

## **Rebel Recruitment and Terrorism in Civil Wars**

### **Abstract:**

How does forced recruitment affect rebels' use of terrorism? We argue that groups employing forced recruitment will launch more attacks against both soft and hard targets and that these attacks will be more severe. Soft target and high casualty attacks facilitate the formation of bonds among abducted recruits, while hard target attacks involve dangerous operations for which groups are willing to sacrifice abducted recruits. Using data on terrorist tactics of rebels, we find robust evidence that groups employing forced recruitment launch more soft target attacks and inflict more casualties. We find modest evidence linking forced recruitment and hard target attacks.

How does forced recruitment affect rebels' use of terrorism in civil wars? Scholars have argued that different recruitment strategies affect rebels' use of one-sided killings (e.g., Humphreys and Weinstein, 2006; Mehrl, 2021; Weinstein, 2005, 2007) and sexual violence (e.g., Cohen, 2013, 2016; Wood 2009). Much of this work focuses on coerced or forced methods of recruitment and how violence against civilians serves as a socialization tool to form bonds between abducted recruits who are often initially distrustful of each other and lack comradery (Cohen, 2013, 2017; Davis and Jang, 2018).

However, quantitative scholarship on forced recruitment tactics and violence in civil wars tends to focus on sexual violence (Cohen, 2013, 2016, 2017). Davis and Jang (2018) provide an important exception, as they investigate the relationship between forced recruitment and civilian casualties from terrorist attacks. However, they examine only rebel groups that use terrorism at least at some point during their lifespan and do not consider variation in other characteristics of these attacks as well. Prior work also tends to focus predominantly on violence against civilians, obfuscating the role of rebel operations against military and government targets (Fortna et al., 2022; Polo and Gleditsch, 2016: 817).

We expand the scope of the analysis by quantitatively comparing not only groups that use different types of terrorism but by comparing groups that use terrorism to those that do not employ it at all. Specifically, we investigate how forced recruitment practices affect the target choices and severity of terrorist attacks perpetrated by rebel movements. This is relevant as brutal acts of violence help foster bonds among abducted recruits (Cohen, 2013, 2016).

In this paper, we argue that groups that use forced recruitment will not only employ more terrorist attacks against civilians or "soft" targets, but that they will also attack militarized or "hard" targets more often. More generally, their attacks will also be more severe. Terrorist

attacks that are severe should particularly help build cohesion among abducted recruits, similar to how brutal acts of multi-perpetrator rape strength bonds among recruits (Cohen 2013, 2016).

We use data on the terrorist attack patterns of rebel organizations present in the Terrorism in Armed Conflict (TAC) dataset (Fortna et al., 2022) that were active across the world, as well as data on forced recruitment in the Rebel Human Rights Violations (RHRV) dataset (Walsh et al., 2023a), to evaluate these arguments. We find that groups that employ forced recruitment not only commit a higher number of attacks against soft targets, but that they more generally conduct attacks that are more severe. However, we find limited evidence of an association between forced recruitment and terrorist attacks against hard targets.

This paper makes several contributions. First, existing quantitative literature on forced recruitment and terrorism focuses on civilian casualties, despite theoretical expectations that the quantity of attacks and target choice matter as well (Davis and Jang, 2018). We contribute in this regard by examining variation in both target choice and severity of terrorist attacks by rebel groups. We show that there may be different logics underlying the relationship between forced recruitment and choices in targets for terrorist attacks.

Second and relatedly, while Davis and Jang (2018) make an essential contribution by examining the relationship between forced recruitment and terrorism, they examine only rebel groups that use terrorism at least at some point during their lifespan. We expand the scope of the analysis by quantitatively comparing not only groups that use different types of terrorism, but by comparing groups that use terrorism to those that do not employ it at all. Third, measures of forced recruitment used in prior studies of civilian victimization tend to be time invariant. However, data from the RHRV dataset on forced recruitment do vary *within* groups over time, allowing us to better account for temporal dynamics.

Fourth, we also hope to contribute to the growing quantitative literature on the use of terrorism in civil wars (Fortna, 2015; Fortna, et al. 2018; Findley and Young, 2012, 2015; Keels and Kinney, 2019; Hinkkainen Elliott et al., 2021; Stanton, 2013; Thomas, 2014;). Fifth, our paper has important policy implications for understanding how forced recruitment practices affect the behavior of rebel groups. A better grasp of the behavior of rebel groups who employ forced recruitment will enable the specialization of counterterrorism efforts.

The rest of this paper proceeds as follows: we begin by establishing the scope conditions of the paper. We then discuss how forced recruitment affects rebel groups' terrorist tactics and derive a set of hypotheses. This is followed by a discussion of the research design and a presentation of the results. We conclude by considering the implications of our findings.

### **Scope conditions**

Before delving into the theory, it is important to define the concepts we will be discussing. First, we follow the Global Terrorism Database's (GTD) definition of terrorism, which is "the threatened or actual use of illegal force and violence by a nonstate actor to attain a political, economic, religious, or social goal through fear, coercion, or intimidation" (GTD Codebook: 11).

Second, we are interested in terrorist attacks against both "soft" and "hard," targets. In line with Piazza (2020), we consider soft targets to be civilians (e.g., the general population, journalists, religious figures, etc.) and civilian buildings and infrastructure (non-government buildings, food and water supplies, transportation, etc.). This is as opposed to hard targets, which Piazza defines as heavily defended or militarized targets, such as police buildings or personnel;

military buildings or personnel; government buildings or personnel; or other violent non-state actors, such as other rebel or terrorist organizations. With these parameters established, we now move to discussing the relationship between forced recruitment and terrorist tactics.

### **Forced recruitment and hard target attacks**

Militant groups must conduct a cost-benefit analysis when deciding whether to attack any type of target (e.g., Best and Lahiri, 2021). Scholars expect that hard targets, such as military bases or heavily defended government buildings, are more difficult to attack because they are typically better guarded and more difficult to access (Berman and Laitin, 2008; Piazza, 2020). Attacks against hard targets are thus riskier because they increase the probability of death or capture for perpetrators and are more difficult to execute successfully.

These factors affect militant groups' cost-benefit analyses when deciding whether to attack specific (hard) targets. Berman and Laitin (2008) argue that militants employ suicide bombers against hard targets to overcome many of these issues. They argue that while suicide attacks result in a loss of personnel, they are beneficial to use against hard targets because the assailants will be less likely to be captured (and potentially inform on their groups) and because it allows for more direct access to targets, increasing the probability of success.

We expect that groups will make a similar calculation with abducted recruits. Specifically, militant groups are more willing to lose certain personnel than others. Abducted recruits are often less disciplined, loyal, committed, and well-trained than volunteers (Cohen, 2013; Eck, 2014; Gates, 2002). Rebel groups also typically invest significant resources in the ideological appeals and/or material incentives they employ as part of their persuasive recruitment

strategies and, consequently, might view the sacrifice of volunteers as a significant waste of resources (Eck, 2014). Thus, abducted recruits, who are often challenging to manage and are typically uncommitted, can be used by groups for riskier operations because it is less costly for a group to lose one abducted recruit than it is for them to lose one volunteer.

Groups often need large numbers of troops to carry out such attacks (Berman and Laitin, 2008; Piazza, 2020) and forced recruitment can aid groups in quickly filling their ranks (Eck, 2014). Indeed, abducted recruits are often treated like cannon fodder or used as human shields during attacks on security forces. Commanders in the Lord's Resistance Army (LRA) often use abducted child soldiers as human shields during engagements with military forces (United States Bureau of Citizenship and Immigration Services, 2001). In Sierra Leone, the Revolutionary United Front (RUF) abducted many recruits, some of whom they forced into front-line combat roles (Human Rights Watch, 2000). In Myanmar, both the government and rebels have been accused of abducting children to use as human shields (Radio Free Asia, 2020).

Eck (2014) argues more broadly that rebel groups often turn to forced recruitment following significant military setbacks. Eck explains that the Communist Party of Nepal – Maoist (CPN-M) began using forced recruitment when they shifted from guerilla tactics to semi-positional warfare, as the extensive investment that came with ideologically indoctrinating recruits was not viable for the group, as many recruits became cannon fodder for large-scale attacks on military positions. Similarly, as the LTTE in Sri Lanka struggled towards the end of its conflict, it instituted a “one family, one child” conscription policy, using child conscripts for major military battles (Human Rights Watch, 2007).

The ways in which abducted recruits are deployed against hard targets can vary across operations. As noted above, while these recruits sometimes use weapons, they serve as human

shields other times. However, in either case, the presence of abducted recruits enhances the ability of rebel organizations to carry out terrorist attacks against hard targets.

Several potential disadvantages of using abducted recruits for these types of missions are worth considering. Abducted recruits are typically less loyal and committed than volunteers. Again, one major risk of attacking hard targets is that perpetrators are more likely to be apprehended and could be compelled or coerced by security forces to provide intelligence on their organizations (Berman and Laitin, 2008). This makes suicide terrorism effective against such targets, as the combatants typically die before they can be captured. Thus, a potential risk of using abducted recruits is that they will be even more likely to inform on their organizations if they are caught because they are not loyal to these groups. However, as noted through several examples above, abducted recruits are often sent on high-risk missions or used as human shields, often facing a high probability of death.

Relatedly, there is also potentially a conflict between sacrificing abducted recruits for dangerous missions against hard targets, while also attempting to foster bonds among them through the use of violence against soft targets (we return to the latter point later). However, groups still actively attempt to indoctrinate and socialize abducted recruits (e.g., Gates, 2017), even when they subject these cadres to significant risks (e.g., Gates, 2002).

Indeed, rebel leaders will try to indoctrinate cadres into believing they have some sort of divine or spiritual protection. As noted above, the LRA often uses abductees as human shields in confrontations with security forces. However, such recruits are promised spiritual protections on the battlefield (Titeca 2010). This can also be done through control of an area's education system, as in the case of ISIS, where educators pushed the children towards jihad, so they would develop loyalty to the organization (Morris and Dunning 2020). Thus, rebel groups often do both

engage in operations to socialize and indoctrinate abducted recruits but also place these same cadres in great danger.

Abducted recruits are costly to monitor because they often try to desert, particularly during the heat of battle (Eck, 2014). Thus, using forced recruits in operations could be risky, as the action could provide these recruits with ample cover to escape. However, such recruits are often compelled to stay, as they or their families can face violent retribution for leaving (Gates, 2002). Furthermore, while the costs associated with monitoring abducted recruits are high in the long-run (Eck, 2014), such considerations matter less if many of these recruits are used sacrificially in the short-run.

Another consideration is that hard targets are often logistically complex to attack, requiring well-trained and equipped combatants (Berman and Laitin, 2008; Piazza, 2020). Abducted recruits, however, often lack such training (Eck, 2014). While this might make abducted recruits disadvantageous for certain operations, the multiple examples highlighted above indicate that the quantity of recruits is often valued over the quality of recruits for attacks against hard targets. Indeed, attacks against hard targets often require a large number of combatants (Berman and Laitin, 2008; Piazza, 2020), which forced recruitment can help provide (Eck, 2014). Overall, while some drawbacks exist to using abducted recruits in operations against hard targets, many of these obstacles can still be overcome.

Forced recruitment thus provides groups with ample resources to attack hard targets by quickly bringing in many recruits who are less costly to lose on the battlefield than volunteers. Abducted recruits can serve either as perpetrators or human shields. Either way, these groups will be better able to engage in risky operations that involve sacrificing many troops, such as attacks against hard targets. This leads to our first hypothesis that:



*H1: Rebel groups that employ forced recruitment will launch a greater number of terrorist attacks against hard targets.*

### **Forced recruitment and soft target attacks**

Abducted recruits tend to lack strong ties to the group and are often distrustful of other members. They are also typically not initially committed to the goals of their groups (Cohen, 2013). Thus, the more groups rely on coercion for recruitment, the less cohesive they tend to be (Cohen, 2017). As a result, rebel commanders have difficulty monitoring, restraining, and punishing the behavior of abducted recruits, particularly when there is a lack of strong internal mechanisms to socialize them (Eck, 2014; Gates, 2017; Hoover Green, 2016).

Hoover Green (2016) discusses how new recruits must be socialized to kill. This socialization and combat experience intensifies the average predisposition to use violence among rebel fighters. Hoover Green then argues that armed groups without established institutions for political education would display broader repertoires of violence. Thus, violence against civilians has been framed as both a consequence of a lack of rebel cohesion and as a tool that rebel leaders sometimes wield to solve the problem of low cohesion among members.

Cohen (2013) examines the relationship between forced recruitment and sexual violence and finds that groups that employ forced recruitment are more likely to perpetrate rape in civil wars. She argues that while cohesion is low in groups that rely on forced recruitment, multi-perpetrator rape serves as a tool for combat socialization as it fosters feelings of loyalty and esteem among members.

Cohen (2017) posits that sexual violence and other abuses can help socialize abducted combatants. She notes that sexual violence can signal masculinity, virility, brutality, and loyalty among combatants. While sexual violence more strongly communicates norms of masculinity and virility relative to other forms of violence (Cohen, 2017), terrorism can still signal brutality and loyalty (Davis and Jang, 2018). Thus, the use of terrorism can also aid in the socialization of abducted combatants.

New rebel recruits are sometimes expected to engage in acts of violence to prove their loyalty (e.g., Blake, 2017; Cohen, 2017). Performative violence can help establish roles for all participants and ensures that no one stands out from the group (Fujii, 2017), creating a sense of belonging (Cohen, 2017). A sense of belonging is often a significant theme in the process of radicalization toward extremism (Haggerty and Bucerius, 2020; Hwang, 2018). Therefore, exposing abducted recruits to performative or brutal violence could aid the group.

Davis and Jang (2018) extend these arguments to terrorist attacks against civilians, finding that groups employing forced recruitment cause more civilian casualties. They posit that attacks against civilians help socialize members in accordance with the norms of the group and will help foster bonds among members with no previous connections. Again, while they make an important contribution, Davis and Jang focus only on groups that use at least some terrorism, and only on attacks against civilians. We expect this relationship to hold, even when including groups that employ no terrorist tactics at all.

Overall, engaging in violence can help foster bonds among recruits through feelings of shared power and esteem, socialize recruits to norms of groups, help establish roles within organizations, and serve as a tool for recruits to signal their loyalty. Given that there are generally stronger norms against violence directed at civilians than violence used against military

targets (e.g., Hultman, 2012), we expect that the transgressive nature of attacks against civilian targets will be particularly effective signals of power, esteem, and loyalty. Indeed, such transgressive violence could signal a recruit's willingness to do anything for the group.

Again, this is particularly useful for groups that employ forced recruitment, as trust and cohesion tend to be low among cadres. Therefore, to increase cohesion and trust among the rank-and-file, terrorism can serve as an important socialization tool to foster bonds among members, similar to other forms of violence (Davis and Jang, 2018). Thus, our second hypothesis is that:

*H2: Rebel groups that employ forced recruitment will launch a greater number of terrorist attacks against soft targets.*

### **Forced recruitment and terrorist attack severity**

We also expect that rebels will conduct more severe attacks, regardless of target choice, when they employ forced recruitment. As noted above, particularly brutal forms of violence can be used to socialize abducted recruits (Horgan et al., 2017). More brutal forms of violence are also effective and fostering bonds among abducted recruits (Cohen, 2013, 2016). This incentivizes rebel groups that employ forced recruitment to launch more severe attacks (Davis and Jang, 2018), not just a greater quantity of them. Indeed, groups that have greater incentive to use shocking forms of violence will perpetrate not just a larger quantity of attacks, but attacks that cause more casualties as well (e.g., Piazza and Soules, 2021). This leads to our final hypothesis that:

*H3: Rebel groups that employ forced recruitment will launch higher casualty terrorist attacks.*

## **Research design**

### *Sample*

We are interested in examining how forced recruitment tactics affect the use of terrorism in the context of civil wars. While multiple important datasets exist that measure a variety of behaviors of terrorist groups (e.g., Hou et al., 2020; Jones and Libicki, 2008; Tokdemir and Akcinaroglu, 2016), they collect information on only groups that use terrorism, prohibiting analysis that examines why some militant groups use terrorism but not others. These datasets also include non-state groups operating inside and outside civil wars.

To analyze how forced recruitment affects terrorism in civil wars, we build off data from the Terrorism in Armed Conflict (TAC) dataset (Fortna et al. 2022). TAC links 409 rebel dyads, active between 1970 and 2013, that are present in the Uppsala Conflict Data Program's (UCDP) Dyadic Dataset (version 1-2014) (Harbom et al., 2008; Themnér and Wallensteen, 2014) to terrorist attack data in the Global Terrorism Database (GTD). The unit of analysis is thus the rebel-government-dyad-year. Due to data availability for the main independent variable (discussed below) our analysis is limited to the period of 1990 to 2013.

In linking the two datasets, TAC enables users to generate additional variables measuring the terrorist tactics of rebel organizations based on data in the GTD. TAC thus allows us to not only compare rebel organizations that use terrorism to those that do not, but to compare different types of terrorist strategies as well. Therefore, we can examine not only whether forced recruitment incentivizes rebels to use more terrorism but how recruitment tactics affect the deployment of different kinds of terrorism.

### *Dependent variables*

Again, we are interested in how forced recruitment shapes militant organizations' use and severity of terrorist attacks. Specifically, for the three hypotheses, we need measures of (1) total attacks against hard targets, (2) total attacks against soft targets, and (3) total casualties inflicted by groups' attacks.

Attacks enter the GTD if they meet at least two of the following three criteria: the attack aims to achieve a political, social, or economic goal; the attack is trying to intimidate or coerce a wider audience beyond the target; and the attack targets non-combatants. For the main analysis, we use more inclusive criteria and include all attacks that meet *at least* two of the three criteria in the GTD. We do this because the third criterion—attacks against non-combatants—disproportionally excludes attacks against hard targets.<sup>1</sup>

To start, we use data from Piazza (2020), who classifies attacks in the GTD as being directed at hard or soft targets. Specifically, using the target type (*targtype1*) variable in the GTD, Piazza classifies attacks as being aimed at hard targets when they are perpetrated against “police and police stations, members of the military or military installments, government figures and buildings, diplomats and embassies, and against other violent non-state actors including rebel movements and terrorist organizations.” In contrast, soft targets include “civilians, businesses, schools and other educational personnel and facilities, nongovernmental organizations, tourists, journalists, [and] religious figures [among other examples]” (Piazza,

---

<sup>1</sup> However, even when all three inclusion criteria for the GTD are used, there are still many hard target attacks. These include well-guarded civilian targets, such as government buildings, which are often classified as hard targets (Piazza 2020). Thus, as a robustness check, we rerun the main analysis, including only attacks that meet all three of the above criteria. The results remain consistent.

2020: 146). Using these data, we build two different dependent variables: a count of hard attacks per dyad-year (Hypothesis 1) and a count of soft attacks per dyad-year (Hypothesis 2).

The final dependent variable is a count of the total number of casualties inflicted by groups' terrorist attacks in a given dyad-year, for any type of target, hard or soft. This is the sum of the total number of people killed (*nkill*) and who experience non-fatal injuries (*nwound*), based on data in the GTD.<sup>2</sup>

Given that the three dependent variables are heavily right-skewed and have median mean values that are significantly different from each other, we employ negative binomial regression to test the all the hypotheses. In all models, the standard errors are clustered by the dyad.

### *Independent variable*

To capture forced recruitment, we rely on data from the Rebel Human Rights Violations (RHRV) dataset (Walsh et al., 2023a), which includes information on a variety of types of human rights abuses by rebel groups, including forced recruitment. In the codebook, the creators of this dataset define forced recruitment as “Any instance in which the rebel group forces an individual against their will to perform work for the organization. This may include forcible recruitment of soldiers, as well as civilian labor” (Walsh et al., 2023b: 6). This includes forcibly recruiting child soldiers, pressganging civilians, forcing civilians to perform non-combat labor, and forced prostitution (Walsh et al., 2023b: 6).

---

<sup>2</sup> While Fortna, Lotito, and Rubin (2022) distinguish between deliberately indiscriminate terrorism and other kinds of attacks in their introduction of TAC, we do not make such a distinction, as we are interested in the effects of forced recruitment on all soft and hard target attacks.

While this variable includes forced recruitment into a variety of roles, beyond combat positions, we employ this measure because it captures variation over time, within groups, for the use of this practice. Other data on forced recruitment is time invariant and has been collected at the conflict, rather than group, level (e.g., Cohen, 2013: footnote 24).

The RHRV dataset provides two measures of forced recruitment, one based on reports from the U.S. State Department, and the other based on reports from Amnesty International. Both are three-point ordinal indicators of whether the reports contain no, occasional, or frequent accusations of forced recruitment by a rebel group in a given year. Following the approach used by Cohen and Nordås (2015), who employ similarly structured data on sexual violence, we create an ordinal variable that captures the highest reported level of forced recruitment by a group, in a given year, across the two reports.

There is a potential for reverse causality. Indeed, because groups are more likely to turn to forced recruitment in response to military losses (Eck, 2014), and because terrorist operations are often risky for the perpetrators (Berman and Laitin, 2008), it stands to reason that frequent attacks could result in more personnel loss. This, in turn, could increase the probability of groups turning to forced recruitment. Put another way, groups that employ terrorism might be more likely to use forced recruitment because they are more likely to suffer military setbacks. Battlefield losses also drive groups to increase their use of terrorism (Polo and González, 2020). To account for this, we lag the measure of forced recruitment by one year.<sup>3</sup>

---

<sup>3</sup> Only dyad-years that meet the 25 battle-death threshold in the UCDP are included in the RHRV dataset. While it results in more missing observations, we lag the main independent variable by one year, instead of the previous time period, as information on these groups' use of forced recruitment during intervening years is missing.

While data do not exist on the exact percentage of rebel groups' membership that have been forcibly recruited, the ordinal variable from the RHRV dataset still captures more variation than existing binary measures of the practice. Thus, the RHRV dataset is ideal for this analysis because it provides a measure that both varies over time and captures more variation than existing sources.

### *Control variables*

We also include a variety of control variables. First, group strength affects both the use of terrorism (e.g., Crenshaw, 1981; Polo and Gleditsch, 2016) and forced recruitment (Sawyer and Andrews, 2020). Thus, we employ data on rebel groups' relative strength from the Non-State Actor (NSA) dataset (Cunningham et al., 2009). Specifically, we use a simplified, three-point ordinal indicator of whether the rebel group is much weaker, weaker, or at parity or stronger than the government it is fighting.<sup>4</sup>

Groups that profit the exploitation of natural resources are both more likely to forcibly recruit child soldiers (Haer et al., 2020) and to perpetrate terrorism (Fortna et al., 2018). Thus, with data from the Rebel Contraband Dataset (Walsh et al., 2018), we include a count of the number of lootable resources that a group profits from in a given year. Territorial control affects the ability of militants to coerce civilian support (Kalyvas, 2006) and launch terrorist attacks (De

---

<sup>4</sup> The original variable is a five-point ordinal indicator of rebel group strength, relative to the government it is fighting. However, this variable is significantly skewed, as approximately 46% of observations in this analysis are coded as being much weaker and another 45% as weaker, with only 9% of observations being distributed across the three highest levels of strength. However, to ensure that the transformation of this variable is not driving the results, we reconduct the main analysis, employing the untransformed measure of relative rebel strength. The results remain consistent (see the appendix).



la Calle and Sánchez-Cuenca, 2011). Thus, we include the NSA dataset's binary measure of whether the group controls territory.

Left-wing rebels are less likely to employ highly lethal attacks or violence against civilians, while radical Islamist groups are more likely to engage in these behaviors (e.g., Asal and Rethemeyer, 2008; Polo and Gleditsch, 2016). Ideology also plays an important role in socializing forced recruits (Gates, 2017). Thus, using data from a variety of sources including Polo and Gleditsch (2016), the Foundations of Rebel Group Emergence (FORGE) dataset (Braithwaite and Cunningham, 2020), and the Women in Armed Rebellion Dataset (WARD) (Wood and Thomas, 2017), we employ two different binary indicators: one measures whether the group has a left-wing ideology and the other captures whether an organization has a radical Islamist ideology.

We also control for the number of years a group has been present in TAC, as groups are more likely to turn to terrorism (Polo and González, 2020) and forced recruitment (Eck, 2014) later in conflicts when they are more desperate. Furthermore, we control for a binary indicator of whether there are two more rebel groups active in a country in a given year (based on groups in TAC), as competition can incentivize both terrorism (e.g., Kydd and Walter, 2006) and forced recruitment (Eck, 2014).

State capacity (Hendrix and Young, 2014) and regime type (e.g., Stanton, 2013) both affect the prevalence of terrorism, as well as potentially shape the protection that civilians have from forced recruitment. Thus, to account for the capacity of the state, we use a logged measure of the per capita GDP based on data from the World Bank (2022). We also employ the Polity Project's 21-point ordinal measure of regime type (Marshall and Gurr, 2020).

In some models, we also include a lagged measure of the dependent variable to account for potential temporal dependencies. However, given concerns that controlling for lagged dependent variables can suppress meaningful effects of other independent variables (Achen, 2000), we also include models without this specification. Finally, in some models for Hypothesis 3, we include the total number of attacks to ensure that a larger number of causalities is not conflated with a larger number of attacks overall.

## **Results**

The results for the three hypotheses are presented in **Tables 1 – 3**, respectively. To ensure that the results are not driven by missing observations, each table presents a variety of models that gradually add control variables. **Table 1** displays the results for tests of the first hypothesis. As expected, forced recruitment has a positive association with the number of attacks against hard targets in all six models. However, this association achieves statistical significance in only four of the models. In particular, controlling for the lagged dependent variable diminishes the statistical significance of forced recruitment. Thus, we find mixed evidence in support of Hypothesis 1.

**Table 1: Forced recruitment and terrorist attacks against hard targets**

	(1)	(2)	(3)	(4)	(5)	(6)
Forced Recruitment <sub>(t-1)</sub>	0.627*** (0.190)	0.501*** (0.187)	0.390* (0.206)	0.252** (0.0986)	0.166 (0.134)	0.171 (0.124)
Relative Rebel Strength		-0.00512 (0.247)	0.336 (0.218)		-0.0554 (0.178)	0.134 (0.163)
Lootable Resources		0.350*** (0.0882)	0.253** (0.120)		0.168*** (0.0602)	0.157** (0.0659)
Territorial Control		-0.0541 (0.353)	0.0145 (0.377)		0.0741 (0.253)	0.134 (0.272)
Left-Wing		1.382*** (0.466)	1.025** (0.450)		1.057*** (0.339)	0.612** (0.264)
Radical Islamist		2.206*** (0.420)	1.698*** (0.399)		1.551*** (0.342)	1.205*** (0.331)
Group Duration		0.0250 (0.0173)	0.00340 (0.0186)		0.0195* (0.0116)	0.00458 (0.0121)
Any Competition		-1.000*** (0.343)	-0.882** (0.367)		-0.363 (0.224)	-0.329 (0.235)
Polity2			0.104*** (0.0282)			0.0898*** (0.0210)
per capita GDP (Logged)			0.292** (0.139)			0.111 (0.0781)
Hard Target Attacks <sub>(t-1)</sub>				0.0544*** (0.0104)	0.0421*** (0.00864)	0.0423*** (0.00606)
Constant	1.566*** (0.304)	-0.0458 (0.568)	-2.239** (0.968)	0.673*** (0.237)	-0.305 (0.429)	-1.242** (0.601)
Observations	724	698	593	684	660	561

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

**Table 2: Forced recruitment and terrorist attacks against soft targets**

	(1)	(2)	(3)	(4)	(5)	(6)
Forced Recruitment <sub>(t-1)</sub>	0.604*** (0.143)	0.530*** (0.167)	0.433** (0.169)	0.289*** (0.0859)	0.254* (0.132)	0.225** (0.115)
Relative Rebel Strength		-0.183 (0.261)	0.0913 (0.241)		-0.172 (0.184)	0.0224 (0.183)
Lootable Resources		0.279*** (0.0905)	0.259** (0.119)		0.167** (0.0694)	0.169** (0.0672)
Territorial Control		-0.290 (0.316)	-0.0960 (0.331)		-0.0975 (0.253)	-0.0638 (0.297)
Left-Wing		1.283*** (0.384)	0.798** (0.349)		0.645** (0.311)	0.211 (0.251)
Radical Islamist		1.769*** (0.366)	1.265*** (0.377)		1.150*** (0.296)	0.858*** (0.296)
Group Duration		0.0231 (0.0169)	0.00732 (0.0173)		0.0281** (0.0128)	0.0225* (0.0131)
Any Competition		-0.553* (0.290)	-0.420 (0.302)		-0.218 (0.225)	-0.230 (0.238)
Polity2			0.0791*** (0.0244)			0.0757*** (0.0209)
per capita GDP (Logged)			0.241 (0.150)			0.0767 (0.0887)
Soft Target Attacks <sub>(t-1)</sub>				0.0424*** (0.00772)	0.0345*** (0.00717)	0.0311*** (0.00729)
Constant	1.610*** (0.291)	0.477 (0.527)	-1.331 (1.079)	0.970*** (0.221)	0.205 (0.407)	-0.468 (0.645)
Observations	724	698	593	684	660	561

Robust standard errors in parentheses

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

The results for the test of Hypothesis 2 are displayed in **Table 2**. Across all models, we find a positive and statistically significant association between forced recruitment and the number of terrorist attacks against soft targets that rebels employ. Thus, there is consistent evidence that forced recruitment is associated with more terrorist attacks against civilians. This lends credence to the argument that forced recruitment can drive a variety of types of civilian victimization.

Moving to the third hypothesis (**Table 3**), across all models, we find strong support for the notion that groups that employ forced recruitment inflict a higher number of casualties. This provides evidence for the argument that forced recruitment will be associated not just with more violence in general, but with particularly brutal forms of violence. Furthermore, while abducted recruits might be less effective soldiers in certain regards (Eck, 2014), their organizations appear to be more brutal overall, showing that these types of groups still pose a significant threat.

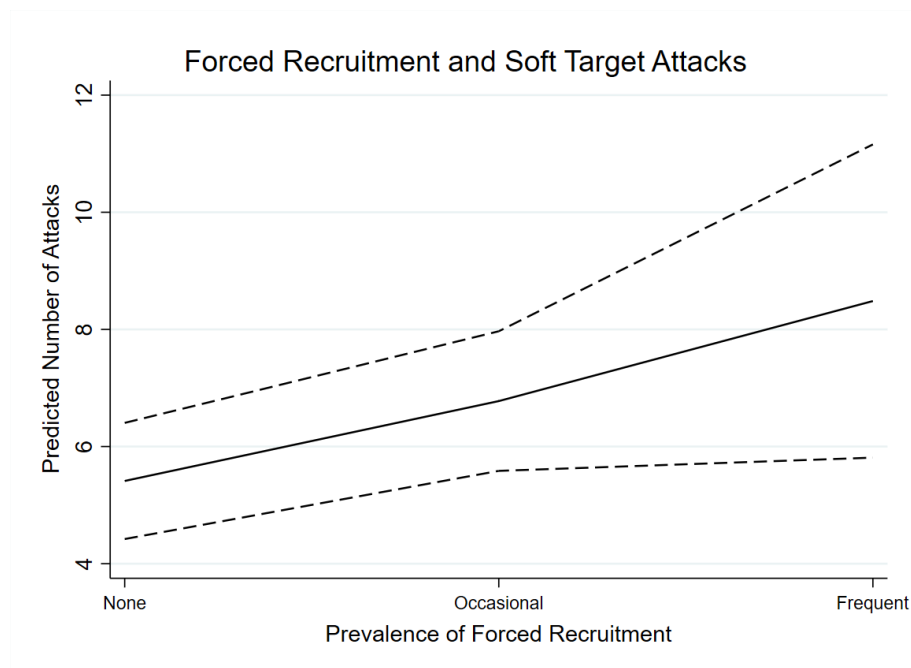
**Table 3: Forced recruitment and total casualties inflicted**

	(1)	(2)	(3)	(4)	(5)	(6)
Forced Recruitment <sub>(t-1)</sub>	0.450** (0.226)	0.525*** (0.200)	0.528** (0.216)	0.190* (0.0969)	0.286** (0.142)	0.275* (0.147)
Relative Rebel Strength		-0.169 (0.314)	0.287 (0.239)		-0.313 (0.197)	-0.0911 (0.260)
Lootable Resources		0.251** (0.101)	0.156 (0.112)		0.0674 (0.0747)	0.0731 (0.0789)
Territorial Control		0.170 (0.374)	0.0690 (0.382)		0.0482 (0.282)	0.0102 (0.323)
Left-Wing		0.608 (0.496)	0.306 (0.415)		0.527* (0.306)	0.259 (0.294)
Radical Islamist		2.283*** (0.484)	1.684*** (0.384)		1.217*** (0.269)	1.127*** (0.317)
Group Duration		0.0135 (0.0225)	0.00806 (0.0211)		0.00738 (0.0142)	0.00783 (0.0139)
Any Competition		-0.787** (0.350)	-0.671* (0.363)		-0.452** (0.202)	-0.527** (0.217)
Polity2			0.0854*** (0.0257)			0.0419* (0.0235)
per capita GDP (Logged)			0.196 (0.143)			-0.0484 (0.0827)
Total Attacks				0.0194*** (0.00655)	0.0157*** (0.00609)	0.0170*** (0.00625)
Total Casualties <sub>(t-1)</sub>				0.00127*** (0.000430)	0.00125*** (0.000443)	0.00107** (0.000537)
Constant	4.603*** (0.478)	3.369*** (0.671)	1.391 (1.095)	3.414*** (0.246)	3.219*** (0.400)	3.321*** (0.756)
Observations	724	698	593	684	660	561

Robust standard errors in parentheses

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

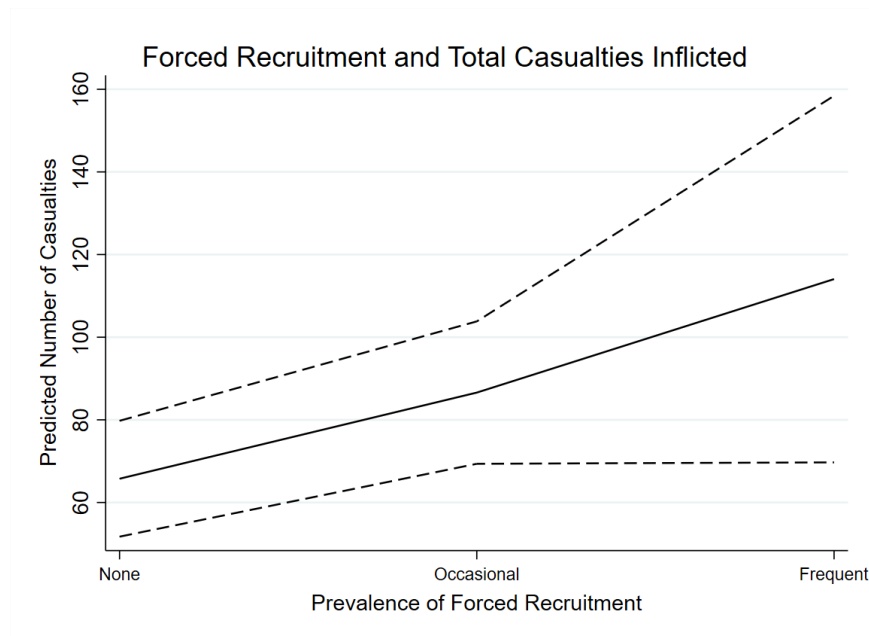
The results also have an important substantive impact. We show the marginal effects for the final two hypotheses below, as they have the most consistent support. Turning to **Figure 1**, the plot of the marginal effects reveals that groups are predicted to employ approximately 5.4 attacks by soft targets in a given year when they do not employ forced recruitment, but this number goes up to about 8.4 for groups that frequently employ forced recruitment. Put differently, groups that extensively employ terrorist attacks are expected, on average, to perpetrate about three more attacks against soft targets, per year, than groups that do not employ these recruitment methods.



**Figure 1: Marginal Effects of Forced Recruitment on Soft Target Attacks**

We see an even wider gulf in the number of casualties inflicted between groups that heavily employ forced recruitment and those that do not use it at all. As **Figure 2** highlights, groups that do not

employ forced recruitment are expected to inflict approximately 66 casualties per year, while those that extensively use forced recruitment are predicted to cause almost double the amount—about 114 casualties per year.



**Figure 2: Marginal Effects of Forced Recruitment on Total Casualties**

### Robustness Checks

We also conduct a series of robustness checks to assess the strength of the findings. The results are available in the appendix. First, recall that the TAC dataset provides various levels of inclusivity for attacks based on how directly it can match a perpetrator in the GTD to a group in the UCDP. Again, for a conservative approach, we use only attacks at the strictest level of inclusion (direct name matches and armed wings) in the main analysis, though there are five additional levels of inclusion.

To ensure that our original measurement choice is not biasing the results, we build three additional sets of variables based on the next three levels of inclusion in TAC. Each measure

becomes increasingly inclusive (i.e., includes more attacks). This includes counting attacks from (1) factions and umbrellas (Level B); (2) Allies and Affiliates (Level C); and unclear connections or changes (Level D). We choose not to include the two most inclusive levels—generic descriptions and unknown attacks—because the descriptions are so vague that they could be attributed to almost any group in the conflict.

We reconduct the main analysis, using all these alternative measures of the dependent variables. Across these alternative measures, forced recruitment has a statistically significant association with hard target attacks in only half of the models (9/18), a significant relationship with soft target attacks in all but one model (17/18), and a significant association with total casualties inflicted in two-thirds of the models (12/18).

As noted above, we use a more inclusive definition of terrorism for the main models in which attacks only have to meet two of the three inclusion criteria in the GTD. We do this primarily because the more restrictive measure of terrorism, in which all three of the aforementioned criteria need to be met, would disproportionately exclude attacks against hard targets. However, even when all three GTD criteria are met, there are still many attacks against hard targets, as heavily fortified civilian targets (e.g., government buildings), are still coded as hard targets (Piazza, 2020).

To ensure that our decision to use a more inclusive definition is not driving the results, we constructed measures of the total number of hard target attacks, soft target attacks, and casualties inflicted that include only attacks that met all three of the GTD's criteria. We rerun the main analysis using these alternative dependent variables. Across all models, we find a statistically significant association between forced recruitment and both the total count of soft



target attacks and the total number of casualties inflicted. However, we find support for the first hypothesis in only four of the six models employed with this alternative measure.

Finally, we consider an alternative measure of forced recruitment. Specifically, some scholars employ binary, rather than ordinal, measures of sexual violence, in an attempt to mitigate biases in coding that are driven by the vast variation in the quality of reporting on human rights abuses across conflicts (Davies and True, 2017; Hoover Green, 2018; Nagel and Doctor, 2020). Thus, we conduct alternative tests in which we transform the ordinal measure of forced recruitment in the main models to a binary indicator of whether forced recruitment was used at all. This variable is also lagged by one year. Using the transformed version of the variable, we find support for all three hypotheses in every model.

Thus, across the various robustness checks, we find very consistent support of an association between forced recruitment and soft target attacks, fairly consistent evidence of a relationship between forced recruitment and the total casualties inflicted, and somewhat mixed evidence of a relationship between forced recruitment and hard target attacks.

## **Discussion and Conclusion**

A robust body of scholarly work finds that groups are more likely to abuse civilians when they employ forced recruitment tactics. However, less quantitative work has evaluated the relationship between forced recruitment and variation in the severity and target choice of rebels' violent tactics.

To remedy this issue, we examine how groups pair forced recruitment with a variety of terrorist strategies. We posit that rebel groups sometimes use abducted recruits as cannon fodder for high-risk missions against heavily defended targets, as they view the loss of such combatants

as less costly than they do for volunteers. We also build off existing literature that finds that forced recruitment is associated with violence against civilians, as such violence can help foster bonds and build cohesion among abducted recruits who are unlikely to have prior connections with each other. Finally, we also argue that groups that employ forced recruitment will carry out more brutal attacks to further foster cohesion among the rank-and-file.

Using data on the terrorist attack strategies of rebel groups involved in civil wars, we find strong evidence of groups that use forced recruitment perpetrating a greater number of soft target attacks and attacks that are more severe overall. We find limited evidence that they also attack more hard targets. These findings broaden our understanding of how abducted recruits are used by rebel groups to carry out violence.

It is important to consider why forced recruitment appears to have a less clear effect on attacks against hard targets than other forms of terrorism. As noted above, operations against hard targets often require a high level of sophistication and well-trained combatants (Berman and Laitin, 2008; Piazza, 2020). Thus, while forced recruits might serve as cannon fodder against some strikes on military targets, other attacks against hard targets that require more sophistication might not be conducive to the use of the typically less trained and less loyal abducted recruits.

Another potential issue is that particularly shocking or brutal forms of violence are effective at fostering bonds among recruits (e.g., Cohen, 2013). However, because violence against military targets is typically viewed as a legitimate part of warfare, these attacks might not be as effective at fostering such bonds. Thus, hard target attacks are higher risk than soft target attacks, but potentially have less utility for groups that employ forced recruitment. On the whole,

groups that employ forced recruitment might benefit more from attacks on soft target attacks, rather than operations against hard targets.

One important limitation of the study is that, while the results provide robust evidence of an association between forced recruitment and a variety of types of terrorist tactics, the data do not allow for direct examination of how abducted recruits are used in missions. This would require data on whether specific combatants were volunteers or abductees. Thus, future quantitative research could be conducted on the specific roles that volunteer and forced recruits fulfill for rebel organizations.

Future work could also examine factors that condition the relationship between forced recruitment and target selection. For instance, existing work explains the ways in which (abducted) recruits can be socialized to conform to certain behaviors (e.g., Gates, 2017; Hoover Green, 2016). It is possible then that groups that are better able to socialize abducted recruits are less likely to attack soft targets because they can engage in non-violent means of socializing recruits. Conversely, it could be the case that when abducted recruits are socialized to align with the preferences of their groups, they become more willing to engage in risky attacks against hard targets because they become more committed to their organizations. Thus, it could be fruitful for scholars to examine a variety of ways in which rebel groups' recruitment strategies affect their tactical choices on the battlefield.

Overall, the results of this study show that characteristics of recruits are important in explaining the terrorist tactics of militant groups, not just the other types of resources available to them. Scholars should account for recruitment tactics in their analysis of how and why groups choose different types of violent tactics. Forced recruitment thus appears to have important consequences for the conduct of civil war.

## References

- Achen CH (2000) Why lagged dependent variables can suppress the explanatory power of other independent variables. In: *Annual Meeting of the Political Methodology Section of the American political science association*, July.
- Asal V and Rethemeyer RK (2008) The nature of the beast: Organizational structures and the lethality of terrorist attacks. *The Journal of Politics* 70(2): 437-449.
- Berman E and Laitin DD (2008) Religion, terrorism and public goods: Testing the club model. *Journal of public Economics* 92(10-11): 1942-1967.
- Best RH and Lahiri S (2021) Hard choices, soft targets: Terror proscription and strategic targeting decisions of FTO. *International Interactions* 47(6): 955-985.
- Blake S (2017) The Shining Path of Peru: An Analysis of Insurgency and Counterinsurgency Tactics. *Small Wars Journal*. Oct 27. Available at: <https://smallwarsjournal.com/jrnl/art/shining-path-peru-analysis-insurgency-and-counterinsurgency-tactics>
- Braithwaite JM and Cunningham KG (2020) When organizations rebel: introducing the foundations of rebel group emergence (FORGE) dataset. *International Studies Quarterly* 64(1): 183-193.
- Cohen DK (2013) Explaining rape during civil war: Cross-national evidence (1980–2009). *American Political Science Review* 107(3): 461-477.
- Cohen DK (2016) *Rape During Civil War*. Ithaca: Cornell University Press.
- Cohen DK (2017) The ties that bind: How armed groups use violence to socialize fighters. *Journal of Peace Research* 54(5): 701-714.
- Cohen DK and Nordås R (2015) Do states delegate shameful violence to militias? Patterns of sexual violence in recent armed conflicts. *Journal of Conflict Resolution* 59(5): 877-898.
- Crenshaw M (1981) The causes of terrorism. *Comparative politics* 13(4): 379-399.
- Cunningham DE, Gleditsch KS and Salehyan I (2009) It takes two: A dyadic analysis of civil war duration and outcome. *Journal of Conflict Resolution* 53(4): 570-597.
- Davies SE and True J (2017) The politics of counting and reporting conflict-related sexual and gender-based violence: The case of Myanmar. *International Feminist Journal of Politics* 19(1): 4-21.
- Davis AP and Jang B (2018) Civilian targeting as interaction ritual: Evidence from insurgent groups in cross-national perspective. *Comparative Sociology* 17(6): 683-703.
- De la Calle L and Sánchez-Cuenca I (2011) What we talk about when we talk about terrorism. *Politics & Society* 39(3): 451-472.

- Eck K (2014) Coercion in rebel recruitment. *Security Studies* 23(2): 364-398.
- Findley MG and Young JK (2012) Terrorism and civil war: A spatial and temporal approach to a conceptual problem. *Perspectives on Politics* 10(2): 285-305.
- Findley MG and Young JK (2015) Terrorism, spoiling, and the resolution of civil wars. *The Journal of Politics* 77(4): 1115-1128.
- Fortna VP (2015) Do terrorists win? Rebels' use of terrorism and civil war outcomes. *International Organization* 69(3): 519-556.
- Fortna VP, Lotito NJ and Rubin MA (2018) Don't bite the hand that feeds: rebel funding sources and the use of terrorism in civil wars. *International Studies Quarterly* 62(4): 782-794.
- Fortna VP, Lotito NJ and Rubin MA (2020) Terrorism in Armed Conflict (TAC) Codebook” Available at: [https://github.com/TACDataProject/TAC/blob/main/Download/TAC\\_Codebook\\_202010.pdf](https://github.com/TACDataProject/TAC/blob/main/Download/TAC_Codebook_202010.pdf)
- Fortna VP, Lotito NJ and Rubin MA (2022) Terrorism in armed conflict: new data attributing terrorism to rebel organizations. *Conflict Management and Peace Science* 39(2): 214-236.
- Fujii LA (2017) ‘Talk of the town’ Explaining pathways to participation in violent display. *Journal of Peace Research* 54(5): 661-673.
- Gates S (2002) Recruitment and allegiance: The microfoundations of rebellion. *Journal of Conflict resolution* 46(1): 111-130.
- Gates S (2017) Membership matters: Coerced recruits and rebel allegiance. *Journal of Peace Research* 54(5): 674-686.
- Global Terrorism Database (GTD) (2021) Codebook: Methodology, Inclusion Criteria, and Variables. Available at: <https://www.start.umd.edu/gtd/downloads/Codebook.pdf>
- Haer R, Faulkner CM and Whitaker BE (2020) Rebel funding and child soldiers: Exploring the relationship between natural resources and forcible recruitment. *European Journal of International Relations* 26(1): 236-262.
- Haggerty KD and Bucarius SM (2020) Radicalization as Martialization: Towards a Better Appreciation for the Progression to Violence. *Terrorism and Political Violence* 32(4): 768-788.
- Harbom L, Melander E and Wallensteen P (2008) Dyadic dimensions of armed conflict, 1946—2007. *Journal of peace research* 45(5): 697-710.
- Hendrix CS and Young JK (2014) State capacity and terrorism: A two-dimensional approach. *Security Studies* 23(2): 329-363.

- Hinkkainen Elliott K, Polo SMT and Reyes LE (2021) Making Peace or Preventing It? UN Peacekeeping, Terrorism, and Civil War Negotiations. *International Studies Quarterly* 65(1): 29-42.
- Horgan JG, Taylor M, Bloom M and Winter C (2017) From cubs to lions: a six stage model of child socialization into the Islamic State.” *Studies in Conflict & Terrorism* 40(7): 645-664.
- Hou D, Gaibullov K, and Sandler T (2020) Introducing extended data on terrorist groups (EDTG), 1970 to 2016. *Journal of Conflict Resolution* 64(1): 199-225.
- Hoover Green A (2016) The commander’s dilemma: Creating and controlling armed group violence. *Journal of Peace Research* 53(5): 619-632.
- Hoover Green A (2018) *The Commander's Dilemma: Violence and Restraint in Wartime*. Ithaca: Cornell University Press.
- Hultman L (2013) UN peace operations and protection of civilians: Cheap talk or norm implementation?. *Journal of Peace Research* 50(1): 59-73.
- Human Rights Watch (2000) Sierra Leone Rebels Forcefully Recruit Child Soldiers. Available at: <https://www.hrw.org/news/2000/05/31/sierra-leone-rebels-forcefully-recruit-child-soldiers>
- Human Rights Watch. 2007. LTTE Recruitment of Children. Available at: <https://www.hrw.org/reports/2007/srilanka0107/7.htm>
- Humphreys M and Weinstein JM (2006) Handling and manhandling civilians in civil war.” *American Political Science Review* 100(3): 429-447.
- Hwang JC (2018) Pathways into Terrorism: Understanding Entry into and Support for Terrorism in Asia.” *Terrorism and Political Violence* 30(6): 883-889.
- Jones SG and Libicki MC (2008) *How terrorist groups end: Lessons for countering al Qaeda* (Vol. 741). Santa Monica: Rand Corporation.
- Kalyvas SN (2006) *The logic of violence in civil war*. Cambridge: Cambridge University Press.
- Keels E and Kinney J (2019) Any press is good press? Rebel political wings, media freedom, and terrorism in civil wars. *International Interactions* 45(1): 144-169.
- Kydd AH and Walter BF (2006) The strategies of terrorism. *International Security* 31(1): 49-80.
- Marshall MG and Gurr TR (2020) Polity 5: political regime characteristics and transitions, 1800–2018. *Center for Systemic Peace*.
- Mehrl M (2021) The effect of child soldiers on rebel violence against civilians.” *Civil Wars* 23(3): 417-460.

- Morris J and Dunning T (2020) Rearing Cubs of the Caliphate: An Examination of Child Soldier Recruitment by Da'esh." *Terrorism and Political Violence* 32(7): 1573-1591.
- Nagel RU and Doctor AC (2020) Conflict-related sexual violence and rebel group fragmentation. *Journal of Conflict Resolution* 64(7-8): 1226-1253.
- Piazza JA (2020) Suicide attacks and hard targets: An empirical examination. *Defence and Peace Economics* 31(2): 142-159.
- Piazza JA and Soules MJ (2021) Terror after the Caliphate: The Effect of ISIS Loss of Control over Population Centers on Patterns of Global Terrorism. *Security Studies* 30(1): 107-135.
- Polo SMT and Gleditsch KS (2016) Twisting arms and sending messages: Terrorist tactics in civil war. *Journal of Peace Research* 53(6): 815-829.
- Polo SMT and González B (2020) The power to resist: Mobilization and the logic of terrorist attacks in civil war. *Comparative Political Studies* 53(13): 2029-2060.
- Polo SMT (2020) The quality of terrorist violence: Explaining the logic of terrorist target choice. *Journal of peace research* 57(2): 235-250.
- Radio Free Asia (2020) "Put Myanmar Army Back on UN Child Violations 'Shame' List, HRW Says." 19 Nov. Available at: <https://www.rfa.org/english/news/myanmar/shame-list-11192020210828.html>
- Sawyer K and Andrews TM (2020) Rebel recruitment and retention in civil conflict. *International Interactions* 46(6): 872-892.
- Stanton JA (2013) Terrorism in the context of civil war. *The Journal of Politics* 75(4): 1009-1022.
- Themnér L and Wallensteen P (2014) Armed conflicts, 1946–2013. *Journal of Peace research* 51(4): 541-554.
- Thomas JL (2014) Rewarding bad behavior: How governments respond to terrorism in civil war. *American Journal of Political Science* 58(4): 804-818.
- Titeca K (2010) The spiritual order of the LRA. In: Allen T and Vlassenroot K (eds) *The Lord's Resistance Army: Myth and Reality*. London: Zed Books, pp. 59-73.
- Tokdemir E and Akcinaroglu S (2016) Reputation of Terror Groups Dataset: Measuring popularity of terror groups. *Journal of Peace Research* 53(2): 268-277.
- United States Bureau of Citizenship and Immigration Services (2001) Uganda: Information on the Lord's Resistance Army (LRA) and the Human Rights Record of Government Security Forces." Available at: <https://www.refworld.org/docid/3decf9a34.html>

- Walsh, JI, Conrad JM and Whitaker BE (2023a) Rebel human rights abuses during civil wars: Introducing the rebel human rights violations dataset.” *Journal of Peace Research*. DOI: 00223433221147940.
- Walsh, JI, Conrad JM and Whitaker BE (2023b) Rebel Human Rights Violations Dataset Codebook.” Available at:  
<https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/KT3PZS>
- Walsh, JI, Conrad JM, Whitaker BE and Hudak KM (2018) Funding rebellion: The rebel contraband dataset. *Journal of Peace Research* 55(5): 699-707.
- Weinstein JM (2005) Resources and the information problem in rebel recruitment.” *Journal of Conflict Resolution* 49(4): 598-624.
- Weinstein JM (2007) *Inside rebellion: The politics of insurgent violence*. Cambridge: Cambridge University Press.
- Wood EJ (2009) Armed groups and sexual violence: When is wartime rape rare?. *Politics & Society* 37(1): 131-161.
- Wood RM and Thomas JL (2017) Women on the frontline: Rebel group ideology and women’s participation in violent rebellion. *Journal of Peace Research* 54(1): 31-46.
- World Bank. 2022. “Work Bank Development Indicators.”