## GÖTEBORGS UNIVERSITET

#### DEPTARTMENT OF POLITICAL SCIENCE

# DO REBEL GROUPS THAT RECRUIT CHILD SOLDIERS PERPETRATE MORE SEXUAL VIOLENCE?

A quantitative analysis of rebel groups in armed conflicts between 1989-2009.

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#### **ABSTRACT**

This master thesis explores the relationship between child soldier recruitment and rebel groups' perpetration of sexual violence. As research has shown that levels of sexual violence not only vary across conflicts, but also across armed groups, scholars have recently come to examine what armed group characteristics can explain this variation. Even though the literature has emphasized rebel groups' recruitment practices as important factors, no study has yet considered the impact of child soldier recruitment on rebel groups' perpetration of sexual violence. This thesis aims to fill this research gap by examining how the recruitment of child soldiers may influence rebel-perpetrated sexual violence. I develop a theoretical framework that presents four different, yet interrelated, arguments as to why rebel groups that recruit child soldiers are more likely to engage in higher levels of sexual violence. To test the hypothesized relationship empirically, I analyze rebel groups active in armed conflicts between 1989-2009, using a newly compiled dataset on child soldier recruitment combined with group-level data on conflict-related sexual violence. The results show that child soldiering is strongly associated with higher levels of sexual violence by rebel groups. Thus, my findings have important implications for both scholars and policymakers.

Key words: conflict-related sexual violence, child soldiers, rebel groups, armed conflict

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#### 1. Introduction

"We were forced to kill without fear, raping girls and women, to prove that we were very strong"

– Ibrahim, former child soldier in Chad (UNICEF 2014).

Why do some armed groups engage in widespread sexual violence whereas others do not? This is a question that has gained attention in the academic literature, as recent studies have shown that the levels and types of sexual violence not only vary across conflicts, but also across armed groups (Cohen 2013; Leiby 2009; Wood 2009). As a result, many scholars have begun to examine what armed group characteristics and factors can explain this observed variation (Wood 2009, 2014). At large, sexual violence in armed conflicts still remains a poorly understood and understudied topic, despite the international community's recognition of conflict-related sexual violence as a grave threat to international peace and security, and the increased attention that the issue has gained in media reporting. Both researchers and policymakers within the United Nations (UN) have asked for more systematic analyses of conflict-related sexual violence so that future policies can be evidence-based (e.g., UN Security Council 2010). One of the most influential studies within this nascent field of research highlights that recruitment practices, i.e. who is recruited and how, is an important factor for understanding the variation in sexual violence across armed actors (Cohen 2013). However, no study has yet considered the impact of child soldier recruitment on armed groups' perpetration of sexual violence. This thesis aims to fill this research gap by examining both theoretically and empirically how the recruitment of child soldiers may influence the levels of sexual violence perpetrated by rebel groups. Thus, the thesis seeks to answer the following research question. Do rebel groups that recruit child soldiers perpetrate more sexual violence?

Even though child soldier recruitment is one of the gravest violations of children's rights, it has during the last decades become an increasingly common practice amongst rebel groups around the world. Like conflict-related sexual violence, little is known about child soldiers' roles as members of armed groups. Therefore, it is important to gain a better understanding of child soldiers' experiences during war. Whereas it is commonly known that many children are abused as sex slaves by high-ranking commanders, less attention has been given to the fact that child soldiers also are forced to perpetrate and participate in acts of sexual violence against others, as illustrated by the above quote from a former child soldier in Chad. Even though there are no studies that systematically examine the relationship between child soldier recruitment and the levels of sexual violence perpetrated by rebel groups, insights from the child soldier literature gives us reasons to

believe that there is a direct link between the two.

In this thesis, I develop a theoretical framework that presents four different, yet interrelated, arguments as to why rebel groups that recruit child soldiers are more likely to perpetrate higher levels of sexual violence. First, I argue that rebel groups force children to participate in acts of sexual violence as part of their indoctrination and initiation process. Second, because children have not developed the same psychological characteristics and cognitive functions as adults, it is easier for rebel groups to manipulate children and force them into committing violent acts. Thus, it may be easier for a rebel commander to order sexual violence if a group consists of many child soldiers. Third, these psychological characteristics also make it more likely that child soldiers will participate in sexual violence due to peer pressure, even when not directly ordered. Finally, even if the children themselves are not actively taking part in acts of sexual violence, their presence can enable other older combatants to more easily engage in such violence. To test the hypothesized relationship empirically, I analyze rebel groups active in armed conflicts between 1989-2009, using a newly compiled dataset on child soldier recruitment combined with group-level data on conflict-related sexual violence. The results show that rebel groups that recruit child soldiers indeed engage in more sexual violence.

The thesis unfolds as follows. Chapter 2 provides an overview of the previous research on the causes of conflict-related sexual violence and identifies a research gap within the existing literature. In chapter 3, I develop four theoretical arguments as to why child soldier recruitment is associated with higher levels of rebel-perpetrated sexual violence. Based on these arguments I proceed by deriving a hypothesis. Chapter 4 introduces the data used in my empirical analysis and describes the operationalization of the variables included, as well as the method employed to estimate the results. Thereafter, I present the findings from my empirical analysis and conduct a series of robustness tests to ensure that the findings remain consistent across model specifications. In chapter 6, I provide a more extensive discussion about the results, as well as the limitations of my study. The last chapter summarizes the thesis and concludes with a discussion regarding the theoretical and policy implications of the findings.

#### 2. Previous Research

The following chapter begins with a brief background and definition of the term conflict-related sexual violence, followed by a more extensive overview of the existing literature examining the causes and variation in conflict-related sexual violence. First, classical country- and conflict-level explanations are presented, before turning to group-level explanations.

#### 2.1 Conflict-Related Sexual Violence: A Brief Background

Even though the history of sexual violence during wartime is as long as the history of war itself, research on conflict-related sexual violence is a relatively recent phenomenon (Eriksson Baaz and Stern 2013; Koos 2015; UN Women 1998). The literature examining the human costs of armed conflicts and civil wars has mainly come to focus on lethal violence such as battle deaths or civilian killings (Cohen 2013). Since for long sexual violence was viewed as an inevitable by-product of war, this is not surprising. It was not until after the genocides in Rwanda and Bosnia-Herzegovina, where rape was widespread, that the issue gained increased attention by the media, policymakers and scholars. Because of the large emphasis on a few specific cases where sexual violence was massive, sexual violence in conflict settings came to be understood as a strategic weapon of war. This dominant narrative led to a neglect of cases where sexual violence follows other patterns. However, in the last couple of years an increasing number of scholars have noted that the magnitude of sexual violence in fact varies across conflicts and countries (e.g., Wood 2009). Several authors have sought to explain this variation and identify factors that contribute to making conflictrelated sexual violence prevalent. However, before delving further into some of the most prominent arguments and findings within the field, it is useful to clarify what scholars and policymakers mean by the term conflict-related sexual violence.

The most common understanding of the concept conflict-related sexual violence amongst both scholars and the international community mirrors the definitions provided by The International Criminal Court (ICC) (Wood 2009). The ICC definition includes acts of, but is not restricted to: "rape, sexual torture and mutilation, sexual slavery, enforced prostitution, enforced sterilization, and forced pregnancy" (ICC 2000). Comparably, the UN defines the term in the following way:

"The term "conflict-related sexual violence" refers to rape, sexual slavery, forced prostitution, forced pregnancy, forced abortion, enforced sterilization, forced marriage and any other form of sexual violence of comparable gravity perpetrated against women, men, girls or boys that is directly or indirectly linked (temporally, geographically or causally) to a conflict" (UN Security Council 2016:1).

Both the ICC and the UN consider sexual violence a broad category that allows for the inclusion of other acts than those explicitly listed. The concept recognizes that not only women and girls, but also men and boys, can become victims of sexual violence.

#### 2.2 Classical Country- and Conflict-Level Explanations

#### **Opportunism**

Most of the existing studies that try to explain the causes of conflict-related sexual violence offer explanations at the level of the country or the conflict. One such common explanation is that war provides an increased opportunity for individuals to carry out acts of sexual violence. With war comes a breakdown of social norms, an absence of the rule of law and weakened state institutions. Since punishment appears unlikely in these lawless environments, many soldiers might take advantage of the situation (Muvumba Sellström 2015; Butler et al. 2007; Brownmiller 1975; Goldstein 2001). From this point of view, men are primarily driven by their sexual urges, urges that are unleashed in a context of war and result in acts of sexual abuse or rape (Haer et al. 2015:613). However, the opportunity-argument is problematic since it relies on an assumption that all men have a latent desire to rape. Cohen (2013) finds partial evidence that state collapse is associated with higher levels of insurgent-perpetrated rape, but in general there is weak cross-national evidence in support of the opportunity-hypothesis (Cohen and Nordås 2015; Loken 2017; Green 2015). Scholars seem to agree that state collapse and weakened institutions are necessary conditions that make sexual violence more likely to occur in wartime than in peacetime, but that this alone does not provide a sufficient explanation (Wood 2009).

An additional set of arguments related to opportunism emphasize the role of greed. Weinstein (2005) argue that armed groups are more prone to engage in rape when conflicts are driven by "economic endowments", particularly endowments or resources that can easily be transformed into selective incentives used to attract new members. When insurgent groups have access to lootable resources, such as natural resource revenues, they might both attract more violent members, and be in less need of civilian support (Cohen 2013; Weinstein 2007).

#### Ethnic hatred

Another widely held belief amongst scholars is that ethnic conflicts are associated with higher levels of sexual violence (e.g., Benard 1994; Bloom 1999; Horowitz 1985; Mullins 2009; Sharlach 2000; Plümper and Neumayer 2006). Ethnic hatred and religious cleavages is said to give rise to more intense emotions, and these types of conflicts are therefore thought to provide a breeding ground

for more extreme types of violence (Fearon 2006:682; Koos 2015). Authors in favor of this argument claim that sexual violence can be used to humiliate opponents and to demonstrate dominance over a different ethnic or religious group. Acts of sexual violence are not only intended to humiliate the targeted women, but also other members belonging to the same ethnic group, as it is implied that these members failed to protect the victims (Plümper and Neumayer 2006:735). Mullins (2009:15) argues that ethnically-charged conflicts are more likely to feature sexual violence as a central technique. Rape can be perpetrated in order to kill members of other ethnic groups, for example through the spread of HIV/AIDS. The objective can also be to inflict long-term physical and psychological trauma on the victim and the victim's relatives (Cohen 2016:51). Furthermore, rape is sometimes perpetrated with the specific intent to impregnate women of the opponent group, as in the Bosnian conflict where Serbian troops abducted and raped Muslims and Catholic Croats in order to "create" Serbian children (Slazman 1998). Even though ethnic hatred appears to be a well-established explanation for the occurrence of conflict-related sexual violence, there is little cross-national evidence supporting the argument as most large-N studies do not find a significant relationship between ethnic conflicts and higher levels of sexual violence (e.g., Butler et al. 2007; Cohen 2013). Leiby (2009) argues that the academic literature's preoccupation with the atrocities committed in a few extreme conflicts, mainly Bosnia-Herzegovina and Rwanda, where the intersection of ethnic violence and widespread rape was apparent, has created a narrative in which ethnic hatred has been given too much explanatory power.

#### Gender inequality

Besides the arguments on behalf of opportunism and ethnic hatred, it is also generally assumed that levels of gender inequality play an important role in explaining sexual violence in conflicts (Cohen 2016; Koo 2002; Jefferson 2004). Gender inequality can create and facilitate social norms that spur violence against women, including CRSV (Baron and Straus 1989; MacKinnon 2006). The argument predicts that countries with low levels of gender equality in peacetime will experience more sexual violence in wartime. Some authors claim that sexual violence during conflict is a continuation and worsening of the discriminatory practices and gender-based violence that women experience every day in peacetime (Jefferson 2004; Farr 2009). According to these authors, the onset of armed conflict exacerbates already existing gender inequalities, making women even more vulnerable targets. On a related note, Butler and Jones' (2016) findings suggest that a country's preconflict level of sexual violence is predictive of the level of sexual violence the country will experience during conflict. However, their preliminary results show that levels of sexual violence before and during conflict do not differ significantly, in contrast to the popular belief. Moreover,

Wood (2009) points out that the continuum thesis does not explain why for example gang rape and sexual abuse by multiple perpetrators is much more prevalent during conflict than during peace.

Many authors favoring the gender inequality thesis emphasize that militarized masculinity plays an important role in explaining the occurrence of conflict-related sexual violence (e.g., Morris 1996; Wood 2014). Training practices within state militaries often rely on gendered stereotypes when it comes to building group cohesion and changing combatants' individual identities (Wood 2009). The ideals of masculinity associated with war and military practice create a sharp dichotomy where women are seen as victims and "objects" of protection, whereas men are viewed as fighters and protectors (Koo 2002). Thus, in a situation of war, a distinction between "our" women and "their" women is established. Soldiers might therefore try to dominate their opponent in gendered terms, something that might provide an explanation for sexual violence against the enemy population. As with the opportunism and ethnic hatred thesis, there is scant empirical evidence indicating that gender inequality is associated with higher levels of sexual violence in wartime. Most quantitative studies find no apparent relationship between society-level indicators of gender equality and levels of CRSV (e.g., Cohen 2013; Loken 2017). Wood (2009) claims that widespread gender inequality might be a necessary condition for sexual violence to be prevalent during conflict, but that this is not enough to account for the observed variation between intrastate armed conflicts.

#### 2.3 Group-Level Explanations

One of the most important findings in the recent literature is that levels of perpetrated sexual violence not only vary across conflict and countries, but also across armed groups. Scholars have noted that not all armed actors engage in widespread sexual violence, some groups even appear to completely refrain from committing sexual atrocities (Leiby 2009; Wood 2009). Within and across conflicts there is a particularly wide variation when it comes to rebel groups' use of sexual violence (Sawyer et al. 2016:3). Thus, recent studies increasingly focus on the different characteristics of armed groups and many argue that group-level factors are essential in order to explain the observed variation sexual violence (Wood 2009, 2014).

#### Internal culture, structure and aim

When it comes to explaining why some groups refrain from engaging in sexual violence, some authors tend to focus on internal cultures and ideologies (e.g., Sawyer et al. 2016; Hoover Green 2016; Leiby 2009). For example, during the Salvadoran civil war the rebel group FMLN displayed

a general restrain against sexual violence, something that is largely attributed to the norms produced by their ideological foundation (Sawyer et al. 2016; Eriksson Baaz and Stern 2013). Moreover, Hoover Green (2016:619) claims that rebel groups that develop strong and consistent institutions for political education are more likely to have narrower repertories of violence, and therefore also engage in lower levels of sexual violence than those without such institutions. Another group of authors consider the internal structure of an armed group as a more important factor. These scholars tend to favor a principal-agent logic when explaining the observed variation in sexual violence across armed groups. Butler et al. (2007) argue that sexual violence is driven by out-ofcontrol agents (fighters), and that sexual violence therefore is less likely to be widespread when combatants are subjected to tight control. In line with this, Wood (2009) finds initial evidence that armed groups' perpetration of sexual violence partly depends upon groups' internal hierarchy and chains of command. Information asymmetries and anarchy within armed organizations can allow rank-and-file soldiers to pursue private interests - such as rape - without the commanders' knowledge. When military hierarchies are well-functioning, commanders can more effectively enforce decisions and punish undisciplined soldiers (Koos 2015; Weinstein 2005). However, other scholars use the same principal-agent framework to claim the opposite, that the presence of clear command structures in fact makes it easier for commanders to order acts of sexual violence. A recent study by Schneider et al. (2015:1341) questions the generalizability of the anarchy-argument and posits that commanders can order sexual violence through a combination of sanctions and rewards. The authors' analysis of a survey conducted with former Congolese combatants shows that ordered rape is more likely in organizations where soldiers fear punishment. Furthermore, Sawyer et al. (2016) combine insights about both the ideological and organizational bases of armed group behavior, and argue that groups desire or need to be perceived as legitimate actors matter for the level of sexual violence that they engage in.

In addition to internal culture and structure, it is argued that an armed group's aim in a conflict might influence the level of sexual violence that the group perpetrates. Groups that are driven by long-term goals of governing, and see themselves as the start of a new social order, might refrain from carrying out widespread sexual atrocities against their future constituencies, in order to gain support and legitimacy (Eriksson Baaz and Stern 2013; Wood 2009, 2010). Others argue that sexual violence can serve as an instrument for ethnic cleansing during secessionist conflicts (Cohen 2013; Bloom 1999; Farr 2009). A related, yet different argument emphasizes that territorial control, rather than the overarching aim of a conflict, matters for the type of violence in which a rebel group engages. Kalyvas (2006) argues that armed groups are less prone to perpetrate indiscriminate

violence against civilians in areas where they exert territorial control. A few other scholars argue that sexual violence is more likely to occur in areas of contested control, since sexual violence can be perpetrated as to forcibly displace people and ensure that these people will not return (Bloom 1999; Sharlach 2000; Cohen 2013).

#### Recruitment practices

A pioneering study by Cohen (2013) offers an alternative explanation for the observed variation in sexual violence, focusing on recruitment practices. Cohen (2013) argues that social cohesion is important for armed groups since it improves the group's chances of survival and reduces the risk that members will defect or attempt to escape. According to Cohen (2013), social cohesion is unlikely to arise spontaneously amongst armed groups that recruit their member through abduction. Group-perpetration of sexual violence may therefore be used as a tool for building internal cohesion and creating a coherent fighting force. The findings from her cross-national analysis show that rebel groups and state forces that forcibly recruit their members commit higher levels of sexual violence than groups that do not use forced recruitment. Thus, recruitment mechanisms appear to be essential factors when it comes to understanding the variation in conflict-related sexual violence.

#### 2.4 Research Gap

While Cohen's (2013) findings are some of the most interesting within the field, she fails to adequately consider that other types of recruitment practices might also influence the levels of perpetrated sexual violence. One such recruitment practice, that many rebel groups rely on, is the recruitment of child soldiers. Currently, no study has neither theoretically nor empirically investigated how child soldier recruitment influences rebel groups' perpetration of sexual violence. Only one study, by Cohen and Nordås (2015), touch very briefly upon the issue when examining sexual violence by pro-government militia groups. However, child soldiering is only mentioned due to methodological reasons, as the authors use child soldier recruitment as a proxy for forced recruitment (of adults) in their statistical analysis. The potential link between sexual violence and child soldier recruitment in itself is not discussed at all throughout their article. Nevertheless, the literature on child soldiering gives us reasons to believe that there is in fact a direct relationship between child recruitment and rebel groups' use of sexual violence, a relationship that so far has been overlooked by scholars.

#### 3. Theoretical Arguments and Hypothesis

The following chapter first provides a definition of the term child soldier and a brief overview of the issue of child soldiering. Next, I develop several theoretical arguments as for why child soldiering is associated with higher levels of sexual violence by rebel groups. Based on these arguments, a hypothesis is derived.

#### 3.1 Child Soldiering: A Brief Overview

According to UNICEF (2007:7), a child soldier is defined as "any person below 18 years of age who has been recruited or used by an armed force or armed group." The 18-years threshold has also been adopted in the UN's Optional Protocol on the Involvement of Children in Armed Conflict (OPCAC) (UN 2000). Even prior to that, two of the most influential reports on children in conflict, the UN Machel Report (Machel 1996) and the UN Convention on the Rights of the Child, used the 18-years threshold in their definitions (Haer and Böhmelt 2016a:169; UN 1989). Note that the official UN definition also refers to children that, for instance, are recruited to work at checkpoints, as spies, cooks or sex slaves, in addition to serving as active combatants. Thus, a child soldier does not necessarily carry a weapon.

Just like sexual violence, child soldiering is not a new phenomenon in armed conflicts (Wessells 2006). The international community has since long condemned the use of child soldiers, and as of today, 159 countries have signed the OPCAC (Faulkner 2016). Despite this, child soldiering practices have altered significantly during the last decades (Haer and Böhmelt 2016a). An increasing number of children are being recruited by armed groups, especially rebel groups. Furthermore, child soldiers are more frequently used as active combatants, rather than being providers of secondary support functions such as cooking or spying (Haer and Böhmelt 2016a:155; Singer 2006). Lasley and Thyne (2015) explain that rebel groups, in contrast to state-actors, did not take part in the development of the international norms against child soldiering and cannot sign on to any of the formal agreements. Consequently, many rebel groups are not as influenced by these norms and continue to pursue the recruitment of children (Faulkner 2016:213). It is tremendously difficult to accurately estimate exactly how many children are recruited in armed conflicts around the world, however, some reports indicate numbers around approximately 200,000 to 300,000 children in current conflicts (Dabbagh 2011; Lasley and Thyne 2015; Vautravers 2008). While rebel groups are not the only organizations that recruit children, Tynes and Early (2015) highlight that

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<sup>&</sup>lt;sup>1</sup> This threshold is however sometimes a subject of controversy (e.g., see Tynes 2011).

they have fewer constrains and more to gain from doing so than, for example, governments do. Regarding the actual recruitment process of child soldiers, many children are abducted or in other ways forced into joining rebel groups. However, scholars have also noted that it is not unusual that children join on a voluntarily basis (Haer 2017; Peters 2004).<sup>2</sup> Children are often attracted to soldiering since it offers them a purpose, an identity and resources such as food and protection, which they otherwise could not have obtained or afforded in civilian life (Wessells 2006:4). Whereas it is commonly known that many children, especially girls, are sexually abused as sex slaves by high-ranking commanders, less scholarly attention has been given to the fact that child soldiers, especially boys, also are forced to participate in acts of sexual violence against others. Therefore, it is important to gain a better understanding of child soldiers' roles as members of rebel groups.<sup>3</sup>

#### 3.2 How Child Soldiering Influences Rebels' Perpetration of Sexual Violence

Even though there are no studies that systematically examine the relationship between child soldier recruitment and rebel groups use of sexual violence, by using insights from the child soldier literature, I can derive four theoretical arguments as for why groups that recruit children are likely to engage in more sexual violence.

First, committing acts of sexual violence can not only allow rebel groups that abduct their members to create and maintain a coherent fighting force, as suggested by Cohen (2013). It can also serve as a tool for indoctrination of child soldiers, regardless of how they were recruited. When a child becomes a member of a rebel group, carrying out violent acts becomes an inevitable part of the child's daily life. Even if a child joins voluntarily, the child soon discovers that attempts to leave the group or refusals to participate in violence come with extreme penalties, such as threats of death (Human Rights Watch 2008). When child soldiers engage in violence, they often believe that they have no other choice than doing so, especially if they previously have seen other children getting killed when disobeying or if they have been beaten themselves (Human Rights Watch 2008). Fear works as a motivation for child soldiers to stay in the group and obey orders (Özerdem and Podder 2011). On a related note, Schneider et al. (2015) demonstrate that combatants that fear punishment by their superiors are more likely to have heard orders that the combatant's unit shall

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<sup>&</sup>lt;sup>2</sup> It is debated whether it is possible to talk about "voluntary" recruitment when it comes to child soldiers (Haer 2017). For instance, it can be argued that children lack cognitive skills to make a fully informed decision, or that they are indirectly forced due to lack of other options. Yet, scholars find that there are several cases in which children are associated with armed groups and where physical coercion or intimidation cannot explain their presence (Hart 2008). <sup>3</sup> It is worth noting that a few scholars have recently begun to examine what consequences child soldiering have on conflict dynamics in general. These studies show that child soldiering can prolong conflicts, make them more likely recur and increase rebel groups' fighting capacities (Haer and Böhmelt 2016a, 2016b, 2017).

engage in sexual violence. Moreover, it has been reported that young boys on a regular basis were forced to rape women and girls as part of the initiation processes of several rebel factions in Liberia (UNICEF 2005). A social worker in Liberia revealed that "boys from both factions have told us that there were initiation procedures when they joined in which they were forced to kill or rape someone or perform some other atrocity [...]. This was supposed to demonstrate that they were brave enough to be soldiers" (Human Rights Watch 2008). If the children failed to prove themselves as worthy soldiers, they would be shot by the rebel leaders. Hence, during child soldiers' initiation process, sexual violence can serve as a tool for introducing young members into a violent male culture. In other words, forcing young boys to participate in such violence represents a symbolic ritual intended to turn young boys into men (Coulter 2009). A former child soldier who was a member of a rebel group in northern Chad told UNICEF that "we [the child soldiers] were forced to kill without fear, raping girls and women, to prove that we were very strong" (UNICEF 2014). Furthermore, ex-combatants from Timor-Leste said that rape was used an initiation ritual for young boys, during interviews with the UNICEF (2001). One boy explained that once he joined an armed group, his first contact with violence was participating in gang rape. The boy said that "they threatened me and told me that I had to kill people and rape women. [...] If we obeyed their orders they would pay attention to us and be kind to us, but if you didn't obey the order..." (UNICEF 2001:63-65).

In addition, it is recognized that sexual violence can be used during the initiation process as a way for rebel groups to break existing ties between child soldiers and their families (Carpenter 2007). Referring to the Sierra Leonean civil war, Carpenter (2007:81) mentions that "in order to sever young soldiers' ties with their families, and to demonstrate their loyalty to the armed group, some boys and young men were forced to rape their sisters, mothers and even grandmothers." After committing such acts against family and community members, it may become difficult for the children to return to their communities. Consequently, the children may start to perceive the rebel group as their family instead, something which makes them exceptionally obedient (Schauer and Elbert 2010; Singer 2006). As Özerdem and Podder (2011:42) puts it: "in the absence of a family, children's need for security, to have someone to love and respect may be transferred to military commanders." As distancing the children from their community fosters intense loyalty and compliance, it can be beneficial for rebel groups to break child soldiers' ties with their families through sexual violence.

Second, as children do not yet possess the same psychological characteristics as adults, they are more vulnerable and easier for rebel groups to exploit, which can make it attractive for rebel groups to recruit children. In general, children are said to be less difficult to manipulate than adults (Wessells 2006; Tynes 2011). As children have not developed the same cognitive skills as adults (Wessells 2006), it is easier to convince them that they are fighting for an important cause, and to order them to commit violence, including sexualized violence, as a part of that cause. Wessells (2006:34-35) points out that children through violent means or threats of violence can be taught to obey commands that most adults would oppose or manage to evade. Once successfully trained, child soldiers will remain much more loyal, dedicated and willing to carry out commands than adult combatants (Gates and Reich 2010; Haer and Böhmelt 2016a). Thus, due to children's undeveloped cognitive functions, it may be easier for a rebel commander to order sexual violence if a group consists of many child soldiers.

Furthermore, Singer (2006) argues children have an underdeveloped understanding of death, which prevents them from fully understanding the consequences of their actions. Child soldiers are therefore more likely to take risks than adults and they also often feel that they are invulnerable (Brett and Specht 2004). As a result, child soldiers may become even more fierce and brutal fighters than their adult peers (Haer and Böhmelt 2016a). A child-care worker in Liberia reported that "some children were the most vicious, brutal fighters of all. [...] Children learn by imitation; they saw killings and then when their commanding officers ordered them to kill, they did" (Human Rights Watch 1994). Moreover, Hecker and Haer (2015) find that child soldiers are more likely to engage in a more diverse set of violent acts - including sexual violence, mutilations and massacres - than adults. Psychological studies indicate that child combatants, as compared to adults, demonstrate a higher level of aggressiveness because they perceive violence in a more positive and fascinating fashion (Schauer and Elbert 2010; Wessells 2006). To induce aggression even more, and reduce feelings of fear before forcibly committing atrocities, many rebel groups also use drugs on the child soldiers (Maclure and Denov 2006). The drugs help to disengage the child's action from any sense of reality and blunt moral inhibitions (Kirby 2015). A camp rehabilitation leader in Sierra Leone explained that when children were given drugs, they would do just about anything that they were commanded to do (Wessells 2006). Hence, rebel groups more easily exploit children and can use the child soldiers as tools for perpetrating a wide range of atrocities.

Third, even if child soldiers are not directly ordered by their commanders to commit sexual violence, children and teenagers are much more susceptible to peer pressure and have a stronger

desire to fit in than adults. When a child belongs to a rebel group, the child depends upon the other members for survival, something which makes peer pressure even more powerful (Wessells 2006:70). On a related note, authors have recently begun to presume that armed groups engage in sexual violence mainly as a "practice", rather than using it as a weapon of war (e.g., Cohen 2013, 2016). Thus, child soldiers may be more likely to participate in a group's "practice" of sexual violence, due to peer pressure from older group members. Moreover, scholars have argued that the fear of being disliked by a group is a major driving force for the perpetration of gang rape during wartime, whereas sexual desires are less frequently mentioned as the underlying reason (Bijleveld et al. 2007; Henry et al. 2003). By participating in for example gang rape, participants can brag about the acts they committed, in order to appear strong and masculine (Cohen 2013). Wood (2014) claims that social pressure is very prominent during military training, and if social pressure has a strong effect on adults, one could expect that it has an even stronger one on children. Young perpetrators of gang rape in the Netherlands revealed that they chose to participate in the rapes simply because they wanted to fit in and were afraid of what the consequences might be if they refrained (Cohen 2016:28). Additionally, an ex-child soldier from Sierra Leone remembers that after he was forced into raping his sister, he expressed that he did not want to not take part in such violence again, but that this caused his fellow combatants to mock him (Cohen 2016:124).

Finally, as previously discussed, child soldiers often provide logistical and supportive functions in addition to participating actively in combat. Such functions can, for example, include standing guard, gathering intelligence, cooking or cleaning. Haer and Böhmelt (2016a:157) argue that child soldiers provision of support functions indirectly contributes to increasing a rebel group's fighting capacity, as the child soldiers' logistical support allows other members to engage in combat tasks rather than other tasks. Following this logic, child soldiers' presence in a rebel group might enable other rebels to more easily engage in sexual violence, such as gang rape, even if the child soldiers themselves are not actively participating. In line with his, several former child soldiers have stated that they had to stand guard and look out for enemy combatants in order to give warnings signs, while their fellow peers took part in gang rape (Cohen 2016:35).

To conclude: first, I argue that rebel groups force children into participating in sexual violence during their indoctrination and initiation process, both as to turn them into "real" soldiers and as a way to sever the ties between the children and their families. Second, because children have not developed the same psychological characteristics and cognitive functions as adults, it is easier for rebel groups to manipulate children and to force them into committing violent acts. Thus, it may

be easier for a rebel commander to order sexual violence if a group consists of many child soldiers. These characteristics also make it more likely that children will participate in sexual violence due to group pressure, even if the violence is not directly ordered. Finally, even if the child soldiers themselves are not actively taking part in sexual violence, they can provide supporting functions that enable other older combatants to more easily engage in sexual violence. In light of all these arguments, I expect that rebel groups that rely on child soldier recruitment perpetrate higher levels of sexual violence than rebel groups that refrain from recruiting children.

#### 3.3 Hypothesis

H1: Rebel groups that recruit child soldiers are more likely to perpetrate higher levels of sexual violence than rebel groups that refrain from child recruitment.

#### 4. Research Design

This chapter presents the data used to conduct the empirical analysis, the operationalization of the variables and the corresponding summary statistics, as well as the method employed to estimate the results.

#### 4.1 Data

In my analysis, I consider all active rebel groups in intrastate armed conflicts between 1989 and 2009<sup>4</sup> as identified in versions 3.3 and 3.4 of the Non-State Actor (NSA) dataset (Cunningham et al. 2009, 2013). The dataset is an expansion of the Uppsala Conflict Data Program/Peace Research Institute Oslo (UCDP/PRIO) Armed Conflict Data and uses all of the conflict-dyads from the UCDP Dyadic Dataset (Harbom et al. 2008; Gleditsch et al. 2002). In order for an armed intrastate conflict to be coded as active it has to: 1) involve the government of a state, 2) take place mainly within the state, 3) involve organized opposition forces, 4) be fought over either the control of territory and/or government, and 5) result in at least 25 battle-related deaths in a calendar year (Cunningham et al. 2013:519). A dyad consists a government and an opposing rebel group. A conflict can include more than one dyad. If a government is opposed by four rebel groups over the same incompatibility, the conflict is made up of four dyads (Gleditsch et al. 2002). The unit of analysis is a conflict-dyad-period. This means that a government is paired with a rebel group in one time period, in which the parameters of the conflict-dyad remain unchanged (Haer and Böhmelt 2016a:159). The data allow for changes over time, since when any of a dyad's attributes changes, a

<sup>&</sup>lt;sup>4</sup> The time span is chosen due the data availability of my dependent variable.

new observation is coded for the dyad (Cunningham et al. 2013:519). In contrast to highly aggregate research designs, which use data on the country- or conflict-level, my research design disaggregates conflicts to the level of the rebel group. By taking this approach, I can refrain from lumping all opposition organizations together as "rebels", when a conflict has multiple actors (Salehyan et al. 2014). Since the purpose of my study is to examine if rebel groups' recruitment of child soldiers affect the levels of sexual violence perpetrated by the rebel groups, the dyadic data has a clear advantage as compared to non-dyadic data, simply because conflict-level data would not allow me to take the variation across groups within the same conflict into account. In total, my sample comprises 257 unique rebel groups and 298 conflict-dyad-periods between 1989-2009.<sup>5</sup>

#### 4.2 Operationalization

#### 4.2.1 Dependent Variable: Sexual Violence Prevalence

I use data from the Sexual Violence in Armed Conflict (SVAC) data set (Cohen and Nordås 2014) for information about rebel groups' perpetration of sexual violence. The SVAC data cover the years 1989-2009 and defines sexual violence as (1) rape, (2) sexual slavery, (3) forced prostitution, (4) forced pregnancy, (5) forced sterilization/abortion, (6) sexual mutilation, and (7) sexual torture. This definition resembles those of the UN and ICC, as presented in chapter 2, and does not exclude female perpetrators or male victims, both of which are observed in the data (Cohen and Nordås 2014:7). The sexual violence prevalence measure is an estimate of the relative magnitude of reported sexual violence perpetrated by a rebel group in a particular year (Cohen and Nordås 2014:7). The prevalence is coded according to an ordinal scale, ranging from 0 to 3, with 0 indicating cases where no sexual violence was reported; 1 indicating cases with "some" reported sexual violence (less than 25 incidents or victims); 2 indicating cases where sexual violence was "commonly/frequently" reported (25-999 incidents or victims); and 3 indicating cases where sexual violence was reported as "massive" (more than 1000 incidents or victims). The scores are based on information from reports across three different sources: US State Department, Amnesty International, and Human Rights Watch.<sup>6</sup> In addition to these sources, the authors also consulted all relevant special reports published by the International Crisis Group (ICG) and the Geneva Centre for the Democratic Control on Armed Forces (DCAF) reports on sexual violence in armed conflict (Cohen and Nordås 2014:18).

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<sup>&</sup>lt;sup>5</sup> After accounting for missing values on the dependent variable. For a list of all included conflict-dyad-periods, see table 10 in Appendix.

<sup>&</sup>lt;sup>6</sup> These sources are some of the most commonly used in quantitative human rights research.

The SVAC dataset builds on the first cross-conflict data collection on rape during civil wars, compiled by Cohen (2013). As compared to Cohen (2013), the SVAC dataset has several advantages such as the employment of a broad definition of sexual violence that does not only include wartime rape. Moreover, whereas the data from Cohen (2013) only distinguishes between group type when it comes to the perpetrator, i.e. if perpetrator was a state or rebel actor, the SVAC dataset contains information on sexual violence for each specific armed group, mentioned by name. Besides the SVAC dataset, only a few authors have attempted to collect data on conflict-related sexual violence or wartime rape. These efforts are limited to covering only single years, a small number of conflicts, or do not include non-state actors such as rebel group (e.g., Butler et al. 2007; Farr 2009; Green 2006). Consequently, the SVAC dataset is the most comprehensive data collection on sexual violence in armed conflicts and the most useful one for the purpose of this study. Even though there are many advantages of the SVAC dataset, one should be aware that underreporting is an issue when attempting to measure sexual violence. To minimize potential sources of bias, the authors took several measures such as testing an alternative data collection process under which information was obtained from all available online sources, including policy reports and scholarly literature, data triangulation and intercoder reliability testing (Cohen and Nordås 2014:422 for further details). Neither of these measures revealed systematic bias in the information coded from the main sources. Thus, despite these issues, the authors are able to reliably measure the relative magnitude of sexual violence across armed groups.

Because underreporting of sexual violence by victims is a problem, one should treat any estimation of the numbers of victims as conservative (Cohen and Nordås 2014:421). Following this logic, I use the highest reported level of sexual violence across the three sources in the SVAC dataset as the dependent variable in my analysis. Accordingly, both the authors behind the dataset (Cohen and Nordås 2015) and Loken (2017) take this approach in two recently published studies.

#### 4.2.2 Key Explanatory Variable: Child Soldier Recruitment

The core explanatory variable for this thesis concerns the recruitment of child soldiers by rebel groups. The information on rebel groups' use of child soldiers comes from a newly complied dataset, The Child Soldier Dataset (CSDS), by Haer and Böhmelt (2016a). In general, it is difficult to obtain reliable data on the use of child soldiers, and earlier attempts to collect systematic cross-sectional data on child soldiers have been limited to covering only a certain region or a few number of armed groups (see e.g., Beber and Blattman 2013; Tynes 2011). The CSDS is the most extensive data compiled on child soldiering as it contains data that go beyond binary indicators for child recruitment, while at the same time ensuring a comprehensive coverage of rebel groups worldwide.

The rebel groups in the CSDS are identified by the NSA dataset versions 3.3 and 3.4. The CSDS follows the same structure and practices as these data. The dataset is based on information provided by independent reports from, *inter alia*, Child Soldiers International, Human Rights Watch, Amnesty International, Global March against Child Labour, as well as various independent news and academic sources in different languages (Haer and Böhmelt 2016a:160). I use an ordinal variable that captures the use of child soldiers on a three-point scale for each rebel group pertaining to a conflict-dyad-period in the NSA dataset, (Haer and Böhmelt 2016a:160). The CSDS employs UNICEF's (2007) definition of a child soldier as any person below the age of 18 who has been recruited or used by a rebel group. A conflict-dyad-period in which a rebel group did not use any child soldiers at all is coded as 0; a conflict-dyad-period in which some child soldiers were recruited is coded as 1 (less than 50 percent of the rebel group consisted of child soldiers); and a conflict-dyad-period in which many child soldiers were recruited is coded as 2 (more than 50 percent of the group consisted of child soldiers). Utilizing this ordinal variable allows me to take the variation in the size of child soldier recruitment across rebel groups in to account.

#### 4.2.3 Alternative Explanations and Control Variables

In addition to my key explanatory variable, I include a number of control variables that according to the previous literature might influence the level of perpetrated sexual violence.

Forced Recruitment: First, I need to account for Cohen's (2013, 2016) argument that armed groups that rely on forced recruitment are more likely to perpetrate rape as a tool for bonding and creating social cohesion. By including a measure for forced recruitment, I can make sure that my child soldier variable does not merely serve as a proxy for forced recruitment, as suggested by Cohen and Nordås (2015). As the authors do not theorize about how the levels of forced recruitment influence sexual violence (i.e. how many of the group members were recruited by force), I create a dummy variable for *forced recruitment*. The variable takes on the value 1 if there were indications of forced recruitment of child soldiers, and 0 if there were no indications that the children were forcibly recruited.<sup>7</sup> The data come from a recent extension of the CSDS and is based on information from the same type of sources as the main explanatory variable (Faulkner et al. 2017). The CSDS offers the most comprehensive data on the forced recruitment of children available, and utilizing this newly compiled information gives me the advantage of being able to control for

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<sup>&</sup>lt;sup>7</sup> By doing this I also avoid the risk of making wrong assumptions about the actual size of the number of forcibly recruited child soldiers.

<sup>&</sup>lt;sup>8</sup> Beber and Blattman (2013) also made an effort to collect some information about the recruitment practices of child soldiers, but this information only covers 19 African groups.

the forced recruitment of child soldiers on the level of the rebel group. In comparison, Cohen's (2013, 2016) measure for forced recruitment is not on the level of the group, but merely indicates if any of the rebel groups active in a conflict forcibly recruited their members, aggregating all groups together to one big group of "rebels".

Territorial Control: The existing literature suggests that sexual violence is more prevalent in areas of contested control (Salehyan et al. 2014). Moreover, Sawyer et al. (2016) find that rebel groups that exercise control over a territory are more likely to perpetrate sexual violence. In contrast, Kalyvas (2006) shows that armed groups use less indiscriminate violence against civilians in areas where they enjoy strong territorial control. To control for these competing arguments, I use a measure for territorial control from the NSA dataset (Cunningham et al. 2009, 2013). The variable is a binary indicator for whether a rebel group controls a territory (1) or not (0).

Central Command Strength: Several scholars claim that armed groups' internal hierarchies matter for the level of perpetrated sexual violence (e.g., Wood 2009). Whereas some authors argue that clear and strong command structures make it easier to order sexual violence, others suggest that a strong central command allows commanders to exhibit tighter control over their combatants as to prohibit sexual violence. In addition, internal discipline within rebel groups may also be a predictor for civilian abuse such as child soldiering (Humphreys and Weinstein 2006; Lasley and Thyne 2015). To account for these potential mechanisms, I control for a rebel group's central command strength, using data from the NSA dataset (Cunningham et al. 2009, 2013). Following Lasley and Thyne (2015), I create a binary variable indicating whether a rebel group has a high or medium strong central control (1), or a low central control or no central leadership at all (0).

Political Wing: The recent literature has suggested that rebel groups with strong ideologies may perpetrate less sexual violence, as they are more likely to exhibit restraints against civilian abuse. However, ideology is not easily defined and comparable data on the types and content of rebel groups' ideologies is difficult to find. One exception is Hoover Green (2016), who made an effort to compile data on whether a rebel group has a communist ideology. Unfortunately, her data only covers 75 rebel groups, which would force me to reduce my already relatively small sample by more than 25 percent. It is also worth noting that the literature remains rather inconclusive about what types of ideologies could give rise to a restraint on violence against civilians. Since Stanton (2009,

<sup>&</sup>lt;sup>9</sup> Besides, her data is currently inaccessible and it is beyond the scope of this thesis to collect comprehensive data on rebel groups' ideologies.

2013) finds that rebel groups with political wings connected to their military organizations to a larger extent exhibit restraint, I use the presence of a *political wing* as a proxy for the presence of an ideology. The variable indicates whether a rebel group has an alleged, acknowledged or explicit link to a political wing (1) or not (0). The data is retrieved from the NSA dataset (Cunningham et al. 2009, 2013).

Duration: A longer conflict-period means more opportunities for perpetrating sexual violence and for sexual violence to diffuse between rebel groups as a "practice" (Cohen and Nordås 2015:889). Moreover, a longer conflict-period also means more opportunities for rebel groups to recruit children (Tynes and Early 2015). Therefore, I need to control for the duration of a conflict. I include a count variable measuring the number of years that elapsed from the start of a conflict-dyadperiod until its end. The variable is based on information from the UCDP/PRIO Armed Conflict Dataset (Gleditsch et al. 2002). By controlling for the length of a conflict-dyad-period, I also control for any remaining time-based dependencies (Haer and Böhmelt 2016a:164).

Conflict Aim: On behalf of the ethnic hatred argument, scholars claim that sexual violence is more likely to be widespread in secessionist conflicts, since it can be used as a tactic to signal that "life together is finished" (Hayden 2000:32). Moreover, Lasley and Thyne (2015) argue that the conflict aim may also affect rebel groups' behavior when it comes to child soldier recruitment. Therefore, I include a variable that captures the conflict aim. The information is obtained through the UCDP/PRIO Armed Conflict Dataset, which contains information about a conflict's contested incompatibility (Gleditsch et al. 2002). According to the UCDP, a conflict can concern either government, territory or both. A conflict over government concerns control of the whole state. A territorial conflict on the other hand is about control of a part of the state (secession or autonomy). Since my sample does not contain any dyad-conflicts that are considered to have mixed aims, I create a binary variable indicating if a conflict concerns government (0) or territory (1).

Civil War Dummy: There is a possibility that conflicts with high levels of sexual violence simply are conflicts that also are more intense in terms of lethal violence (Butler et al. 2007; Cohen 2013, 2016). Moreover, the literature on child soldiering show that rebel groups in civil wars are more prone to use child soldiers (Gates and Reich 2010). To control for conflict intensity, I include a binary variable indicating whether a conflict-dyad-period belongs to a civil war (1) or not (0). The data come from the UCDP/PRIO Armed Conflict Dataset, in which a civil war is defined as an

armed conflict that averaged 1000 or more annual battle deaths over the conflict period (Gledistch et al. 2002).

Fertility Rates: As many authors argue that gender inequalities contribute to making sexual violence more prevalent during wartime, I control for the level of gender inequality in a country where a conflict took place using a measure of the country's *fertility rate*. In general, measuring gender inequalities is difficult and there is a scarcity of reliable and comparable cross-national data on the issue. However, Caprioli et al. (2009) and Cohen (2016) claim that the fertility rate is the best available proxy, as it reflects both cultural factors such, as personal choices, as well as structural inequalities and discrimination against women, such as lower levels of education, income, and political power. The data on fertility rates is taken from the World Bank Development Indicators and is measured as the total number of births per woman, by country and year (World Bank 2017). I use the average value of this variable for each conflict-period.

Religious Fractionalization: Many scholars suggest that ethnic hatred facilitates sexual violence, since it can play an important role in dominating and humiliating opponents of another ethnic group. Since most quantitative studies find no relationship between ethnic fractionalization, or ethnic wars, and the perpetration of sexual violence (e.g., Butler et al. 2007; Cohen 2013; Loken 2017; Hoover Green 2016), I employ an alternative yet related measure in my analysis. The variable religious fractionalization captures how religiously fragmented a country in which a conflict took place is. The measure is taken from Fearon and Laitin (2003:78) and reflects the probability that two randomly selected individuals in a country belong to different religious groups. A higher number indicates a more fractionalized society. The variable is time invariant.

Magnitude of State Failure: Since the previous literature suggests that state collapse and lawlessness increase the opportunity for perpetrating sexual violence, I control for the magnitude of state failure. I measure state capacity using the variable "magfail" from the Political Task Force Instability (PITF) dataset which indicates the failure of state authority (Marshall et al. 2009). The variable ranges from 1 (adverse regime change with no significant weakening of state institutions) to 4 (complete collapse of state authority). Following other scholars (e.g., Cohen 2013; Williams and Masters 2011), I add

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<sup>&</sup>lt;sup>10</sup> For example, the UNDP offers two different gender variables: the Gender Empowerment Measure (GEM) and the Gender-Related Development Index (GDI). However, these were only recorded from 1995, which makes them less useful for my study. Moreover, because these measures entailed significant biases for developing countries, they were replaced in 2010 with a new measure, the Gender Inequality Index (GII) (Cohen 2013:482; UNDP 2015).

<sup>&</sup>lt;sup>11</sup> Cohen (2013) argues that it is unlikely that wartime rape affects national fertility rates, as the chance of pregnancy per rape is rather low (see Holmes et al. 1996).

the value 0 to the scale to indicate cases where there was no state failure. I use the highest value recorded in a conflict-period.

Resources: Some scholars emphasize that greed can play an important role in civilian abuse. Rebel groups may be more prone to engage in rape when conflicts are driven by "economic endowments", as such violence can be used to terrorize people in areas with valuable resource (Cohen and Nordås 2015; Weinstein 2005). Moreover, groups that have access to material resources can increasingly abuse civilians as they do not depend on extensive civilian support (Weinstein 2005). Furthermore, rebel groups' ability to recruit children might also be influenced by the wealth of the group (Dallarie 2011; Haer and Böhmelt 2016a). Therefore, I control for the presence of lootable resources in a country where a conflict took place. I use data from Buhaug and Lujala (2005), Gilmore et al. (2005), Lujala et al. (2007) and Lujala (2009), which indicate the presence of drugs, oil, diamonds and/or gemstones in a country. I follow Haer and Böhmelt (2016a) and create an additive variable that ranges from 0 to 4. A higher value indicates the presence of more resources in the country in which an insurgent group is operating.

*In(Population):* At last, I include the natural logarithm of a country's population size, seeing as it can affect the conflict dynamics. States with greater populations offer more opportunities for violence against citizens, and a larger population also implies that there is a larger pool of recruits, including children, for the rebels (Haer and Böhmelt 2017:7, 2016b; Salehyan et al. 2014). The data is retrieved from the World Bank Development Indicators (World Bank 2017). I use the average value over the period 1989-2009.

Table 1 summarizes the descriptive statistics and the variation inflation factors (VIFs) for the variables. A correlation matrix shows that the models in my analysis do not have any problems with multicollinearity, since none of the variables included are correlated with a value higher than 0.8.<sup>12</sup> The VIF scores are well below the common threshold value of 5 for all variables, which confirms that no multicollinearity is present in the data (O'Brien 2007).

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<sup>&</sup>lt;sup>12</sup> See table 5 in Appendix.

**Table 1. Descriptive Statistics** 

Variable	Observations	Mean	Std. Dev.	Min	Max	VIF
Sexual violence prevalence	298	0.34	0.77	0	3	
Child Soldier Recruitment	298	0.93	0.64	0	2	1.49
Forced Recruitment	297	0.40	0.49	0	1	1.57
Territorial Control	297	0.34	0.47	0	1	1.16
Central Command Strength	296	0.73	0.44	0	1	1.04
Political Wing	297	0.37	0.48	0	1	1.09
Duration	298	4.29	5.99	0	42	1.18
Conflict Aim	297	0.40	0.49	0	1	2.13
Civil War Dummy	289	0.47	0.50	0	1	2.02
Fertility Rates	298	4.74	1.93	1.22	7.79	1.53
Religious Fractionalization	297	0.40	0.20	0	0.78	1.16
Magnitude of State Failure	298	0.73	1.44	0	4	1.17
Resources	294	2.13	1.12	0	4	1.86
ln(Population)	298	16.94	1.58	13.21	20.77	2.39

#### 4.3 Estimation Strategy

To estimate the impact of child soldier recruitment on the levels of perpetrated sexual violence by rebel groups, I use an ordered probit to model the likelihood of sexual violence falling into one of the four ordered categories (Cohen 2016). Whereas a linear model, such as an OLS regression, assumes that these categories are evenly spaced, the ordered probit model relaxes this assumption given that the categories are ordered rather than only categorical.<sup>13</sup> As it is difficult to determine if the distance between no reports of sexual violence (coded as 0) and "some" reports (coded as 1), is the same as the distance between "some" reports and "frequent" reports (coded as 2), or as between "frequent" reports and "massive" reports (coded as 3), the linearity assumption might be violated. Therefore, an ordered probit regression is the most suitable model choice for the dependent variable (Cohen 2016:85). In order to account for potential intra-group dependencies across the conflict-dyad-periods and heteroscedasticity, I use robust standard errors clustered on government-rebel dyads.

<sup>&</sup>lt;sup>13</sup> The choice between a logit and probit can be considered a stylistic one, as there is little practical difference between estimates (Dey and Astin 1993). I chose a probit model to get a higher degree of comparability with previous studies within the field (e.g., Cohen 2013, 2016).

#### 5. Results

This chapter presents the findings and substantive results of the empirical analysis. Furthermore, a series of robustness tests are carried out.

#### 5.1 Main Analysis

Table 2. Sexual Violence Perpetrated by Rebel Groups: Ordered Probit Model

DV: Sexual Violence Prevalence	Model 1	Model 2	Model 3	Model 4
Child Soldier Recruitment	0.825***	0.687***	0.664***	0.701***
	(0.165)	(0.174)	(0.176)	(0.196)
Forced Recruitment		0.290	0.195	0.172
		(0.199)	(0.204)	(0.219)
Territorial Control		0.484***	0.470**	0.400**
		(0.181)	(0.195)	(0.196)
Central Command Strength		-0.275	-0.269	-0.423**
		(0.200)	(0.194)	(0.196)
Political Wing		-0.228	-0.212	-0.193
C		(0.215)	(0.221)	(0.232)
Duration		0.005	0.010	0.030**
		(0.011)	(0.011)	(0.014)
Conflict Aim		, ,	-0.404	-0.323
			(0.345)	(0.338)
Civil War Dummy			0.070	-0.027
,			(0.321)	(0.305)
Fertility Rates			, ,	-0.025
,				(0.052)
Religious Fractionalization				0.819*
0				(0.478)
Magnitude of State Failure				0.070
				(0.063)
Resources				-0.137
				(0.091)
ln(population)				-0.135
(f - I )				(0.096)
Constant cut1	1.730***	1.662***	1.487***	-0.828
	(0.201)	(0.265)	(0.366)	(1.574)
Constant cut2	2.184***	2.146***	1.990***	-0.294
	(0.209)	(0.277)	(0.373)	(1.550)
Constant cut3	2.804***	2.785***	2.643***	0.407
01	(0.280)	(0.336)	(0.424)	(1.563)
Observations Page P 2	298	293	284	279
Pseudo R-2	0.091	0.128	0.137	0.174

*Note*: Robust standard errors in parentheses, clustered on government-rebel-dyad. Sexual violence prevalence is the maximum reported prevalence across the three sources in the SVAC dataset. \*\*\*\* p<0.01, \*\*\* p<0.05, \* p<0.1

Table 2 displays the results from the ordered probit regression models. I estimate four different models to ensure that my findings are robust across different model specifications. The first model shows the bivariate relationship between my core explanatory variable and the dependent variable. Model 2 includes the core explanatory variable, as well as control variables on the group-level (rebel group characteristics). In model 3, control variables on the conflict-level are added (conflict characteristics). Finally, country-level variables (country characteristics in the rebel groups' countries of origin) are added in model 4, which is the full model including all control variables.

The findings presented in table 2 show that there is strong support for my hypothesis. The coefficient for child soldier recruitment is positive and significant at the .01 level. Thus, child soldier recruitment is associated with increased reports of rebel-perpetrated sexual violence. In other words, rebel groups that recruit (more) child soldiers are more likely perpetrate higher levels of sexual violence. The findings remain statistically significant at the .01 level across all model specifications, even when covariates on the group-, conflict-, and country-level are added. Furthermore, another important finding is that the measure for forced recruitment does not significantly influence the prevalence of sexual violence. The variable is introduced to isolate the effect of child soldier recruitment *per se*, in order to ensure that the child recruitment variable does not merely proxy forced recruitment, as suggested by Cohen and Nordås (2015). My results show the core explanatory variable remains positive and significant, even after controlling for the forced recruitment of child soldiers. Hence, child soldier recruitment has a positive impact on perpetrated sexual prevalence, regardless of how the children were recruited.

Out of the other group-level control variables introduced in model 2, territorial control has a positive and significant impact on sexual violence prevalence at the .01 level. These results suggest that rebel groups that control territory are more likely to perpetrate sexual violence than those groups that do not control any territory. Once conflict and country factors are added in models 3 and 4, territorial control remains positive and significant (then at the .05 level) while two additional group-level covariates also turn out statistical significance at the .05 level: central command strength and the duration of a conflict-dyad-period. The coefficient for central command strength is negative, which indicates that rebel groups that have a high or medium strong central control are

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<sup>&</sup>lt;sup>14</sup> To further ensure that the means through which child soldiers are recruited do not influence the level of perpetrated sexual violence, I estimated the effect of forced recruitment on sexual violence prevalence using a sub-sample, including only the rebel groups that did engage in child soldier recruitment. The results show that forced recruitment is not a statistically significant predictor for sexual violence prevalence amongst groups that use child soldiers. See table 9 in Appendix.

less likely to perpetrate sexual violence than those that have low central control or no central leadership at all. The duration of a conflict-dyad-period appears to, as expected, have a positive impact on sexual violence prevalence. Thus, as the duration of a conflict increases, so does the likelihood of observing higher levels of rebel-perpetrated sexual violence. The variable indicating whether a rebel group has a political wing does not have a statistically significant effect on sexual violence prevalence.

Out of the conflict- and country-control factors introduced in models 3 and 4, only religious fractionalization turns out as a statistically significant predictor for the levels of sexual violence. Neither conflict aim, national fertility rates, the magnitude of state failure, population size nor the presence of lootable resources in a rebel group's country of origin seem to influence the level of sexual violence perpetrated by the group.

#### 5.2 Substantive Effects

Even though my results display a strong and robust relationship between child soldier recruitment and sexual violence, it is difficult to directly interpret the size of the effect from the ordered probit regression. To determine the substantive impact of child soldier recruitment on sexual violence prevalence, I calculated the likelihood of each level of sexual violence when the child soldier recruitment variable takes on the value 0 (no children recruited), 1 (some children recruited) and 2 (many children recruited) using CLARIFY (Tomz et al. 2003). Table 3 displays the mean predicted probabilities of rebel-perpetrated sexual violence at each level of the dependent variable, given that a group recruits no, some, or many child soldiers. The probabilities are based on model 4 in table 2, including all control variables set at their mean values. The substantive results show that rebel groups that recruit many child soldiers are 5.2, 10.5, and 23.6 times more likely to commit sexual violence at levels 1, 2, and 3, respectively, than those groups that do not recruit children. Rebel groups that recruit some child soldiers are 2.8, 3.8, and 5.2 times more likely to commit sexual violence at levels 1, 2, and 3, respectively, than those groups that do not recruit any children. The results of my analysis are therefore the first indication that child soldier recruitment might indeed increase the levels of sexual violence perpetrated by rebel groups during armed conflict.

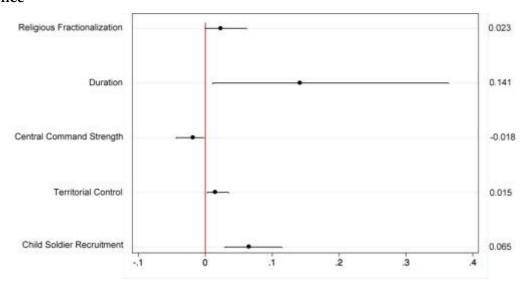
Table 3. Mean Predicted Probabilities With and Without Child Soldier Recruitment

	Child Soldier Recruitment =0	Child Soldier Recruitment =1	Child Soldier Recruitment =2
Pr(Sexual Violence Prevalence=0)	0.9489404	0.8353778	0.6085311
Pr(Sexual Violence Prevalence =1)	0.0344253	0.0970808	0.1782157
Pr(Sexual Violence Prevalence =2)	.0137481	0.0526117	0.1449106
Pr(Sexual Violence Prevalence =3)	0.0028863	.0149297	0.0683426

*Note:* The mean predicted probabilities are based on the ordered probit model with robust standard errors cluster on government-dyad, including all control variables from the model 4 set at their mean values. Two-tailed t-tests confirm that the differences in the mean predicted probabilities at levels 0, 1, 2 and 3 are statistically significant at the .01 or 0.05 level.

In addition, I also calculated first difference estimate for child soldier recruitment. The first difference estimate shows the change in the predicted probability (in percentage points) of observing an outcome as a given independent variable is moved from its minimum to its maximum value, while holding all other variables constant at their mean (King et al. 2000; Tomz et al. 2003). Accordingly, I calculated the change in probability of observing the highest level of sexual violence (level 3), as the child soldier recruitment variable is moved from its minimum (0) to its maximum value (2), holding all other variables constant at their mean value. The estimates are displayed in figure 1. The figure also depicts the change in the predicted probability of observing the highest level of sexual violence for the four control variables that turned out statistically significant in the ordered probit regression, when moved from their minimum to maximum value.

Figure 1. Substantive Effects: First Difference Estimates for the Highest Level of Sexual Violence



Note: Values indicate first difference estimations (•), horizontal bars pertain to 90 percent confidence intervals.

In substantive terms, the likelihood that a rebel group perpetrates the highest level of sexual violence increases by 6.5 percentage points when child soldier recruitment moves from its minimum to its maximum value. Moreover, the likelihood that a rebel group perpetrates sexual violence at levels 1 or 2 or increases with 14.3 and 13.1 percentage points respectively when child soldier recruitment moves from its minimum to maximum value is (values not presented in the figure). These findings support my hypothesis since they show that child soldier recruitment has a sizable effect on sexual violence, even when accounting for several other factors. Only the duration of a conflict-period has a larger substantive effect (14.1 percentage points) than child soldiers recruitment on the probability of observing sexual violence at levels 1, 2 and 3, when moved from it minimum to maximum value. However, it is worth noting that the duration variable ranges from 0 years all the way up to 42 years. Moving the variable from its minimum to its maximum value therefore requires a rather large increase in a conflict-period's duration, considering that the mean value is 4.29 years.

#### 5.3 Robustness Checks

In order to increase the confidence in my findings, I performed a series of robustness checks and alternative specifications of the ordered probit regression models from table 2.

First, in order to provide further assurance concerning the coding of the levels of sexual violence, I test if a different aggregation of the dependent variable alters my findings. As suggested in Cohen (2016), I collapsed the dependent variable to create a binary variable, grouping categories 1-3 of the original dependent variable together. Thus, the new binary dependent variable captures whether a rebel group engaged in any sexual violence or not. Moreover, because there are only 11 observations of the highest level of sexual violence (level 3) when using the ordinal dependent variable, these observations could potentially belong to an outlier category, which could lead to an overestimation of my results. By re-calculating my models using a binary dependent variable for sexual violence I am also able ensure that my results are not driven by these potential outliers. Table 4 shows that the main results from the ordered probit model remain robust to this change, the only difference being that the measure for religious fractionalization now turns out statistically insignificant.

Table 4. Robustness Check: Binary Dependent Variable (Probit Model)

DV: Sexual Violence Occurrence	Model 2	Model 3	Model 4
Child Soldier Recruitment	0.721***	0.698***	0.771***
	(0.200)	(0.202)	(0.220)
Forced Recruitment	0.216	0.122	0.108
	(0.212)	(0.219)	(0.238)
Territorial Control	0.645***	0.646***	0.586***
	(0.203)	(0.224)	(0.227)
Central Command Strength	-0.437*	-0.439*	-0.588***
	(0.233)	(0.229)	(0.225)
Political Wing	-0.178	-0.155	-0.131
	(0.238)	(0.249)	(0.254)
Duration	0.008	0.014	0.032*
	(0.014)	(0.014)	(0.017)
Conflict Aim		-0.513	-0.496
		(0.408)	(0.401)
Civil War Dummy		0.005	-0.086
		(0.382)	(0.373)
Fertility Rates			-0.050
			(0.054)
Religious Fractionalization			0.699
-			(0.511)
Magnitude of State Failure			0.013
			(0.065)
Resources			-0.154
			(0.118)
ln(population)			-0.145
			(0.111)
Constant	-1.647***	-1.408***	1.305
	(0.277)	(0.429)	(1.774)
Observations	293	284	279
Pseudo R-2	0.188	0.205	0.252

*Note*: Robust standard errors in parentheses, clustered on government-rebeldyad. The dependent variable indicates whether any sexual violence was reported by a rebel group across the three sources in the SVAC dataset.

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Second, it is suggested that rebel groups that recruit child soldiers might not be a random sample (Bakaki and Hinkkainen 2016; Beber and Blattman 2013; Haer and Böhmelt 2016a). Therefore, I employed a recursive bivariate probit model based on the guidelines in Maddala (1983) and Greene (2012) as an additional robustness test.<sup>15</sup> It is possible that the factors that influence rebel groups' perpetration of sexual violence also could have influenced their recruitment of child soldiers during the conflict in the first place. Not accounting for this two-stage process could under- or overestimate of the impact of child soldiering on sexual violence prevalence (Haer and Böhmelt

<sup>&</sup>lt;sup>15</sup> For practical examples, see Bakaki and Hinkkianen (2016) and the appendix of Haer and Böhmelt (2016a).

2016a). To account for this potential selection bias (the non-random assignment of child soldiers), the recursive bivariate probit model uses two separate equations, one selection equation and one outcome equation, with correlated disturbances (Bakaki and Hinkkainen 2016; see appendix of Haer and Böhmelt 2016a). For these equations, I must define two different dependent variables. For the outcome equation, I use the binary variable indicating whether a rebel group engaged in sexual violence (due to the bivariate model's requirement of binary dependent variables). For the selection equation, I as use a dummy variable for whether a rebel group recruited child soldiers or not. The two equations are then estimated at the same time, while the correlation in equations' error processes is taken into account (Bakaki and Hinkkianen 2016:559; Haer and Böhmelt 2016a). The results from the bivariate probit model show that the rho ( $\rho$ ) value is statistically insignificant, which means that there is no evidence that the model's two equations are correlated. Furthermore, the findings are in line with the results of the ordered probit models (table 2). Thus, my model is not affected by a selection into child soldier recruitment and the results from the ordered probit regressions are therefore unbiased and robust.

Third, instead of controlling for the *religious fractionalization* in a rebel group's country of origin, I employ Fearon and Laitin's (2003) corresponding measure for *ethnic fractionalization*. The measure captures the likelihood that two randomly chosen people from a state belong to different ethnolinguistic groups. The ethnic fractionalization variable turns out statistically insignificant and does not alter my main results. Only one change can be observed amongst the control variables as the coefficient for a country's population is now negative and significant at the .10 level. This suggests that an increasing population size reduces the likelihood of rebel group-perpetrated sexual violence, which is contrary to the common expectations.

Fourth, I estimated a model considering the average level of state failure recorded in a conflict-period, instead of the maximum recorded value. In addition to the measure for the magnitude of state failure taken from the PITF dataset, I also considered the natural logarithm of the average annual GDP per capita for the period 1989-2009, in each state where a conflict took place, as an alternative proxy for state capacity.<sup>19</sup> Neither of these variables alter the estimated effects for the

<sup>&</sup>lt;sup>16</sup> As the bivariate probit model requires one variable in the selection equation to be excluded from the outcome equation, I excluded the *civil war dummy* in the second equation.

<sup>&</sup>lt;sup>17</sup> Results are displayed in table 6 in Appendix.

<sup>&</sup>lt;sup>18</sup> Results are displayed in model 5, table 7 in Appendix.

<sup>&</sup>lt;sup>19</sup> Several authors have shown that state capacity is highly correlated with GDP per capita, and the measure has been commonly used as a proxy in cross-sectional studies (e.g., Fearon and Laitin 2003). The data is obtained from the World Bank Development Indicators and is in current US dollars (World Bank 2017).

core explanatory variable and the group-level factors, however, religious fractionalization loses its significance.<sup>20</sup>

At last, even though an ordered probit regression is the best choice considering the nature of my (ordinal) dependent variable, estimating models using this particular method might make it harder for models to converge, given the relatively small number of observations in my sample (Cohen and Nordås 2015:894). Therefore, I re-estimated my results using an OLS regression model with robust standard errors clustered on government-rebel dyad. The main findings regarding child soldier recruitment remain the same as when using the ordered probit model.<sup>21</sup>

#### 6. Discussion and Limitations

The empirical analysis presented in the previous section provides strong support for the hypothesis in this thesis. There appears to be a consistent and significant association between child soldier recruitment and higher levels of perpetrated sexual violence by rebel groups. This finding remains robust across several alternative model specifications and robustness checks. Moreover, the size of the effect appears to be rather large, seeing as rebel groups that recruit children are far more likely to perpetrate sexual violence at levels 1, 2 and 3 as compared to groups that do not use child soldiers. Since no study has yet systematically examined the relationship depicted in this paper, my results are a first indication that the recruitment of children might indeed increase the likelihood that rebel groups will engage in more sexual violence. The findings shine light upon the disturbing fact that not only are child soldiers subjected to sexual violence and other horrendous violent acts, but they are also forced to perpetrate and participate in such acts. Hence, it appears as if rebel groups are able to use child soldiers as a tool for perpetrating a variety of atrocities during armed conflict.

Another important finding is that the forced recruitment of child soldiers does not have a statistically significant impact on the levels of sexual violence. Therefore, my results indicate that child soldier recruitment *per se*, regardless of how the children were recruited, is associated with more sexual violence by rebel groups. The insignificant result for the forced recruitment variable lends further support for the theoretical mechanisms I suggest, as these do not depend upon how the child soldiers were recruited. Moreover, this discovery challenges Cohen and Nordås' (2015) assumption that child soldier recruitment is a reliable proxy for forced recruitment, at least when

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<sup>&</sup>lt;sup>20</sup> See model 6 and 7, table 7 in Appendix.

it comes to rebel groups (taking into account that their study only looks at pro-government militias).

In terms of the remaining group-level control variables, my results also demonstrate support for other existing arguments in the literature. The negative coefficient for central command strength supports the anarchy-argument, which suggests that sexual violence is driven by out-of-control fighters and information asymmetries within rebel groups (e.g., Butler et al. 2007, Wood 2009). Thus, it appears as if internal hierarchies and chains of command indeed might influence sexual violence, as argued by for instance Wood (2009). Moreover, rebel groups that control territory are more likely to engage in sexual violence. This implies that sexual violence can serve as an instrument for ethnic cleansing or be used to displace people, if perpetrated within or close to the controlled area (Bloom 1999; Cohen 2013; Sharlach 2000). However, the results regarding territorial control should be interpreted with caution seeing as the data on sexual violence is not georeferenced, meaning that am I not able to control for the exact location of the violent incidents. Continuing, the positive effect of duration may be because additional conflict years simply provide more opportunities for perpetrating sexual violence, or that a longer conflict-period allows for sexual violence to diffuse between different armed groups as a "practice" (Cohen and Nordås 2015:889). Furthermore, despite that the recent literature emphasizes that armed groups' ideologies play an important role in restraining sexual violence, I do not find support for this argument when using the presence of a political wing as a proxy for ideology. In addition, more intense conflicts, i.e. civil wars, are not associated with higher levels of sexual violence. Thus, my results reaffirm previous findings that conflicts with more sexual violence are not simply conflicts with more lethal violence (Cohen 2013, 2016; Cohen and Nordås 2015).

As for the factors observed at the country-level, I find weak support for some of the most conventional wisdoms about the determinants of sexual violence in armed conflict. Neither the variable capturing gender inequality nor the variable for the magnitude of state failure turn out statistically significant. The insignificant results for gender inequalities mirror those of Cohen (2013, 2016) and Loken (2017). In support of authors like Bloom (1999), the results from the ordered probit model show that rebel groups in more religiously fragmented states are more likely to engage in higher levels of sexual violence. However, the coefficient for religious fractionalization does not remain significant across a series of robustness tests. Even though gender inequality, state failure and religious fractionalization might be linked to other aspects of armed conflict, once a conflict has begun, these factors do not seem to explain why some rebel groups perpetrate high levels of sexual violence whereas others do not.

In general, my findings suggest that group-level factors are better predictors for the level of sexual violence perpetrated by rebel groups than conflict- or country-level ones. This is hardly surprising since these country-level measures should not be able to account for why rebel groups within the same conflict, exposed to the same societal gender norms, living under the same conditions of lawlessness and existing in an ethnically or religiously divided conflict, still vary in the level of perpetrated sexual violence.

While my analysis shows a strong and consistent association between child soldier recruitment and rebel-perpetrated sexual violence, there are still a few limitations of my study. First, it is possible that there are other factors not included in my models that could be causing rebel groups to engage in both child recruitment and high levels of sexual violence. Such factors could include rebel groups' internal cultures, norms and morale. On a related note, a binary variable denoting whether a rebel group has a political wing may be a rough proxy for the presence or absence of an ideology. However, as research on the variation in sexual violence across armed groups is a relatively new field of study, many characteristics of rebel groups are not yet documented in a systematic fashion. Nonetheless, I have employed the best proxies available for some of the most difficult-to-measure variables in order to address any issues of omitted variable bias.

Second, there are a few limitations of the SVAC data used for the dependent variable in this study, as discussed in chapter four. For instance, the reporting of sexual violence in armed conflicts might be uneven over time. It is possible that human rights organizations gained increased interest in the issue after the high-profile conflicts in Bosnia-Herzegovina and Rwanda and thus started reporting more about sexual violence, as compared to previous years (Cohen and Nordås 2014). This might imply that the severity of sexual violence in armed conflicts prior to this is underestimated. Furthermore, it is plausible that different types of conflicts may have gained uneven amounts of attention in terms of international reporting. However, as described in chapter four, the authors behind the SVAC dataset employed several measures to minimize these problems. Nevertheless, the unequal interest in sexual violence across conflicts and over time could potentially lead to an over- or underestimation of the results.

Third, it is important to note that I am not able to test which of the four proposed mechanisms, developed in the theoretical section, are the primary driving forces of my results. Since it is beyond the scope of this study to examine the mechanisms at the micro-level, it is not possible to say with certainty what mechanisms are in place. Lastly, one should also be careful about generalizing the

results of my analysis to other armed groups than rebel groups, since incentives and internal group dynamics might differ between different types of armed actors.

#### 7. Conclusion

As research has shown that levels of sexual violence not only vary across conflicts, but also across armed groups, scholars have recently come to examine what armed group characteristics can explain this variation. Even though recruitment practices have been highlighted as an important factor for understanding the variation in sexual violence, no study has yet considered the impact of child soldier recruitment. With this thesis, I aimed to fill this gap by examining both theoretically and empirically how the recruitment of child soldiers might influence the levels of sexual violence perpetrated by rebel groups. Thus, this thesis sought to answer the following question. Do rebel groups that recruit child soldiers perpetrate more sexual violence?

Theoretically, I purposed four interrelated mechanisms for why child soldier recruitment increases the levels of sexual violence perpetrated by rebel groups. First, I argue that rebel groups force children to participate in acts of sexual violence during their indoctrination and initiation process, both in order to turn them into "real" soldiers and as a way to sever the ties between the children and their families. Second, because children have not developed the same psychological characteristics and cognitive functions as adults, it is easier for rebel groups to manipulate and make child soldiers extremely obedient. Thus, it may be easier for a rebel commander to order sexual violence if a group consists of many child soldiers. Third, these characteristics also make it more likely that child soldiers will participate in sexual violence due to peer pressure, even when not directly ordered. Finally, even if the children themselves are not actively taking part in acts of sexual violence, their presence can enable other older combatants to more easily carry out sexual violence. Based on these arguments, I hypothesize that rebel groups that recruit child soldiers are more likely to perpetrate higher levels of sexual violence than those that refrain from using child soldiers.

To test my hypothesis empirically, I analyzed rebel groups active in armed conflicts between 1989-2009, using a newly compiled dataset on child soldier recruitment combined with data on sexual violence from the SVAC dataset. The results show that child soldiering indeed is associated with higher levels of sexual violence perpetrated by rebel groups. Moreover, the size of the effect appears to be relatively large. In other words, the answer to my research question is: yes, rebel groups that recruit child soldiers are more likely to engage in sexual violence than groups that do not recruit children. My findings contribute to the ongoing effort to better understand the variation

in sexual violence across armed groups, as well as the recent literature examining the consequences of child soldiering.

While my thesis sheds light upon a previously unexamined relationship, one study is not sufficient in order to fully address this important issue. Thus, there are several avenues for further research. As discussed in the previous chapter, I am not able to test which of the four theoretical mechanisms is the primary driving force of my results. Scholars could therefore through in-depth case studies try to sort out which underlying mechanisms are in place. Qualitative studies could also provide more detailed insights to rebel groups' exploitation of children, as well as give a more comprehensive picture of child soldiers' experiences during armed conflict. In addition, scholars should more thoroughly examine whether there are factors, such as norms and culture, which make rebel groups more likely to both commit high levels of sexual violence and recruit child soldiers. Moreover, given that my study only looks at sexual violence and child recruitment by rebel groups, future studies could examine if the same relationship can be observed for state forces or other armed actors. As for the more theoretical implications of my study, scholars should consider to primarily include group-level factors when analyzing the variation in sexual violence across armed actors, as country- and conflict- level factors appear to be weak predictors. Generally, future academic studies on sexual violence should think about incorporating measures of child soldier recruitment into their empirical models for more thorough results.

Regarding policy implications, my findings give an indication to international policymakers that two of the worst aspects of armed conflict, sexual violence and child soldiering, may be interlinked. Knowing what factors increase the likelihood of widespread sexual violence can potentially help policymakers to prevent and respond to such events in the future. Thus, policymakers should be aware that conflicts in which children are being recruited by rebel groups are also at high risk for widespread sexual violence. Since I have shown that child soldiering, in addition to being a brutal deprivation of children's human rights, can bring about negative externalities for third parties, it is of utter importance that the international community take efforts towards establishing more effective measures against child recruitment. Furthermore, policymakers should consider developing more holistic policies aimed at targeting both child soldier recruitment and sexual violence, as the two seem to be connected. Lastly, my thesis underscores how vulnerable children are to numerous forms of abuse and exploitation during armed conflict. Even though post-conflict Disarmament, Demobilization, and Reintegration (DDR) programs usually contain child-specific components, the academic community has recognized that these programs have problems with

addressing child soldiers' different experiences and needs in the aftermath of a conflict. When designing and implementing DDR programs, policymakers should keep in mind that child soldiers not only are victims of various forms of abuse, but that they also are forced to perpetrate atrocities, including sexualized violence, against others.

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## Appendix

Table 5. Correlation Matrix

Authore	Violence Prevalence	Recruitment	Recruitment Control	nt Control	Command Strength	Wing	Duration	Aim	Dummy	Rates	Fractionalization State Failure	State	State Failure Resources In(population)
Sexual Violence Prevalence	1				3								
Child Soldier Recruitment	0.3493	-											
Forced Recruitment	0.2865	0.5211	-										
Territorial Control	0.1791	0.1546	0.2008	1									
Central Command Strength	-0.0510	0.0003	0.0083	0.1062	-								
Political Wing	-0.0846	0.0165	-0.1308	0.1272	0.0133								
Duration	0.0997	0.2022	0.2126	0.1304	0.0213	0.1089	-						
Conflict Aim	-0.1792	-0.0670	-0.1569	0.0290	-0.0005	0.0774	0.1154	-					
Civil War Dummy	0.1882	0.1140	0.1946	0.1214	-0.0031	-0.1324	-0.0745	-0.6674	+				
Fertility Rates	0.1542	0.1999	0.1148	0.0141	-0.0606	-0.0493	-0.0477	-0.4724	0,4193	1			
Religious Fractionalization	0.1833	0.1011	0.0684	0.0756	0.0160	-0.0415	-0.1627	-0.0481	0.1028	0.2262		2	
Magnitude of State Failure	0.1347	0.0929	0.1408	0.1210	0.0831	0.0364	-0.0189	-0.1198	0.1806	0.1835		0.0306	
Resources	-0.1153	0.1769	0.1390	-0.0918	0.0138	0.0078	0.1681	0.1281	-0.1482	0.0086		-0.1551	
In(population)											•	71160	

Table 6. Robustness Check: Bivariate Probit Model

	Bivariate Probit Model (1)
Outcome Equation (Sexual Violence (	Occurrence)
Child Soldier Recruitment	0.901***
	(0.235)
Forced Recruitment	0.094
	(0.240)
Territorial Control	0.528**
	(0.210)
Central Command Strength	-0.584***
	(0.224)
Political Wing	-0.112
G	(0.245)
Duration	0.029
	(0.018)
Conflict Aim	-0.440
	(0.271)
Fertility Rates	-0.054
	(0.051)
Religious Fractionalization	0.661
rengious i racuonanzation	(0.513)
Magnitude of State Failure	0.018
magintude of state I andre	(0.064)
Resources	-0.179
Resources	(0.116)
ln(population)	-0.136
тфоршацоп)	(0.114)
Constant	1.091
Constant	(1.842)
Selection Equation (Child Soldier Rec	` '
Territorial Control	0.504**
Territoriai Controi	
C	(0.221) -0.109
Central Command Strength	
Duration	(0.201)
Duration	0.108***
C. d'. A'	(0.034)
Conflict Aim	-0.125
D	(0.266)
Resources	0.248***
O' TIWE D	(0.085)
Civil War Dummy	0.286
	(0.262)
Constant	-0.285
	(0.302)
ρ(rho)	-0.221
Observations	279

Table 7. Robustness Checks: Alternative Control Variables

DV: Sexual Violence Prevalence	Model 5	Model 6	Model 7
Child Soldier Recruitment	0.716***	0.702***	0.699***
	(0.198)	(0.197)	(0.184)
Forced Recruitment	0.195	0.161	0.194
	(0.220)	(0.224)	(0.223)
Territorial Control	0.389**	0.393**	0.371*
	(0.192)	(0.195)	(0.194)
Central Command Strength	-0.421**	-0.406**	-0.399**
	(0.198)	(0.194)	(0.196)
Political Wing	-0.196	-0.199	-0.139
	(0.232)	(0.234)	(0.227)
Duration	0.026*	0.032**	0.028**
	(0.014)	(0.014)	(0.014)
Conflict Aim	-0.281	-0.323	-0.221
	(0.329)	(0.338)	(0.335)
Civil War Dummy	-0.040	-0.028	0.029
•	(0.308)	(0.307)	(0.299)
Fertility Rates	-0.018	-0.018	-0.063
,	(0.053)	(0.052)	(0.071)
Ethnic Fractionalization	0.286	,	,
	(0.400)		
Magnitude of State Failure (Highest Values)	0.060		
( 8 ,)	(0.064)		
Resources	-0.145	-0.136	-0.112
	(0.092)	(0.094)	(0.094)
ln(population)	-0.174*	-0.133	-0.177*
(1-1)	(0.094)	(0.098)	(0.095)
Religious Fractionalization	(0.07.)	0.774	0.752
		(0.481)	(0.495)
Magnitude of State Failure		0.075	` ,
(Average Values)		(0.077)	
ln(GDP/capita)			-0.108
			(0.126)
Constant cut1	-1.633	-0.781	-2.402
	(1.495)	(1.605)	(2.040)
Constant cut2	-1.104	-0.248	-1.878
	(1.474)	(1.582)	(2.040)
Constant cut3	-0.412	0.452	-1.172
	(1.479)	(1.601)	(2.087)
Observations	279	279	267
Pseudo R-2	0.169	0.174	0.171
	0.107	V-11	V.111

Table 8. Robustness Check: OLS Regression Results

DV: Sexual Violence Prevalence	Model 1	Model 2	Model 3	Model 4
Child Soldier Recruitment	0.415***	0.331***	0.329***	0.345***
	(0.089)	(0.090)	(0.090)	(0.090)
Forced Recruitment	(* * * * * /	0.165	0.126	0.127
		(0.109)	(0.109)	(0.111)
Territorial Control		0.214**	0.211**	0.162*
		(0.099)	(0.099)	(0.098)
Central Command Strength		-0.106	-0.110	-0.139
		(0.101)	(0.102)	(0.103)
Political Wing		-0.145	-0.130	-0.140
		(0.094)	(0.097)	(0.101)
Duration		0.002	0.004	0.012*
		(0.006)	(0.006)	(0.007)
Conflict Aim			-0.215*	-0.193
			(0.125)	(0.121)
Civil War Dummy			0.049	-0.023
			(0.132)	(0.132)
Fertility Rates				-0.012
				(0.025)
Religious Fractionalization				0.473*
				(0.256)
Magnitude of State Failure				0.030
				(0.038)
Resources				-0.060
				(0.055)
ln(population)				-0.049
,				(0.039)
Constant	-0.044	0.022	0.096	0.919
	(0.062)	(0.108)	(0.153)	(0.646)
Observations	298	293	284	279
R-squared	0.12	0.163	0.184	0.230

Table 9. Sub-Sample: The Effect of the Forced Recruitment of Child Soldiers on Sexual Violence

DV: Sexual Violence Prevalence	Model 1
Forced Recruitment	0.342
1 oreca rectainment	(0.232)
Territorial Control	0.447**
	(0.226)
Central Command Strength	-0.433*
<u> </u>	(0.221)
Political Wing	-0.345
	(0.258)
Duration	0.039***
	(0.015)
Conflict Aim	-0.363
	(0.390)
Civil War Dummy	0.022
	(0.345)
Fertility Rates	0.004
	(0.065)
Religious Fractionalization	1.133**
	(0.514)
Magnitude of State Failure	0.060
	(0.067)
Resources	-0.098
	(0.101)
ln(population)	-0.232**
	(0.097)
Constant cut1	-2.849*
	(1.601)
Constant cut2	-2.330
	(1.599)
Constant cut3	-1.642
	(1.612)
Observations	213
Pseudo R-2	0.146

Table 10. Conflict-dyad-periods Included in the Analysis

Location	Rebel Group Name	Conflict Start	Conflict En
Afghanistan	Taliban	2003-06-04	2005-12-31
Afghanistan	Taliban	2006-01-01	2010-12-31
Afghanistan	Jamiat-i-Islami	1996-01-01	1996-12-31
Afghanistan	Hezb-i-Islami	1992-06-01	1995-12-31
Afghanistan	Hezb-i-Islami	2008-01-01	2010-12-31
Afghanistan	Junbish-i Milli-yi Islami	1993-03-08	1995-12-31
Afghanistan	Mahaz-i Milli-yi Islami-yi Afghanistan	1980-01-01	1989-12-31
Afghanistan	Hizb-i Islami-yi Afghanistan - Khalis faction	1980-01-01	1991-12-31
Afghanistan	Taliban	1995-02-01	1996-09-28
Afghanistan	Jamiat-i-Islami	1989-03-01	1992-04-28
Afghanistan	Hezb-i-Islami	1989-03-01	1992-04-28
Afghanistan	Hezb-i-Wahdat	1989-02-28	1995-12-31
Afghanistan	UIFSA	1996-10-13	2001-11-12
Afghanistan	Military Faction	1990-03-06	1990-03-08
Algeria	FIS	1992-12-01	1997-10-01
Algeria	Exile and Redemption	1991-12-01	1991-12-31
Algeria	GIA	1993-01-01	2003-12-31
Algeria	AQIM	1999-01-01	2010-12-31
Angola	UNITA	1992-09-01	1992-12-31
Angola	UNITA	1993-01-01	1997-12-31
Angola	FLEC-FAC	1994-01-01	1996-12-31
Angola	FLEC-FAC	1997-01-01	1998-12-31
Angola	FLEC-FAC	2002-01-01	2009-12-31
Angola	FLEC	1991-06-03	1997-12-31
Angola	FLEC	2002-01-01	2002-12-31
Angola	UNITA	1989-01-01	1991-05-01
Angola	UNITA	1998-08-01	2002-02-22

Azerbaijan	Republic of Nagorno-Karabakh	1991-12-30	1994-05-04
Azerbaijan	Republic of Nagorno-Karabakh	2005-01-01	2005-12-31
Azerbaijan	Husseinov Military Faction	1993-06-04	1993-06-21
Azerbaijan	OPON forces	1995-03-15	1995-03-17
Bangladesh	JSS/SB/Shanti Bahini	1975-02-01	1992-11-15
Bosnia and Herzegovina	Serbian Republic of Bosnia and Herzegovina	1992-04-07	1995-12-14
Bosnia and Herzegovina	Croatian Republic of Bosnia and Herzegovina	1993-04-01	1994-03-18
Bosnia and Herzegovina	Autonomous Province of Western Bosnia	1993-10-03	1995-12-14
Bosnia and Herzegovina	Serbian irregulars	1992-04-07	1995-12-14
Bosnia and Herzegovina	Croatian irregulars	1993-04-01	1994-03-18
Burundi	Palipehutu	1991-11-26	1992-12-31
Burundi	CNDD	1994-11-26	1998-05-08
Burundi	Frolina	1997-01-01	1997-12-31
Burundi	CNDD-FDD	1998-06-07	2003-12-31
Burundi	Palipehutu-FNL	1997-01-01	2008-12-31
Cambodia	FUNCINPEC	1997-06-10	1997-12-31
Cambodia	Khmer Rouge/PDK	1990-01-01	1998-10-25
Cambodia	Khmer Rouge/PDK	1979-01-09	1989-12-31
Cambodia	KPNLF	1990-01-01	1991-10-23
Cambodia	FUNCINPEC/ANS	1990-01-01	1991-10-23
Cambodia	FUNCINPEC/ANS	1982-01-01	1989-12-31
Central African Republic	UFDR	2006-10-30	2006-12-31
Central African Republic	CPJP Military faction (former of André Volingha)	2009-06-12	2010-12-31
Central African Republic	Military faction (forces of André Kolingba) Faction of François Bozize	2001-05-28	2001-06-06
Central African Republic Chad	Revolutionary Forces of 1 April	2001-10-26 1989-10-20	2002-12-31 1989-12-31
Chad	MOSANAT	1989-03-03	1989-12-31
Chad	Islamic Legion	1989-01-01	1990-12-31
Chad	CSNPD	1992-08-31	1994-08-11
Chad	CNR	1992-12-31	1994-12-31
Chad	MPS	1990-03-31	1990-12-02
Chad	FNT	1992-12-31	1994-10-16
Chad	MDD [-FANT]	1991-12-31	1993-12-31
Chad	MDD [-FANT]	1997-01-01	1997-12-31
Chad	FARF	1997-11-30	1998-05-07
Chad	MDJT	1999-12-31	2002-12-31
Chad	FUCD	2005-01-01	2006-12-31
Chad	RAFD	2006-01-01	2006-12-31
Chad	UFDD	2006-01-01	2007-12-31
Chad	AN	2008-01-01	2008-12-31
Chad	Military faction (forces of Maldoum Bada Abbas)	1991-01-01	1991-12-31
Chad	UFR	2009-04-17	2009-12-31
Colombia	FARC	1978-01-01	2010-12-31
Colombia	ELN	1984-01-01	2010-12-31
Colombia	EPL	1984-01-01	1990-12-31
Colombia	EPL	2004-01-01	2004-12-31
Comoros	MPA	1997-09-03	1997-09-07
Congo	Ninjas	1993-11-11	1994-12-31
Congo	RCD	1998-08-11	2001-12-31
Congo	MLC	1998-11-07	2001-12-31
Congo	RCD Faction	1999-01-01	2000-12-31
Congo-Brazzaville	Ninjas	1998-12-14	1999-12-29
Congo-Brazzaville	Cocoyes	1997-10-18	1999-12-29
Congo-Brazzaville	Ntsiloulous	1998-12-14	2002-12-31
Cote D'Ivoire	MPCI	2002-09-19	2002-12-31
Cote D'Ivoire	MPIGO	2002-11-11	2003-12-31
Cote D'Ivoire	MJP	2002-12-03	2003-12-31
Cote D'Ivoire	FN	2004-06-07	2004-12-31
Croatia	Serbian irregulars	1992-07-01	1992-12-31
Croatia	Serbian Republic of Krajina	1992-01-01	1995-11-12
Democratic Republic of Congo	AFDL	1996-10-18	1997-05-17
Democratic Republic of Congo	CNDP	2006-01-01	2008-12-31
Democratic Republic of Congo	BDK	2007-01-01	2008-02-28
Democratic Republic of Congo	BDK	2008-03-01	2008-12-31
Djibouti	FRUD	1991-11-12	1994-12-26
Djibouti	FRUD – AD	1999-01-01	1999-12-31
Egypt	al-Gamaa al-Islamiyya	1993-03-17	1998-12-31 1991-12-31
El Salvador Eritrea	FMLN EIJM	1980-09-02 1997-04-30	
Eritrea	•	2003-01-01	1999-12-31
Ethiopia  Ethiopia	EIJM EPRDF	1989-01-01	2003-12-31 1991-12-31
Ethiopia Ethiopia	Military faction (forces of Amsha Desta and Merid Negusie)	1989-05-16	1989-12-31
Ethiopia Ethiopia	ARDUF	1996-04-26	1996-12-31
Ethiopia	EPLF	1975-01-01	1991-05-28
Ethiopia Ethiopia	ONLF	1994-02-26	2010-12-31
Ethiopia	OLF	1977-01-01	1995-12-31
Ethiopia	OLF	1996-01-01	2009-12-31
Ethiopia	al-Itahad al-Islami	1993-10-13	1999-12-31
Georgia	Republic of Abkhazia	1992-08-16	1993-12-01
Georgia	Zviadists	1992-03-16	1993-10-15
Georgia	Republic of South Ossetia	1992-06-09	1992-07-14
Georgia	Republic of South Ossetia	2004-08-19	2004-08-19
Georgia	Republic of South Ossetia	2008-08-08	2008-12-31
Guatemala	URNG	1982-03-07	1995-12-31
Guinea	RFDG	2000-09-01	2001-12-31
Guinea-Bissau	Military Junta for the Consolidation of Democracy, Peace and Justice	1998-06-07	1999-05-07
Haiti	Military faction (forces of Himmler Rebu and Guy Francois)	1989-01-01	1989-12-31
Haiti	Military faction (forces of Raol Cédras)	1991-01-07	1991-01-07

Haiti	FLRN	2004-01-01	2004-02-29
Haiti	OP Lavalas (Chimères)	2004-08-05	2004-12-31
India	ATTF	1992-10-12	1993-08-23
India	ATTF	1997-01-01	1999-12-31
India	NLFT	1995-10-01	2006-12-31
India	NSCN	1992-07-31	2000-12-31
India	UFLA	1990-02-01	2009-12-31
India	ABSU	1989-03-16	1990-12-31
India	BDSF/NDFB	1993-01-01	2004-12-31
India	PLA		
		1992-01-01	1998-12-31
India	PLA	2004-01-01	2006-12-31
India	UNLF	1994-08-21	2009-12-31
India	Kashmir Insurgents	1989-12-11	2010-12-31
India	Sikh insurgents		
	0	1983-08-20	1993-12-31
India	Naxalites/PWG	1990-01-01	2004-09-20
India	MCC	1992-04-06	2004-09-20
India	CPI-Maoist	2005-01-30	2010-12-31
India	NSCN - K	2005-01-01	2007-12-31
India	KCP	2008-01-01	2009-12-31
India	DHD – BW	2008-01-01	2008-12-31
India	PREPAK	2008-01-01	2009-12-31
India	PULF	2008-11-09	2008-12-31
India	NDFB – RD	2009-01-13	2010-12-31
India	KNF	1997-07-13	1997-12-31
Indonesia	Fretilin	1992-12-15	
			1992-12-31
Indonesia	Fretilin	1997-05-31	1998-12-31
Indonesia	Fretilin	1985-01-01	1989-12-31
Indonesia	GAM	1990-06-22	1991-06-15
Indonesia	GAM	1999-01-01	2005-10-12
Iran	Mujahideen e Khalq	1986-01-01	1993-12-31
Iran	Mujahideen e Khalq	1997-01-01	2001-12-31
Iran	KDPI	1979-03-15	1996-12-31
Iran	PJAK	2005-01-01	2009-12-31
Iran	Jondullah	2006-01-01	2009-12-31
Iraq	KDP/DPK	1979-01-01	1990-12-31
Iraq	KDP/DPK	1991-01-01	1991-12-31
-			
Iraq	PUK	1976-01-01	1990-12-31
Iraq	PUK	1991-01-01	1996-12-31
Iraq	Supreme Council for the Islamic Revolution in Iraq (SCIRI)	1991-01-01	1996-12-31
-	Al-Mahdi Army		
Iraq		2004-01-01	2008-12-31
Iraq	Ansar al-Islam	2004-01-01	2007-12-31
Iraq	ISI/Jama'at Al-Tawhid wa Al-Jihad	2004-01-01	2005-12-31
Iraq	ISI/Jama'at Al-Tawhid wa Al-Jihad	2006-01-01	2007-12-31
Iraq	ISI/Jama'at Al-Tawhid wa Al-Jihad	2008-01-01	2010-12-31
Iraq	RJF/Al-Jaysh al-Islami fi Iraq	2005-01-01	2007-12-31
Israel	Fatah	2000-11-01	2007-12-31
Israel	PIJ	1995-01-01	1995-12-31
Israel	PIJ	2002-01-01	2010-12-31
Israel	Hamas	1993-09-12	1994-12-31
Israel	Hamas	2001-01-01	2009-12-31
Israel	PFLP	2001-01-01	2001-12-31
Israel	PFLP	1989-01-01	1989-12-31
Israel	AMB	2002-03-26	2004-12-31
Israel	PNA	1996-09-25	1996-12-31
Israel	PNA	2000-01-01	2002-12-31
Israel	Popular Resistance Committees	2006-01-01	2006-12-31
Israel	Hezbollah	1990-11-09	1999-12-31
Israel	Hezbollah	2006-01-01	2006-12-31
Laos	LRM	1989-12-01	
			1990-12-31
Lebanon	Lebanese Army (Aoun)	1989-03-15	1990-10-13
Lebanon	Lebanese Forces	1989-01-01	1989-09-23
Lesotho	Military Faction	1998-09-04	1998-09-24
Liberia	NPFL	1989-12-29	1990-09-10
Liberia	INPFL	1990-09-09	1990-09-10
Liberia	LURD	2000-07-08	2003-12-31
Liberia	MODEL	2003-01-01	2003-12-31
Macedonia	National Liberation Army (UCK)	2001-01-22	2001-08-12
Mali	MPA	1990-06-01	1990-12-31
Mali	FIAA	1994-01-01	1994-12-31
Mali	ATNMC	2007-01-01	2009-12-31
Mauritania	AQIM	2010-09-15	2010-12-31
Mexico	EZLN	1994-01-01	1994-01-12
Mexico	EPR	1996-06-28	1996-12-31
Morocco	POLISARIO	1975-01-20	1989-10-11
Mozambique	Renamo	1977-01-01	1992-10-04
Myanmar	KIO	1961-01-01	1992-12-01
Myanmar	KNU	1988-01-01	2010-12-31
Myanmar	Shan State Army - South (SSA-S)	1996-01-01	2010-12-31
Myanmar	MTA	1993-01-01	
			1995-12-31
Myanmar	NMSP	1990-01-01	1990-12-31
Myanmar	KNPP	1992-01-01	1992-12-31
Myanmar	KNPP	1996-01-01	1996-10-15
*			
Myanmar	KNPP	2005-01-01	2005-12-31
Myanmar	Rohingya Solidarity Organisation	1991-12-29	1994-12-31
Myanmar			
	God's army	2000-01-01	2000-12-31
Myanmar			
Myanmar	UWSA	1997-03-16	1997-12-31
Myanmar	UWSA ABSDF	1997-03-16 1990-03-20	1997-12-31 1994-12-31
*	UWSA	1997-03-16	1997-12-31

Myanmar	BMA	1996-12-23	1996-12-31
Nepal	CPN-M/UPF	1996-07-13	2006-12-31
Nicaragua	FDN/Contras	1982-03-18	1990-04-19
Niger	CRA	1994-05-16	1994-10-09
Niger	FDR	1995-07-10	1995-12-31
Niger	MNJ	2007-01-01	2008-12-31
Niger	FLAA	1991-12-01	1992-12-31
Niger	UFRA	1997-11-29	1997-11-29
Nigeria	Ahlul Sunnah Jamaa	2004-01-01	2004-12-31
Nigeria	NDPVF	2004-01-01	2004-12-31
Nigeria	Boko Haram	2009-07-26	2009-12-31
Pakistan	MQM	1990-01-01	1990-12-31
Pakistan	MQM		
Pakistan	Baluch Ittehad	1995-01-01 2005-01-01	1996-12-13 2006-12-31
Pakistan	BLA/Baluchistan Liberation Army	2004-01-01	2009-12-31
Pakistan	TNSM	2007-07-04	2007-12-31
Pakistan	TTP	2008-01-01	2010-12-31
Pakistan	BRA/Baluchistan Republican Army	2008-01-01	2009-12-31
Panama	Military faction (forces of Moisés Giroldi)	1989-10-03	1989-10-03
Papua New Guinea	BRA	1989-01-01	1996-06-15
Paraguay	Military Faction (forces of General Rodriguez)	1989-02-03	1989-02-03
Peru	Sendero Luminoso	1982-08-22	1999-12-31
Peru	Sendero Luminoso	2007-11-14	2009-12-31
Peru	MRTA	1989-03-14	1993-12-31
Philippines	Communist Party of the Philippines	1969-09-01	2010-12-31
Philippines	Military Faction (forces of Honasan, Abenina & Zumel)	1987-01-27	1990-12-31
Philippines	MILF	1990-02-04	1990-12-31
Philippines	MILF MNI F	1994-01-01	2009-12-31
Philippines	MNLF	1981-01-01	1993-12-31
Philippines	Abu Sayyaf	1993-05-03	2010-12-31
Philippines	MNLF - NM	2001-11-19	2002-01-31
Philippines	MNLF - HM	2007-01-01	2007-12-31
Romania	National Salvation Front	1989-12-23	1989-12-25
Russia	Republic of Chechnya	1994-12-11	1996-08-31
Russia	Republic of Chechnya	1999-08-07	2007-12-31
Russia	Parliamentary forces	1993-10-03	1993-10-04
Russia	Wahhabi movement of the Buinaksk district	1999-08-10	1999-09-24
Russia	Forces of the Caucasus Emirate	2007-10-09	2010-12-31
Rwanda	FPR	1990-10-01	1994-07-19
Rwanda	FDLR	2009-01-20	2010-12-31
Senegal	MFDC	1990-09-01	2003-12-31
Sierra Leone	WSB	2000-01-01	2000-09-10
Sierra Leone	RUF	1991-03-23	1996-12-31
Sierra Leone	RUF	1997-01-01	2000-11-10
Sierra Leone	AFRC	1997-05-25	1999-12-31
Sierra Leone	Kamajors	1997-05-29	1998-12-31
Somalia	SNM	1983-02-05	1991-12-31
Somalia	SPM	1989-01-01	1991-12-31
Somalia	USC	1990-11-18	1991-01-29
Somalia	USC Faction	1991-01-29	1996-12-31
Somalia	SRRC	2001-05-12	2002-12-31
Somalia	ARS/UIC		2008-12-31
Somalia		2006-01-01	
	Al-Shabaab	2008-01-01	2010-12-31
Somalia	Harakat Ras Kamboni	2008-01-01	2008-12-31
Somalia	Hizbul-Islam	2009-03-17	2010-12-31
Soviet Union	Government of Armenia and ANM	1990-01-01	1991-08-15
Soviet Union	Azerbaijani Popular Front	1990-01-19	1990-01-20
Spain	ETA	1991-01-02	1992-10-25
Sri Lanka	LTTE	1984-09-10	1991-03-31
Sri Lanka	LTTE	1991-04-01	2009-05-19
Sri Lanka	JVP	1989-01-01	1990-12-31
Sri Lanka	EPRLF	1989-01-01	1989-12-31
Sudan	SLM/A	2003-01-01	2003-12-31
Sudan	SLM/A	2004-01-01	2010-12-31
Sudan	JEM	2003-01-01	2003-12-31
Sudan	JEM	2004-01-01	2010-12-31
Sudan	NRF	2006-01-01	2006-12-31
Sudan	SLM/A – MM	2006-01-01	2006-12-31
Sudan	SPLM	1983-05-17	2004-12-31
Sudan	SLM/A–Unity	2007-01-01	2008-12-31
Tajikistan	Movement for Peace in Tajikistan	1998-11-04	1998-11-09
Tajikistan	UTO	1992-06-29	1998-12-31
Thailand	Patani insurgents	2003-01-01	2010-12-31
Trinidad and Tobago	Jamaat al-Muslimeen	1990-07-27	1990-08-01
Turkey	Devrimci Sol	1991-07-13	1992-10-07
Turkey	PKK/Kadek	1984-08-15	2010-12-31
Turkey	MKP	2005-01-01	2005-12-31
Uganda	UPA	1989-01-01	1992-12-31
Uganda	LRA	1988-02-25	2001-08-08
Uganda	LRA	2001-08-09	2010-12-31
Uganda	WNBF	1996-05-01	1996-12-31
Uganda	ADF		
		1996-11-13	2002-12-31
Uganda	ADF	2007-01-01	2007-12-31
Uganda	UNRF II	1997-01-01	1997-12-31
United Kingdom	PIRA/IRA	1971-08-01	1991-12-15
United Kingdom	Real IRA	1998-08-15	1998-08-15
Uzbekistan	JIG	2004-01-01	2004-12-31
Uzbekistan	MIU	1999-02-16	2000-12-31

Venezuela	Military faction (forces of Hugo Chávez)	1992-02-04	1992-11-29
Yemen	Democratic Republic of Yemen	1994-04-27	1994-07-07
Yemen	AQAP	2009-11-03	2010-12-31
Yugoslavia	Republic of Croatia	1991-06-26	1991-12-15
Yugoslavia	Croatian irregulars	1991-06-26	1991-12-15
Yugoslavia	Republic of Slovenia	1991-06-27	1991-07-15
Yugoslavia	UČK	1998-02-28	1999-06-03