young male surplus is more pronounced in districts with a larger urban proportion. As can be observed, we do not find support for the notion that a surplus of young men in itself is associated with more state-based violence. As we can see in Model 1, the effect of an increased access to men is negative for state-based violence in fully rural districts. Ergo, when men continue to reside in the rural areas, a large number of men do not appear to result in improved recruitment opportunities for military organizations. However, for higher levels of urban proportion, the effect of a young male surplus flips and becomes positive, as seen from the positive and significant interaction term. A similar pattern is reproduced in regard to the number of fatalities, as observed in Model 2: The effect of a young male surplus is negative when urban proportion is low, but becomes positive and significant for higher levels. A male surplus combined with a higher number of them living in urban areas is hence likely to result in more, and more deadly, violence involving the state. This supports the idea that men are more possible to reach and mobilize in these settings due to an increased number of groups and networks ([Hudson et al. 2008/2009](#)) providing the military organizations with resources for conflict. Hence, living in an urban area does not appear to automatically result in an increased level of tolerance and cosmopolitan values ([Buhaug and Urdal 2013](#)). Potentially, in especially divided societies, this could be the result of an increasing urbanization that may cause more tension as groups interact and compete in close proximity ([Elfverson, Gusic, and Höglund 2019](#)).

If we turn our attention to non-state-based violence, that is conflict that does not involve the state, Model 3 shows no support for a conditional effect. The coefficient for a young male surplus is positive and significant, but does not depend on the level of urban proportion (as seen from the nonsignificant interaction term). Hence, the effect of a young male surplus we found in [table 3](#) is reproduced: The likelihood of non-state violence is *not* conditioned on higher levels of men living

<sup>20</sup> For instance, we tested an indicator of the proportion of women who are literate, generating substantially the same results, and a measure of the proportion of women who have autonomy over household purchases, which was significant in all four models. All alternative tests are discussed in the Supplementary Information.

<sup>21</sup> For more information, see, for example, UCDD's pages on conflicts in India: <http://ucdp.uu.se/#/actor/141>.

**Table 3.** Young male surplus and subnational armed conflict

	<i>State-based violence</i>		<i>Non-state violence</i>	
	<i>Model 1</i> <i>Incidence (logit)</i>	<i>Model 2</i> <i># of fatalities (NBRM)</i>	<i>Model 3</i> <i>Incidence (logit)</i>	<i>Model 4</i> <i># of fatalities (NBRM)</i>
Young male surplus	-4.957 (8.558)	-17.155* (9.803)	28.801*** (9.140)	76.119** (34.067)
Ln population	0.295** (0.134)	0.603*** (0.185)	0.323 (0.222)	0.815* (0.442)
Urban proportion	-0.513 (0.627)	-0.136 (0.785)	1.130 (0.796)	1.854 (2.845)
Capital	0.788** (0.306)	1.273** (0.567)	0.560 (0.466)	1.156 (1.779)
Ln income	-0.263*** (0.069)	-0.238** (0.109)	-0.463*** (0.100)	-1.204*** (0.341)
Hindu proportion	-0.139 (0.434)	-1.410** (0.667)	-2.205*** (0.698)	-3.718** (1.487)
Muslim proportion	-0.139 (0.559)	-1.108 (1.066)	2.140** (0.796)	8.325* (4.310)
State-based t-1	1.909*** (0.163)	2.049*** (0.162)		
Proximate state-based	0.943*** (0.049)	1.105*** (0.058)		
Non-state t-1			3.028*** (0.432)	4.189*** (1.080)
Proximate non-state			0.002** (0.001)	0.172* (0.094)
Constant	-6.646*** (1.607)	-6.829*** (1.937)	-8.842*** (2.376)	-12.029** (5.206)
Pseudo R <sup>2</sup>	0.375	0.128	0.167	0.051
Observations	12,838	12,838	12,838	12,838

Notes: (1) Robust standard errors in parentheses, adjusted for clustering on the district. (2) \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

in urbanized districts. That said, should a non-state conflict occur, as displayed in Model 4, the effect of a young male surplus is conditioned on higher levels of urban proportions, as seen from the significant interaction term. This means that we are unlikely to see conflicts between groups occur in an urban setting, but if they do, then they are likely to be of a more severe magnitude. As pointed out by Varshney (2003), large scale riots primarily take place in urban areas.

But perhaps it is not only urban proportion but also the economic conditions that men live under that have an effect. This can speak to how some men perceive their capacity to fulfill expectations on different forms of masculine roles in society. As argued, if a large group of men are not able to find a spouse or a job, they can have a higher likelihood of gathering and organizing into networks or groups through which information campaigns for recruitment can be directed. This can be particularly

so if men are unable to fulfill traditional gender roles, i.e., are unable to marry, or exist outside of traditional networks of normative control (Hudson et al. 2008/2009). Hypothesis 3c therefore suggests that the effect of a male surplus may be more pronounced under higher levels of male unemployment. This conditional effect is assessed in table 5 later.

Given the support found previously for the notion that a surplus of young males is associated with more political violence, and informed by previous research, we had expected that this effect should be even more pronounced under conditions of high male unemployment in the district. Such circumstances would, arguably, lower the threshold for recruitment even further as fewer viable alternatives would be available to young men. However, we find no support for this hypothesis; the effect of a male surplus is not conditioned on male unemployment either for state-based or non-state conflicts. That

**Table 4.** Young male surplus, urban proportion, and subnational armed conflict

	State-based violence		Non-state violence	
	Model 1 Incidence (logit)	Model 2 # of fatalities (NBRM)	Model 3 Incidence (logit)	Model 4 # of fatalities (NBRM)
Young male surplus *urban proportion	65.143** (32.369)	181.271*** (34.850)	-34.376 (45.986)	348.163** (141.397)
Young male surplus	-15.908 (9.808)	-54.751*** (12.309)	35.943** (14.832)	7.856 (31.729)
Urban proportion	-7.088** (3.412)	-18.544*** (3.693)	4.762 (4.847)	-33.282** (13.441)
Ln population	0.276** (0.135)	0.637*** (0.179)	0.329 (0.221)	0.812** (0.405)
Capital	0.749** (0.316)	0.719 (0.458)	0.540 (0.446)	-0.127 (1.773)
Ln income	-0.248*** (0.071)	-0.270*** (0.102)	-0.472*** (0.100)	-1.138*** (0.277)
Hindu proportion	-0.155 (0.424)	-1.540** (0.648)	-2.184*** (0.696)	-4.319*** (1.442)
Muslim proportion	-0.204 (0.548)	-1.648 (1.094)	2.224*** (0.793)	7.288* (4.167)
State-based t-1	1.922*** (0.163)	2.046*** (0.163)		
Proximate state-based	0.949*** (0.049)	1.138*** (0.059)		
Non-state t-1			3.022*** (0.429)	4.191*** (0.976)
Proximate non-state			0.003*** (0.001)	0.188* (0.104)
Constant	-5.400*** (1.737)	-3.228 (2.038)	-9.631*** (2.670)	-5.207 (5.319)
Pseudo R <sup>2</sup>	0.376	0.134	0.168	0.053
Observations	12,838	12,838	12,838	12,838

Notes: (1) Robust standard errors in parentheses, adjusted for clustering on the district. (2) \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

said, while the findings reported in table 5 do not support Hypothesis 3c, it should be noted that they are sensitive to model specification. If, for instance, *Young male surplus* is interacted with a measure for the overall (i.e., male and female) unemployment of the district, the results are more in line with our hypothesis, at least with regard to state-based conflict. Also, if we consider only unemployment of *young* men, we also find some support for enhancing the effect of a young male surplus in state-based conflicts.

The results concerning the control variables are generally as expected. Higher income levels predict less armed conflicts of both types. Closeness to the state capital is significantly associated with state-based conflicts, but is unrelated to non-state violence. The level of urbanization has little explanatory power, except when interacted with a young male surplus; re-estimating the

models without urban proportion does not substantially alter the results. Population size is positively related to state-based violence but a less robust control when predicting non-state violence. The indicators measuring religion are also mostly significant and suggest that more polarized settings, rather than areas dominated by one religion, are particularly conflict prone. Last, the spatial and temporal lags are significant throughout the models.

## Conclusion

In order to progress our understanding of why there is a relationship between gender inequality and armed conflict, this article identified and developed three clusters of potential explanations with the aim of differentiating between them: We took as our starting point the

**Table 5.** Young male surplus, unemployment, and subnational armed conflict

	<i>State-based violence</i>		<i>Non-state violence</i>	
	<i>Model 1</i> <i>Incidence (logit)</i>	<i>Model 2</i> <i># of fatalities (NBRM)</i>	<i>Model 3</i> <i>Incidence (logit)</i>	<i>Model 4</i> <i># of fatalities (NBRM)</i>
Male surplus *male unemployment	-15.380 (245.127)	319.145 (286.703)	362.971 (320.845)	-272.175 (1034.841)
Young male surplus	-4.338 (26.122)	-42.511 (29.921)	-24.179 (35.785)	93.512 (121.593)
Male unemployment	2.433 (24.500)	-33.479 (28.537)	-17.036 (34.649)	33.942 (103.394)
Ln population	0.298* (0.134)	0.611*** (0.183)	0.388 (0.243)	0.862* (0.452)
Urban proportion	-0.522 (0.621)	-0.195 (0.762)	0.900 (0.698)	1.937 (3.057)
Capital	0.765** (0.305)	1.203** (0.547)	0.289 (0.442)	1.122 (1.852)
Ln income	-0.262*** (0.070)	-0.239** (0.106)	-0.519*** (0.100)	-1.220*** (0.406)
Hindu proportion	0.140 (0.437)	-1.405* (0.680)	-2.016*** (0.700)	-3.554** (1.541)
Muslim proportion	-0.158 (0.543)	-1.032 (1.083)	2.497*** (0.911)	8.199** (4.096)
State-based t-1	1.902*** (0.162)	2.090*** (0.166)		
Proximate state-based	0.943*** (0.049)	1.107*** (0.059)		
Non-state t-1			2.671*** (0.447)	3.995*** (1.169)
Proximate non-state			0.002*** (0.001)	0.160*** (0.081)
Constant	-6.843* (2.713)	4.267 (3.367)	-6.285 (3.787)	-15.120 (12.251)
Pseudo R <sup>2</sup>	0.375	0.128	0.188	0.052
Observations	12,838	12,838	12,838	12,838

Notes: (1) Robust standard errors in parentheses, adjusted for clustering on the district. (2) \**p* < .1; \*\**p* < .05; \*\*\**p* < .01.

most dominant explanation focusing on gender inequality norms, and then teased out two additional specific explanations relating to societal capacity and gendered socioeconomic developments. We aimed to isolate the explanatory power of each by identifying unique indicators to capture each explanation and by using a more nuanced dependent variable distinguishing between state-based conflicts and non-state conflicts, as well as considering the magnitude of violence. We tested the hypotheses on a newly compiled subnational dataset on India for the time period of 1989–2014.

As we suspected, we find that the three clusters of explanations do not produce the same outcomes in the data. We argue that this speaks to the need to adjudicate between different forms of mechanisms that can connect

gender inequality to conflict. Our findings suggest that two of the clusters are key. One is societal capacity that appears to speak to the role of gender equality and women’s participation for more peaceful resolutions of potential conflicts. The other is the gendered socioeconomic development explanation that highlights the role of gender inequality and masculinity for armed conflict. Surprisingly, though, the third, and most dominant explanation in previous research, gender inequality norms, in and of itself, was only very weakly significant in our models.

As regard the societal capacity explanation, we asked whether a higher investment in women would enable a more peaceful approach to conflict resolution. Resonating somewhat in ongoing policy debates on “more

women, more peace,” the answer to that question is yes. Our results show that educational investment in women correlates with violent conflict being less likely. Importantly, we should be careful not to read an essentialist interpretation into these results; it does not mean that women are more peaceful. Rather, this explanation considers the investment in women as a being a strong indicator of higher levels of societal capacity, such as improved networks and information sharing. This, in turn, could mean the availability of additional resources for handling conflicts more peacefully. This would particularly be the case if it has meant that women are more mobilized around improving women’s rights. As observed by Varshney, this has been a political goal in India that has cut across other political and ethnic divides. Hence, it has had an effect of contributing to the creation of cross-cutting networks, which, in turn, can have a pacifying effect (Varshney 2003). The positive effect on peace could potentially also stem from an indirect effect where a higher investment in women could be related to stronger state institutions (see also Bussman 2007). Improved state capacity is an established explanation for a decreased risk of armed conflict. While not possible to examine further with our data, we argue that systematically examining the roles of women’s organizations, women’s participation, and the relation to the capacity of state institutions for peace is a fruitful future research venue.

As regard the second cluster of explanations that had a strong effect, we looked closer at the suggestion that certain gendered socioeconomic developments do make more young men available for recruitment into armed groups. Although gender can often mistakenly be treated as being synonymous with women, our results support Goldstein’s observation that the importance of gender for war might ultimately revolve a bit more around men (Goldstein 2001). Gendered socioeconomic trends resulting in a surplus of young men do appear to create certain ripe conditions for armed conflict. That said, there are important differences between state-based and non-state-based conflicts. In our study, the role of a young male surplus is clearly supported for non-state-based conflict but less so for state-based conflicts. In addition, we looked closer at whether it mattered if men were gathered in urbanized areas or if they were unable to fulfill traditional gender roles, i.e., were unemployed or too poor to be able to afford marriage. Here, there is some support that both state-based and non-state conflicts are affected by an excess young male population under conditions where men to a higher degree live in urban areas but not necessarily conditioned by unemployment. In India, this finding is interesting as research suggests that unemployment plays a major role in men’s ability to fulfill gender roles, such

as marriage and that being left out of the labor market would make them easier to recruit. We therefore suggest that future research should more closely study recruitment patterns under these conditions, particularly focusing on the role of masculinity for involvement in insurgency.

Concluding, we return to the fact that we also unearthed a puzzling non-result on norms. This is one of the most commonly used explanations in current research. However, when we examined if we are likely to see more armed conflict in areas dominated by higher levels of gender inequality norms, we found little support in our study. This was the case also when using alternative measurements. That does not necessarily mean that we can discount the normative explanation. For one, normative aspects could potentially feed in to the measurement of male surplus if the male surplus is driven in part by a son preference norm or if hyper-masculinist ideals are used in recruitment. For example, the *Bajrang Dal*, the youth wing of the Hindu nationalist *Vishwa Hindu Parishad*, recruits primarily among young men, often in impoverished areas. They are known for participating in riots and lynch mobs targeting religious minorities, especially Muslims. The group uses highly gendered narratives, with elements of honor culture (Financial Express 2018). At times, the gendered narrative is also coupled with Hindu nationalism. For instance, in a recent campaign, the group warned that Hindu girls could be trapped by Muslims boys trying to convert them through a “love jihad” and hence recommended parents to restrict the movement of their daughters (The Economic Times 2018).

As implied, the explanation on societal capacity focusing on the role of women is also not void of normative dimensions. Inequality norms could affect access to education for girls. That said, as the results from using this indicator on women’s education rate apparently differ in effect compared to measurements focusing on the gap between men and women in education access, i.e., male-to-female literacy rates, we must also recognize that this speaks in favor of societal capacity playing an important independent role for peace. It is possible that women can be more active in society if they are more educated, even if the society as a whole still struggles with inequality norms. It is also possible that women thereby can contribute to an increased number of networks and other capacities that enable a more peaceful resolution of conflicts. In all, the normative argument is therefore one that we claim requires more careful consideration. Important insights for such research could be gained from recent survey-based research that is now quickly progressing. For example, a study by Bjarnegård, Brounéus, and Melander (2017) dissects norms and identifies

different forms of attitudes related to gender inequality. Interestingly, it separates between patriarchal values, ideas of male toughness, and of male privilege and also finds no support for patriarchal norms in themselves effecting the attitudes to violence. Scrutinizing these different types of gender norms, and how they interact with other aspects of gender inequality at the individual and subnational level, is a fruitful venue for future studies.

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## Supplementary Information

Supplementary information is available in the *Journal of Global Security Studies* data archive.

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