Girl soldiering in rebel groups, 1989-2013: Introducing a new dataset

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Abstract
This article introduces the *Girl Child Soldier Dataset* (G-CSDS), which provides information on the number of girl soldiers and their functions (supporters or combatants) in rebel groups between 1989 and 2013. The dataset can be easily combined with other data based on the Uppsala Conflict Data Program (UCDP), and we demonstrate its usefulness with descriptive statistics and a regression analysis that is informed by previous research on women's participation in armed groups. Among other findings, our analysis suggests that there are crucial differences between girl combatants and those active in more supportive roles. We conclude that the G-CSDS provides a central platform of easily-accessible information that will be useful to scholars and practitioners working on civil conflict, human rights, armed groups, or demobilization, disarmament, and reintegration (DDR) programs.

Keywords: girl soldiers, girl fighters, rebel groups, dataset

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Introduction

According to UNICEF (2002) estimates, hundred-thousands of children participate – forced or voluntarily – in non-state armed groups[1] in conflicts around the world. However, possibly due to the widely-held presumption that war is 'men's work' (e.g., Brett, 2003: 1-2; Fox, 2004: 469; Mason, 1992; Mazurana et al., 2002; Park, 2006; Denov, 2008), *girl soldiers* have largely been neglected by academic work and the policy community (e.g., McKay, 2005; Park, 2006; Denov, 2010). Especially before the 2000s, scholarship on child soldiers overwhelmingly reflected the experience of boys (McKay & Mazurana, 2004; Brett & Specht, 2004; Spellings, 2008; see also Gentry & Sjoberg, 2015). Girls associated with armed groups were typically treated as an addendum, mentioned only peripherally at best.

It is, however, important to devote more systematic attention to girl soldiers for at least five reasons. First, studies suggest that up to 40 percent of some non-state armed groups active in recent African conflicts were girls (Mazurana et al., 2002; Denov, 2008: 814), making girl soldiering a notable phenomenon. Second, girls' experiences are fundamentally different from those of boy soldiers (e.g., Mazurana & McKay, 2001; Mazurana et al., 2002; Park, 2006; Tonheim, 2014). The former frequently take care of different tasks than the latter (Park, 2006: 321), and they do experience inequality, such as receiving less food or poorer health care in comparison to boy soldiers (Mazurana & McKay, 2001). Girls' vulnerability, low status, and their gender also make them even more susceptible to widespread abuse (e.g., Mazurana et al., 2002: 113). These differences are mirrored in the data this article introduces: patterns of girl soldier recruitment differ from those of boy recruitment (Haer & Böhmelt, 2016a,b). Our data suggest that out of the rebel-conflict-dyad periods using any child soldiers (around 74 percent), slightly more than half of them (about 63 percent) have used girls, too. That is, 37 percent of the rebel-conflict-dyad periods in our data differ in boy-girl child soldier recruitment.

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[1] We focus on rebel organizations as Fox (2004: 467) and Denov (2008: 814) argue that cultural norms and legal mechanisms largely discourage girl recruitment by state military organizations.

Third, girl soldiers' experiences differ from that of women in armed groups. Although they share the aspect of gender oppression (Thomas & Bond, 2015; Gentry & Sjoberg, 2015), girls might be more extremely affected due to their young age (Park, 2006). Additionally, girls are more vulnerable to sexual assault because of common fears of HIV/AIDS in the case of adult females, and may experience more reproductive health issues due to childbearing at a young age. Even after conflicts terminate, girls keep being peculiarly susceptible: once united with their families, girls are more often subjected to stigma and mocking for having been sexually 'used' (Tonheim, 2014). Fourth, girls may also not have the emotional or social resources to draw upon that women have developed to cope with the ordeals they face (Machel, 2001: 55; Park, 2006). Not surprisingly, therefore, the difference between women and girls is obvious in our data: using Thomas & Bond (2015) for the comparison, there are 47 African rebel-conflict-dyad periods with women soldiers, but only 41 out of them have girl soldiers. In addition, six rebel-conflict-dyad periods recruited women, but no girls at all, while there are nine rebel-conflict-dyad periods where girls were recruited, but no women.[2] Finally, girls are commonly not considered in reintegration programs. This is partly because the international community is still poorly informed about the determinants of girl soldiering and the roles girls have within rebel groups (e.g., Mazurana et al., 2002). Identifying and understanding these patterns can help tailoring programs to more effectively assist (former) girl soldiers in post-conflict societies and even during disputes (see also Basini, 2013).

Most existing scholarship on girl soldiers has been primarily qualitative in nature, often limited to a set of prominent cases (e.g., McKay, 2005, 2008; West, 2000; Podder, 2011).[3] Conflicts and armed groups in which no or few girl were involved are usually omitted (see Henshaw, 2016a: 209), which induces selection bias and limits earlier findings' generalizability. For example, omitting those cases with few or no girl soldiers elides the gendered dimensions of (non-)

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[2] Due to the regional focus in Thomas & Bond (2015), these numbers are for Africa only.
[3] An important exception is Mazurana et al. (2002; Mazurana, 2004), as discussed below.

participation as it is particularly these omitted cases that help understand the masculinization of rebellion or the feminization of staying home. This issue seems even more central, since it is plausible that conflicts without girl soldiers share similarities that could make their recruitment more difficult. Focusing solely on cases of girl soldiering does not allow us to discover these key constraining factors.

One reason for the absence of systematic empirical work seems to be the lack of high-quality data. We seek to address this with the *Girl Child Soldier Dataset* (G-CSDS), one of the first comprehensive datasets on girl soldiers. Based on academic, IGO, NGO, government, and media sources, the G-CSDS provides information on the number and type of girl soldiers in all rebel groups from 1989 to 2013 as identified by the Non-State Actor (NSA) project (Cunningham, Gleditsch & Salehyan, 2013). The G-CSDS allows scholars and practitioners alike to address previously unexplored questions on the determinants of the recruiting of girl soldiers or fighters as well as the consequences and impact of girl soldiering. In the following, we describe the dataset and present some descriptive patterns. We also demonstrate its usefulness with a regression analysis that is informed by recent research on women's participation in armed groups (Thomas & Bond, 2015).

Child and girl soldiers: Definitions

The definitions of 'child' and 'child soldier' are subject to considerable debate. It is often contended that childhood is a socially constructed category, which is both historically and culturally contingent (see Park, 2006). Despite cross-cultural variation, the almost universally ratified UN Cape Town Principles (UNICEF, 1997) and Paris Principles (UNICEF, 2000) define child soldiers as 'any person below 18 years of age who is, or who has been, recruited or used by an armed force or armed group in any capacity, including but not limited to cooks, porters, messengers and anyone accompanying such groups, other than family members.' Following this,

we define girl soldiering by rebel groups as the recruitment of females below the age of 18 by a non-governmental group of people having announced a name for their group and using armed force to influence the outcome of the stated incompatibility (also Sundberg et al., 2012).

This definition includes girls recruited for, e.g., sexual purposes and, therefore, not only refers to children with arms. Moreover, the definition comprises children who were forcibly recruited as well as those that joined 'voluntarily.'[4] This is especially important as girl soldiers are often perceived as 'abductees' or 'passive objects, with no 'agency' to act or speak for themselves' (Brett, 2004: 31). However, many girl soldiers identify themselves as volunteers and, as such, have agency.[5]

The Girl Child Soldier Dataset (G-CSDS)

Research on the determinants and consequences of child soldiering has recently intensified (e.g., Tynes & Early, 2015; Brett & Specht, 2004; Achvarina & Reich, 2006; Gates & Reich, 2010; Becker, 2010; Machel, 1996; Beber & Blattman, 2013; Haer & Böhmelt, 2016a,b). However, most studies have paid little attention to *girl soldiers*. Some notable exceptions are Mazurana et al. (2002) or McKay (2005) who examine why girls join armed groups. What is missing thus far, though, is systematic research on why girls are recruited by rebel organizations in the first place and why they are sometimes used on the battlefield and solely in supportive roles at other times.

Collecting information on child soldiers is a challenging task, even more so when focusing on girls. Rarely are the numbers of girls known, especially in the context of forced recruitment (Mazurana et al., 2002: 108). Moreover, girls often refrain from disclosing their experience out of shame and fear of retribution (Mazurana et al., 2002; McKay, 2008). Consequently, there is no cross-sectional dataset available that records information on the presence and roles of girls in rebel organizations. An important exception is Mazurana et al. (2002; extended by Mazurana,

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[4] Of course, it is debated whether we can speak of 'voluntary' enlistment in the case of children.
[5] For excellent illustrations of agency, see Utas (2005) on the Liberian civil war or Marks (2013) on the role of women as both perpetrators and victims of sexual violence during the civil war in Sierra Leone.

2004) who collected information on the presence of girl soldiers between 1990 and 2002. However, they only report whether the government, opposition, or paramilitary/militia forces in a country have recruited at any point in 1990-2002. This aggregated and time-invariant format makes it difficult to draw conclusions about the reasons why rebel groups recruit girls.

With the aim to provide a more comprehensive dataset, we compiled the G-CSDS. These data rely on the structure of the NSA dataset (Cunningham et al., 2013). The unit of analysis in the G-CSDS is the same as in the NSA: the conflict-dyad-period, i.e., a government is combined with a rebel group in one conflict episode in which the attributes of this dyad do not change. As soon as there is a change in any of the dyad's parameters (e.g., the characteristics of the actors), a new observation is given. A conflict may involve more than one rebel organization and, hence, each separate rebel group forms a conflict-dyad with the government. Over the course of these periods, changes in girl soldiering can – and do – occur. Our coding of girl soldiers and their roles relies on independent reports from *Child Soldiers International*, *Human Rights Watch*, *Amnesty International*, country reports of the US State Department, the *International Labor Organization*, and various news and academic sources in different languages (Dutch, English, German, French, and Spanish). Coders made a concerted effort to validate the data and check for consistency. If no reports were found that confirmed the use of girl soldiers by a group, this organization was coded as having no female child soldiers. For all variables, we only considered participation within the context of a rebel group; girls on their own or who act in unorganized groups are not captured by our data.

Although we took great care of ensuring accuracy of the collected data, potential sources of bias might persist. For example, advocacy groups have incentives to exaggerate the proportion of girl soldiers to raise attention. On the other hand, rebel groups could downplay their recruitment to avoid punishment by the international community. It is also likely that advocacy groups and news sources only report girl soldier usage by rebels that are well-known. Consequently, finding no

reports on girls may not necessarily mean that an armed group did not use girls. Hence, we may actually underestimate the presence of girl soldiers in rebel groups with our dataset.

However, when comparing the G-CSDS with the only other existing large-*N* dataset on girl soldiers (Mazurana et al., 2002; Mazurana, 2004), we identify three minor differences. First, Mazurana et al. (2002; Mazurana, 2004) coded some countries, such as Japan or South Africa that are not included in the NSA data. We then also do not have information on whether girls are present in non-state groups active in these particular countries. Second, Mazurana et al. (2002; Mazurana, 2004) indicate that opposition groups in Eritrea used girl soldiers. Yet, there was no conclusive evidence that the *Eritrean Islamic Jihad*, the only opposition group recognized by the NSA data, recruited girls. Third, our data show that the *National Transition Council* (an opposition group in Libya) recruited girls, which differs from the coding in Mazurana et al. (2002; Mazurana, 2004). The reason for this discrepancy is that this group was active in 2011-2012, which is not covered by their data.

Mazurana et al. (2002; Mazurana, 2004) also have information on the role of girls within armed groups, listing countries in which girls served as fighters between 1990 and 2002. When comparing their information with our more detailed codings, we again identify some minor differences. First, our dataset contains some armed groups that recruited girls to perform combat functions, which are not included in Mazurana et al. (2002; Mazurana 2004). For instance, in Afghanistan (*Taliban*), Chad (*Front Uni pour le Changement*), and in the Chechen Republic, the G-CSDS reports that girls were involved in combat, while this is not coded in Mazurana et al. (2002; Mazurana 2004). This difference is primarily driven by the longer time period of our dataset. Second, in contrast to our data, Mazurana et al. (2002; Mazurana, 2004) have identified a few countries in which girls performed a combat function. For instance, we did not find information that girls in Spain or Iraq are used as fighters. This difference might be because our data focus on non-state groups and do not include government parties. In sum, however, we did

not identify major differences or a systematic bias. In the Appendix, we also discuss the differences between the G-CSDS and data on women's participation in armed groups.[6]

Variables of the G-CSDS

The G-CSDS comprises three variables. Two of them measure girls' participation in rebel groups, while the third one looks at their roles. First, *Girl participation dummy* is a binary variable receiving the value of 1 when a rebel group used any number of girls in any capacity (0 otherwise). The second item, *Girl participation ordinal*, records the number of girls in comparison to the total number of children involved in a group on a three-point scale: we assign the value of 0 if a rebel group in a conflict period did not recruit girls; the value of 1 if a rebel group recruited only a few girls, i.e., less than 15 percent of the total amount of child soldiers; and the value of 2 if a rebel group recruited 'many' girls, i.e., more than 15 percent of the total amount of child soldiers. The 15-percent threshold is based on Brett (2004), as it marks the last third of her estimation that up to 30 percent of rebel groups' child soldiers may be girls. However, rebel groups were only categorized as having many girl soldiers if multiple sources indicated this.

Finally, we coded whether girls participated actively in combat roles (*Girls in combat*): when evidence suggested that girls directly fought in battle, a rebel group in a conflict period received the value of 1 (0 otherwise). The Appendix further elaborates on the coding procedures.

Descriptive overview

Between 1989 and 2013, we coded information on rebel groups' girl soldier usage in 321 conflict-dyad-periods. In the following, we discuss some descriptive patterns and demonstrate the G-

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[6] Henshaw (20016 a,b) collected data on women's participation in 72 randomly chosen rebel groups from 1990 to 2008. Thomas & Bond (2015) provide information on women in 167 armed groups in 19 African countries. The comparison with our data shows that some groups use girl soldiers, but not women. At the same time, there are very few groups, which apparently use women, but no girls. These differences are largely given by armed groups having specific policies concerning the recruitment of girls versus women. Additionally, there might be differences in defining 'supportive roles' across datasets.

CSDS's usefulness for scholars and practitioners. First, our dataset points to a considerable variation in enlistment patterns by rebel groups and how they use girls. Around 52 percent of the rebels in all conflict-dyad-periods did not recruit any girl soldiers in 1989-2013 (Table I). For example, the *Jamiat-i-Islami* in Afghanistan refrains from recruiting girls. At the same time, around 10 percent of all conflict-dyad-periods are characterized by girl recruitment on a large scale (Table I). In the *Lord's Resistance Army* in Uganda, for instance, more than 15 percent of the total amount of child soldiers were girls. There is also functional variation: in only 18 percent of our cases, girls were active as combatants (57 out of all 321 conflict-dyad-periods). For example, *Al Shabaab* in Somalia solely uses girls in supportive roles such as cooking or sexual slavery. On the other hand, the *Sendero Luminoso* in Peru belongs to the 18 percent of our cases that have used girls as combatants.

Table I. Distribution of girls in supportive and fighting functions

	Frequency	Percent
No girl soldiers	167	52.02
Girl soldiers	154	47.98
Few girl soldiers (<15%)	123	38.32 (79.87)
Many girl soldiers (>15%)	31	9.66 (20.13)
Girl in supportive roles	97	30.22 (62.99)
Girl fighters	57	17.76 (37.01)
Total	321	100.00

Percentages in parentheses refer to girl-soldier only sample, i.e., the 154 conflict-dyad periods in our data with girl soldiers

Figure 1 and Table I further shed light on the difference between girl soldiers in supportive functions and those active in combat. The map highlights countries that had active rebel groups via the 'maximum level' of recruitment: (0) no conflict according to the UCDP data, (1) conflict, but no girl soldiers, (2) rebels had girl soldiers, or (3) rebels had girl fighters. Clearly, girl

soldiering is present all over the world. However, there are fewer countries in which rebels used girls as fighters as compared to those that use them in supportive functions (Table I): only about 37 percent of all rebel groups in the conflict-dyad-periods with girl soldiers employ them as fighters.
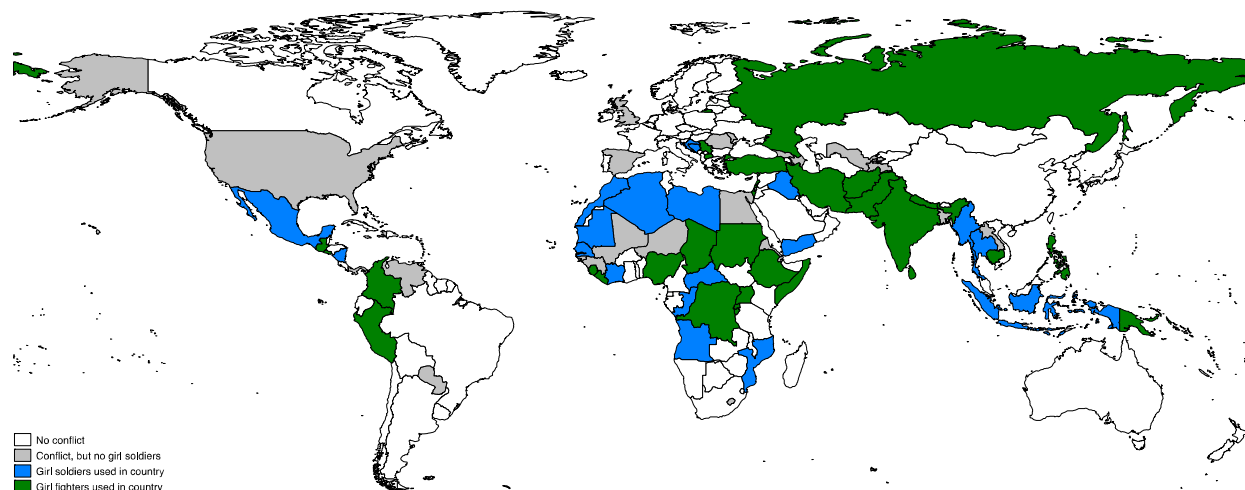

Figure 1. Girl soldiers and fighters in rebel groups: country overview

Data pertain countries that host(ed) rebel groups. We display the 'maximum level' of conflict and girl recruitment over the entire time period 1989-2013. For example, if a rebel group is coded as 'having recruited girl fighters' only in one year since 1989, it is marked in green.

Application

We illustrate the usefulness of our data with a regression analysis on the factors influencing the recruitment of girls by rebel groups and what roles they fulfill. While we use either *Girl participation dummy* or *Girls in combat* as the dependent variable, the explanatory variables are based on Thomas & Bond's (2015) study on women's participation in armed groups. They argue that organizational attributes determine women's presence in military organizations and test this with data on 166 violent political groups across 19 African countries in 1950-2011. Their explanatory variables capture both the demand for women in and supply to organizations.[7]

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[7] We do not seek to 'improve' upon Thomas & Bond (2015), but merely present a different analysis (on girls as opposed to women). The purpose of the following exploratory application is exclusively to demonstrate the concept/usefulness of the newly compiled data.

First, there is the rebel-group size. Since smaller rebel groups can hardly afford to lose supporters, the costs of internal discord resulting from conflict over incorporating girls is likely to be greater for smaller groups (Thomas & Bond, 2015: 490). Therefore, like recruiting women, we expect that smaller rebel groups are less likely to recruit girls. Based on the NSA data (Cunningham et al., 2013), we created a dichotomous variable distinguishing between relatively small (2-999 members; coded as 1) and larger rebel groups (coded as 0).

Second, Thomas & Bond (2015: 491) point to the importance of competition. On one hand, rebel leaders seek to be more inclusive in highly competitive environments, increasing the likelihood of recruiting girls. On the other hand, including girls could dissatisfy some members who then leave and join a rival group. To avoid this, competition might discourage women – and girl – recruitment. We use the NSA data (Cunningham et al., 2013) to create a binary variable that receives the value of 1 if more than two rebel organizations existed in a conflict environment (0 otherwise).

Third, groups based on fundamentalist Islamic ideals often attempt to reinforce girls' and women's exclusion from public life and, therefore, are more reluctant to recruit them (Thomas & Bond, 2015: 494). We coded whether a rebel group is based on Islamic principles (1) or not (0), using Gleditsch & Rudolfsen (2015). We opted for this operationalization for groups' gender ideology as Thomas & Bond (2015: 493) solely rely on public declarations that women are 'integral to their movement or their struggle aims to liberate women.' That said, the effect should be similar. Furthermore, groups fighting for separatism are often less likely to attract popular support (Thomas & Bond, 2015). Hence, they may need to exploit alternate strategies to outnumber government forces, such as the recruitment of girls. To examine this, we include a variable from the NSA data (Cunningham et al., 2013) on whether a rebel group fights a secessionist conflict (coded as 1) or not (coded as 0). Additionally, rebel groups relying on terrorism will be more inclined to recruit people who are not suspected of subversive activities,

enhancing the 'element of surprise' (Thomas & Bond, 2015). Since girls are usually perceived as 'less threatening,' the effect could be stronger for girls than adult females. We use the binary variable *Terrorism* from Cunningham et al. (2013) indicating that terrorism is a dominant conflict strategy (coded as 1; 0 otherwise).

Fourth, more inequality between men and women may be associated with a higher likelihood of girls joining armed groups. We consider a measure on women's political rights in a country provided by Cingranelli, Richards & Clay (2014). This item ranges from 0 (women's political rights not guaranteed by law) to 3 (rights guaranteed in both law and practice). It might also be that a lack of state security affects girls' decision to enlist to rebel groups for protection (Achvarina & Reich, 2006). We account for this by using the *Physical integrity rights index* from Cingranelli et al. (2014). It ranges from 0 (no government respect for rights) to 8 (full respect for rights). Since girls may not have the emotional/social resources that women have developed (Machel, 2001; Park, 2006), the effect of both items could be more pronounced for girls.

Fifth, children tend to join rebel groups more often in weaker states (Tynes & Early, 2015: 95). To capture this, we use the natural logarithm of a state's *GDP per capita* from Gleditsch (2002). Furthermore, more democratic forms of government could decrease rebels' incentives to recruit children (Tynes & Early, 2015: 90f). We use the *polity2* item from the Polity IV dataset. Finally, the longer the duration of a conflict-dyad-period, the higher the probability of child recruitment (Tynes & Early, 2015). We employ a count variable measuring the time (in years) elapsed since the start of a conflict-dyad-period until its end; this item is based on the UCDP dataset (Gleditsch et al., 2002). The effects pertaining to women and girls should be similar for these three variables.

Model 1 in Table II focuses on *Girl participation dummy* as the outcome variable (girls used in supportive as well as combat functions), while Model 2 uses *Girls in combat* as the dependent variable. Since both outcomes are binary, we use logistic regression and cluster the standard errors at the country level. Substantive results are presented in Figure 2, where we show first differences.

These underlines that particularly smaller rebel groups are less likely to recruit girls; the likelihood of girl soldiering decreases by about 16 percentage points, while the risk of using girls as fighters drops by 11 percentage points when raising *Size* from its minimum to its maximum.

Table II. Explaining rebels' use of girl soldiers in civil war

	Model 1	Model 2
	Girls' participation	*Girls in combat*
Small	-0.75	-1.97
	(0.42)*	(0.81)**
Competition	-1.04	-0.82
	(0.49)*	(0.55)
Women's political rights	0.57	0.13
	(0.29)*	(0.43)
Phys. integrity rights index	-0.31	0.07
	(0.12)**	(0.11)
Islam	-0.51	-1.96
	(0.41)	(0.85)**
Secessionist conflict	-0.19	-1.27
	(0.39)	(0.71)*
Terror	1.17	
	(0.72)*	
Duration	0.19	0.16
	(0.04)**	(0.04)**
GDP per capita (ln)	-0.40	-0.64
	(0.20)*	(0.29)*
Democracy	0.04	0.15
	(0.04)	(0.05)**
Constant	3.09	3.47
	(1.76)*	(2.60)
Obs.	213	203
Log pseudolikelihood	-119.86	-68.35

Robust standard errors clustered on country in parentheses. Model 2 omits the item *Terror* due to perfect prediction.

* significant at 5 percent; ** significant at 1 percent (one-tailed)

Second, the more competition among groups, the *less* likely it is that we observe girl soldiering. This is supported by the negative coefficient of *Competition* in Model 1 as well as the first difference estimate in Figure 2 (-24.2 percentage points). Table II emphasizes moreover that there are crucial differences between girl soldiers in general and those that participate as

combatants. While both *Women's political rights* and *Physical integrity rights index* exert a statistically significant impact on girl soldiering, this effect disappears as soon as we limit the dependent variable to girls in combat. While the influence of *Physical integrity rights index* is in the expected direction, *Women's political rights* is associated with a positive sign, suggesting that gender equality increase the likelihood of girl soldiering.
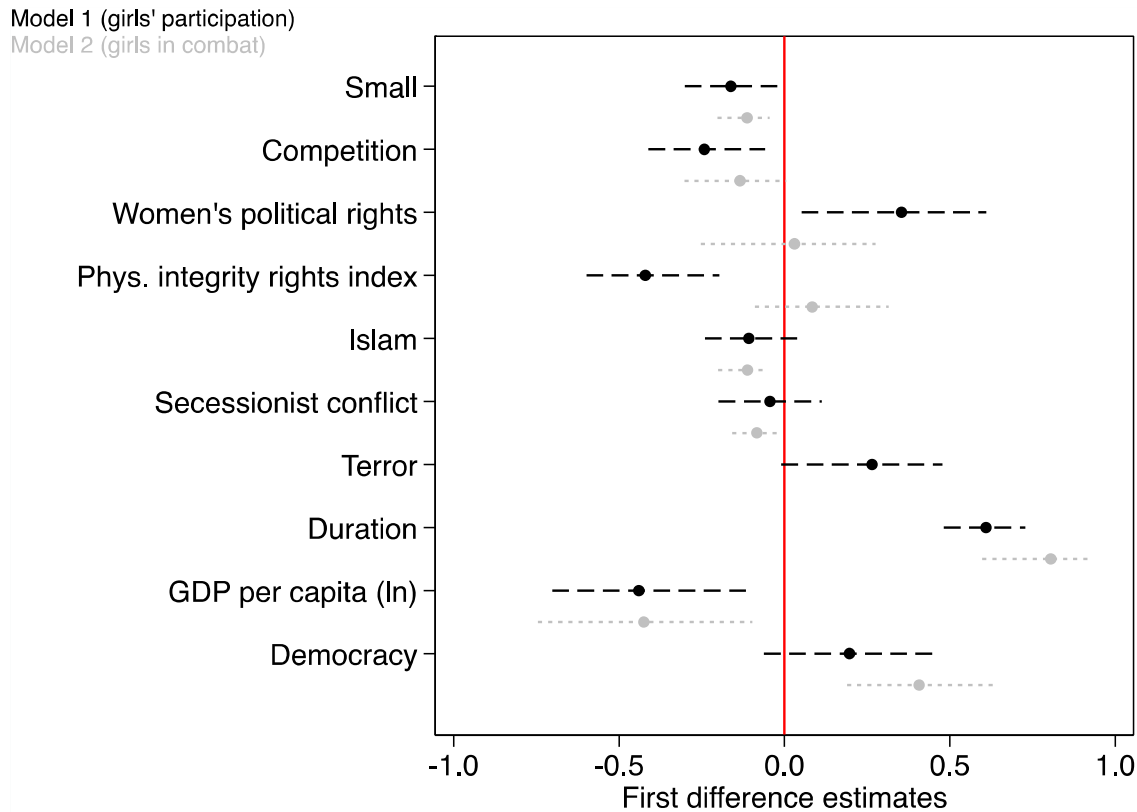

Figure 2. First differences

Graph displays point estimates and 90 percent confidence intervals (horizontal bars). A first difference is the change in the probability that the outcome variable is 1 when observing a change from the minimum to the maximum of a specific explanatory variable while holding all other covariates at their median. The vertical red line signifies a first difference of 0.

Besides, while *Islam* is negatively associated with *Girls participation*, the estimate is not statistically significant. Focusing only on girls in combat functions, *Islam* reaches conventional levels of significance, though. A secessionist conflict agenda does only seem to matter for using girls in combat. At the same time, the result for *Terror* is in line with theoretical expectations, although we lack enough variance in terms of *Girls in combat*: *Terror* drops out of the model as

conflict-dyad periods characterized by terrorist campaigns (*Terror*=1) predict the non-recruitment of girl combatants perfectly. Finally, the longer a conflict episode, the higher the likelihood of girl soldiering.

GDP per capita (ln) is negatively associated with both rebels recruiting girls and using them as fighters. And while *Democracy* is statistically insignificant in Model 1, it exerts a positive and significant effect in Model 2. The impact disappears when disaggregating the regime-type variable into autocracy (-10 to -6), anocracy (-5 to 5), and democracy (6 to 10 on the *polity2* scale) dummies, however: rebel groups operating in autocracies are less likely than those operating in democracies or anocracies to recruit girl soldiers (generally or as fighters), but one can hardly distinguish among the latter two forms of government.

While there are other issues to examine, including endogeneity affecting, e.g., duration and girl soldiering, our demonstration of how the G-CSDS can be employed highlights the potential these data have in addressing new research questions – and, considering Thomas & Bond's (2015) results, that there are significant differences between women and girl recruitment of armed groups.

Conclusion

There has been no systematic analysis of which organizations use girls and in what kind of function. The G-CSDS, a new dataset on girl soldiers in rebel groups, addresses this shortcoming. While these data fill an important academic niche, this is only the beginning as several avenues for research can be studied with their help. Eventually, the dataset allows to investigate the conditions under which non-state armed groups use girls and what impact they have during conflict and on post-conflict stability. The data may further help to identify the underlying causes and the consequences of girl soldiering as they offer the necessary scientific background for policy evaluation and implementation programs.

For instance, the dataset can shed light on the so-called substitution argument by Wood (2010): armed groups with girl soldiers may perpetrate less sexual violence. Additionally, it will inform the discussion on the linkage between the ideological base of rebel groups and their recruitment patterns: girls could be especially likely to join leftist organizations due to their equality agenda. Or consider the support for rebel groups: girl soldiering is an abhorrent form of recruitment in the eyes of the domestic public and the international community (e.g., Biberman & Zahit, 2016). Consequently, the recruitment of girls by rebel groups can disproportionally affect the level of support. From a policy perspective, the G-CSDS shows that girl soldiers are not a rare 'anomaly:' girl soldiering occurs frequently, their use varies across organizations, and their experience in armed groups is multifaceted and complex as girls may be victims and perpetrators simultaneously. On the other hand, the data can inform reintegration programs' abilities to address sexual violence and coerced participation in violence (see also Basini, 2013).

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