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## Leadership Matters: The Effects of Targeted Killings on Militant Group Tactics

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### ABSTRACT

Targeted killings have become a central component of counterterrorism strategy. In response to the unprecedented prevalence of this strategy around the world, numerous empirical studies have recently examined whether “decapitating” militant groups with targeted killings is strategically effective. This study builds on that research program by examining the impact of targeted killings on militant group tactical decision-making. Our empirical strategy exploits variation in the attack patterns of militant groups conditional on whether a government’s targeted killing attempt succeeded against them operationally. In both the Afghanistan-Pakistan and Israel-West Bank-Gaza Strip theaters, targeted killings significantly alter the nature of militant group violence. When their leaderships are degraded with a successful strike, militant groups become far less discriminate in their target selection by redirecting their violence from military to civilian targets. We then analyze several potential causal mechanisms to account for these results and find strongest evidence that targeted killings tend to promote indiscriminate organizational violence by empowering lower level members with weaker civilian restraint.

### KEYWORDS

Drones; leadership decapitation; militant groups; targeted killing

It is only undisciplined troops who make the people their enemies.<sup>1</sup>

The Sicarii employed assassinations in Jerusalem as early as 60 A.D. The state of Israel has practiced them or the modern equivalent of targeted killings ever since Palestinian terrorists from Black September murdered eleven members of its Olympic team in the 1972 Munich Games.<sup>2</sup> The United States embraced targeted killings after the 1998 East Africa embassy bombings, when President Clinton issued three top-secret Memoranda of Understanding to kill Osama bin Laden and his lieutenants.<sup>3</sup> In practice, though, targeted killings remained relatively rare until al-Qaida struck the homeland. Armed with rapidly improving drone technology, President Bush authorized nine targeted killing attempts from 2001 to 2007, followed by thirty-six in his final year of office. President Obama dramatically increased drone strikes against militants in the tribal regions of Pakistan and to a lesser extent in Yemen and Somalia. Between 2009 and 2012, there were 295 strikes in Pakistan alone.<sup>4</sup> Targeted killings are expected to remain a cornerstone of counterterrorism strategy not only for Israel and the United States, but for many other countries around the world.

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This study examines the effects of a particular type of targeted killing strategy—leadership decapitation. Targeted killing and leadership decapitation, though often employed interchangeably, are not synonymous. The former refers to operationally successful attacks against any level of militant, whereas the latter refers only to those against the leaders. Unmanned aerial vehicles or drones are the preferred method of leadership decapitation, but many other methods are in use, such as the May 2011 raid on Osama bin Laden’s Abbottabad compound.

The intent of decapitation is to reduce the threat of militant groups by degrading their leaderships.<sup>5</sup> Given the international importance of this strategy, numerous empirical studies have recently examined whether decapitating militant groups with targeted killings is strategically effective. No consensus has emerged. Several scholars conclude that leadership decapitation is indeed a useful instrument of counterterrorism.<sup>6</sup> Others contest that assessment.<sup>7</sup> The intellectual discord is unsurprising as scholars have employed different data, methodologies, and metrics of counterterrorism success from the lifespan of militant groups to their lethality, rate of attacks, even propaganda output.

This study is inspired by that research program, but extends it in a new direction. Our motivating question is not over the strategic utility of decapitation strikes per se, but their impact on militant group tactical choices. Like governments, militant groups exhibit wide variation in their tactical choices.<sup>8</sup> We assess how killing members of militant groups—especially the leaders—alters their target selection. Political scientists routinely distinguish between “indiscriminate” attacks against civilian targets versus more “selective” attacks against military targets.<sup>9</sup> This distinction has both normative and strategic implications. Distinction is a core principle under international humanitarian law governing the legal use of force in armed conflict, whereby the perpetrators must distinguish between combatants and civilians.<sup>10</sup> More relevant for this study, the political effectiveness of violence hinges on the target. For state and nonstate challengers, indiscriminate violence against civilian targets is less strategic than more selective violence against military targets.<sup>11</sup> Following this tradition, our study assesses how degrading the leaderships of militant groups with targeting killings affects the quality of their violence in terms of its selectivity.

The empirical strategy exploits variation in the attack patterns of militant groups conditional on whether a government’s targeted killing attempt against the leadership succeeded operationally. The sample is restricted to the conflict zones with the greatest of decapitation strike attempts. In both the Afghanistan-Pakistan and Israel-West Bank-Gaza Strip theaters, targeted killings significantly alter the nature of militant group violence. When their leaderships are debilitated in a successful strike, militant groups become far less discriminate in their target selection by redirecting their violence from military to civilian targets.<sup>12</sup>

This finding seems credible for multiple reasons. At least in theory, it accords with four potential causal explanations. First, it is often said that weaker groups gravitate to softer targets out of necessity; terrorism, after all, is described as a proverbial weapon of the weak.<sup>13</sup> Second, vengeance may also help to account for the rise of indiscriminate violence after a targeted killing. When a militant leader has been struck, other organization members naturally experience strong emotions to mete out an immediate reprisal, which may be directed against civilians if suspected of having collaborated with the government.<sup>14</sup> A third explanation is suggested in Brandt and Sandler, who demonstrate

empirically that transnational terrorist groups gravitate towards softer targets when opportunities to strike harder ones become less available.<sup>15</sup> Conceivably, decapitation strikes motivate groups to strike military targets, leading to enhanced security of them and thus stronger incentives to strike softer targets, which are typically civilian ones. A fourth explanation within organizational theory may likewise elucidate why decapitation promotes indiscriminate organizational violence. Because replacements are overwhelmingly subordinates rather than superiors, targeted killings can create leadership deficits that empower lower level members of the organization.<sup>16</sup> This change in the internal composition of militant groups may affect the quality and hence selectivity of their violence. A common belief within the conflict literature is that whereas militant leaders are generally strategic actors who select tactics to optimize their political platform, lower level members disproportionately lack commensurate discipline.<sup>17</sup> The principal-agent framework anticipates a disconnect between the preferences of leaders (viz. principals) and the behavior of subordinates (viz. agents), especially when the former cedes decision-making to the latter.<sup>18</sup> Building on these empirical and theoretical observations, we explore whether militant groups are prone to engaging in politically risky indiscriminate violence when their leaderships are degraded by targeted killings and lower level members gain additional tactical autonomy. Potential parallels are found within national militaries, which are more inclined to harm civilians when the leadership delegates tactical decisions to pro-government militias.<sup>19</sup>

This organizational explanation best accounts for the results. Our analysis finds both quantitative and qualitative evidence that targeted killings compromise the selectivity of militant group violence by creating leadership deficits that empower lower level members of the organization with inferior civilian restraint. Indeed, militant leaders often warn their foot soldiers to employ greater restraint towards civilians due to the political risks. Abdullah Yusuf Azzam, Regis Debray, Vo Nguyen Giap, Che Guevara, Carlos Marighella, and other revolutionary leaders repeatedly cautioned fighters against attacking civilians because of the potential political backlash.<sup>20</sup> Che, for instance, admonished foot soldiers to “avoid useless acts of terrorism.”<sup>21</sup> His fighting manual emphasizes that “terrorism is of negative value, that it by no means produces the desired effects, that it can turn a people against a revolutionary movement.”<sup>22</sup> In the *Minimanual of the Urban Guerrilla*, Marighella likewise advises the rank and file not to “attack indiscriminately without distinguishing between the exploiters and the exploited.”<sup>23</sup> More recently, the FARC leadership “repudiated and condemned” fighters for their “lack of foresight” in attacking civilians.<sup>24</sup> Fatah leaders urge operatives to strike the Israel Defense Forces while expressing “total opposition to actions targeting civilians.”<sup>25</sup> The leader of the Kurdistan Workers’ Party, Murat Karayilan, also directs his forces to engage “military targets” but “not harm civilians.”<sup>26</sup> Even the al-Qaida leadership has reprimanded its foot soldiers for attacking civilians in Afghanistan, Algeria, Egypt, Iraq, Lebanon, Somalia, Syria, and Yemen.<sup>27</sup> The implication is that diminishing the leadership of militant groups with targeted killings may promote indiscriminate organizational violence by ceding tactical decision-making to subordinates with weaker civilian restraint.

The next four sections investigate the effects of decapitation strikes on militant group tactics. The first section demonstrates with a natural experiment that groups in both the Afghanistan-Pakistan and Israel-West Bank-Gaza theaters are significantly more likely to attack civilian targets than military ones when their leaderships have been attrited with

targeted killings. The second section explores the empirical basis of four potential causal mechanisms—namely, that militant group violence becomes less discriminate after a targeted killing due to organizational weakness, the desire for retribution, changes in militant group targeting opportunities, or from leadership deficits. The evidence indicates that leadership deficits best account for the change in militant group tactics after a targeted killing. The third section scrutinizes this interpretation with a qualitative case study on the inner workings of the Taliban. The Taliban case underscores how targeted killings can encourage politically counterproductive attacks against the population by empowering wayward subordinates with greater tactical autonomy. The fourth section concludes with suggestions for future research on the relationship between the internal dynamics of militant groups and their tactical choices.

### Testing the effects of decapitation on militant group tactics

How does leadership decapitation affect militant group tactics? To answer this question, our statistical analysis focuses on the conflict zones in Afghanistan-Pakistan and Israel-West Bank-Gaza Strip, which historically have experienced the most targeted killing attempts against militant leaders. For the Afghanistan-Pakistan theater, the targeted killing data come from the New America Foundation (NAF). The NAF collects data on drone strikes through content analyses of local and international media organizations. At least three media organizations “with deep and aggressive reporting capabilities” in the region verified each strike.<sup>28</sup> For the Israel-West Bank-Gaza theater, the targeted killing data come from Zussman and Zussman.<sup>29</sup> Their dataset is comprised of Israeli attacks on the leaders of the most lethal Palestinian groups during the Second Intifada according to local think tanks and nongovernmental organizations. Unlike the NAF data, the Zussman and Zussman dataset includes decapitation methods beyond drones such as from snipers and bombs. Another noteworthy difference is that whereas Zussman and Zussman’s sample of targeting killing attempts is restricted to leaders, NAF also includes attacks against low level militants. Because our interest is in the tactical effects of decapitation, our analysis excludes targeted killing attempts against non-leaders whether by drone or other means.

Information on the attack patterns of the militant groups comes from the Global Terrorism Database.<sup>30</sup> The GTD records variation in target selection in terms of whether the groups attacked military or civilian targets.<sup>31</sup> For the purpose of our analysis, we use data on all attacks committed by al-Qaida and the Taliban in the Afghanistan-Pakistan theater and by the militant wings of Fatah, Hamas, and Palestinian Islamic Jihad in the Israel-West Bank-Gaza theater.<sup>32</sup> Although the NAF data are continuously updated, details of the targeting events become murkier in 2011, providing a natural upper limit on our estimation sample in the Afghanistan-Pakistan conflict zone. Conversely, we truncate the sample from below by excluding targeted killing attempts prior to 2008, when the tactic was not yet employed on a regular basis.<sup>33</sup> Our periods of observation thus span from 2008 to 2011 for the Afghanistan-Pakistan theater and from 2000 to 2004 for the Israel-West Bank-Gaza theater. Table 1 presents descriptive statistics for both conflict zones.<sup>34</sup>

Table 2 presents information on the targeting choices of the militant groups themselves. Because our main empirical interest is whether they become less discriminate when their leaderships are eroded, we divide the sample into cases of operationally successful and unsuccessful targeted killing attempts. The tactical change in the organizations is

**Table 1.** Descriptive statistics.

	Afghanistan and Pakistan					Total
	2008	2009	2010	2011		
Targeted killings						
Successful	10	10	15	5		40
Unsuccessful	7	19	14	10		50
Total	17	29	29	15		90
Source: New America Foundation						
Attacks						
Military	56	27	33	64		180
Civilian	144	195	165	107		611
Total	200	222	198	171		791
Source: Global Terrorism Database						
	Israel-West Bank-Gaza Strip					Total
	2000	2001	2002	2003	2004	
Targeted killings						
Successful	9	23	43	28	7	110
Unsuccessful	0	10	3	6	1	20
Total	9	33	46	34	8	130
By group						
Fatah	6	12	18	5	2	43
Hamass	2	13	20	22	3	60
Islamic Jihad	1	8	8	7	3	27
Source: Zussman and Zussman (2006)						
Attacks						
Military	4	9	12	16	7	48
Civilian	2	34	59	42	24	161
Total	6	43	71	58	31	209
By group						
Fatah	1	7	34	17	12	71
Hamass	2	23	26	32	14	97
Islamic Jihad	3	13	11	9	5	41
Source: Global Terrorism Database						

Notes: Compared to the New America Foundation and the Zussman and Zussman datasets, we have slightly less decapitation attempts because we combine decapitation attempts on the same and adjacent days. Combined attempts are indicated as successful if at least one of them was successful.

**Table 2.** Mean comparison: Decapitation attempts.

	Successful	Unsuccessful	Difference
Afghanistan and Pakistan			
Proportion of Military Targets	0.1524	0.1968	-0.0444
Number of Attacks	7.9250	7.7600	0.1650
Israel-West Bank-Gaza Strip			
Proportion of Military Targets	0.2182	0.3900	-0.1718*
Number of Attacks	0.8091	0.8000	0.0091

Notes: \*/\*\*/\*\* indicate significant differences at the 10%/5%/1% level based on student's *t*-tests of group mean comparisons of the target choice and of attacks in the fourteen days after a decapitation attempt.

remarkably consistent across conflict zones. In both the Afghanistan-Pakistan and Israel-West Bank-Gaza theaters, the ratio of attacks on military targets versus civilian ones is markedly lower in the two-week period immediately after an operationally successful strike, when tactical decision-making is presumably most affected.

These mean comparisons are suggestive of a causal link, but do not establish one. To draw stronger causal inferences, we turn to regression analysis. Because we are analyzing



count data, we employ a Poisson model. A common assumption for establishing a causal link is the “inherent randomness” of whether a decapitation strike happens to kill the target.<sup>35</sup> The target’s fate depends largely on happenstance, such as whether he happens to be home during the strike, jump out of his car to avoid the fatal hit, or find cover beneath a canopy of trees. Previous studies emphasize that although the decision to authorize targeted killings is not random, their operational outcome is generally driven by chance conditional on the occurrence of such an attempt.<sup>36</sup> Our estimation strategy thus approximates a natural experiment, with a control group of unsuccessful targeted killings and a treatment group of successful targeted killings. Because the operational outcome of a targeted killing is essentially random, we can better isolate the causal effects on militant group tactics.

The logic of our identification strategy is expressed formally below. Let  $H_{t,i}$  indicate the of attacks on military targets that took place in the two weeks after a killing attempt. The subscript  $t$  is the time at which the attempt occurred and the subscript  $i$  indicates the group was targeted. For our estimations, we consider the sample of all targeted killing attempts regardless of operational outcome and indicate the sum as  $N$ .  $A_{t,i}$  is defined as the total of attacks that occurred in the fourteen days after a targeted killing. Naturally,  $H_{t,i}$  is a strict subset of  $A_{t,i}$  (that is,  $H_{t,i} \subset A_{t,i}$ ). Using both  $H_{t,i}$  and  $A_{t,i}$ , we can define the expected of military attacks  $H_{t,i}$ , conditional on the occurrence of  $A_{t,i}$  attacks:

$$E(H_{t,i}|S_{t,i}, \mathbf{D}_t, A_{t,i}) = \exp(\alpha_i + S_{t,i}\beta + \mathbf{D}_t\gamma + \ln(A_{t,i})) \quad (1)$$

where  $S_{t,i}$  indicates whether a targeted killing attempt was operationally successful,  $\mathbf{D}_t$  is a set of time-dependent control variables, and  $\alpha$ ,  $\beta$ , and  $\gamma$  are the parameters which are to be estimated (see below). Including  $\ln(A_{t,i})$  means that we are conditioning the expected of military attacks taking place on the fact that  $A_{t,i}$  attacks took place in total. In the estimation, we pool all groups active in either one of the two theaters so as to obtain a sufficient of observations.

Using (1), we can demonstrate the merit of the identification strategy. If the success of a targeted killing is generally random, the expected of military attacks perpetrated after a successful targeted killing is  $E(H_{t,i}|S_{t,i} = 1, \mathbf{D}_t) = \exp(\alpha_i + \beta + \mathbf{D}_t\gamma + \ln(A_{t,i}))$ , whereas the expected of military attacks after an unsuccessful targeted killing attempt is given by  $E(H_{t,i}|S_{t,i} = 0, \mathbf{D}_t) = \exp(\alpha_i + \mathbf{D}_t\gamma + \ln(A_{t,i}))$ . Thus, the change in the of military attacks due to a successful targeted killing is:

$$\frac{E(H_{t,i}|S_{t,i} = 1, \mathbf{D}_t)}{E(H_{t,i}|S_{t,i} = 0, \mathbf{D}_t)} = \frac{\exp(\alpha_i + \beta + \mathbf{D}_t\gamma + \ln(A_{t,i}))}{\exp(\alpha_i + \mathbf{D}_t\gamma + \ln(A_{t,i}))} = \exp(\beta), \quad (2)$$

which is referred to as the incidence rate ratio. In contrast to the parameter  $\beta$ , the incidence rate ratio reveals the practical significance of the relationship. Indeed, it may be understood as the factor by which the relative of military attacks will change if the targeted killing attempt is successful.

Our estimation specifications include group-specific effects ( $\alpha_i$ ) and period dummies ( $\mathbf{D}_t$ ).<sup>37</sup> For the Israel-West Bank-Gaza theater, we identify attacks and targeted killings on the group level and include two group-specific effects in the estimation (the third is the reference group). For the Afghanistan-Pakistan theater, we treat the Taliban and al-Qaida as one unit and therefore include a single constant in the model. The following



phase-of-conflict dummies are employed for the Israel-West Bank-Gaza theater, as delineated in Jaeger and Paserman: *Ehud Barak to Ariel Sharon* (09/29/2000–02/06/2001), *Sharon to the September 11 attacks* (02/07/2001–09/11/2001), *9/12 to Operation Defensive Shield* (09/12/2001–03/28/2002), *Defensive Shield to Roadmap* (03/29/2002–06/24/2002), *Roadmap to ceasefire* (06/25/2002–06/28/2003), *ceasefire* (06/29/2003–08/21/2003), and *post-ceasefire* (08/22/2003–01/15/2005).<sup>38</sup> For the Afghanistan-Pakistan theater, we construct the following phase-of-conflict dummies: *Bush presidency* (01/01/2008–01/20/2009), *Obama presidency to assassination of Osama Bin Laden* (01/21/2009–05/01/2011), and *assassination of bin Laden onward* (05/02/2011–12/31/2011). Additionally, we include a dummy for the *Malakand Peace Accord* (02/15/2009–04/30/2009) calling for an end to military operations in the Swat.

Table 3 presents the main estimation results. The first column for the Afghanistan-Pakistan and Israel-West Bank-Gaza theaters contains the parameter estimates. These results indicate that targeted killings change the tactical behavior of the militant groups. Following a successful strike, they are significantly more likely to redirect their violence from military to civilian targets. Table 4 presents the incidence rate ratios corresponding to the parameter estimates. In the wake of a successful strike, the relative of military attacks drops by 30 percent in the Afghanistan-Pakistan theater and by 50 percent in the Israel-West Bank-Gaza theater. In sum, removing leaders of militant groups in the most active theaters has a statistically significant, substantively important impact on their

**Table 3.** Estimation results.

	Military Attacks	Number of Attacks
Afghanistan and Pakistan		
Success	-0.358* (0.186)	0.0170 (0.0676)
Bush	Reference	Reference
Obama	-0.199 (0.277)	-0.0769 (0.0663)
Osama	0.591* (0.311)	-0.103 (0.0854)
Malakand Accord	-0.281 (0.269)	0.0618 (0.134)
Constant	-1.546*** (0.269)	2.110*** (0.0592)
Offset	ln(Number of Attacks)	None
Observations	90	90
Israel-West Bank-Gaza Strip		
Success	-0.589* (0.311)	-0.0206 (0.322)
Barak-Sharon	Reference	Reference
Sharon-9/11	-1.233*** (0.407)	1.918* (0.988)
9/12-ODS	-1.550*** (0.315)	2.665*** (1.017)
ODS-Roadmap	-18.00*** (0.556)	2.294** (1.041)
Roadmap-Ceasefire	-1.186*** (0.221)	2.118** (0.976)
Ceasefire	See Notes	-12.13*** (1.273)
Post-Ceasefire	-1.618*** (0.499)	1.931* (1.000)
Fatah	Reference	Reference
Hamas	0.330 (0.386)	-0.106 (0.243)
Islamic Jihad	0.410 (0.606)	-1.330*** (0.462)
Constant	0.259 (0.437)	-2.066** (1.003)
Offset	ln(Number of Attacks)	None
Observations	63	130

Notes: \*/\*\*/\*\* indicate statistical significance at the 10%/5%/1% level, robust standard errors in parentheses. Estimation based on a Poisson count model of the targets of attacks in the fourteen days after a decapitation attempt. The offset indicates what, if applicable, the dependent variable was conditioned on. If no attacks occurred after a targeted killing, that observation is automatically dropped from the estimation sample for the Military Attacks estimation. The Ceasefire dummy is dropped because none of the decapitation attempts in that period were followed by attacks.

**Table 4.** Incidence rate ratio of a successful targeted killing.

Afghanistan and Pakistan	
Military Attacks	0.699* (0.130)
Number of Attacks	1.017 (0.0688)
Israel-West Bank-Gaza Strip	
Military Attacks	0.555* (0.173)
Number of Attacks	0.980 (0.315)

Notes: Estimation is as in Table 3. The cell entries indicate the factor by which a successful targeted killing affects the proportion of military attacks.

\*/\*\* indicate statistical significance at the 10%/5%.

tactical decisions. These organizations are far more likely to perpetrate indiscriminate attacks in the immediate aftermath of a targeted killing against the leadership.

To help determine whether decapitation directly impacts the nature of militant group violence, we conducted additional robustness checks. First, we investigated whether targeted killings of one group affect the tactical behavior of other groups—a potential sign of spurious results. That is, we examine whether decapitating the leader of a group leads other groups in that theater to pursue more indiscriminate violence. For this evaluation, we employ a placebo regression strategy in which the targeted killings of one group are randomly matched with the attacks of another. Two unique ways exist for matching the three groups in the Israel-West Bank-Gaza conflict, such that none is matched with itself.<sup>39</sup> The results, presented in Table 5, reveal the absence of intergroup “spillover” effects. Evidently, the groups analyzed do not condition their target selection on the fate of other leaders.

Second, we add temporal variables to rule out potential confounds. For instance, we account for seasonal effects to minimize the impact of weather, which is relevant in several ways. Civilians are more likely to spend time outdoors and thus be attacked as conditions improve. Moreover, our analysis reveals that the success rate of targeted killing attempts varies across seasons.<sup>40</sup> This is consistent with information from drone operators that clouds and precipitation can obscure satellites, hindering operations. Indeed, declassified al-Qaida documents reveal that bin Laden once warned operatives against switching safe houses on clear days.<sup>41</sup> To alleviate such weather-related concerns, we include a specification with monthly dummies in column 1 of Table 6. Similarly, in column 2 we control for Ramadan, a religious holiday that may also affect the exposure of Muslim populations to militant attacks as well as government countermeasures. For neither theater are the findings driven by our periodization scheme, seasonal variation, or Ramadan festivities.

**Table 5.** Spill-over effects.

	Benchmark	Spillover 1	Spillover 2
Success	-0.589* (0.311)	-0.460 (0.381)	-0.114 (0.752)

Notes: Dependent variable is target choice. Estimation is as in Table 3. In the Benchmark decapitation attempts on a group are matched with the attacks of that group. In Spillover 1, the matching (decapitation attempt-attacks) is Fatah-Islamic Jihad, Hamas-Fatah, Islamic Jihad-Hamas. In Spillover 2, the matching is Fatah-Hamas, Hamas-Islamic Jihad, Islamic Jihad-Fatah. \*/\*\* indicate statistical significance at the 10%/5%.

**Table 6.** Further analyses.

	Seasonal Effects	Ramadan Effect	Third & Fourth	Fifth & Sixth
Afghanistan and Pakistan	-0.306* (0.166)	-0.346* (0.197)	-0.281 (0.175)	0.0637 (0.194)
Israel-West Bank-Gaza Strip	-0.763** (0.331)	-0.589* (0.314)	0.328 (0.551)	0.587 (0.398)

Notes: \*/\*\* indicate statistical significance at the 10%/5%.

Third, we revisited our decision to analyze militant attacks within two weeks of the targeted killing attempt. The two-week window is not arbitrary; it is intentionally narrow to capture the tactical effects of decapitation in the immediate aftermath of the government strike, when they are presumably strongest. Over time, militant group violence may become more selective as groups gain capability, the desire for vengeance subsides, and targeting opportunities return to pre-strike levels—or because wayward operatives are disciplined, learn the strategic value of safeguarding the population, and suitable leadership replacements are vetted. As a robustness check, we extend the window of one to two weeks to three to four weeks and five to six weeks after the targeted killing attempt. The results, presented in columns 3 and 4 of Table 6, confirm that militant group tactics indeed become less indiscriminate over time.

Fourth, we hedge on the decision to employ a Poisson model versus other count models. For the Israel-West Bank-Gaza theater, we observe *prima facie* evidence of mild under-dispersion, whereas for the Afghanistan-Pakistan theater, we observe evidence of mild over-dispersion. While the latter can be resolved using negative binomial regression, the former cannot. A Poisson model was initially employed to maintain a consistent estimation approach, with robust standard errors to allow for mild over- and under-dispersion. As a robustness check, however, we reran the Afghanistan-Pakistan tests with a negative binomial regression, which does not attenuate the results.

Fifth, we experimented with different coding rules for the dependent variable of militant group target selection. Prior studies by Max Abrahms and then others emphasize that organizations risk compromising their political goals by committing indiscriminate violence against civilians rather than more selective violence against military personnel.<sup>42</sup> Less clear, however, is whether non-military government targets are selective or indiscriminate. To deal with this ambiguity in the literature, such attacks were initially coded as civilian and then recoded as military. Treating these “middling” values as either civilian or military does not negate the findings. In fact, treating the government targets as military rather than civilian only increases the statistical significance ( $p < .05$ ). Another coding option is to remove government targets entirely, which further strengthens the results ( $p < .03$ ). Our findings are thus robust to assigning government targets to military targets or dropping government targets altogether from the analysis. In fact, these alternate coding decisions enhance the statistical significance.

Finally, we paid attention to the possibility that certain leaders may be harder to eliminate than others. Only one leader in the datasets was able to repeatedly elude targeted killing attempts. Baitullah Mehsud, the notorious Taliban leader based in Waziristan, was targeted unsuccessfully 10 times before his eventual assassination on August 5, 2009. Inclusion of a dummy variable controlling for this particularly prized leader does not change the results. In fact, it increases the significance of the main variable of interest from the Afghanistan-Pakistan theater. In sum, we consistently find across specifications that operationally successful decapitation attempts erode the selectivity of militant group violence in the immediate aftermath of the strike.

### Explaining the indiscriminate violence

On the surface, at least four theoretical mechanisms may explain the change in militant group tactics following a successful targeted killing against the leadership. First, a

structural explanation holds ostensible promise. The logic is intuitive. Soft targets are by definition easier to attack than hard targets for both state and nonstate challengers. Empirical studies have found that state challengers are indeed disposed to civilian victimization when weak.<sup>43</sup> Conceivably, the target selection of non-state challengers follows the same pattern when enfeebled from targeted killings. That is, militant groups may be inclined to commit indiscriminate violence when their organizational capability is diminished through targeted killings. After all, terrorism has been called a “weapon of the weak” since Crozier coined the adage.<sup>44</sup>

Second, the change in organizational tactics may spring from revenge. Ganor observes that offensive actions can induce a “boomerang effect” by increasing the “motivation to exact vengeance.”<sup>45</sup> Kilcullen and Exum add that targeted killing is an offensive action that can spur an immediate “desire for revenge,” resulting in a short-term rise of militant group activity.<sup>46</sup> Kalyvas maintains that combatants in civil war may retaliate against civilians in particular due to their real or perceived role in spying.<sup>47</sup> Anecdotally, this narrative has been applied to describe militant responses to targeted killings in both the Israeli-Palestinian and Afghanistan-Pakistan theaters.<sup>48</sup>

Third, killing the leaders of militant groups may create superior opportunities for them to strike civilian targets. Militant groups are typically understood as rational actors who respond predictably to changes in their constraints.<sup>49</sup> When certain targets are closed off, terrorists search for alternatives. Enders and Sandler have shown how efforts to secure embassies in the 1980s shifted attacks to diplomatic officials outside of secure compounds.<sup>50</sup> More recently, Brandt and Sandler reveal that transnational terrorist groups have gravitated to attacking businesses and private parties as authorities have implemented additional security for officials and the military.<sup>51</sup> Based on the logic of transference, decapitation may likewise result in the hardening of military targets, incentivizing groups to redirect their violence towards the population.

A fourth explanation derives from organizational theory. Organizational theory may shed light on the conditions under which militant groups are liable to attack civilians. Though an analytical simplification, a common distinction is between leaders and subordinates. Across a wide variety of organization types, demographic studies find that leaders are more likely than their subordinates to possess superior cognitive abilities, judgment, and focus on realizing the official aims of the organization.<sup>52</sup> Within organizational theory, the principal-agent framework helps to account for the common disconnect between the preferences of leaders and the actual behavior of subordinates. As detailed elsewhere, agency problems happen because prospective members have an incentive to manipulate private information by overstating their qualifications and to then pursue private agendas upon joining.<sup>53</sup> Agency problems afflict all organizations, but leadership deficits exacerbate them, as principals delegate authority to less reliable agents.<sup>54</sup> Although previous scholarship has applied the principal-agent framework to other important questions about militant groups, we assess its relevance for their targeting choices.

Mirroring the organizational theory literature, conflict research suggests relevant differences among members. Militant group leaders are typically understood as more strategic than their foot soldiers because they are younger, have less experience with asymmetric conflict, and are not as carefully vetted.<sup>55</sup> By empowering such members, leadership deficits within militant groups may therefore increase their odds of engaging in politically suboptimal attacks. Targeted killings in both the Afghanistan-Pakistan and

Israel-West Bank-Gaza theaters have indeed created leadership deficits, which may erode the selectivity of organizational violence by empowering less reliable subordinates to commit politically risky indiscriminate attacks against civilians.<sup>56</sup> As Johnston and Sarbahi point out, “Those elevated to replace killed leaders will be, on average, less-skilled and of lower quality to the organization than their predecessors.”<sup>57</sup> Admittedly, all four causal logics may contribute in subterranean ways to the change in organizational tactics. Our assessments below indicate, however, strongest empirical evidence that decapitation promotes indiscriminate organizational violence due to the leadership deficits themselves.

The structural argument suffers from a couple important empirical objections. Empirical studies have found surprisingly scant support for its underlying assumptions that weaker groups are prone to attacking civilians. Indeed, the proposition that terrorism is a weapon of the weak seems to lack an empirical basis.<sup>58</sup> Furthermore, many empirical studies challenge whether targeted killings reduce the overall capability of militant groups.<sup>59</sup> To aid in this evaluation of whether targeted killings lower the capability of militant groups, we estimate whether they constrain them from mounting operations. This is a relevant test because the amount of violence produced by militant groups is the most common proxy for their capability.<sup>60</sup>

We define the expected of attacks taking place as:

$$E(A_{t,i}, \mathbf{D}_{t,i}) = \exp(\alpha_i + S_{t,i}\beta + \mathbf{D}_t\gamma) \quad (5)$$

Our identifying assumption again allows us to equate the causal effect of a successful targeted killing with the value of  $\exp(\beta)$ . In this case, however, we interpret the incidence rate ratio,  $\exp(\beta)$  as the factor by which the total of attacks changes from an operationally successful targeted killing. As Tables 3 and 4 show, targeted killings have no significant effect on the amount of militant group violence in either theater within two weeks of the successful strike.

This result simultaneously undercuts the vengeance thesis, which would anticipate a post-decapitation uptick in militant group violence. It is also consistent with a recent study of decapitation strikes against al-Qaida and its affiliates, which finds “no indication” that the desire for revenge alters their behavior in any systematic way.<sup>61</sup> To help assess whether the revenge impulse is driving the change in militant group tactics, we again conduct additional analyses. The Zussman and Zussman dataset facilitates this assessment by distinguishing between political leaders, who mainly supply ideological guidance, and military leaders, who mainly supply tactical guidance. Killing either type of leader presumably spurs a vengeance impulse in the group. If this impulse encourages civilian targeting, we would therefore expect to find diminished targeting selectivity after either a political or military leader is killed. Table 7 reveals, however, no significant change in target selection when only political leaders are eliminated,

**Table 7.** Political leaders.

	Benchmark	Least	Intermediate	Most	Only
Success	-0.589* (0.311)	-0.703** (0.314)	-0.702** (0.311)	-0.673** (0.307)	-0.194 (0.403)

Notes: Dependent variable is target choice. Estimation is as in Table 3. The Benchmark column repeats the basic results, the subsequent columns drop decapitation attempts on political leaders according to the Most, Intermediate, and Least restrictive criteria of Zussman and Zussman (2006). In the final column, we only use successful decapitation attempts against political leaders according to the least restrictive criterion; the same exercise is not possible for the other criteria as there are not sufficient observations regarding attempts against them. \*\*/\* indicate statistical significance at the 10%/5%.

whereas the violence becomes even more indiscriminate both statistically and substantively when the sample of decapitated leaders is restricted to military ones.<sup>62</sup> These results vitiate the notion that vengeance is causing the indiscriminate violence, while simultaneously bolstering the principal-agency thesis, which would expect a reduction in the quality of organizational violence only when tactical guidance is compromised from degrading military command.

There is also comparatively weak evidence that the observed changes in organizational tactics are due to altered targeting opportunities over time. As noted, all of our specifications for both theaters control for time with phase-of-conflict dummies, such as the ones proposed in Jaeger and Paserman.<sup>63</sup> Adding dummies for each year as another robustness check only increases the significance of the main estimation results. The targeting opportunity argument also rests on the assumption that civilians become even easier to attack in the immediate aftermath of targeted killing attempts. Direct testimonies from the ground suggest, however, that civilians appear to act rationally in targeted killing campaigns by concealing themselves from combatants.<sup>64</sup> Consequently, militant groups have more restricted opportunities to target civilians following a targeted killing. It is also unlikely governments fortify military assets only when a leader has been killed. Presumably, being shot at has a similar effect especially if the literature is right that the operational success hinges largely on happenstance. Finally, the opportunity explanation cannot resolve why governments would harden military targets for only a couple weeks after a leader has been neutralized given the ongoing attempts on other leaders.

Analyzing variation in the type of militant killed provides additional support that decapitation promotes civilian targeting due to leadership deficits. This explanation would anticipate a stronger tactical change when the most senior militant leaders are killed. Differences in the targeted killing datasets facilitate this assessment. The Zussman and Zussman dataset is composed of targeted killing attempts against only the most senior leaders, whereas the NAF dataset also includes attempts against mid-level leaders and even low-level militants.<sup>65</sup> Because of our particular interest in the tactical effects of decapitation, we consistently excluded from the analysis attempts against non-leaders. Yet the variation in militant leader-type aids our evaluation of whether leadership deficits promote indiscriminate organizational violence. [Table 4](#) confirms that the relative of military attacks after a targeted killing drops by 30 percent in the NAF sample compared to 50 percent in the Zussman and Zussman sample, where decapitated leaders tended to be more senior within the organizations.

Similarly, the principal-agency thesis predicts that militant groups will experience larger tactical shifts where the leadership exercises greater influence over subordinates. Following Abrahms and Potter (2015), we proxy the tactical influence of a leader in terms of his geographic proximity to operatives based on the assumption that he tends to lose agency control as they travel away from him.<sup>66</sup> The NAF dataset facilitates this evaluation by coding whether the decapitation strikes happened in Pakistan or Afghanistan. This distinction is useful because Pakistan accounts for the lion's share of decapitations against the senior leadership whereas lower-level targeted killings are more common in Afghanistan. [Table 8](#) reveals that organizational violence became even less discriminate in Pakistan following a successful targeted killing in accordance with principal-agency logic. Our assessment is based thus far on statistical analyses, but the next section probes its plausibility by qualitatively process-tracing the Taliban's tactical decision-making.



**Table 8.** Geographic dispersion.

	Benchmark	Pakistan	Afghanistan
Success	-0.358* (0.186)	-0.828** (0.379)	-0.204 (0.187)

Notes: Estimation and controls as in Table 3. In the second column only attacks in Pakistan are included and in the third column only attacks in Afghanistan. \*/\*\* indicate statistical significance at the 10%/5%.

## Taliban case

The Taliban illustrates how targeted killings can create leadership deficits that promote indiscriminate violence because a) the leaders have consistently commanded lower level members to attack military targets, not civilian ones; b) the leadership's stance is based on the perceived political costs of civilian targeting; c) the organization suffers from a principal-agency problem, as foot soldiers sometimes flout their targeting guidelines; d) the leadership incentivizes selective violence by disciplining fighters who harm civilians; e) but decapitation strikes have empowered lower level fighters with inferior civilian restraint.

Since it was overthrown in the post-9/11 American-led invasion, the Taliban has killed thousands of Afghan civilians mainly with suicide attacks, improvised explosive devices, and assassinations. These actions are in direct defiance of the leadership's injunctions to safeguard the population. Mullah Mohammed Omar, spiritual head and chief strategist of the Taliban from 1996 to 2013, would emphasize in public statements: "The mujahedeen have to take every step to protect the lives and wealth of ordinary people."<sup>67</sup> It is tempting to dismiss this position as mere propaganda. But the leadership's proscription against harming civilians has been at the core of the "Code of Conduct" issued to Taliban members since the first "Layeha" of 2006. Rule 21 states, "Anyone who has killed civilians during the Jihad may not be accepted into the Taliban movement."<sup>68</sup> In the 2009 Layeha, Rule 41 reminds foot soldiers to "avoid civilian casualties"; Rule 48 bans "cutting noses, lips, and ears off people"; and Rule 59 mandates that "the Mujahidin must have a good relationship with all the tribal community and with the local people."<sup>69</sup> In the 2010 Layeha, Rule 57 decrees, "In carrying out martyrdom operations, take great efforts to avoid casualties among the common people"; Rule 65 enjoins Mujahidin to "be careful with regard to the lives of the common people and their property"; and the back cover stresses that "taking care of public property and the lives and property of the people is considered one of the main responsibilities of a Mujahed."<sup>70</sup> According to the Taliban Leadership Council, the only permissible targets are selective: "foreign invaders, their advisors, their contractors and members of all associated military, intelligence and auxiliary departments. And similarly, the high ranking officials of the stooge Kabul regime; members of Parliament; those associated with Ministries of Defense, Intelligence and Interior."<sup>71</sup> In the 2010 Layeha, Rule 5 likewise directs operatives to attack "high-ranking government officials" and Rule 41 demands the target of suicide bombers to be "high valued."<sup>72</sup>

Taliban leaders oppose civilian targeting because of the political risks.<sup>73</sup> To win over the population, the leaders try to demonstrate the selectivity of Taliban attacks by withholding credit for attacks on civilians, while boasting of ambushes against military personnel.<sup>74</sup> In fact, only such selective attacks are featured in Taliban promotional videos.<sup>75</sup> When Afghan civilians are killed, the leadership often claims they were combatants. For instance, a Taliban spokesman insisted that the 27 laborers shot dead in October 2008 were secretly



“Afghan National Army soldiers ... traveling to Helmand wearing ordinary clothes.”<sup>76</sup> Alternatively, the leaders have blamed civilian casualties on the Afghan government, NATO forces, or the U.S. military. When Taliban culpability is undeniable, the leadership attributes the indiscriminate violence to rogue fighters in the organization. These behaviors point to an appreciation at the top that attacks on civilians incur prohibitive audience costs.

Within the Taliban, lower level members indeed perpetrate the lion’s share of indiscriminate violence.<sup>77</sup> The discrepancy between their targeting guidelines and practices is often ascribed to principal agency problems within the organization. Clark assigns the civilian targeting to the fact that “The Taliban has severe command and control problems within its ranks.”<sup>78</sup> The International Crisis Group emphasizes how the leadership “has struggled to exert authority over its field commanders” and that “given the autonomy that Taliban commanders and allied networks enjoy, the leadership might exercise little control over every-day military operations.”<sup>79</sup> *Reuters* points out, “Even if the Taliban wants to bring down the of civilians it kills, it lacks total control over the bombers, or those who guide them.”<sup>80</sup> Taliban difficulties with command and control are rooted in its “open door” recruitment policy, which has historically admitted fighters with weaker abilities and organizational commitment. Compared to their leaders, these lower level members are characteristically described as incompetent, inexperienced, negligent, and undisciplined fighters.<sup>81</sup>

To protect Afghan civilians, Taliban leaders incentivize their members to engage in selective violence. The Code of Conduct is not lacking in enforcement mechanisms.<sup>82</sup> A leaked internal report from the NATO-led International Security Assistance Force details how the injunctions against civilian harm are “strictly enforced, with an elaborate system of checks and balances to insure [*sic*] compliance.” To gain local support, the Taliban leadership has established independent commissions throughout Afghanistan of “neutral observers and judges” to formally complain about targeting violations.<sup>83</sup> The leadership has also distributed phone numbers for anonymous complaints, leading to numerous cases in which offending members were expelled from the Taliban, stripped of their position, disarmed, imprisoned, or publicly rebuked. When high-level commanders are found guilty of civilian targeting, they may be subjected to punishment under Sharia law.<sup>84</sup> Such leadership enhances the selectivity of Taliban violence. The Code of Conduct educates foot soldiers about targeting practices, removes transgressors, and deters potential offenders from punishing civilians. Notably, a United Nations report affirms that Taliban leaders reduce “casualties among the common people” by “implementing guidance in the *Layeha* to target military objects more carefully.”<sup>85</sup> The leaders also offer hands-on targeting training to spare civilians, steer them away from crossfire, and promote members for engaging military targets.<sup>86</sup>

Since 2008, however, the United States has attrited the leadership in an unprecedented targeted killing campaign. On the surface, the impact of the drones has been modest. The Taliban’s ability to mount operations has stayed constant, as a seemingly inexhaustible supply of lower level members has ascended through the ranks.<sup>87</sup> Gopal observes that the removal of over a thousand “high-value” Taliban members “has not diminished the insurgents’ capability to attack. . . . What it has done is force major demographic shifts in the makeup of the insurgency and a concomitant shift in insurgent operating procedures.”<sup>88</sup> Given the internal dynamics of the Taliban, the targeted killings have

eroded organizational restraint towards civilians by endowing subordinates with additional operational autonomy.<sup>89</sup> According to an estimate from the Human Terrain System, targeted killings reduced the average age of Taliban leaders from 34 to 26 years old.<sup>90</sup> There is broad agreement that whereas the older guard helped to impose selective violence, replacements are more inclined to harm the population because they are “prone to make operational and strategic mistakes,” “less competent than their predecessors,” “less experienced and less skilled,” “less likely to be amenable to restraining their actions” against civilians, “more dangerous,” “more brutal” towards civilians, and both “more radical” and “more radicalized” in their treatment of the population.<sup>91</sup> A report from the Center on International Cooperation at New York University affirms: “The military campaign targeting insurgent leaders within Afghanistan has weakened the overall command structure and the ability of the central leadership to enforce decisions. A reshuffling of the leadership, along with all layers of ranks of commanders, has seen the rise of a younger and more radical generation” towards civilians.<sup>92</sup> The counterterrorism analyst Leah Farrall has likened the decapitation campaign to the practice of killing off older elephants. The killings thin out the herd, but it then becomes prone to indiscriminate rampages without the guidance of the older, wiser guard.<sup>93</sup>

In sum, the Taliban is an intrinsically important, within-sample case that illustrates how targeted killings can promote indiscriminate organizational violence. The Taliban case study highlights how targeted killings can erode the quality of organization members and hence its tactical choices. When lower level members with inferior tactical discretion gained autonomy, Taliban violence became less selective.

### Future research

Though controversial, targeted killings have become a central component of contemporary counterterrorism strategy. A flurry of recent work has empirically examined the outcome in terms of the strategic utility. The forgoing analysis extends this research program by investigating how decapitating militant groups affects their tactical choices. In the two most active conflict zones, targeted killings reduce the quality of organizational violence in terms of its selectivity. When their leaderships are weakened with targeted killings, militant groups are far more likely to attack civilians notwithstanding the potential political costs.

In theory, this outcome may arise for multiple reasons. Our quantitative and qualitative analyses indicate, however, that leadership deficits are the best explanation. This explanation is rooted in the growing realization within conflict research that militant groups are internally heterogeneous actors, whose leaders are typically more disciplined than lower level members of the organization.<sup>94</sup>

This study invites future research. First, researchers should expand the sample of militant groups to probe the generalizability of our main finding that decapitation promotes indiscriminate organizational violence. We intentionally restrict analysis to the two theaters on the receiving end of numerous decapitation strike attempts for which there are sufficiently reliable data. Consequently, though, all of the organizations in our sample are Islamically inspired. They were also subjected to repeated targeted killings, which eliminated not only high-value members but many of their replacements. Subsequent work should investigate whether slighter changes in the composition of

militant groups have similar effects on their tactical decisions and whether these are mediated by other group characteristics such as organization size, goals, and interconnectedness.<sup>95</sup> Our statistical analysis suggests that targeted killings are particularly likely to result in indiscriminate violence when the leaders struck are both more senior and responsible for supplying tactical guidance. But expanding the sample of members killed would help to establish how principal loss erodes the quality of organizational violence by empowering less disciplined operatives with additional tactical autonomy.

Second, additional qualitative cases would help to demonstrate that Taliban-like dynamics apply equally elsewhere. Our case study strengthens the statistical evidence that targeted killings promote civilian targeting through principal loss. Other examples, however, may provide support for alternative mechanisms and the antecedent conditions for them to obtain. These may also help to clarify why lower level members seem to exhibit less civilian restraint than their leaders. The former tend to have weaker abilities and commitment than the latter in the Taliban. But more cases would tease out the role of adverse selection versus moral hazard within militant groups. Supplemental cases would also provide insight into why militant groups seem to “heal” after an operationally successful targeted killing. In the Taliban, the leadership actively punishes—even replaces—wayward commanders that attack the population. In other cases, the replacements may exhibit signs of learning by favoring more selective violence over time as the risks of indiscriminate violence become apparent. Experience may likewise explain why some leaders favor civilian targeting while others oppose this practice.

Third, alternative empirical strategies may yield further evidence that leaders generally restrain the rank and file from perpetrating indiscriminate violence. For example, researchers might further test whether decentralized groups are prone to civilian targeting due to their diffuse decision-making structure, as suggested in Abrahms and Potter (2015).<sup>96</sup> This pattern would fit the “new” dimension of international terrorism beginning in the 1990s, which is often said to hail from groups that are both less centralized structurally and restrained tactically.<sup>97</sup> To distill the targeting preferences of members, another potentially valuable approach would be to assess whether the leadership is less likely to claim credit when operatives attack civilian targets rather than military ones. The Taliban case study is suggestive, but more rigorous testing on a larger sample of groups could bolster the evidence that leaders tend to be more hesitant than their subordinates about harming the population owing to the potential political costs. Beyond target selection, future research should also search for other indicators that lower level members tend to behave less strategically. This would be useful to minimize any endogeneity concerns and to allow for the possibility that civilian targeting may be strategic under certain rare conditions.

Finally, future research should rethink whether decapitation is effective in light of our findings. On one hand, decapitation does not appear to reduce the quantity of militant group violence at least in the short term. On the other hand, decapitation appears to erode the quality of the violence. The leadership deficits may expedite the demise of militant groups by encouraging them to redirect their violence to suboptimal targets with higher costs.

## Notes

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29. Asaf Zussman and Noam Zussman, "Assassinations: Evaluating the Effectiveness of an Israeli Counterterrorism Policy Using Stock Market Data," *Journal of Economic Perspectives* 20 (2006): 193–206.
30. National Consortium for the Study of Terrorism and Responses to Terrorism (START), Global Terrorism Database [Data file], 2011, <http://www.start.umd.edu/gtd>.
31. Military and police targets are coded as military, all others as civilian. We subsequently employ different coding decisions as a robustness check.
32. Ideally, the data would be sufficiently fine-grained to fully separate targeted killings attempts against al-Qaida and the Taliban, but the New America Foundation acknowledges the "target organization" during this period was often "unclear" (Bergen and Tiedemann). Due to the operational coordination of al-Qaida and the Taliban in the Afghanistan-Pakistan theater during our observation period, we treat them as a single unit within the territory. Although imperfect, this analytical approach is employed in other statistical studies (e.g., Abrahms and Potter [see note 11 above] and by major regional authorities (e.g., International Crisis Group 2008). The Afghanistan Independent Human Rights Committee (2011) likewise aggregates the groups as "anti-government elements." In our analysis, any bias generated from collapsing the two groups will most likely weaken the results.
33. For instance, 2008 saw eleven attempts to kill the leaders, whereas only one attempt was made in 2007.
34. We list slightly fewer attempts than in the datasets to establish independent observations by combining multiple attempts on either the same or adjacent days. Such attempts are coded as successful if at least one hit the target.
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36. Jaeger and Paserman, "The Shape of Things to Come" (see note 7 above); Johnston, "Does Decapitation Work?" (see note 6 above).
37. Fixed effects capture all unobserved heterogeneity between the groups such as their size, goals, and interconnectedness.
38. Jaeger and Paserman, "The Shape of Things to Come" (see note 7 above).
39. These are (attempt-attacks) Fatah-Islamic Jihad, Hamas-Fatah, Islamic Jihad-Hamas and Fatah-Hamas, Hamas-Islamic Jihad, Islamic Jihad-Fatah. This test is not possible for groups in the Afghanistan-Pakistan theater due to data limitations.
40. Graph is available on request.
41. Johnston and Sarbahi, "The Impact of US Drone Strikes" (see note 16 above).
42. Abrahms, "Al Qaeda's Miscommunication War" (see note 11 above); Abrahms, "Al Qaeda's Scorecard" (see note 11 above); Abrahms, "Why Terrorism Does Not Work" (see note 11 above); Abrahms, "The Political Effectiveness of Terrorism" (see note 11 above); Abrahms, "Does Terrorism Really Work?" (see note 11 above); Abrahms and Potter, "Explaining Terrorism" (see note 11 above); Abrahms and Gottfried, "Does Terrorism Pay?" (see note 11 above); Rose et al., "Does Terrorism Ever Work?" (see note 11 above); Claude Berrebi and Esteban F. Klor, "Are Voters Sensitive to Terrorism: Direct Evidence from the Israeli Electorate," *American Political Science Review* 102 (2008): 279–301; Christophe Chowanietz, "Rallying around the Flag or Railing Against the Government? Political Parties' Reactions to Terrorist Acts," *Party Politics* 17 (2011): 673–98; Audrey K. Cronin, *How Terrorism Ends* (Princeton, NJ: Princeton University Press, 2009); Anna Getmansky and Tolga Sinmazdemir, "Success Breeds Failure: The Effect of Terrorist Attacks on Land Control in the Israeli-Palestinian Conflict" (Prepared for the American Political Science Association Annual Meeting, 2012); Anna Getmansky and Thomas Zeitzoff, "Terrorism and Voting: The Effect of Rocket Threat on Voting in Israeli Elections," *American Political Science Review* 108 (2014): 588–604. See, for example, Peter Krause, "The Political Effectiveness of Non-State Violence: A Two-Level Framework to Transform a Deceptive Debate," *Security Studies* 22 (2013): 259–94.
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49. For a contrarian view, see Max Abrahms, "What Terrorists Really Want: Terrorist Motives and Counterterrorism Strategy," *International Security* 32 (2008): 78–105.
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52. See, for example, Fred E. Fiedler, "Leadership Effectiveness," *The American Behavioral Scientist* 24 (1981): 619; Shelley A. Kirkpatrick and Edwin A. Locke, "Leadership: Do Traits Matter?" *The Executive* 5 (1991): 48–60.
53. Darren Hawkins, David A. Lake, Daniel L. Nielson, and Michael J. Tierney, *Delegation and Agency in International Organizations* (Cambridge, UK: Cambridge University Press, 2006). The former pathology refers to "adverse selection," the latter to "agency slack" or "moral hazard."
54. Pollack, "Delegation, Agency, and Agenda" (see note 18 above).
55. See, for example, Abrahms and Potter, "Explaining Terrorism" (see note 11 above); Chenoweth et al., "What Makes Terrorists Tick" (see note 17 above); Moghadam, "Palestinian Suicide Terrorism" (see note 17 above); Siegel and Young, "Simulating Terrorism" (see note 17 above).
56. Replacements are typically subordinates rather than superiors. See Abrahms and Potter, "Explaining Terrorism" (see note 11 above); Byman, *A High Price* (see note 2 above); Johnston and Sarbahi, "The Impact of US Drone Strikes" (see note 16 above); Price, "Targeting Top Terrorists" (see note 6 above).
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