Changing the Guard: Rebel Leadership Transitions in Syria

Joshua Fawcett Weiner[*]

University of British Columbia

24 August 2022

Abstract

Intuitively, leadership should matter in civil wars, but there is little evidence regarding how and why it matters. Yet, governments regularly target militant leaders (Jordan 2019, 4), and 90 percent of rebel groups possess a clear central command that exerts a moderate to a high amount of control over the group's constituent parts (Prorok 2016, 72–73). Existing scholarship indicates that variation in rebel institutions impacts patterns of rebel group violence, but little work has been done on the interplay between rebel leaders, the institutions of the groups they lead, and leaders' impact on conflict dynamics.

I propose a novel theoretical framework and examine whether leadership change can affect the violent conduct of rebel groups using updated original data on assassination attempts of rebel leaders during the Syrian civil war. The relationship between rebel leaders and insurgent group violence is tested on 15 of the largest rebel groups in Syria's civil war using a quantitative design that leverages variation in insurgent group violence, as well as leadership transitions within insurgent groups. Following Jones and Olken (2009) and Johnston (2012), I exploit the inherent randomness of the success or failure of assassination attempts to identify the causal effect of rebel leadership removal on insurgent group violence. I find that successful assassination attempts reduce rebel group violence, but only when senior leaders are targeted, not mid-level officials. Importantly, successful attempts degrade groups, but do not reduce overall levels of violence in the conflict. This points to defection as an understudied mechanism in conflict with multiple armed groups.

Please do not cite or circulate

---

  * Ph.D. Candidate, Department of Political Science, The University of British Columbia, Vancouver, British Columbia, Canada. Email: j.weiner@alumni.ubc.ca

1. Introduction

Does leadership matter in civil wars? History is replete with examples of leaders who have had a significant impact on interstate or intrastate conflicts, such as Charles Taylor of the National Patriotic Front of Liberia (NPFL) or Joseph Kony of the Lord's Resistance Army (LRA). Moreover, governments actors, in particular the United States and Israeli militaries and intelligence agencies, have expended considerable resources attempting to capture or kill specific rebel or terrorist leaders. After the September 11th attacks by Al-Qaeda in 2001, the US government prioritized targeting the leaders and members of armed nonstate groups, including Osama bin Laden, who was killed in 2011 (Gunneflo 2016, 82). Moreover, the Israel Supreme Court, sitting as the High Court of Justice, Israel's highest judicial authority, ruled that the targeted killing of individuals is permissible under certain conditions, effectively legalizing a practice the Israeli government began in the 1970s and 1980s (Gunneflo 2016, 15–16). While governments employ multiple strategies to degrade armed nonstate actors, given they are expending resources to target rebel and terrorist leaders, many policy makers and elected officials believe leaders impact these groups' ability to act.

Theoretically, reasons such as regime survival, government latitude on security matters, and a lack of institutionalization in rebel groups lead us to believe that both government and rebel leadership should play a role in civil wars. However, the systematic evidence in the political science literature on the affects of leadership on intrastate conflict is limited. Some more recent International Relations (IR) scholarship has examined the effects of leader background and psychology on interstate conflict and crisis bargaining (Brutger and Kertzer 2018; Yarhi-Milo 2018; Horowitz and Stam 2014; Lupton 2018), but the influence of leaders remains understudied

at the subnational level, with a few exceptions (Doctor 2021; Prorok 2016; Cunningham and Sawyer 2019; Huang, Silverman, and Acosta 2022).

The research on leaders and interstate war provides a helpful foundation to build upon, but, because government leaders face different incentives and constraints domestically, and rebel leaders operate in a categorically different institutional context, we cannot assume findings about leaders at the international level hold for civil wars. This paper will begin to fill this gap by laying out a theoretical framework for the role of rebel leaders in explaining the conflict dynamics of insurgent groups. The theory is tested by examining rebel leaders' transitions, specifically, whether successful assassination attempts alter the violent conduct of rebel groups.

There is little debate that leadership matters in civil war. Capable leaders should run more effective, cohesive organizations that are more likely to keep to their commitments and less likely to fragment. Yet, it remains unclear to what extent and under what conditions insurgent leaders matter to conflict. The challenge, thus far, has been identifying and parsing out the independent effects of individuals from the structural constraints placed on rebel groups (Doctor 2021, 2). There is excellent research on how resource endowments (Weinstein 2005; G. Blair, Christensen, and Rudkin 2021) and social networks (Staniland 2014) shape rebel group behaviour, but there is room to expand upon existing research and account for how and why independent action by insurgent leaders shapes rebel group behaviour.

This paper will briefly review the existing literature on the effects of leaders and leadership targeting during civil war. Then I will lay out my theory that insurgent leaders are crucial to an armed group's ability to organize and launch attacks due to two mechanisms: 1) organizational ability, which is critical to the group's ability to function collectively; and 2) serving as a nexus for information sharing to ensure effective command-and-control during conflict. I will also

explain how this novel theory fits into and complements existing work on civil wars. Finally, I test my argument by exploiting the inherent randomness of the success or failure of assassination attempts to identify the causal effect of successful rebel leadership targeting on the frequency and intensity of insurgent group violence in Syria. I find that while targeting all people in positions of authority within rebel groups, including local commanders and senior officials, does not affect groups' behaviour, targeting rebel leaders decreases the violent conduct of insurgent groups over time.

2. State and Rebel Leaders

2.1 Existing Theory

This paper will draw on two related literatures to help address the extent to which leaders matter. The first body of literature looks at leaders in the civil war context and tends to emphasize variation in leader incentives and the effects of different institutional constraints on leaders' choices. The second is the literature on leadership targeting, which focuses less on leaders' characteristics and on how the unexpected death of a leader can change the behaviour of armed groups and states.

2.1.1 Intrastate Conflict

Research on interstate conflict in IR has increasingly found that leaders matter when assessing the foreign policy of states (Sechser 2018; Lupton 2017; Weisiger and Yarhi-Milo 2015; Yarhi-Milo, Kertzer, and Renshon 2018; Horowitz et al. 2018). Conversely, the extent to which leaders shape civil wars is largely unknown. However, what is clear is that subnational conflict has become increasingly common, especially since 2003 (Walter 2017, 470), even as interstate war has decreased significantly since 1945 (Fazal 2007). Not only are civil wars more common, but since the 1990s they make up the vast majority of battle-related deaths compared to conflicts between

states (Pettersson et al. 2021; Gleditsch et al. 2002). In 2016, there were 92 deaths in conflicts between states, and 87,340 deaths in civil conflicts with and without foreign intervention (Pettersson et al. 2021; Gleditsch et al. 2002). Civil wars are becoming longer and deadlier as they often include multiple warring factions in societies with deep societal divisions, making long-lasting negotiated settlements less likely (Walter 2017, 470).

Existing political science work on intrastate war has, in general, emphasized structural and institutional factors to explain rebel group behaviour. Much of this civil war literature has produced important findings on varying patterns of rebel group violence (Weinstein 2006), reasons for rebel group fragmentation (Cunningham 2013), as well as explanations for variation in how rebel groups govern communities under their control (Arjona 2016). Moreover, Walter has explored the importance of reputation for resolve in civil wars, but her units of analysis were ethnic groups and states rather than leaders (Walter 2009). There is a significant body of excellent work on civil wars, but, while policy makers, individuals and combatants acknowledge the anecdotal importance of leaders, there has been little empirical research on the systematic effects of leader variation in the intrastate war context. I propose to add to this civil war literature, by bringing leaders more explicitly into theories of civil war. Often, theories of rebel groups begin at the group rather than at the individual level, but there are important reasons to expect both that leadership matters in rebel organizations and that individuals' backgrounds will influence how they lead. This does not mean that leadership matters in exactly the same ways in intrastate war as it does in interstate war. Government leaders face different incentives and constraints to action domestically than in the international sphere, and rebel leaders cannot be expected to operate like state leaders. I elaborate more on these factors in the theory section of this paper.

As far as I am aware, there has been limited comprehensive leader-centric analysis of subnational conflict intensity and rebel group organizational dynamics. Though, there is evidence that both state and rebel leaders' face varying incentives to bargain for peace (Prorok 2016). Rebel or government leaders will be less likely to negotiate substantively if they believe they performed poorly and will be held responsible for the conflict (Prorok 2016, 70). This assignment of responsibility and corresponding expectation of punishment "creates perverse incentives for leaders who bear responsibility for the war to become unfaithful agents and 'gamble for resurrection'" (Prorok 2016, 74). So, the incentives of rebel leaders to negotiate and potentially peacefully end a conflict are partially dependent on rebel group performance.

Additionally, Cunningham and Sawyer have found that the ways rebel leaders come to power influences incentives states have to invite leaders to the bargaining table (Cunningham and Sawyer 2019, 620). States are more likely to negotiate with insurgent leaders who gain power via elections or selection by rebel officers, than with leaders who found their own group or split from an existing one (Cunningham and Sawyer 2019, 622). Elections may signal greater rebel group cohesion, which might alleviate the commitment problems that make civil wars difficult to resolve peacefully.

Austin Doctor as well as Reyko Huang, Daniel Silverman and Benjamin Acosta, have more explicitly examined the effects of rebel leaders' military and political backgrounds. More specifically, Doctor finds that leaders with prior military training or experience in national or state militaries are more likely to create separate military wings, while leaders with combat experience are less likely to create distinct units and the latter are better able to prevent group fragmentation (Doctor 2021, 18; 2020, 599). Huang, Silverman, and Acosta have created an expansive dataset on rebel leaders (Acosta, Huang, and Silverman, n.d.), and, using these data, they have found that

leaders with prior international experiences are more likely to receive funding from external sources during a conflict (Huang, Silverman, and Acosta 2022, 8). What Doctor and existing work do not capture are the effects of leaders, conditional on selection effects, insurgent institutions, and the strategic environment. This is where I believe my theory of rebel leaders and empirical design can contribute to the existing scholarship on civil wars.

2.1.2 Leadership Targeting

This paper also draws from and contributes to the existing literature on leadership targeting. While government targeted killing programs have continued, there is an active scholarly debate about whether or how much these programs destabilize rebel groups. Jordan finds that leadership decapitation is not particularly effective at eliminating terrorist groups (Jordan 2009; 2014; 2019). Organizations that are larger, older, are more bureaucratized, have higher levels of popular support, or are driven by a religious or a separatist ideology are unlikely to decline when they lose their leaders (Jordan 2009, 722; 2019, 7). Jordan's findings are important and useful, but it is worth noting that leadership targeting might be viewed as effective by the targeting party even if it does not result in the targeted organization's collapse. Dormancy or decreased violent activity might be a significant achievement for the party carrying out the assassination attempt. Moreover, parties do not select candidates for leadership targeting at random. The issue of potential selection effects, where groups that are targeted might be more dangerous or bureaucratized than the groups which were not targeted, is not sufficiently addressed.

In contrast, Jones and Olken find that successful assassination attempts of autocratic state leaders produce sustained moves towards democracy, even while intensifying limited conflicts (Jones and Olken 2009, 56–57). Johnston applies Jones and Olken's methodology to insurgent groups and discovers that successful decapitation attempts increase the chances of war termination

and the probability of government victory while reducing militant attack frequency and intensity (Johnston 2012, 50). Leadership targeting can also lead to other outcomes, such as the breakdown of alliances between militant groups (C. W. Blair, Horowitz, and Potter 2022). It is also important to consider that while a successful assassination might reduce the violent activity of a particular rebel group, it might not decrease any given conflict's overall level of violence. Especially in conflicts with multiple militant groups, combatants may be able to defect and join another group if theirs is degraded after one or more successful assassination attempts against its senior leadership. Due to defection, a successful assassination attempt may be beneficial to another party in the conflict, but it might not reduce overall levels of violence and civilian victimization.

This paper leverages leadership transitions, much like Johnston, in order to determine their affect on the violent conduct of rebel groups. However, this paper looks at one conflict, holding the strategic environment constant in a way these previous studies do not. While this results in fewer assassination attempts to analyze quantitatively, I believe the reduction in potential confounding or time effects is worth the trade-off in the number of observations. Moreover, the monthly data I have gathered adds significantly more granularity to my analysis than previous studies, which rely on annual data. More generally, with this project I am attempting to make contributions to the literatures on civil war and leadership in IR. This first image study will hopefully illuminate some of the ways in which rebel leaders both do and do not matter during civil wars. Lastly, my research makes a data contribution by providing data on leadership targeting events.

2.2 Theory of Rebel Leaders

2.2.1 Differences Between Interstate and Intrastate Military Leaders

There are some fundamental differences between the leaders of most states and the leaders of rebel

groups. States are typically led by political leaders who, during their tenure, are not directly involved in the day-to-day conduct of military campaigns. Insurgent leaders are often in the position of making political decisions for the group they lead, such as whether to negotiate with the government, as well as directing military operations. In this way, rebel leaders share some of the responsibilities of both state leaders and military generals, though rebel groups sometimes divide military and political responsibilities, much like governments. This study focuses primarily on the violent conduct of rebel groups, including: the frequency of their attacks; the combat deaths they cause and sustain; and their use of indiscriminate violence. The types of decisions rebel leaders make to impact these battlefield outcomes are made more in their capacity as generals or military leaders than in their capacity as political leaders. This is not to say that these actions are not political, but this project examines the effects of rebel leaders on battlefield outcomes rather than on political settlements. However, rebel leaders are not selected like military generals.

While specific generals may have had significant impacts on particular battles or military campaigns, the interstate war literature often treats generals as essentially interchangeable. We do not expect them to systematically vary in quality or ability. This is because generals typically rise through the ranks of their respective state militaries. While some generals might be political appointees, most have spent significant portions of their adult lives in the military. Professional military experience, selective promotion, and military institutions help mould generals into who they are. Socialization and selection help remove systematic variation in the quality of individual officers within the same professional military. In fact, militaries, arguably, depend on officers of the same rank being interchangeable. It is required to ensure operational flexibility, maintain institutional standards, and complete military objectives despite casualties. The same cannot be said of rebel leaders.

Rebel leaders do not necessarily have to rise through the ranks of a particular rebel group. Some come to power that way, but about 40 percent of rebel leaders founded the organizations they lead (Cunningham and Sawyer 2019, 625). This, combined with the wide variation of institutionalization in rebel organizations, means that we should expect there to be significant variation in the ability or quality of rebel leaders. We can sustain this expectation because rebel groups cannot be expected to consistently select and socialize their officers the way professional militaries do. This study aims to examine whether leadership turnover can explain part of the variation in the conflict dynamics of rebel groups.

2.2.2 Institutional Selection and Impact

Rebel groups have varying levels of institutionalization (Staniland 2014; Arjona 2016; Doctor 2021; Huang 2016; Shesterinina 2021; Mampilly 2015). Scholars have done excellent research on sources of this institutional variation, including factors like the pre-war social networks present in a community (Staniland 2014; Shesterinina 2021) and rebel group time horizons (Arjona 2016), but leadership variation may also play a role in rebel group conduct.

We can expect leader selection to be partially conditional on the organization's institutions. Furthermore, insurgent groups' institutions mould rebel leaders, but, given the enormous range of institutionalization in insurgent groups, there should be a correspondingly vast range in the ability of rebel leaders. Not all rebel groups will be able to select and train their ideal rebel leader as consistently as state militaries are able to select and train their officers, which provides an opportunity to examine whether leadership turnover impacts the conduct of armed groups. Even at the same level of institutionalization, two rebel groups may select and socialize their leaders differently. A Marxist rebel group and an Islamic Fundamentalist rebel group may employ different selection mechanisms or prioritize different characteristics from one another, and these
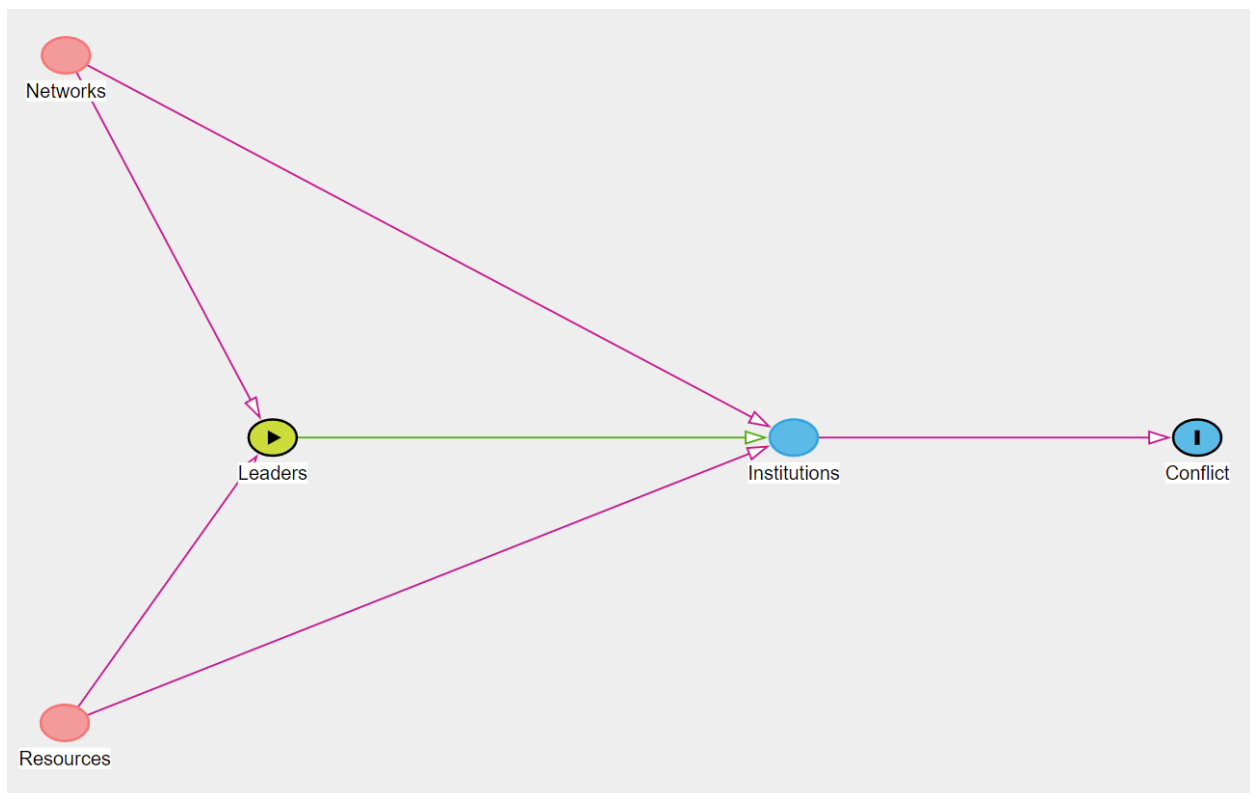
differences in who is selected to lead the rebel group might differentially impact the group's ability to engage in violent conflict. If, at the same level of insurgent group institutionalization, variation in rebel leaders impacts conflict dynamics then institutions have been soaking up some of the effects that should be attributed to leadership. This study aims to explore and explain the effects of leadership turnover in rebel groups on the group's conflict dynamics during civil war. Hopefully, this will further nuance to our understanding of civil wars by differentiating between the institutions and leadership of rebel groups.

Institutions generally serve to constrain the effect of variation in leaders in three ways. First, institutions moderate the real effects of leaders, which typically affects the dependent variable of interest. Leaders, even autocratic ones are typically not able to act unilaterally (Weeks 2008). Second, institutions, via selection effects, should select for broadly similar leaders. This constrains variation in the independent variable in first image studies of leaders. Third, except for leaders of personalist regimes and rebel groups, leaders cannot usually meaningfully affect or select for the institutions that constrain them. This means that once institutions are accounted for, although they often are not included in studies of leaders, it can become difficult to detect or explain any systematic variation at the level of individual leaders. However, crucially, these three elements do not hold in the case of rebel leaders or personalist regimes, with the latter potentially being more closely related on this point than personalist regimes are to other interstate leaders. This places rebel leaders on one end of the continuum of leadership variation, the end where we might expect leaders to be able to exert the most influence. Consequently, we can expect to see greater variation in the selection of rebel group leaders and in rebel leaders' ability to influence the institutions and violent conduct of the groups they lead.

2.2.3 Theoretical Model

Figure 1 depicts the theorized relationship between insurgent group leaders and the institutions and conflict dynamics of the militant groups during civil wars. In normal circumstances, the arrow from leaders to the institutions of the rebel group would be bidirectional, meaning that leaders affect institutions and the group's institutions affect rebel leaders. In this case, I am specifically studying transitions caused by assassination, because that is one time that the causal arrow is unidirectional from leaders to institutions. One leader is removed, and another can be installed, so that we can detect the effects, if any, of new leaders on the institutions or conflict dynamics of the rebel group. The conflict node in Figure 1 is capturing the violent behaviour of rebel groups in this study, including the frequency of attacks by a rebel group as well as the deaths caused and sustained by the group.

Figure 1: Directed Acyclic Graph of Rebel Leaders

Pre-war social networks and resource endowments both affect rebel leaders as well as the institutions of rebel groups. Resource endowments can either exacerbate or restrain the behaviour of militants by altering the incentives and trade-offs leaders and fighters face (Weinstein 2006). For example, groups that rely heavily on lootable resources, such as alluvial diamonds and gold, face challenges attracting more dedicated recruits (Weinstein 2005, 603). These less dedicated recruits are more likely to use indiscriminate violence against civilians (Cohen 2016). While leaders may be able to influence or account for this to some degree, they cannot escape the benefits and constraints imposed by the resources available to them and their armed group. However, resource endowments change extremely slowly, so, for all intents and purposes, they are effectively fixed prior to the conflict. One exception is foreign funding for rebel groups, which I control for to isolate the relationship between leaders and violent group behaviour.

The strength of rebel institutions, which are related to the social networks from which the rebel groups emerge, are another crucial intervening variable (Staniland 2014, 9). Pre-war social networks are one element that has been shown to affect rebel group institutions (Staniland 2014) and should also impact the group's leader, since they are typically drawn from those same networks. Much like many resource endowments, pre-war social networks change quite slowly and are fixed prior to the conflict for the purposes of this analysis. Since I am examining the effects of leaders on their own groups, the role of pre-war networks and resources are held relatively constant once I control for potential shifts in foreign funding. This leads us to two hypotheses:

H1: the unplanned death of rebel leaders will decrease the number of attacks their insurgent group undertakes.

H2: the unplanned death of rebel group leaders will decrease conflict intensity of the group.

2.3 Theorized Mechanisms

2.3.1 Organizational Ability and Effective Command-and-Control

Rebel leaders serve as the head of organizations that are often quite large with hundreds or, potentially, thousands of fighters under their command. Being in this position and ensuring that the organization they lead continues to carry out violent attacks, many of which are against armed opposition, requires organizational skill and effective systems of command and control. Leaders may serve as a central node for information sharing and decision-making, which enables the coordination of large and small-scale operations across expansive and regularly hostile, geographic space. For these reasons, the unplanned removal of a rebel leader can be expected to cause noticeable disruptions in the group's ability to organize and launch large combat operations, especially in the short to medium term. Different elements of the organization may not have communicated with one another before, except through the leader, and they may not be able to sustain the trust necessary to launch attacks. The leader's death could leave remaining commanders without important information on suppliers or connections to sources of foreign funding (Huang, Silverman, and Acosta 2022, 3). The death of charismatic, personalist leaders may also precipitate increased rates of defection or desertion as soldiers and commanders might have been particularly attached to the leader's cult of personality. Once a charismatic leader is killed, combatants who chose that militant group because of their connection to the leader might become increasingly likely to defect or desert. This is especially true in cases where there are other competing rebel groups, as there are in Syria. All these factors could serve to decrease the efficacy of a rebel group that loses its leader unexpectedly.

While it is difficult to assess the organizational ability of rebel leaders or gather detailed information on the command-and-control systems of numerous rebel groups over time, there is

existing evidence that offer some support for this mechanism. Many militant groups are incapacitated in the wake of successful leadership decapitation events (C. W. Blair, Horowitz, and Potter 2022, 31). Johnston cites several cases where a group's operations were curtailed after the death of their leader, because they relied heavily on that individual's organizational skills and charisma (Johnston 2012, 51). Leaders' instrumental role in planning and executing attacks may also explain Ryckman's finding that leadership targeting often leads to group inactivity if not the dissolution of the armed group (Ryckman 2020, 174).

Many rebel leaders will be adept and experienced in the use of violence. In fact, they are often selected for it. During her exhaustive interviews with combatants and former combatants in the Syrian civil war, Mironova finds that military experience and being a veteran of memorable battles was seen as the most important criterion for rebel leaders (Mironova 2019, 257). This combat experience, which could very well exceed that of any of the subsequent leaders, enhances individuals' organizational skills, partially by improving their ability to credibly threaten violence and engage in collective action (Jha and Wilkinson 2012, 884). Organizational skill, which can be learned during conflict, can reduce the cost of organizing groups to act collectively (Jha and Wilkinson 2012, 888). This mechanism will be explored more qualitatively in future work, but the leader's organizational skill and effective command-and-control abilities may be the crucial mechanism that degrades the ability of rebel groups to function and sustain violent conflict when their leaders are killed. Consequently, we could expect more institutionalized and bureaucratized rebel groups, which are more akin to state militaries, to be less affected by the assassination of their leaders. Following this logic, assassination would be more effective against less institutionalised groups or militant groups more reliant on charismatic leaders.

2.3.2 Potential Covariates of Interest

As theorized in Figure 1, militant leaders primarily affect civil war conflict intensity through the institutions and practices of the rebel groups they lead. Nevertheless, several other factors moderate and influence the relationship between leader experience and the insurgent group's organizational outcomes.

Pre-war social networks and resource endowments both affect rebel leaders as well as the institutions of rebel groups. Resource endowments can either exacerbate or restrain the behaviour of militants by altering the incentives and trade-offs leaders and fighters face (Weinstein 2006). For example, groups that rely heavily on lootable resources, such as alluvial diamonds and gold, face challenges attracting more dedicated recruits (Weinstein 2005, 603). These less dedicated recruits are more likely to use indiscriminate violence against civilians (Cohen 2016). While leaders may be able to influence or account for this to some degree, they cannot escape the benefits and constraints imposed by the resources available to them and their armed group. However, resource endowments change extremely slowly, so, for all intents and purposes, they are effectively fixed prior to the conflict. One exception is foreign funding for rebel groups, which I control for to isolate the relationship between leaders and violent group behaviour.

The strength of rebel institutions, which are related to the social networks from which the rebel groups emerge, are another crucial intervening variable (Staniland 2014, 9). Pre-war social networks are one element that has been shown to affect rebel group institutions (Staniland 2014) and should also impact the group's leader, since they are typically drawn from those same networks. Much like many resource endowments, pre-war social networks change quite slowly and are fixed prior to the conflict for the purposes of this analysis. Since I am examining the

15

effects of leaders on their own groups, the role of pre-war networks and resources are held relatively constant once I control for potential shifts in foreign funding.

3. Testing the Argument

Do successful assassination attempts affect the violent behaviour of rebel groups? This project is attempting to draw causal inferences between rebel leadership turnover and the intensity of armed conflict, specifically the frequency of violent events the rebel group engages in and the deaths the group causes and sustains during fighting. The unit of analysis is rebel group by month—year.

The theory will initially be tested in the context of the Syrian civil war, which began in 2011. The Syrian civil war has been extremely violent. There were 7,775 battles and incidences of remote violence and 1,697 incidences of violence against civilians occurring in a recent one-year period (May 2020 – May 2021) (Raleigh et al. 2010). Fatalities per event range from fewer than ten to more than 100 people according to the Armed Conflict Location and Event Data Project (ACLED) (Raleigh et al. 2010). Syria seems like an ideal setting to test my theory because of the large number of rebel groups, meaning that there should be significant variation in the number of violent attacks each group undertakes and the casualties each group causes over time. Due to the number of groups and the intensity of the war, there should also be a large enough sample of groups that both do and do not experience unplanned leadership turnover. Studying one conflict allows me to examine variation in the effects of leadership turnover on rebel group conflict dynamics while the national context is held constant.

3.1 Data

The information for the dependent variables employed in this study, count of violent events per month and deaths per month by rebel group, was constructed from the Uppsala Conflict Data

Program and the Peace Research Institute of Oslo (UCDP/PRIO) Georeferenced Event Dataset (GED) (Pettersson et al. 2021; Sundberg and Melander 2013). The group names in the events data were matched with a sample of the 44 rebel groups often regarded as major players in the Syrian civil war (Gade, Hafez, and Gabbay 2019, 326). Based on the available GED data, I was able to build a militant group by month—year panel dataset for 15 rebel groups running from 2011 to 2018. I am not aware of any prior studies of rebel leadership targeting that use data this granular, but it is precisely at this higher level of detail where it is most empirically tractable to attribute decreased activity to the effects of leadership targeting. Figure 2 depicts the natural log of violent event counts by militant group by year, while Figure 3 shows the natural log of deaths by group and year, with deaths being both caused and sustained by the group, inclusive of civilians and unknown persons. As the figures show, violent events and deaths occur fairly consistently throughout the conflict.

Figure 2: Violent Event Counts by Year and Group

Figure 3: Conflict Intensity by Year and Group
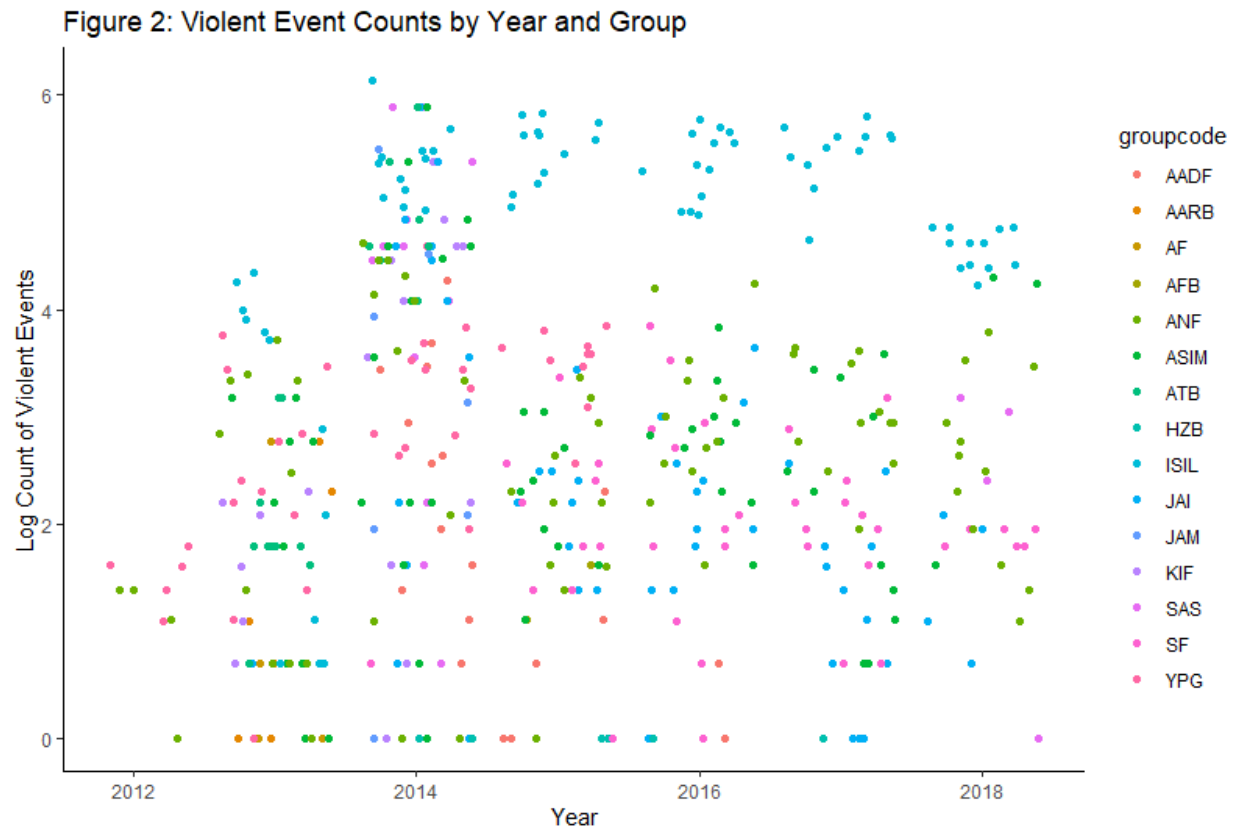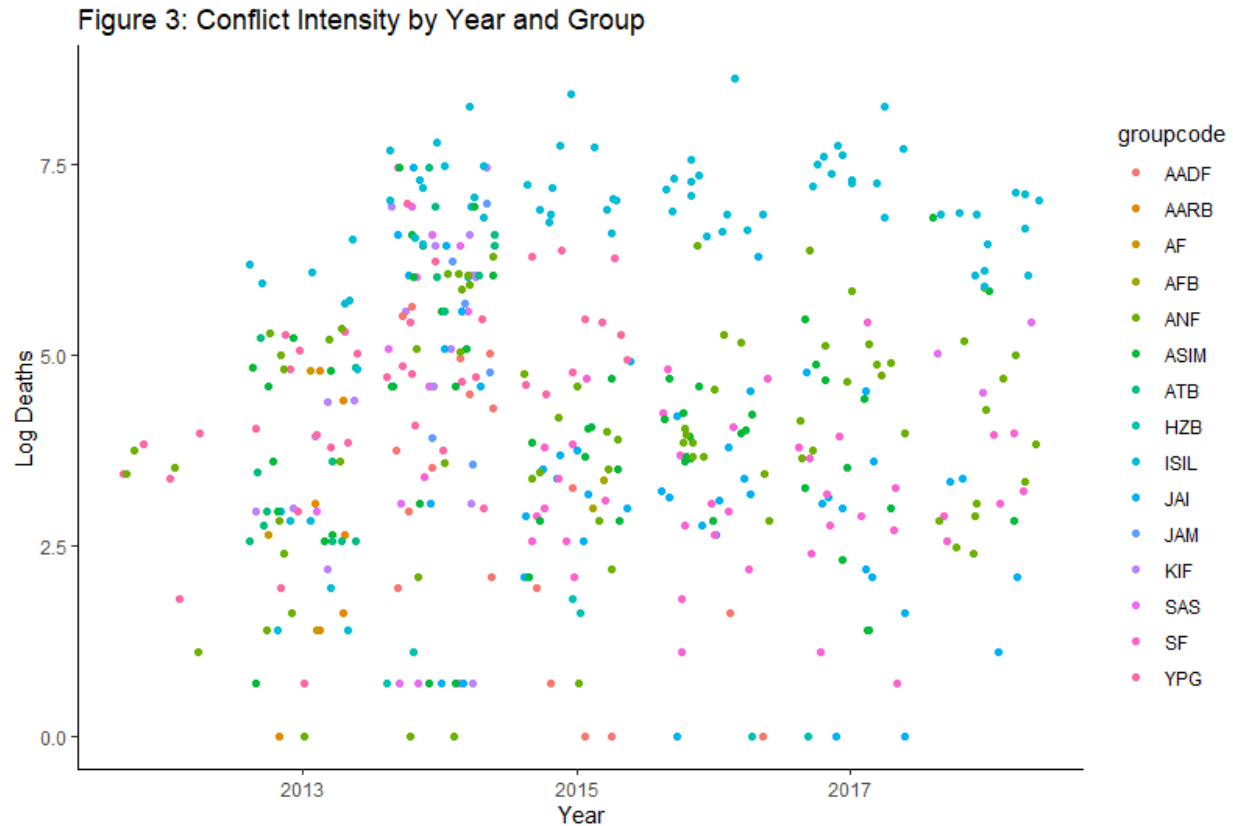
The primary independent variable is a successful assassination attempt, with the sample of attempts comprising both successful and unsuccessful attacks. The names of rebel group leaders, senior officials and commanders were collected from the Mapping Militants Project as well as policy reports ("Mapping Militant Organizations" 2021). In conjunction with information on the group names, I collected data on leadership targeting via a large set of keyword searches (detailed in the Appendix) through the Lexis-Nexis Academic Universe database.[2] Following the strategy employed by Jones and Olken (2009) and Johnston (2012), serious assassination attempts only include cases where the assassins undertook the attempt, as opposed to foiled plots, and in cases where the weapon (gun, explosive device, airstrike, etc.) was discharged, excluding cases where the attempt was thwarted before the weapon could be used (Jones and Olken 2009, 59; Johnston

---

2. The Lexis-Nexis site is accessible at https://www.lexisnexis.ca/en-ca/home.page.

2012, 54). All of the attempts captured in my data are serious assassination attempts and the attempts were cross-validated across multiple news sources as often as possible. For each assassination attempt, I recorded the date of the attack, the leader's name and title, the group they are affiliated with, the weapons used, the result of the attempt for the leader, and, where possible, whether there were other casualties and whether the attack was carried out by a single individual or more than one person. The assassination data includes a total of 28 attempts, with 18 of those resulting in the death of the targeted person. To investigate the effect of leadership targeting beyond rebel leaders, the assassination data includes a variety of senior militants such as military commanders; provincial leaders; religious leaders; heads of specific divisions, such as finance or intelligence; as well as the primary leaders of insurgent groups. Figure 4 displays the successful and unsuccessful assassination attempts over time throughout the Syrian civil war.

Figure 4: Assassination Attempts by Year
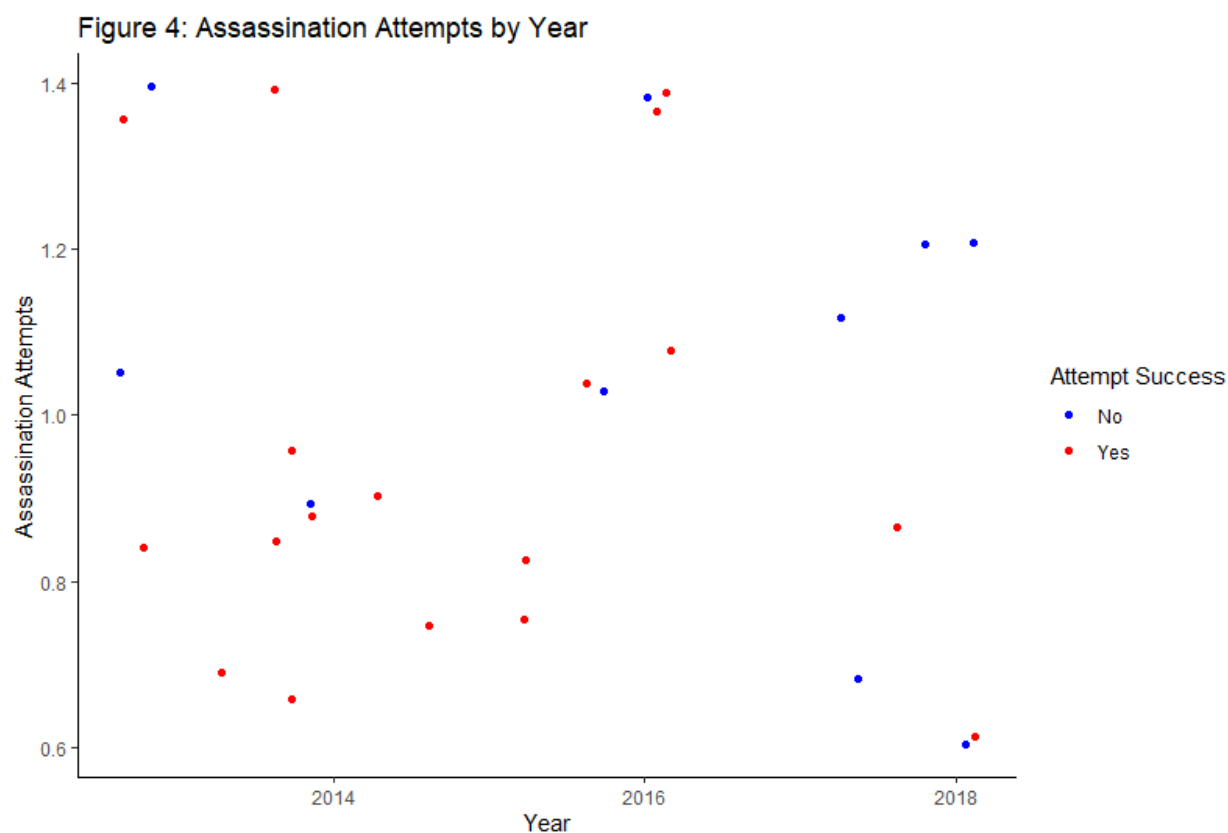
3.2 Empirical Strategy

This paper seeks to identify the causal effect of the assassination of rebel leaders and senior officers on the groups they lead. This is challenging since insurgent officials and leaders are not targeted at random. To identify the causal effect of assassination, I leverage the randomness inherent in whether a serious assassination attempt is successful. In this way, the assassination attempts that fail to eliminate their intended target serve as controls for the successful assassination attempts (Johnston 2012, 58). Conditional on a weapon being discharged, whether it is a gun being fired or an explosive being detonated, the success of the attempt in killing the targeted person is uncorrelated with the error term (Jones and Olken 2009, 66). Since the weapon used in the attack may be correlated with the attack's success the cross-sectional model specifications in this paper will include a control for weapon type. Although, inclusion of these weapon controls does not affect the results. There may still be differences between groups selected for assassination attempts and those that are not, but this paper primarily focuses on variation within those groups selected for an assassination attempt by another rebel group or third party.

As a first step, this paper will estimate a linear model to determine whether the attempted assassination of senior rebel officials, commanders, and leaders changes their group's violent conduct. Since we can expect that an assassination attempt would affect an insurgent group in the future, I look at whether the attempt affects the number of violent events and total deaths associated with the group one month after the attempt as well as in a three-month moving average ($t_{+1\text{-}3}$). Next, I look at a subsample of the assassination attempts that involve only senior insurgent leaders. Leaders play a crucial role in the rebel groups that they lead, and they should be harder to replace than other senior officials. This means the assassination of a leader should have a larger impact on rebel group operations than, for example, the death of a provincial commander or senior official

in change of the group's finances. Out of the 28 total attempts, senior leaders were the target of nine attacks spread across eight different rebel groups, with five of those attempts resulting in the leader's death. This subset includes assassination attempts against the military and political leaders of a rebel group. In the case of Hezbollah, their military leader in Syria, Mustafa Badreddine, also known as Mustafa Badr Al Din, was included, but the observation drops out of the model due to missing data. For this sample, I use a time series panel model, with the success or failure of the assassination attempt effectively performing as-if random assignment to treatment. The treatment being the death of the leader for the unit of analysis, the rebel group by month—year. Using these models, we can determine if the assassination of rebel leaders produces an immediate effect on insurgent violent conduct and/or whether the assassination also results in a sustained effect on group behaviour.

Through these two separate tests, we can address H1 and H2 and determine the effect of killing rebel leaders and senior officials on militant group violent behaviour. If there is no effect then we can reject the hypothesis that leaders are integral to the conduct of rebel groups, they may be as replaceable as senior officials in other contexts. If the effect of the assassination of rebel leaders is negative and significant, then we will have strong evidence that they matter for the violent conduct of armed groups. If rebel leaders affect militant group operations, it bolsters the case for more explicitly theorizing the role of leaders in armed groups.

3.3 Results

The results of the linear models for the full sample of assassination attempts as well as the time series models can be found in Figure 5 and Figure 6 respectively, while Appendix Tables A5 and A6 show the full results. The models estimated in Figure 5 include controls for whether the targeted individual was the leader of their respective group as well as for the type of weapon used. In the

full sample of assassination attempts for the Syrian civil war (Figure 5) it appears that successfully killing senior rebel leaders and commanders has no impact on the violent behaviour of the militant group they are associated with. The frequency of violent events and total deaths are not statistically significant, and neither are the three-month moving averages. Therefore, I fail to reject H1 that the assassination of senior rebel officials negatively impacts the violent behaviour of rebel groups.

These results may be due to the small sample size involved in looking at this cross-sectionally, since the one-month results are based on only 26 observations and the three-month average results are based on 24 observations. Conversely, it is possible that neither rebel leaders nor senior officials affect the violent behaviour of rebel groups, or that only the removal of rebel leaders, and not any of their subordinates, impacts the frequency and intensity of militant group behaviour.

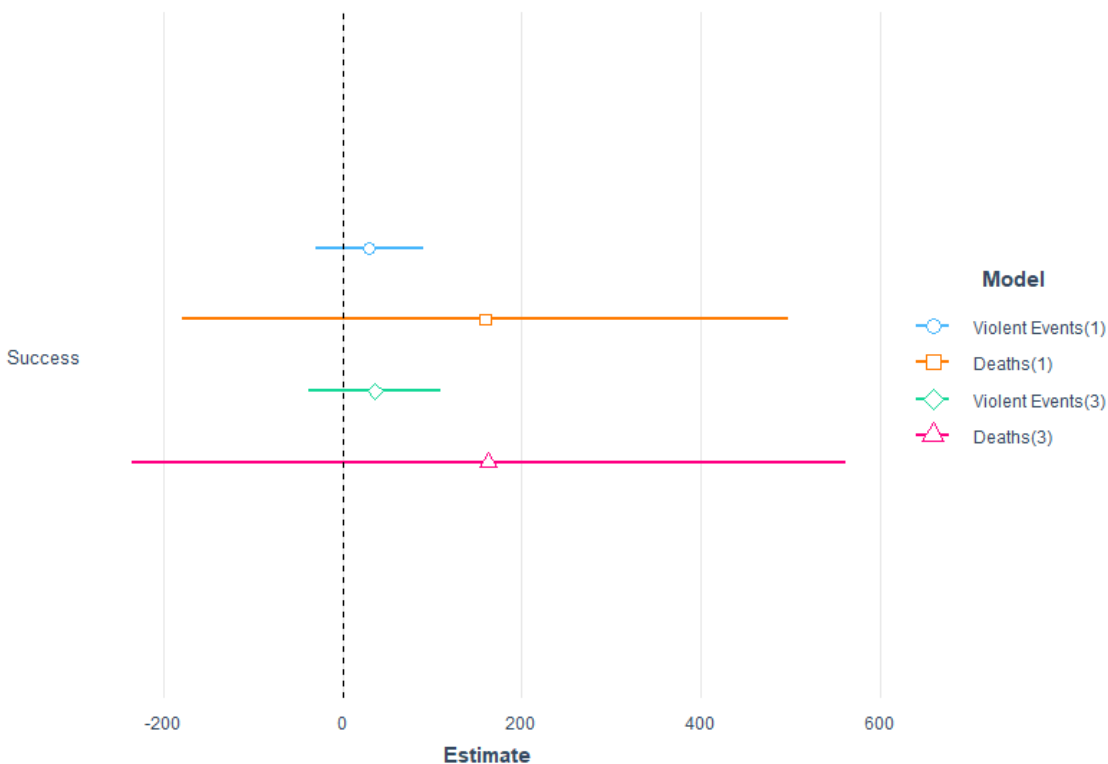**Figure 5**: Coefficient Plot for All Assassination Attempts

Figure 6 presents the results of the time series panel models on the effects of violently removing only senior rebel leaders on the violent conduct of the rebel groups they led. The models in Figure 6 include a control for whether the group receives support from a foreign government. As mentioned, there are only eight groups in the sample, and two, the Islamic State and the Al-Nusrah Front,[3] do not receive foreign support. The models also include a measure of time (year—month), as well as rebel group fixed effects. Standard errors are clustered by rebel group. As Figure 6 demonstrates, when focusing specifically on leaders we can see that while their assassination does not produce an immediate decline in the activity of the rebel group they once led, it does have a sustained negative effect on group activity. The time since attempt variable captures the sustained downward trend that groups experience after a successful assassination attempt. Groups that are subject to successful assassination attempts are involved in fewer violent events; and the total deaths, including both the deaths they cause and those they sustain, decline. While civilian deaths are included in total deaths, when they are broken out separately, they are not correlated with successful assassination attempts. Foreign government support was dropped from the model due to collinearity. This is fairly strong support for H2 that the unplanned death of their leaders decreases the violent behaviour of rebel groups. Assassination does not immediately reduce militant group activity, but it does shift the trend downward in the long term. So, the level of violence that groups undertake remains relatively stable as a result of their leader being assassinated, but there is a meaningful difference between the rate of violent behaviour pre and post intervention. Combined with random assignment to treatment, it appears as though successful assassination attempts degraded Syrian rebel groups over the course of the conflict.

---

3. The Al-Nusrah Front also goes by the names Jabhat Fateh al-Sham and Hay'at Tahrir al-Sham over the period covered by these data (2011-18).

Figure 6: Coefficient Plot for Leader Assassination Attempts
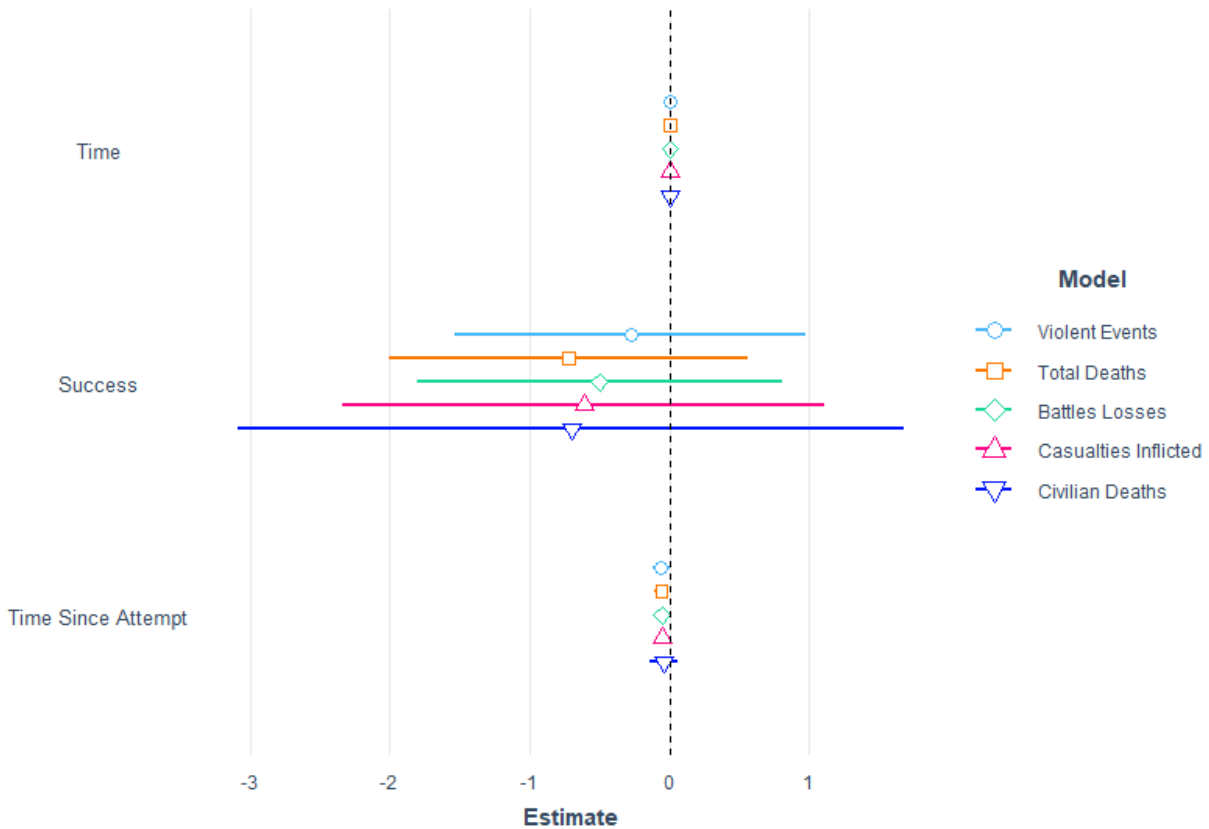
In some important ways, these findings align with past research and our expectations. In line with Jordan's research, leader assassination did not unequivocally result in the elimination of any armed groups. Although, after the death of its leader, Abdel Qader Saleh, Liwa al-Tawhid declined to the point where there are conflicting reports about whether it is still operating independently ("Mapping Militant Organizations" 2021). More generally, I find that leadership targeting reduces the frequency and intensity of armed group violence over time, in line with Johnston (2012) and Ryckman (2020). This paper also provides evidence that there are noticeable differences between successfully targeting rebel leaders and assassinating other senior rebel officials, a unique finding in the leadership targeting literature. This evidence could inform government policy, as well as

adjust our expectations about what can be expected from leadership targeting programs, since they are unlikely to definitively end a conflict.

4. Conclusions

The role of rebel leaders is largely undertheorized in studies of conflict and civil war, but there are reasons to expect that leaders matter to the conduct of the rebel groups that they lead. Rebel leaders, like personalist autocrats, are able to influence the institutions of the organizations they run, unlike most leaders. This, combined with insurgent groups being less institutionalized than most state governments provides fewer checks on leader behaviour and allows for the selection of a wider array of rebel leaders.

This paper tests one way in which rebel leaders might matter by examining how their assassination affects the violent conduct of the militant groups they ran. I created a granular insurgent group by month—year panel dataset based on the GED for the Syrian civil war from 2011 to 2018 and combined that with original data on 28 assassination attempts against the leaders and the senior officials of rebel groups involved in the conflict. Then, I examined the causal effect of successful assassination attempts by leveraging the randomness related to the result of an assassination attempt, conditional on a weapon being discharged. This inherent randomness associated with the result of an assassination attempt effectively randomizes rebel leaders into treatment and control groups, conditional on a sincere attempt being made against their life. Subsequently, I tested whether these treatment and control groups, which contain all senior rebel officials and leaders, differ on measures of insurgent group violent conduct. I find that the assassination of senior rebel officials and commanders do not affect rebel group violence in cross-sectional models. However, when we focus only on rebel leaders over time, it becomes clear that

their assassination produces a sustained negative effect on the violent activity of the groups they previously led.

Several questions and avenues for interesting research remain. Qualitative event histories of each assassination attempt could provide more information on how the subsequent leader of each rebel organization is selected. In examining the next leader of each insurgent group that experiences a successful assassination, I hope to learn more about what drives rebel leader selection. How are the next leaders different from the previous ones, if at all? In the nascent literature on rebel leader variation, selection processes and effects are largely bracketed, but, since we have good evidence that selection is not randomly assigned, we need to think seriously about how it affects our outcomes of interest.

This theory of rebel leaders and my empirical work continues to bring individuals back into the study of international relations and conflict processes. Demonstrating that rebel leaders matter for the violent conduct of insurgent groups contributes to existing scholarship on rebel leaders, leadership targeting, and civil war conflict dynamics. Hopefully, further research on the behaviour of armed insurgent groups will be beneficial to governments, international organizations and non-governmental organizations' attempts to mitigate violence and resolve ongoing conflicts. This work is preliminary, but it furthers our understanding of when and why insurgent leaders matter in civil war, and consequently improves our understanding of dynamic conflict processes.

5. References

Acosta, Benjamin, Reyko Huang, and Daniel Silverman. n.d. "Introducing ROLE: A Database of Rebel Leader Attributes in Armed Conflict." *Journal of Peace Research*, 1–26.

Arjona, Ana. 2016. *Rebelocracy: Social Order in the Colombian Civil War*. Cambridge: Cambridge University Press.

Blair, Christopher W., Michael C. Horowitz, and Philip B. K. Potter. 2022. "Leadership Targeting and Militant Alliance Breakdown." *The Journal of Politics* 84 (2): 000–000. https://doi.org/10.1086/715604.

Blair, Graeme, Darin Christensen, and Aaron Rudkin. 2021. "Do Commodity Price Shocks Cause Armed Conflict? A Meta-Analysis of Natural Experiments." *American Political Science Review* 115 (2): 709–16. https://doi.org/10.1017/S0003055420000957.

Brutger, Ryan, and Joshua D. Kertzer. 2018. "A Dispositional Theory of Reputation Costs." *International Organization* 72 (3): 693–724. https://doi.org/10.1017/S0020818318000188.

Cohen, Dara Kay. 2016. *Rape during Civil War*. Ithaca: Cornell University Press.

Cunningham, Kathleen Gallagher. 2013. "Actor Fragmentation and Civil War Bargaining: How Internal Divisions Generate Civil Conflict." *American Journal of Political Science* 57 (3): 659–72. https://doi.org/10.1111/ajps.12003.

Cunningham, Kathleen Gallagher, and Katherine Sawyer. 2019. "Conflict Negotiations and Rebel Leader Selection." *Journal of Peace Research* 56 (5): 619–34. https://doi.org/10.1177/0022343319829689.

Doctor, Austin C. 2020. "A Motion of No Confidence: Leadership and Rebel Fragmentation." *Journal of Global Security Studies* 5 (4): 598–616. https://doi.org/10.1093/jogss/ogz060.

Doctor, Austin C. 2021. "Rebel Leadership and the Specialisation of Rebel Operations." *Civil Wars* 00 (00): 1–32. https://doi.org/10.1080/13698249.2021.1906073.

Fazal, Tanisha M. 2007. *State Death: The Politics and Geography of Conquest, Annexation, and Occupation*. Princeton: Princeton University Press. https://doi.org/10.1007/978-1-4020-6682-5.

Gade, Emily Kalah, Mohammed M. Hafez, and Michael Gabbay. 2019. "Fratricide in Rebel Movements: A Network Analysis of Syrian Militant Infighting." *Journal of Peace Research* 56 (3): 321–35. https://doi.org/10.1177/0022343318806940.

Gleditsch, Nils Petter, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand. 2002. "Armed Conflict 1946-2001: A New Dataset." *Journal of Peace Research* 39 (5).

Gunneflo, Marcus. 2016. *Targeted Killing: A Legal and Political History*. Cambridge: Cambridge University Press.

Horowitz, Michael C, Philip Potter, Todd S Sechser, and Allan Stam. 2018. "Sizing Up the Adversary: Leader Attributes and Coercion in International Conflict." *Journ* 62 (10): 2180–2204. https://doi.org/10.1177/0022002718788605.

Horowitz, Michael C., and Allan C. Stam. 2014. "How Prior Military Experience Influences the Future Militarized Behavior of Leaders." *International Organization* 68 (3): 527–59. https://doi.org/10.1017/S0020818314000046.

Huang, Reyko. 2016. *The Wartime Origins of Democratization*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9781316711323.

Huang, Reyko, Daniel Silverman, and Benjamin Acosta. 2022. "Friends in the Profession: Rebel Leaders, International Social Networks, and External Support for Rebellion." *International Studies Quarterly* 66 (1). https://doi.org/10.1093/isq/sqab085.

Jha, Saumitra, and Steven Wilkinson. 2012. "Does Combat Experience Foster Organizational Skill? Evidence from Ethnic Cleansing during the Partition of South Asia." *American Political Science Review* 106 (4): 883–907. https://doi.org/10.1017/S000305541200041X.

Johnston, Patrick B. 2012. "Does Decapitation Work? Assessing the Effectiveness of Leadership Targeting in Counterinsurgency Campaigns." *International Security* 36 (4): 47–79. http://patrickjohnston.info.

Jones, Benjamin F., and Benjamin A. Olken. 2009. "Hit or Miss? The Effect of Assassinations on Institutions and War." *American Economic Journal: Macroeconomics* 1 (2): 29–54. https://doi.org/10.1257/mac.1.2.55.

Jordan, Jenna. 2009. "When Heads Roll: Assessing the Effectiveness of Leadership Decapitation." *Security Studies* 18 (4): 719–55. https://doi.org/10.1080/09636410903369068.

———. 2014. "Attacking the Leader, Missing the Mark: Why Terrorist Groups Survive Decapitation Strikes." *International Security* 38 (4): 7–38. https://doi.org/10.1162/ISEC_a_00157.

———. 2019. *Leadership Decapitation: Strategic Targeting of Terrorist Organizations*. Stanford: Stanford University Press. http://www.sup.org/books/title/?id=30621.

Lupton, Danielle L. 2017. "Out of the Service, Into the House: Military Experience and Congressional War Oversight." *Political Research Quarterly* 70 (2): 327–39. https://doi.org/10.1177/1065912917691359.

———. 2018. "Reexamining Reputation for Resolve: Leaders, States, and the Onset of International Crises." *Journal of Global Security Studies* 3 (2): 198–216. https://doi.org/10.1093/jogss/ogy004.

Mampilly, Zachariah Cherian. 2015. *Rebel Rulers: Insurgent Governance and Civilian Life during War*. Ithaca: Cornell University Press.

"Mapping Militant Organizations." 2021. Stanford University. 2021.

Mironova, Vera. 2019. *From Freedom Fighters to Jihadists: Human Resources of Non-State Armed Groups*. New York, NY: Oxford University Press. https://doi.org/10.1093/oso/9780190939755.001.0001.

Pettersson, Therese, Shawn Davies, Amber Deniz, Garoun Engström, Nanar Hawach, Stina Högbladh, Margareta Sollenberg, and Magnus Öberg. 2021. "Organized Violence 1989-2019, with a Special Emphasis on Syria." *Journal of Peace Research* 58 (4): 809–25. https://doi.org/DOI: 10.1177/00223433211026126.

Prorok, Alyssa K. 2016. "Leader Incentives and Civil War Outcomes." *American Journal of Political Science* 60 (1): 70–84. https://doi.org/10.1111/ajps.

Raleigh, Clionadh, Andrew Linke, Håvard Hegre, and Joakim Karlsen. 2010. "Introducing ACLED-Armed Conflict Location and Event Data." *Journal of Peace Research* 47 (5): 651–60.

Ryckman, Kirssa Cline. 2020. "Lasting Peace or Temporary Calm? Rebel Group Decapitation and Civil War Outcomes." *Conflict Management and Peace Science* 37 (2): 172–92. https://doi.org/10.1177/0738894217724135.

Sechser, Todd S. 2018. "Reputations and Signaling in Coercive Bargaining." *Journal of Conflict Resolution* 62 (2): 318–45. https://doi.org/10.1177/0022002716652687.

Shesterinina, Anastasia. 2021. *Mobilizing in Uncertainty: Collective Identities and War in Abkhazia* . Ithaca, NY: Cornell University Press.

Staniland, Paul. 2014. *Networks of Rebellion: Explaining Insurgent Cohesion and Collapse*. Ithaca, NY: Cornell Studies in Security Affairs, Cornell University Press.

Sundberg, Ralph, and Erik Melander. 2013. "Introducing the UCDP Georeferenced Event Dataset." *Journal of Peace Research* 50 (4): 523–32.

Walter, Barbara F. 2009. *Reputation and Civil War: Why Separatist Conflicts Are So Violent*. New York, NY: Cambridge University Press.

Walter, Barbara F. 2017. "The New New Civil Wars." *Annual Review of Political Science* 20: 469–86. https://doi.org/10.1146/annurev-polisci-060415-093921.

Weeks, Jessica L. 2008. "Autocratic Audience Costs: Regime Type and Signaling Resolve." *International Organization* 62 (1): 35–64. https://doi.org/10.1017/S0020818308080028.

Weinstein, Jeremy M. 2005. "Resources and the Information Problem in Rebel Recruitment." *Journal of Conflict Resolution* 49 (4): 598–624. https://doi.org/10.1177/0022002705277802.

———. 2006. *Inside Rebellion: The Politics of Insurgent Violence*. Cambridge: Cambridge University Press.

Weisiger, Alex, and Keren Yarhi-Milo. 2015. "Revisiting Reputation: How Past Actions Matter in International Politics." *International Organization* 69 (2): 473–95. https://doi.org/10.1017/S0020818314000393.

Yarhi-Milo, Keren. 2018. *Who Fights for Reputation: The Psychology of Leaders in International Conflict*. Princeton, NJ: Princeton University Press.

Yarhi-Milo, Keren, Joshua D. Kertzer, and Jonathan Renshon. 2018. "Tying Hands, Sinking Costs, and Leader Attributes." *Journal of Conflict Resolution* 62 (10): 2150–79. https://doi.org/10.1177/0022002718785693.

6. Appendix

Table A1: Assassination Attempt Descriptive Information

Number of Attempts	Successful Attempts	Number of Unique Groups
28	18	9

Table A2: Assassination Attempts by Weapon

	Serious Attempts	Wounded	Leader Killed
Type of Weapon			
Gun	6	1	3
Explosive Device	10	3	5
Airstrike	11	2	9
Unknown	1	1	0

Table A3: Assassination Attempts by Group

Group Name	Group Code	Attempts	Successes
Ahrar al-Sham	ASIM	7	5
Al-Farouq Brigades	AF	1	1
Liwa al-Tawhid	ATB	4	3
Free Syrian Army	FSA	1	0
Hezbollah	HZB	1	1
Jabhat al-Nusra	ANF	8	4
ISIL	ISIL	4	2
Jaysh al-Islam	JAI	1	1
Suqour al-Sham	SAS	1	1

Table A4: Keyword Searches

	Keywords
Event	{assassination OR assassin OR assassinated OR wound OR wounded OR injure OR injured OR kill OR killed OR attack OR attacked OR attempt OR attempted OR bomb OR bombed OR airstrike OR murder OR murdered OR shot OR shoot OR stab OR stabbed OR missile OR assault OR assaulted OR escape OR escaped OR die OR dies OR died OR perish OR perishes OR perished OR slain}
Leader	{leader, ruler, commander [specific leaders names since all groups known]}
Rebel Group	{[specific names since groups known, e.g. ISIS, Free Syrian Army]}

Table A5: Linear Models of All Assassination Attempts

	Dependent variable:			
	Violent Events(1)	Deaths(1)	Violent Events(3)	Deaths(3)
	(1)	(2)	(3)	(4)
Success	29.388	159.502	36.041	162.697
	(28.906)	(162.177)	(35.138)	(189.971)
Leader	-31.866	-190.637	27.577	116.980
	(33.001)	(185.150)	(38.797)	(209.753)
Explosive Device	17.069	136.253	5.305	63.095
	(33.855)	(189.943)	(45.217)	(244.458)
Airstrike	6.861	102.455	11.273	145.732
	(35.645)	(199.985)	(48.439)	(261.877)
Unknown Weapon	131.425	665.501	132.604	598.515
	(70.523)	(395.667)	(84.146)	(454.923)
Constant	24.575	95.499	30.396	141.818
	(32.075)	(179.956)	(40.780)	(220.474)
Observations	26	26	24	24
R^2	0.226	0.202	0.163	0.140
Adjusted R^2	0.032	0.002	-0.069	-0.099
Residual Std. Error	62.807 (df = 20)	352.375 (df = 20)	73.603 (df = 18)	397.927 (df = 18)
F Statistic	1.165 (df = 5; 20)	1.012 (df = 5; 20)	0.702 (df = 5; 18)	0.584 (df = 5; 18)

Note: $^{*}p<0.05$; $^{**}p<0.01$; $^{***}p<0.001$

Table A6: Panel Models of Senior Leader Assassination Attempts

Log Dep. Variables: Model:	Battles (1)	Total Deaths (2)	Battle Deaths (3)	Deaths Inflicted (4)	Civilian Deaths (5)
Variables					
Time	0.0032***	0.0036***	0.0027**	0.0028***	0.0021
	(0.0005)	(0.0008)	(0.0011)	(0.0006)	(0.0017)
Success	-0.2790	-0.7256	-0.5017	-0.6119	-0.7031
	(0.5305)	(0.5416)	(0.5520)	(0.7030)	(0.9727)
Time Since Attempt	-0.0609*	-0.0596**	-0.0568**	-0.0499**	-0.0417
	(0.0268)	(0.0228)	(0.0184)	(0.0186)	(0.0418)
Fixed-effects					
Rebel Group	Yes	Yes	Yes	Yes	Yes
Fit statistics					
Observations	301	297	289	273	192
R^2	0.48976	0.48128	0.41155	0.49020	0.56720
Within R^2	0.11296	0.11019	0.08455	0.10085	0.07248

Clustered (Rebel Group) standard-errors in parentheses
Signif. Codes: ***: 0.01, **: 0.05, *: 0.1