

Doctrine and Violence: the Impact of Combatant Training on Civilian Killings

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Abstract: Military theorists and practitioners have long argued that training shapes how combatants treat civilians during war. Yet there is little systematic evidence regarding the impact of training on wartime behavior, and almost none for non-state armed groups, despite that fact that such groups intensively train their fighters in order to shape their behavior towards civilian populations. This article argues that among insurgent groups that emphasize the strategic and tactical importance of restraint towards civilian populations, political training can reduce civilian killings. We test the observable implications of our theory in the case of Colombia, using survey data on former FARC insurgents and sub-national data on civilian killings. We find support for our hypothesis, with results that are robust to a range of model specifications and controls, including alternate sources of combatant discipline and obedience, such as military training and punishment.

Keywords: Training, indoctrination, ideology, civil war, violence, civilian, victimization, FARC, Colombia

Training is a crucial determinant of military behavior in wartime. It influences not only internal governance practices, but also how military organizations relate to civilian populations, including how, where, and against whom they employ violence. While some armed groups use training to direct violence against specific civilian groups, in many contexts training is used to restrain the accidental or deliberate targeting of civilians by foot soldiers in ways that might undermine broader strategic goals.¹ Military doctrine suggests that training should have larger violence-reducing effects in irregular wars in which armed group units operate among civilian populations.²

Despite a growing literature on the internal organization of armed groups,³ there has been only limited research on combatant training and indoctrination and the consequences such processes have on the conduct of war.⁴ This is particularly noteworthy given that across the world, armed groups with widely differing motives and structures generally place great emphasis upon training and indoctrination.⁵ These processes are fundamental mechanisms through which armed groups attempt to shape the behavior of individual combatants.⁶

This article explores the relationship between political training and the propensity for armed groups to kill civilians. We argue that the *political content* of training matters. The function of political training is not just to discipline combatants to follow orders, but to *reshape* combatants' beliefs in order to serve the aims of the group.⁷ Given imperfect monitoring of soldiers' behavior, indoctrination and training are essential to transforming the preferences of fighters, reducing the need for punishment.⁸ In cases where armed groups view civilian abuse as counterproductive to the war effort, and where combatants are trained and indoctrinated accordingly, we should expect to see more restraint exercised towards civilian populations.

In order to empirically evaluate the impact of training on civilian victimization, we examine patterns of armed group training and civilian killings in Colombia. We use data gleaned from a survey of demobilized guerrilla fighters from the Revolutionary Armed Forces of Colombia (FARC), and use survey respondents' answers about their training to calculate training intensity across geographic departments. We then match this information to violent events data to estimate the effect that different levels of FARC training intensity have on civilian killings, after controlling for potential confounders.

Our findings suggest that the content of training matters greatly for the conduct of soldiers and carries implications for civilian killings. Political training strongly decreases FARC's killing of civilians. Our statistical results are robust to the inclusion of a battery of control variables, including levels of territorial contestation, group disciplinary measures (another mechanism often considered crucial to mitigating civilian abuse), as well as the intensity of military training.

This study makes several contributions. First, by focusing on training, we identify and begin to theorize an important dimension of the internal organization and functioning of armed groups that has been largely overlooked in contemporary empirical research. Second, we empirically test the relationship between political training and other forms of group socialization and control on the incidence of civilian killings in one of the world's most protracted and still ongoing conflicts. Finally, we underline the potential contribution of individual-level survey data to our understanding of the dynamics of civil war. Few studies use survey data of former combatants to systematically assess the correlates of wartime behavior, even though such data provide a powerful opportunity to explore factors that motivate or mitigate outcomes such as the killing of civilians.

The paper proceeds as follows. The next section theorizes training of combatants in armed conflict. It identifies the causal mechanisms through which political training might impact combatant behavior, especially regarding civilian victimization. The third section describes our survey data and explains the research design. The fourth section presents the statistical results and an extensive battery of robustness checks, which present additional statistical evidence to evaluate the impact of alternate sources of combatant discipline on civilian killings. The final section discusses the implications of our findings.

LEARNING HOW NOT TO FIRE A GUN

Training is the bedrock of military organization. Recruits to formal and non-state armed forces spend significant time drilling, practicing, and absorbing information.⁹ This process has two basic functions: the socialization of recruits into the norms and operating procedures of the organization, and the inculcation of specific skills that allow recruits to fight effectively.¹⁰ The goal of training is to turn ordinary individuals into soldiers: as Morris Janowitz argues, “professional socialization—that is, education and training—is considered essential to fashion and refashion the military man.”¹¹

The process and content of training varies widely within and across military organizations. However, it is possible, and we argue critical, to distinguish between two broad dimensions of warfighting, each of which requires a distinct form of training: the *production and application* of coercive force, on the one hand, and the *management* of force, or decisions regarding where and how violence and coercion should be utilized, on the other.¹² The production of force is developed through military and operational training, the management of force through exposure to political training and doctrine. We expand on this distinction below, before drawing out a testable proposition regarding the impact of political training on combatants' behavior towards civilians in irregular war.

The production and application of force requires a range of mechanical, technical, and organizational skills. The content of this sort of training—which we shorthand as “military training”—is correspondingly broad and diverse: soldiers are taught to effectively use weapons, maintain their physical condition, work with equipment, execute a wide range of tactics and maneuvers, operate on varying forms of terrain, and to function smoothly within larger units. Military training is designed to accustom soldiers to conditions and challenges that they might expect to encounter in battle, so as to mitigate the potential for confusion in combat.¹³

Military training is typically routinized and intense. Recruits are put through periods of extreme physical and mental stress, typically via taxing physical tasks, sleep deprivation, and psychological pressure (or according to many accounts, abuse) from trainers.¹⁴ These processes are thought to serve an equally important set of latent functions: to acclimate soldiers to follow orders and maintain discipline, and to build a sense of shared identity, trust, cohesion, and coordination within and among small group units.¹⁵ Importantly, training is not a one-off treatment that prepares a soldier for combat, but is typically an ongoing process that begins prior to deployment and continues in the field.¹⁶

A second dimension of training—which we focus on in this paper—concerns the *purpose and management* of force. In both formal state and insurgent forces, recruits undergo training and indoctrination processes that steep them in the political ideology of their organization, stressing the righteousness of the use of force when sanctioned by the leadership. These abstract principles, however, are formalized in military doctrine. Doctrine, in Deborah Avant’s definition “falls between the technical details of tactics and the broad outline of grand strategy. Whereas tactics deals with issues about how battles are fought, doctrine encompasses the broader set of issues about how one wages war.”¹⁷ Doctrine is not designed to tightly script the actions of soldiers, but instead provides a body of knowledge, principles, and policies in order to inform the decision-making of soldiers in the field.¹⁸

Political training and exposure to doctrine are designed to re-shape the preferences of individual combatants. As opposed to punishment and disciplinary measures, which condition combatants to sublimate their preferences to avoid an undesired effect, indoctrination is designed to alter preferences and introduce new ones. Herbert C. Kelman notes that through processes such as training, an agent moves from *compliance* (based on obtaining rewards or avoiding punishment), to *identification* (based on the desire for social affirmation), to *internalization* of the rules of the group, when “an individual accepts influence because the content of the induced behavior—the ideas and actions of which it is composed—is intrinsically rewarding.”¹⁹

a. Political training and the principal-agent problem

We begin with several first principles at the micro-level about what drives individual combatants in armed groups to engage in abuse of civilians, despite the existence of group-level incentives to refrain from targeting innocent civilians.²⁰ We conceptualize the relationship between combatants and commanders as a principal-agent problem. Principal-agent models are useful to describe relationships in which preferences between principals and agents diverge and there are informational asymmetries between those parties.²¹

Preferences between commanders and combatants might diverge for a number of reasons. Lower-level combatants often have different backgrounds than commanders—including lower levels of education, and lower socioeconomic status—and therefore are likely to have joined their armed group for different reasons than commanders.²² These differing incentives are coupled with informational asymmetries, which make it difficult for commanders to perfectly monitor the behavior of combatants. This occurs when it is difficult or impossible to establish verification mechanisms for the completion of particular tasks, providing combatants with opportunities to cheat, engage in self-enrichment, use violence against targets not sanctioned by commanders, or refrain from engaging in violent acts ordered by commanders.²³ In view of these dynamics, commanders rely on a range of tools—including training regimes and punishment of combatants for infractions—to ensure that combatants will engage in behaviors to advance their groups' interest.

The relationship between indoctrination and other forms of social control, notably discipline and punishment, has received attention in the literature on armed group behavior.²⁴ Amelia Hoover Green, for example, argues that indoctrination and political education programs help solve the “commander's dilemma”: combatants must be ready to engage in violence, yet commanders must be able to control violence to reduce wanton and indiscriminate attacks against civilians that could hurt the group's chances of success. Well-institutionalized attempts to control violence through political indoctrination are often an efficient and effective way to restrain the production of violence,²⁵ as are bureaucratic procedures to increase monitoring of agent behavior.²⁶

In civil wars, the principal-agent problem is compounded by the fact that combatants are surrounded by civilian populations with uncertain loyalties. This uncertainty presents risks for both sides, but *particularly* for civilians, as it often drives combatants and groups to selectively eliminate civilians who are suspected to collaborate with rival groups.²⁷ Insurgents are also threatened by information leakage that can expose them to violence from stronger opponents.²⁸ Even where the majority of civilians support a given faction, information provided by a single outlier may be sufficient to expose combatants to risk. Front-line combatants will bear the brunt of failure to resolve each dimension of the information problem and thus are more likely to default to using violence against civilians rather than opting for restraint that might benefit the group. It is important to note here that combatants do not necessarily

rationaly calculate where and how to deploy violence against (potential) enemies: they are driven by the uncertainty, stress and fear of potential betrayal by civilians, and may as a result engage in civilian abuse rather than careful assessment and restraint.

We are also *not* making the claim that combatants are sadistic savages who, without the moderating influences of training and punishment, would abuse civilian populations. We are making the more modest claim that given the uncertainty and fluidity of civil war, some fraction of combatants will engage in civilian abuse when their commanders have not convinced them through political training to tolerate more risk for the greater good. The theory that we advance in the following section is sociological: it is about how variation in the institutionalized rules and practices of armed groups govern how combatants within small groups assess the risks and benefits of violence against the civilian populations that surround them.

b. Varieties of political training and civilian abuse

Commanders of armed groups recognize the benefits of political training: groups around the globe extensively employ political training and indoctrination. Christopher Clapham, reviewing a range of insurgent groups, notes “recruits, or indeed officers or their equivalents, may receive formalized training not simply on military technicalities, but on the organization, aims and ideology of the movement.”²⁹ The clearest evidence comes from Marxist groups in which ideological motivations play a central role in both recruiting and mobilizing troops. For instance, the Eritrean People's Liberation Front (EPLF) “was marked...by an intense commitment to inculcating all of its members with an official 'history' which constituted the ideological charter of the movement, together with formalized structures for self-criticism and thorough training in the theory of liberation war derived from Mao Tse Tung.”³⁰ Maoist forces in Nepal have explicitly and successfully used ideology and political education programs to both generate and retain recruits.³¹ Indeed, as Che Guevara indicated, “[t]he important thing, that which must never be neglected in a school for recruits, is indoctrination; this is important because the men arrive without a clear conception as to why they come, with nothing more than very diffuse concepts about liberty, freedom of the press, etc. without any clear foundation whatever. Therefore, the indoctrination should be carried out with maximum dedication and for the maximum amount of time possible.”³²

While Maoist and Marxist groups may be most likely to carry out regular political indoctrination, the practice is also widely employed by religiously-motivated and ethnic irredentist movements. Salafist Jihadi and other violent Islamist movements, including Al Qaeda and the Taliban, employ indoctrination in order to cultivate recruits, prepare rank-and-file fighters, and develop new leaders within the movement.³³ Rohan Gunaratna, in his analysis of Al Qaeda, notes that the movement placed great emphasis on political-religious indoctrination, considering it “far more important than battlefield or terrorist-combat training.”³⁴ Political indoctrination is also

known to be widespread in ethnic insurgent movements, including Sri Lanka's Liberation Tigers of Tamil Eelam (LTTE), and among the many ethnic minority insurgent groups along Burma's frontiers.³⁵

In civil wars in which combatants and populations are intermingled, political beliefs (*why* groups fight) are closely linked to doctrine (*how* they fight), particularly with respect to the treatment of civilians.

In some cases, political beliefs and doctrine will emphasize restraint against civilians. For instance, some Marxist insurgent groups' political narratives center upon the liberation of the peasantry, stressing the importance of popular support from cultivators to wage effective guerrilla war. Variation in elite support for Marxist-Leninist political ideology, which stressed the importance of refraining from indiscriminate violence against civilians, appears to explain patterns of abuse in the Mozambican and Angolan civil wars.³⁶ Relatedly, evidence from the terrorism literature suggests that leftist and other non-religious ideological commitments explain why some terrorist groups choose to carry out non-lethal as opposed to deadly attacks.³⁷

In other cases, political ideologies will identify some civilian populations as legitimate and justifiable targets of violence. Examples include the extreme case of Rwandan Hutu *genocidaire* beliefs and violence. More generally, recent research on violence against civilians in ethnic armed conflicts has found evidence that both rebel groups and governments direct violence against each others' ethnic bases.³⁸ In Latin American civil wars such as those in Guatemala and El Salvador, right-wing governments and paramilitary groups were motivated by an anti-communist doctrine that emphasized the removal of potential political enemies; in these cases, governments carried out significant indiscriminate violence against civilians, enabled by a doctrine that permitted the large-scale "mistaken" killing of innocent civilians suspected of being sympathizers or guerrillas.³⁹ Similarly, some Marxist/Leninist groups sanctioned violence against "class enemies." Massacres of suspected Communist supporters in Indonesia in the mid 1960s by "gangster" militias followed similar patterns.⁴⁰

It is important to note that political ideology and doctrine are not always coterminous: groups may employ doctrine that appears to be at odds with their political beliefs and agenda. For instance, in Peru the Maoist insurgent group *Sendero Luminoso* perpetrated horrific atrocities against the population it was dedicated to "liberating." That said, different armed groups define and identify civilian (non-combatant) populations according to different terms (or different degrees of consistency), and groups sometimes readily identify some segments of the population as enemies and legitimate targets. In some cases, doctrine will clearly map onto political beliefs, but this should be rigorously examined and tested rather than assumed.

We derive the following testable proposition regarding the impact of political training and indoctrination on the killing of civilians by armed groups: *greater exposure to political training and indoctrination that prohibits civilian abuse should lead to decreased*

civilian killings. This argument comes with scope conditions: we expect this proposition to hold in cases where the armed group's doctrine emphasizes restraint towards civilians

VIOLENCE AND THE TRAINING OF ARMED GROUPS IN COLOMBIA

Theory and doctrine suggest that training should matter most in irregular wars, which now comprise the majority of armed conflicts around the globe.⁴¹ Colombia provides fertile ground for testing theory related to training and civilian victimization in irregular wars, given the consistency and intensity of armed group indoctrination systems, and the unusually long duration of the conflict.

One of the longest-running insurgencies in the world, the Colombian conflict has featured a constellation of leftist insurgent groups, rightist armed "self-defense" and paramilitary organizations. The ongoing conflict has its roots in *La Violencia*, a civil war that lasted from 1948 until the installation in 1958 of a rotating presidency among the Conservative and Liberal parties, called the *Frente Nacional*, intended to stop the bloodshed.⁴² Two of the left-wing armed groups that exist today—the *Fuerzas Armadas Revolucionarias de Colombia* (FARC) and the *Ejército de Liberación Nacional* (ELN)—emerged as *La Violencia* was ending.⁴³

The primary insurgent organization, the FARC, was founded in 1964.⁴⁴ The FARC was founded on Marxist ideology, and its explicit goals include large-scale land redistribution to counter historic economic inequalities, as well as the Colombian government's overthrow.⁴⁵ Many contend that the FARC's ideology has drifted over time, particularly as the group has become enmeshed in narco-trafficking, with some positing that the FARC have become nothing more than criminals, representative of the "rebels as criminals" hypothesis.⁴⁶ However, we agree with Gutiérrez Sanin's argument (2004) that despite the FARC's engagement in illicit activities, including the drug trade, the group is much more than a criminal organization. Rather, only its deep ideological, Marxist roots can help explain a number of behaviors in which it engages on a daily basis.⁴⁷

While FARC's strength has varied over time - due to changing levels of international support, the group's ability to extract rents from civilians and recruit combatants, as well as its efficacy in maximizing profits from the trade in narcotics - it remained a relatively small fighting force of a few thousand until the early 1980s, when it began a geographical expansion, buoyed by profits from taxing coca. By the early 2000s, FARC numbered between 16,000 and 20,000 combatants, with approximately half of those fighters killed or captured during Álvaro Uribe's administration, which lasted from 2002-2010. Two rounds of peace negotiations with the FARC failed: one in 1982 under the Belisario Betancur administration and another in 1998 under the Andrés Pastrana administration.⁴⁸ A current round of negotiations is near completion, and widely expected to lead to a peace agreement by March 2016.

Training of new recruits to the FARC includes military training, such as weapons handling, cleaning, and assembly, physical exercise, operating in formation, and combat tactics, as well as ideological instruction, consisting of lectures on Marxism and Colombian history.⁴⁹ In terms of military training, demobilized combatants report that training consisted of “two-month training sessions, which included learning how to handle AK-47 and M-16 rifles and adapting to living in harsh jungle environments.”⁵⁰ In addition to such military training, however, “indoctrination was also high on the agenda.”

Indoctrination activities included daily lessons on “FARC's political ideology and discipline, [and] absorbing the many rules that make up life in a FARC camp.” Training focused on doctrine, including regulations on the treatment of civilian populations. One former fighter interviewed by Human Rights Watch noted that “[t]hey taught us how to obtain the support of the civilian population and the right conduct, like not to go into the population and take their animals and behave badly and trick them with words. That's forbidden. There are rules for all of that.”⁵¹ As Alberto de Jesus Morales (alias “Pajaro”) describes, “[t]hey gave us training for something like 20 days, teaching the laws and the rules and what are the rules you have to follow when you're in there, the discipline you're supposed to have...”⁵² Such training has not, of course, prevented FARC from killing civilians: both group-sanctioned, targeted attacks against civilians, as well as more “opportunistic” killings by individual fighters. However, the group's goals and training processes clearly emphasize and inculcate general restraint against civilian populations.

How much training does the average FARC recruit receive? From journalistic accounts and interviews with ex-combatants, we know that FARC combatants “study Lenin and Marx everyday,”⁵³ and from interviews with scholars that ideological instruction consists of daily, mandatory lectures, evening readings, and discussion groups.⁵⁴ Topics for instruction and group discussion involve Colombian history, and political economy. There is variation across individuals: some testify to an even more intense process of indoctrination:

For four hours a day, they are taught FARC ideology: The Colombian government is corrupt; the American government is imperialistic; FARC is the people's army; the FARC and the poor are persecuted by the state. With the FARC's form of limited Marxism having changed little in forty years, there is hardly more rhetoric to absorb.⁵⁵

Another combatant reports that she “studied reading, writing, FARC ideology, and weapons for at least two hours a day” and in the evenings, “all FARC camps had a 'cultural hour,' when they would discuss the news and politics or sing and play music.”⁵⁶ However, it is important to note that while the content and process of training

is dictated from the top-down, each commander has some scope for its application in the field. One account from a FARC captive notes that “Indoctrination was one of the commander’s responsibilities. Each camp was built on the same model, and each featured a classroom where the commander communicated and explained his orders....”⁵⁷ In short, political training is generally frequent and intensive in the FARC, but varies by locality.

We can also derive an understanding of the content of the group’s political training from the jobs performed by political officers. The survey instrument we use for our statistical analysis—introduced in the next section—included a question that asked respondents their rank and to describe the main functions they performed. Respondents who self-identified as political officers described key functions, including meeting with and organizing the local public, mediating local disputes, ensuring the good comportment of their troops with the local population, and providing ideological instruction for combatants.

In sum, based on the FARC’s ideology, its emphasis on liberating the peasantry, and the group’s strong doctrinal emphasis on winning over civilians, we expect that FARC units with more political training should kill fewer civilians.

Note that the theory and empirical analysis in this paper do not focus on the right-wing, anti-guerrilla paramilitary organizations that have been an important feature of the Colombian conflict. Paramilitaries have accounted for a large proportion of Colombia’s civilian casualties over the last two and a half decades, mainly because paramilitary ideology emphasized the importance of eradicating support for the guerrilla among civilian populations through collective targeting.⁵⁸ While intuitively this could imply a positive relationship between training and civilian killings within the paramilitaries, we do not focus on these groups here for a few reasons. First, following a demobilization process in the mid-2000s, many former paramilitary fighters reconstituted themselves into apolitical criminal gangs known as *bandas criminales* (BACRIM) that did not possess the same anti-guerrilla political project as earlier iterations of paramilitaries. Including them would introduce significant measurement error. There is also evidence that the AUC’s ideological position towards civilians shifted over time, as the group attempted to moderate its indiscriminate violence and attract greater civilian support.⁵⁹ The survey data we use in this research do not capture this type of variation in political training.

RESEARCH DESIGN

We draw upon a survey of 476 former FARC combatants to test our hypothesis. The data were collected in 2008 by *Fundación Ideas para la Paz* (FIP), a Colombian non-governmental organization. Between 2003 and July 2014, more than 25,000 combatants from leftist groups in Colombia disarmed, demobilized, and reintegrated into civilian

life.⁶⁰ They have done through a slow, individual process of defection in the context of an escalation of government counterinsurgency initiatives following the election of President Álvaro Uribe in 2002.

The FIP survey was administered using a stratified random sample of demobilized combatants between February 5, 2008 and May 31, 2008 in various regions across Colombia. More specifically, interviewers conducted the survey on the Caribbean Coast,⁶¹ in Antioquia,⁶² Valle del Cauca, Nariño, and Bogotá. The sample was randomly drawn from the full list of guerilla ex-combatants processed through the Colombian government's reintegration program. The difficulties of constructing a truly representative sample of ex-combatants is well known, especially in the context of an ongoing conflict: some combatants desert without participating in a demobilization process,⁶³ some leave their armed groups but make their way into the ranks of criminal gangs, while still others may be unwilling to speak to enumerators for fear of retribution from former groups. The first two problems are structural and our survey, like nearly all others, is unable overcome these.⁶⁴ Yet the survey implementation was designed to mitigate respondents' fear of participation. Reintegration program staff who were acquainted with sampled respondents initiated contact to introduce the survey and the enumerator, facilitating an atmosphere of trust. Additionally, the survey questions on which we rely do not require admissions of guilt for any behavior that could be seen to be objectionable, thereby mitigating concerns about untruthful responses.

The survey includes information on ex-combatants' modes of training and their locations across time. To test our hypothesis regarding the effect of training on civilian casualties, we build the key independent variable from a question that asked, "What type of training did you receive?"⁶⁵ with possible responses including military and political training. Respondents could answer "yes" to all, some, or none of these options. *Political training* is constructed by calculating the percent of respondents from each group active in a given department-year who answered "yes" to having received political training. That is, if 15 of 20 FARC ex-combatants active in the department of Antioquia in 1998 reported having received political training, then *Political training* takes a value of 0.75 in that department-year.

We might be concerned about how representative demobilized FARC fighters are of the larger universe of active insurgent combatants. Those who left the FARC might differ systematically from those who carried on the fight, including having been trained in systematically different ways. As such, although the survey sample is representative of the entire population of *demobilized* fighters, insurgent combatants who demobilized individually may have received less political training than those who remained in the field, rendering them less likely to remain in the armed group, particularly when under military pressure.

To test for this source of bias, we examine a sample of insurgent combatants who were *captured* by the Colombian armed forces (N=49) and subsequently processed through the government reintegration program alongside other demobilized combatants. To rule out potential selection effects, we compare captured and demobilized insurgents across a range of dimensions, including distributions of training and indoctrination, experiences of punishment and discipline within the group, reasons for joining the armed group, and age at time of recruitment.

The results are presented in Table 1. We find no statistically significant difference between captured and demobilized combatants in terms of training, as well as other theoretically salient factors.⁶⁶ We also test for other potential confounds that might bias our estimates of “baseline” FARC combatants. If our sample of captured combatants is spatially clustered, its characteristics might reflect the idiosyncrasies of a single unit or front. We conduct a Kolmogorov-Smirnov nonparametric test to determine whether the distribution of combatants’ primary area of operations differed across captured and individually demobilized combatants, and find no evidence of spatial clustering.⁶⁷

Table 1

We merge survey data on training and combatants' location and time in the armed group to department-level data on FARC killings of civilians, which span the temporal period 1988-2005.⁶⁸ We use measures of civilian killings because we concur with Kalyvas that although homicide “does not exhaust the range of violence...it is an unambiguous form that can be measured more reliably than other forms,” and that “homicide crosses a line: it ‘is an irreversible direct, immediate and unambiguous method of annihilation’...”⁶⁹

The data we use to construct the dependent variable identify the number of civilians killed by the FARC in each year in each department. The data were collected by the Human Rights Observatory of the Vice Presidency of Colombia. The process of collecting the Human Rights Observatory violence data proceeded as follows. Members of the national police in the field radioed incident reports to police brigades. This information was reviewed by the brigade and, once its accuracy was verified, it was subsequently sent up to the division level, which verified information on a daily basis. Violent events were then entered into a national database and also provided to the General Command in hard copy. The General Command again reviewed information for accuracy and brought together reports from the various branches of the armed forces. Once all of these verification steps had been undertaken, the data were then provided to civilian officials in the Colombian Ministry of Defense for inclusion in the dataset.

One concern about government mortality data is the potential for political influence to bias civilian mortality estimates; specifically, we would be concerned that

the data would over-count killings by guerrilla, and undercount killings by the Colombian military and right-wing paramilitary actors. Albertus and Kaplan (2013) have compared these government data to other datasets of Colombian violence during specific periods of time. Two findings bear repeating. First, the government data are highly correlated with data collected by a Colombian non-governmental organization, the Center for Research and Popular Education/Peace Program (CINEP/PPP), a Jesuit think tank that codes press reports from twenty national and regional sources, which are then subsequently verified with an extensive network of local church officials. The added benefit of checking the government data against the CINEP data is that the church has sources of reporting in hard-to-reach locations, helping to mitigate potential problems of unintentional under-reporting of events in hard-to-reach locations. More specifically, in comparing the government dataset to the CINEP dataset Albertus and Kaplan (2013: 225) find that "[a] full 88 percent of municipality-years differ by at most one guerrilla action, and 96 percent differ by three or fewer actions." Second, they find that estimates of guerrilla presence in the government dataset are also very similar to those found in estimates conducted by *Personerías*, local government functionaries whose job is, in part, to monitor citizen's rights, receive complaints from citizens about violations of their human rights, and to report on those violations to other state agencies. For these reasons, and due to the strict coding procedures adopted by the government, we can be reasonably satisfied that the data used in the manuscript are minimally biased when compared to existing alternatives.

All this said, it is important to note that observational data on civilian mortality is not necessarily representative of the population of conflict events or killings,⁷⁰ owing to biases in the degree to which events are reported by victims, communities, or observers; geographic variation in reporting capacity or access; or political biases.⁷¹ Validation against additional datasets whose biases and reporting emphases are likely to cut in different directions than those of the Human Rights Observatory provides a useful check against potential bias in the data. We acknowledge, however, that these sources may "agree" on an incorrect pattern of lethal violence if many cases remain unknown to all these convenience sources. As such, it is important to note that it cannot be assumed (or demonstrated) that our violence data are representative of the true population of episodes of lethal violence in Colombia. In some cases, scholars have used Multiple Systems Estimation (MSE) to rigorously assess levels of missingness in violence data.⁷² Although recent efforts have attempted to reconcile differing counts of homicides across datasets in Colombia, to our knowledge MSE has only been used to forensically analyze violence data in one department, Casanare.⁷³

It is also important to note that the dependent variable may capture multiple types of civilian killings by the FARC. The variable therefore includes civilians killed in clashes, in indiscriminate attacks by the FARC, or in acts of selective violence. In contexts of irregular war such as the Colombian conflict, most victims are civilians. One

estimate from the Centro Nacional de Memoria Histórica - one that has been controversial - holds that approximately 80% of all deaths in the conflict have been civilians, and most are not killed amidst clashes in pitched battles along frontlines.⁷⁴ Rather, given the irregularity of the fighting, most are killed in "takeovers" of towns or in selective killings.

In estimating our models, we control for a variety of department level variables that are likely to confound the unbiased estimation of the effect of training on civilian casualties. The department level controls, described in detail below, are grouped into four broad categories: endogenous conflict dynamics, geographic characteristics, economic attributes of the area, and, finally, a population variable to provide for scale control.

We begin by controlling for endogenous conflict dynamics. We do so for a number of reasons. First, there are opportunity costs to engaging in political training: time spent indoctrinating combatants is time away from imparting military training and tactics that might keep both combatants and commanders alive during military operations. A key implication of this argument is that we would expect to see less training in highly competitive regions, where the tempo of combat with rival groups precludes intensive training.

Second, there are tactical repercussions to choosing *not* to politically train one's combatants that are related to the competitiveness of particular regions. If an area of operations is non-competitive - that is, an armed group has achieved complete territorial control - the baseline probability of civilian abuse is likely to be lower.⁷⁵ When not engaged in ongoing combat operations, commanders will be better able to monitor combatants to determine whether their own fighters engaged in civilian abuse, thereby deterring abuses from occurring in the first place.

Third, competitive environments may provide commanders incentives to train their combatants: if civilians prefer to collaborate with less abusive armed groups, and if training is capable of limiting abuses against civilians, commanders should find it most useful to politically train combatants in highly competitive locales and would therefore be willing to absorb the potential costs of doing so. Given that there are strong theoretical reasons to believe each of the aforementioned claims, and given the lack of prior empirical studies on this question, this is ultimately an empirical matter and as such we test these relationships statistically.

To do so, we include the number of clashes between the FARC and paramilitary groups (*Guerrilla-Paramilitary Clashes*), between government and guerrilla groups (*Government-Guerrilla Clashes*) and between government and paramilitary groups (*Government-Paramilitary Clashes*). Each clash variable is lagged by one year to prevent measuring on the right hand side what we aim to explain on the left hand side. These data are all drawn from the Observatory dataset described above.

Next, we include geographic variables to be sure that civilian casualties are not being driven by topological, geological, or climactic characteristics of individual departments. These variables include the department's area, average elevation, average rainfall, soil quality and erosion, and an index of water availability. *Area* is the total surface area of a department, measured in square hectares and provided by the National Statistics Bureau. *Altitude* measures the average number of meters above sea level for each department, taken from the Instituto Geográfico Agustín Codazzi (IGAC). *Rainfall* captures the average rainfall in a given department, measured in 1995 and provided by the Centro de Estudios sobre Desarrollo Económico (CEDE) at the Universidad de los Andes. *Soil* is an index, constructed by CEDE based on data gathered by the IGAC, that captures conditions such as topography, drainage, climate, and other factors. The measurement was constructed taking into account area, among other features, and was standardized with a mean of zero and a standard deviation of one. *Erosion*, constructed by CEDE based on data gathered by the IGAC, provides an index of erosion. It is derived from an ordinal scale that codes whether areas are characterized by inundation, light erosion, moderate erosion, severe erosion, very severe erosion, and no erosion, and was then modified to take into account area. To facilitate interpretation, it has been standardized with a mean of zero and a standard deviation of one. *Water* is an index of the availability of water at the department level, constructed from georeferenced data on the coverage of local aqueducts. The continuous measurement was developed by CEDE, based on data gathered by IGAC. All of these factors likely shape agricultural production and, therefore, armed group tactics and state repression.

Third, we use two economic variables that might drive armed group activity and civilian targeting. *Poverty* is the average of the Unsatisfied Basic Needs poverty index (NBI) at the department level from the 1993 census, provided by the National Statistics Bureau. *Gini* is a measure of income inequality, calculated as the Gini coefficient for each department in Colombia and taken from the National Statistics Bureau and the Ministry of Social Development. Finally, we include *Population*, which equals the total number of residents in a given department, as reported in the 1993 census by the National Statistics Bureau.

EMPIRICAL RESULTS

All of the results from models reported below use a negative binomial estimator with fixed effects at the department level, to account for unmeasured time-invariant characteristics. We use a negative binomial estimator because the dependent variable is a count of events, and is overdispersed: the variance of the count is much greater than its mean (however, results are also robust to estimation using OLS.)⁷⁶ The unit of

analysis is the department-year. Coefficients are presented as Incident Rate Ratios (IRRs): similar to odds ratios, an IRR of 1.5 indicates a 50% increase in the dependent variable for every unit change in a given independent variable, while an IRR of 0.5 indicates a 50% decrease in the dependent variable.

We begin with baseline models, shown in Table 2, which estimate the effect of political training on civilians killed by the FARC, conditional on covariates.

Table 2

Model 1 estimates the bivariate relationship between political training and civilian killings; Model 2 includes a full vector of control variables. The results for both models show strong support for our hypothesis. Higher intensities of political training among FARC combatants are correlated with substantively and statistically significant declines in civilian killings: FARC units that have 100% of their combatants have reported political training are estimated to kill 68% fewer civilians than those with no political training at all.⁷⁷ Importantly, the relationship between political training and reduced civilian mortality is robust to the inclusion of variables measuring armed group clashes (Model 2). Training and indoctrination have clear, independent and substantial effects on armed group behavior towards civilians. This finding provides support for institutionalist accounts of armed group behavior: violence is not solely driven by localized strategic pressures and incentives, but instead reflects group norms and processes.

We now turn to several theoretically salient control variables. Model 2 provides little evidence that clashes between armed groups have a substantial direct impact on civilian populations: greater numbers of clashes between the government and insurgents are associated with small increases in the rate of civilian casualties, while there is no statistically significant relationship between guerrilla-paramilitary clashes and civilian casualties nor government-paramilitary clashes. While violence against civilians in the Colombian civil war has been substantial, it largely reflects direct targeting of civilians by armed groups rather than “collateral damage.” We also find no link between variables tracking economic deprivation (*Poverty*) and inequality (*Gini*) and intensities of FARC attacks against civilians: while economic deprivation and inequality have been tied to FARC recruitment and community support, they do not motivate detectable levels of civilian killings.

Robustness checks

With these preliminary results in mind, we now turn to several robustness checks, to confront potential threats to inference. These address alternative mechanisms through which commanders generate compliance - punishment and military training - and address whether these mechanisms allow for independent decision-making at the unit level.

a. Training and obedience

The dominant argument regarding the impact of training simply suggests that it re-shapes the goals of individual soldiers. A second, highly plausible account implies more drastic effects: training may instead simply lead to conditioned *obedience*, rendering soldiers compliant to orders from superiors. If this were true, then individual combatants and small group units deliberately kill civilians only as much (or as little) as their superiors believe they should. If the result of indoctrination is conditioned obedience to orders, then training should have no independent effect. Given the potential threat to inference this poses, we address this relationship both theoretically and empirically.

Military jurisprudence on civilian killings runs counter to the idea that soldiers simply and consistently implement their commander's will.⁷⁸ One reason is that there is no *a priori* reason to expect that norm of obedience should erode *all other norms* of behavior, including those operative in the soldier's society: thus, "murder, rape, pillage or torture... [are] clearly criminal because [they violate] common-sense rules of decency, social conduct, and morality."⁷⁹ A stronger claim suggests that soldiers retain their own preferences even in the face of training: "military training may attempt to make obedience totally automatic, but it cannot, simply because of human nature."⁸⁰ Plus, the literature on principal-agent problems in military organizations demonstrates that while preference alignment is a goal, monitoring and sanctioning processes exist precisely because foot soldiers may not perfectly implement their commander's will. For these reasons, we argue that training is not merely a proxy for the preferences of officers: as armed forces clearly recognize, it has independent effects.

We assess the impact of training on obedience empirically, by returning to our survey data, which include information on the provision (and severity) of disciplinary measures within the armed group. It is implausible that training would lead to total social control, such that small infractions by combatants would never occur. However, if training does create *conditioned* obedience, we should expect that it would reduce the number of severe infractions requiring punishment. To test this proposition, we create a new variable, *Severe Punishment*, which records the percentage of combatants in each unit who report having been disciplined with corporal punishment. Empirically, this form of punishment is unusual, and minor forms of discipline (additional guard duties or hard labor) are more common.

Table 3

Severe Punishment is correlated only weakly (and positively) with political training (0.152).⁸¹ Models 3 and 4 in Table 3 take the provision of punishment of combatants as a dependent variable, to test whether soldiers continue to engage in behaviors that violate commanders' preferences and are subsequently punished for doing so. Model 3 estimates the bivariate relationship, while Model 4 controls for a range of department-level confounders. Both models show that there is no statistically significant relationship between political training and punishment.

We can conclude from these results that training does not simply induce compliance. Combatants are still being punished for transgressive actions, and it is unlikely that combatants are wholesale adopting their commanders' preferences. Training, therefore, is likely exerting an independent effect. However, the results raise a new concern: punishment or other discipline-enhancing factors could be used as a complement for political training: political training might be necessary but insufficient absent other reinforcement. We address this in the following sub-section.

b. Alternate sources of discipline: punishment and military training

Armed groups inculcate adherence to group rules and control over foot soldiers using both punishment and training.⁸² Theoretically, punishment and training have been conceptualized as substitutes. Kelman suggests that effective indoctrination should lead to internalization of group norms, eliminating the need for commanders to police combatant behavior.⁸³ Scott Gates and Ragnhild Nordås likewise argue that the “level of direct observation of all activities of the agent (soldiers) by the principal (commanders) can therefore be relaxed in situations where recruits have been trained (or indoctrinated) to the point of full internalization.”⁸⁴ In addition to re-shaping individual preferences, training improves group efficiency by reducing the need for surveillance and sanctions. Intense political training may be a less costly form of exerting social control over combatants than resorting to disciplinary measures that might backfire, leading combatants to defect or desert.⁸⁵

While it is true that both punishment and training alter the behavior of individual combatants, they do so through distinct mechanisms. Punishment alters preference *ordering* by encouraging agents to sublimate their own desires, while training introduces *new* preferences, which are ranked above prior desires. To test this possibility we include a variable that codes the percent of ex-combatants active in a given department-year who reported having received punishment.⁸⁶ If the provision of political training and punishment is highly correlated, it is possible that due to multicollinearity political training would be rendered insignificant in our models once we control for the deployment of punishment. Empirical tests of this relationship find

that political training remains statistically significant and negative even after controlling for punishment.⁸⁷

Punishment, however, is not the only other source of discipline. Military training is also a key component of structuring activities and controlling combatants. The literature on military training presents a mixed picture of its impact on soldiers' behavior towards civilians. One perspective suggests that by conditioning soldiers to follow orders, and by inculcating greater discipline, military training should lead to both greater battlefield effectiveness and restraint in the use of force.⁸⁸

Similar to punishment, military training could be an omitted variable that is highly correlated with political training; its omission from our empirical analysis might bias the results, and its inclusion (if highly collinear) might render the effects of political training insignificant. We test for this in a final battery of models.

Table 4

Table 4 systematically examines these relationships, using a negative binomial estimator with department-level fixed effects. Model 5 shows that military training is not significantly correlated with FARC killings and Model 6 shows that political training remains significant and negatively correlated with civilian killings, even after controlling for military training. Political indoctrination has an independent and robust effect on civilian abuse.

Commanders of armed groups shape combatant behavior through military and political training and punishment. Our results show that punishment alone is insufficient to shape behavior towards civilians, and is not necessary to do so. The same holds for military training. Political training, on the hand, is both necessary and sufficient to reduce civilian killings.

CONCLUSION

This paper contributes to a growing literature that looks within non-state armed groups to explain variation in their behavior, and assesses the impacts that the organization, rules, and operations of armed groups have on their behavior towards civilian populations. Until now, there has been much conventional wisdom on the impact of training, informed by the experiences of practitioners and military officers, working both within the militaries of advanced industrial powers and in post-conflict and transitional contexts. Yet scholars of civil war have surprisingly ignored training, to the detriment of understanding how and whether it shapes armed groups' treatment of civilian populations.

This paper provides one of the first empirical analyses in the field of the impact of training on civilian killings. Our research suggests that political training helps explain variation in the use of deadly force against civilians. The empirical findings

suggest that political training and indoctrination—processes that inform how, when, and why force should be utilized—have great impact on the extent to which armed groups kill civilians. It appears that important tactical decisions by armed groups are not simply products of their strategic environment, but instead reflect sociological and institutional factors: rules, norms, and beliefs about proper conduct that are passed onto combatants.

The abuse of civilians in civil war is a pressing policy issue due to the human costs borne by civilians. This study demonstrates the importance of harnessing micro-level data in conflict zones, especially from demobilized combatants, to better understand the mechanisms driving wartime behavior, especially across groups within individual conflict zones and across subunits within armed groups. Studying training, indoctrination, and codes of conduct internal to armed groups holds great promise for advancing our understanding of conflict processes in civil war.

Table 1: Differences in Means Across Captured and Individually Demobilized Combatants

Variable	Difference in Means	t-Statistic
Joined insurgents for ideological reasons	-0.035	(-0.53)
Joined insurgents for economic reasons	0.138	(1.900)
Felt besieged by military while in group	-0.275***	(-4.52)
Received punishment while in group	-0.181	(-1.91)
Received political training	-0.408	(-1.42)
Received military training	0.012	(0.439)
Age at recruitment	0.316	(1.850)
Year of birth	-5.827***	(-3.63)
Male	0.105	(1.290)

* p<0.1, ** p<0.05, *** p<0.01.

Table 2: Political Training and Civilian Killings in Colombia, 1988-2005

	Model 1	Model 2
Political Training	0.474* (0.213)	0.360* (0.198)
Guerrilla-Government Clashes (lagged)		1.010*** (0.003)
Government-Paramilitary Clashes (lagged)		0.886 (0.100)
Guerrilla-Paramilitary Clashes (lagged)		1.007 (0.011)
Rainfall		1.000 (0.000)
Water Quality		1.000 (0.000)
Altitude		1.000 (0.000)
Area		1.000 (0.000)
Soil		1.746** (0.464)
Erosion		1.023 (0.277)
Poverty		1.001 (0.011)
Gini		0.825 (2.211)
Population		1.000** (0.000)
Constant	0.650 (0.271)	0.823 (2.115)
Observations	511	385

Coefficients presented as Incident Rate Ratios (IRRs). Standard errors in parentheses.

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

Table 3: Punishment and Selection Into Training, 1988-2005

	Model 3	Model 4
Political Training	0.974 (0.036)	0.976 (0.035)
Guerrilla-Government Clashes (lagged)		1.000 (0.000)
Government-Paramilitary Clashes (lagged)		0.999 (0.003)
Guerrilla-Paramilitary Clashes (lagged)		1.000 (0.001)
Constant	1.059* (0.035)	1.054 (0.035)
Observations	544	533

Coefficients presented as Incident Rate Ratios (IRRs). Standard errors in parentheses.

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

Table 4: Military Training and Civilian Casualties in Colombia, 1988-2005

	Model 5	Model 6
Military Training	1.382 (0.824)	1.382 (0.824)
Rainfall	1.000 (0.000)	1.000 (0.000)
Guerrilla-Government Clashes (lagged)	1.010*** (0.003)	1.010*** (0.003)
Government-Paramilitary Clashes (lagged)	0.884 (0.104)	0.884 (0.104)
Guerrilla-Paramilitary Clashes (lagged)	1.013 (0.011)	1.013 (0.011)
Water Quality	1.000 (0.000)	1.000 (0.000)
Altitude	1.000 (0.000)	1.000 (0.000)
Area	1.000 (0.000)	1.000 (0.000)
Soil	1.746** (0.455)	1.746** (0.455)
Erosion	1.010 (0.271)	1.010 (0.271)
Poverty	1.002 (0.012)	1.002 (0.012)
Gini	1.706 (4.437)	1.706 (4.437)
Population	1.000** (0.000)	1.000** (0.000)
Constant	0.0924 (0.236)	0.0924 (0.236)
Observations	385	385

Coefficients presented as Incident Rate Ratios (IRRs). Standard errors in parentheses.

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

¹ See, notably, The U.S. Army/Marine Corps Counterinsurgency Field Manual. (University of Chicago Press, 2007), 6-13, as well as Jacob N. Shapiro. 2015. *The Terrorist's Dilemma: Managing Violent Covert Organizations*. Princeton University Press.

² Rupert Smith. *The Utility of Force* (Alfred A. Knopf, 2005). The U.S. Army/Marine Corps Counterinsurgency Field Manual argues that “poorly trained leaders and units are more prone to committing human rights violations than well-trained, well-led units.” An investigation into the abuse of prisoners at Abu Ghraib prison found that soldiers who abused prisoners lacked proper training in the handling of detainees or formal training regarding the Geneva Convention on treatment of prisoners. See Anthony M. Taguba, AR 15–6 Investigation of the 800th Military Police Brigade (United States Department of Defense, 2004): 19, 26. Retrieved at: http://www.npr.org/iraq/2004/prison_abuse_report.pdf.

³ Macartan Humphreys and Jeremy M. Weinstein, “Handling and Manhandling Civilians in Civil War,” *American Political Science Review* 100, no. 3 (2006): 429–447; Patrick Johnston, “The Geography of Insurgent Organization and its Consequences for Civil Wars: Evidence from Liberia and Sierra Leone,” *Security Studies* 17, no. 1 (2008): 107–137; and Bernd Beber and Christopher Blattman, “The Logic of Child Soldiering and Coercion,” *International Organization* 67, no. 1 (2013): 65 - 104.

⁴ The only existing work of which we are aware that explicitly connects armed group training to civilian victimization is Amelia Hoover Green, *Repertoires of Violence Against Noncombatants: The Role of Armed Group Institutions and Ideologies*, PhD dissertation at Yale University (2011).

⁵ See Christopher Clapham, ed. 1998. *African Guerrillas*. Oxford: James Currey, Peter W. Singer, *Children at War* (University of California Press, 2006), 77-79; Elisabeth Jean Wood. “Armed Groups and Sexual Violence: When Is Wartime Rape Rare?” *Politics & Society* 37, no. 1 (2009): 131-162.

⁶ Scott Gates, “Recruitment and Allegiance: The Microfoundations of Rebellion,” *Journal of Conflict Resolution* 46, no. 1 (2002): 111-130. See also Michael Hechter, *Principles of Group Solidarity* (Berkeley: University of California Press, 1987).

⁷ Francisco Gutiérrez Sanín, “Telling the Difference: Guerrillas and Paramilitaries in the Colombian War,” *Politics and Society* 3 (2006): 27.

⁸ Amelia Hoover Green, *Repertoires of Violence Against Noncombatants: The Role of Armed Group Institutions and Ideologies*, PhD dissertation at Yale University (2011): 9.

⁹ Janowitz notes that “the military, when it is not engaged in combat, is a training apparatus whose personnel spend considerable time teaching or being taught.” Morris Janowitz, *Military Institutions and Coercion in the Developing Nations: The Military in the Political Development of New Nations* (University of Chicago Press, 1988): 157.

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- ¹⁰ Peter Karsten, ed., *The Training and Socializing of Military Personnel* (Taylor and Francis, 1998): ix.
- ¹¹ Morris Janowitz, *On Social Organization and Social Control* (University of Chicago Press, 1991): 297.
- ¹² Samuel Huntington, *The Soldier and the State* (Belknap Press of Harvard University Press, 1957): 13; The U.S. Army/Marine Corps Counterinsurgency Field Manual (University of Chicago Press, 2007): 6-14.
- ¹³ Carl Von Clausewitz. *On War*, Chapter VIII, Book I (1909).
- ¹⁴ For dramatic accounts of intense psychological pressure on recruits, see R. Wayne Eisenhart, "You Can't Hack It Little Girl: A Discussion of the Covert Psychological Agenda of Modern Combat Training," *Journal of Social Studies* 31, no. 4 (1975); Edward J. Drea, "In the Army Barracks of Imperial Japan," in Peter Karsten, Ed., *The Training and Socializing of Military Personnel* (Routledge, 1998): 69.
- ¹⁵ The U.S. Army/Marine Corps Counterinsurgency Field Manual (University of Chicago Press, 2007); Risa A. Brooks, "Introduction: The Impact of Culture, Society, Institutions, and International Forces on Military Effectiveness," in *Creating Military Power: the Sources of Military Effectiveness*, ed. Risa A. Brooks and Elizabeth A. Stanley (Stanford University Press, 2007). Building cohesion is thought to be crucial to create small group loyalty and social ties sufficient to drive recruits to fight and risk their lives for each other, and to prevent group disintegration through desertion or defection.
- ¹⁶ Colonel John R. Martin, "Training Indigenous Security Forces at the Upper End of the Counterinsurgency Spectrum," *Military Review* (November/December 2006): 59.
- ¹⁷ Deborah Avant, "The Institutional Sources of Military Doctrine: Hegemons in Peripheral Wars," *International Studies Quarterly* 37, no. 4 (1993): 409-430. In the language of
- ¹⁸ Morris Janowitz, "Changing Patterns of Organizational Authority: The Military Establishment," *Administrative Science Quarterly* 3, no. 4 (1959): 473-493.
- ¹⁹ Herbert C. Kelman, "Compliance, Identification, and Internalization: Three Processes of Attitude Change," *Journal of Conflict Resolution* 2, no. 1 (1958): 53.
- ²⁰ "Innocent" here means those civilians that have not collaborated with a rival armed group.
- ²¹ See, for example, Gary J. Miller. "The Political Evolution of Principal-Agent Models," *Annual Review of Political Science* 8: 203-225 (2005); Neil J. Mitchell. *Agents of Atrocity: Leaders, Followers and Human Rights Violations in Civil Wars*. New York: Palgrave Macmillan (2004).
- ²² Stathis N. Kalyvas, "The Urban Bias in Research on Civil Wars," *Security Studies* 13(3): 1-31 (2004).
- ²³ Scott Gates, "Recruitment and Allegiance: The Microfoundations of Rebellion," *The Journal of Conflict Resolution* 46(1): 111-130 (2002).

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- ²⁴ We discuss the relationship between punishment and training in much greater length in the Robustness Checks subsection below.
- ²⁵ Amelia Hoover Green, “Repertoires of Violence Against Noncombatants: The Role of Armed Group Institutions and Ideologies.” Ph.D. dissertation. Yale University (2011).
- ²⁶ Jacob N. Shapiro. 2015. *The Terrorist’s Dilemma: Managing Violent Covert Organizations*. Princeton University Press.
- ²⁷ Stathis N. Kalyvas. *Logic of Violence in Civil War* (Cambridge University Press, 2006).
- ²⁸ This is similar to information leakage risks faced by other clandestine organizations, such as terrorist groups. See Jacob N. Shapiro, *The Terrorist’s Dilemma: Managing Violent Covert Organizations*, Princeton University Press, 2013
- ²⁹ Christopher Clapham, ed. 1998. *African Guerrillas*. Oxford: James Currey, p. 10.
- ³⁰ Ibid.
- ³¹ See Kristine Eck, “Recruiting Rebels: Indoctrination and Political Education in Nepal,” in *The Maoist Insurgency in Nepal Revolution in the Twenty-First Century*, ed. Mahendra Lawoti and Anup K. Pahari (Routledge, 2010).
- ³² Che Guevara, *Guerrilla Warfare* (SR Books, 1960): 124.
- ³³ Brian Michael Jenkins, “Countering al Qaeda: An Appreciation of the Situation and Suggestions for Strategy”, RAND Corporation (2002): 5, 4, 101, 173-4, 239.
- ³⁴ Rohan Gunaratna, *Inside Al-Qaeda* (Columbia University Press, 2002): 73.
- ³⁵ Jo Becker, “Child Recruitment in Burma, Sri Lanka, and Nepal,” in Scott Gates, Ed. *Child Soldiers in the Age of Fractured States* (University of Pittsburgh Press, 2010).
- ³⁶ Kai M. Thaler, “Ideology and Violence in Civil Wars: Theory and Evidence from Mozambique and Angola,” *Civil Wars* 14, no. 4 (2012): 546-567.
- ³⁷ Victor Asal and R. Karl Rethemeyer, “Dilettantes, Ideologues, and the Weak: Terrorists Who Don’t Kill,” *Conflict Management and Peace Science* 25, vol. 3 (2008).
- ³⁸ Hanna Fjelde and Lisa Hultman “Weakening the Enemy: A Disaggregated Study of Violence against Civilians in Africa” *Journal of Conflict Resolution*, Vol. 58, 2014
- ³⁹ In Guatemala it is commonly believed that paramilitary forces were decisive in helping the government “win” the war against insurgents. See, for instance, David Stoll, *Between Two Armies in the Ixil Towns of Guatemala* (Columbia University Press, 1993).
- ⁴⁰ John Gittings. 1999. “The Indonesian Massacres, 1965-1966: Image and Reality.” In *The Massacre in History*, Mark Levene and Penny Roberts, eds. Berghahn Books. 247-263.
- ⁴¹ Bethany Lacina and Nils Petter Gleditsch, “Monitoring Trends in Global Combat: A New Dataset of Battle Deaths,” *European Journal of Population* 21, no. 2-3 (2005): 145-166.
- ⁴² The *Frente Nacional* was in place until 1974. For a short but incisive analysis of the *Frente Nacional* see Eduardo Pizarro Leongómez, “Comienzo el Frente Nacional: Paz de Partidos,” *Semana* (2004): 188-190.
- ⁴³ We focus on the left-wing FARC and the right-wing paramilitaries, which we discuss below.

⁴⁴ For a definitive history of the FARC, see Eduardo Pizarro Leongómez, *Las FARC (1949-2011): De Guerrilla Campesina a Máquina de Guerra* (Grupo Editorial Norma, 2011). For a history of the FARC and regional differences in its approach to insurgency, see Gallego, Carlos Medina, ed. 2011. *FARC-EP: Flujos y Reflujos, La Guerra en las Regiones*. Universidad Nacional de Colombia.

⁴⁵ On the history of armed resistance to the Colombian government see, for example, Pécaut, Daniel. 1987. *Crónica de dos Décadas de Política Colombiana: 1968-1988*. Siglo XXI.

⁴⁶ See, for example, Paul Collier and Anke Hoeffler, "On Economic Causes of Civil Wars," *Oxford Economic Papers* 50 (1998): 563-73; Collier, "Rebellion as a Quasi-Criminal Activity," *Journal of Conflict Resolution* 44, no. 6 (2000): 839-54.

⁴⁷ Francisco Gutiérrez Sanin "Criminal Rebels? A Discussion of Civil War and Criminality from the Colombian Experience" *Politics & Society*, Vol. 32, No. 2, 2004.

⁴⁸ A negotiated process between the César Gaviria administration and smaller rebel groups in the late 1980s and early 1990s led to the demobilization of the M-19 and the EPL.

⁴⁹ Human Rights Watch, "You'll Learn Not to Cry: Child Combatants in Colombia," (2003). Accessed at <http://hrw.org/reports/2003/colombia0903/>

⁵⁰ Elyssa Pachico and Jeremy McDermott, "InSide: Can the FARC Still Train Their Soldiers?" (March 2011). Accessed at <http://www.insightcrime.org/news-analysis/inside-can-the-farc-still-train-their-soldiers>

⁵¹ Human Rights Watch. "You'll Learn Not to Cry: Child Combatants in Colombia," (2003). Accessed at <http://hrw.org/reports/2003/colombia0903/>

⁵² Pachico and McDermott, *ibid.*

⁵³ Benitez, Federico and Mario Zamudio. "Las Farc hoy, selva adentro" (El Espectador, February 14, 2015).

⁵⁴ See Ugarriza, Juan Esteban and Michael Weintraub, "The Effects of Ideology on Insurgent Targeting Decisions: Explaining Colombian Guerrillas' Tactical Choices," presented at the International Studies Association Annual Meeting, New Orleans, LA (2015).

⁵⁵ Victoria Bruce, Karin Hayes, and Jorge Enrique Botero, *Hostage Nation: Colombia's Guerrilla Army and the Failed War on Drugs*, (Knopf, 2010): 26.

⁵⁶ Bruce et al, *ibid.*: 78.

⁵⁷ Ingrid Betancourt, *Even Silence Has an End: My Six Years of Captivity in the Colombian Jungle* (Penguin, 2010): 23.

⁵⁸ On the "paramilitarization" of the Colombian conflict see Marc Chernick, "The Paramilitarization of the War in Colombia," (*NACLA Report on the Americas*, 1998): 28–33, and on "collective targeting" of civilians by paramilitaries, see Abbey Steele, "Electing Displacement: Political Cleansing in Apartadó, Colombia," *Journal of Conflict Resolution* 55, no. 3 (2011): 423-445. The paramilitary "pledge of allegiance" is: "To

defend our children, our home, our belongings, our land...[Now] we are autodefensa groups, and we are fighting for the defense of honor and good of the Colombian citizens. We fight against the Communist Party, the FARC, and all the subversive groups of Colombia.” Steven Dudley, *Walking Ghosts: Murder and Guerrilla Politics in Colombia* (Routledge, 2004): 122-123. See also: Francisco Gutierrez Sanín and Mauricio Barón, “Re-stating the State: Paramilitary Territorial Control and Political Order in Colombia (1978-2004),” *Crisis States Programme Working Paper no. 66* (2005): 12.

⁶⁰ See, for example, “Aumenta número de desmovilizados de grupos ilegales.” 14 July 2014. *Semana.com*. Accessed at <http://www.semana.com/nacion/articulo/sube-en-20-la-cifra-de-desmovilizados-de-grupos-ilegales/395692-3>.

⁶¹ With the exception of Córdoba and Sucre.

⁶² With the exception of Urabá.

⁶³ Enzo Nussio, “How Ex-combatants Talk About Personal Security: Narratives of Former Paramilitaries in Colombia,” *Conflict, Security & Development* 11, no. 5 (2011): 579–606; Ben Oppenheim, Juan F. Vargas, Abbey Steele, and Michael Weintraub, “True Believers, Deserters, and Traitors: Who Leaves Insurgent Groups and Why,” *Journal of Conflict Resolution* (forthcoming).

⁶⁴ Other surveys of former combatants have contended with similar issues. Several studies, notably Humphreys and Weinstein’s study of former fighters in Sierra Leone, relied on village elites to identify former combatants and constructed a sample frame from these village data. Humphreys and Weinstein note that there is no guarantee that this approach produced an accurate sample frame, but argue that it was the most effective available. See Macartan Humphreys and Jeremy Weinstein, “Who Fights? The Determinants of Participation in Civil War,” *American Journal of Political Science* 52, no. 2 (April 2008): 436–455. See also Michael J. Gilligan, Eric N. Mvukiyehe, and Cyrus Samii, “Reintegrating Rebels into Civilian Life: Quasi-Experimental Evidence from Burundi,” *Journal of Conflict Resolution* 57, no. 4 (2013).

⁶⁵ In Spanish, the question reads, “¿Qué tipo de entrenamiento recibió?”

⁶⁶ In this table the total N represents individual combatants (rather than the department year, which is the unit of analysis in the OLS models we present below). The total N here is 582: because we are only interested in testing whether those who demobilized individually differ systematically from captured insurgents across meaningful variables (such as training), we compare the mean level of training (and other covariates) across captured insurgents (N=49) and insurgents who individually entered the ACR’s demobilization program (N=533).

⁶⁷ The *p*-value of the Kolmogorov-Smirnov nonparametric test is 0.99.

⁶⁸ Our dependent variable does not use self-reported survey responses regarding civilian abuse for two reasons. First, the survey did not ask a sufficiently broad range of

questions about the kinds of armed actions against civilians during the course of combat. Second, individuals are likely to under-report their participation in behaviors that are, or are seen to be, immoral or criminal.

⁶⁹ Stathis Kalyvas, *The Logic of Violence in Civil War* (Cambridge: Cambridge University Press, 2006): 20

⁷⁰ On this issue, see Jule Krüger, Patrick Ball, Megan E. Price, and Amelia Hoover Green “It Doesn’t Add up: Methodological and Policy Implications of Conflicting Casualty Data” in Taylor B. Seybolt, Jay D. Aronson, Baruch Fischhoff, ed. *Counting Civilian Casualties: An Introduction to Recording and Estimating Nonmilitary Deaths in Conflict*. Oxford University Press (2013).

⁷¹ Probability sampled survey data *may* present a more representative, unbiased picture, although in practice non-response at the household, battery or item level can lead to similar challenges. See Neil F. Johnson, Michael Spagat, Sean Gourley, Jukka-Pekka Onnela and Gesine Reinert, “Bias in Epidemiological Studies of Conflict Mortality” *Journal of Peace Research* 45(5), 2008.

⁷² Examples include Patrick Ball’s analysis of data in Guatemala (Ball, Patrick. 1999. AAAS/CIIDH database of human rights violations in Guatemala (ATV20.1), accessed at: <https://hrdag.org/guatemala-ciidh-data/>); Ball et al.’s analysis of data from Kosovo (Patrick Ball, Wendy Betts, Fritz Scheuren, Jana Dudukovich, and Jana Asher. 2002. AAAS/ABA-CEELI/Human Rights Data Analysis Group database of killings in Kosovo., accessed at: <https://hrdag.org/kosovo-data-killings/>); and Hoover-Green’s analysis of data from El Salvador (Hoover-Green 2011, *ibid.*)

⁷³ For a recent national level analysis, see Instituto Nacional de Medicina Legal y Ciencias Forenses Grupo Centro de Referencia Nacional sobre Violencia. 2015. *Forensis 2014: Datos Para la Vida*. Bogotá, Colombia. For an MSE approach in Colombia, see Tamy Guberek, Daniel Guzmán, Megan Price, Kristian Lum and Patrick Ball. (2010). Benetech/Human Rights Data Analysis Group database of lethal violence in Casanare, accessed at <https://hrdag.org/casanare-colombia/>

⁷⁴ Stathis N. Kalyvas and Laia Balcells, “International System and Technologies of Rebellion: How the End of the Cold War Shaped Internal Conflict,” *American Political Science Review* (2010).

⁷⁵ Kalyvas *ibid.* 2006.

⁷⁶ Colin A. Cameron and Pravin K. Trivedi, “Econometric Models Based on Count Data: Comparisons and Applications of Some Estimators and Tests,” *Journal of Applied Econometrics* 1(1): 29-53, 1986. See also Gary King, “Event Count Models for International Relations: Generalizations and Applications”, *International Studies Quarterly* 33(2), 1989. Although we use fixed effects at the department level, we present estimated coefficients for time-invariant variables given that negative binomial fixed effects is not a “true” fixed effects methods. See, for example, Paul D. Allison and

Richard P. Waterman, "Fixed-Effects Negative Binomial Regression Models," *Sociological Methodology* 32: 247-265, 2002.

⁷⁷ Taken from Model 2. These results are significant at $p < 0.05$.

⁷⁸ See especially Mark J. Osiel, "Obeying Orders: Atrocity, Military Discipline, and the Law of War," *California Law Review* 86, no. 5 (1998).

⁷⁹ United States Army, *Your Conduct in Combat Under the Law of War: Field Manual 27-2* (1984).

⁸⁰ Richard T. De George, "Defining Moral Obligations: The Need For a Military Code of Ethics," *Army* 34 (December 1984): 22-30.

⁸¹ *Severe Punishment* is also weakly correlated with military training (0.148), which, as we discuss below, is another potential vehicle for inducing discipline and control.

⁸² Scott Gates, "Recruitment and Allegiance: The Microfoundations of Rebellion." *Journal of Conflict Resolution* 46, no. 1 (2002): 111-130; and Macartan Humphreys and Jeremy M. Weinstein, "Handling and Manhandling Civilians in Civil War," *American Political Science Review* 100, no. 3 (2006): 429-447.

⁸³ Kelman, *ibid.*

⁸⁴ Scott Gates and Ragnhild Nordås, "Recruitment and Retention in Rebel Groups," Prepared for the 2010 Annual Meeting of the American Political Science Association, Washington, DC, September (2010).

⁸⁵ On armed cohesion, see Paul D. Kenny, "Structural Integrity and Cohesion in Insurgent Organizations: Evidence from Protracted Conflicts in Ireland and Burma," *International Studies Review* 12 (2010): 533-555. See also Ben Oppenheim, Juan F. Vargas, Abbey Steele, and Michael Weintraub, "True Believers, Deserters, and Traitors: Who Leaves Insurgent Groups and Why," *Journal of Conflict Resolution* (2015).

⁸⁶ Although the data contain information on individual exposure to punishment, this may reflect *demand* for punishment (e.g. propensity of combatants to violate group rules) rather than supply. For instance, given that the sample contains a large number of demobilized FARC combatants who voluntarily left the war, this sub-group may be particularly prone to receiving punishment. As noted above, our sample includes *captured* combatants, for whom this selection problem does not exist; captured combatants can be treated as representative of FARC who did not defect. We test whether individually demobilized FARC receive greater punishment no statistically significant difference.

⁸⁷ Results from these models are available upon request from the authors.

⁸⁸ This again assumes that commanders wish to restrain violence. If commanders wish to stimulate atrocities, obedient troops may not hesitate to carry out their orders.

Herbert C. Kelman, "Violence without Moral Restraint: Reflections on the Dehumanization of Victims and Victimizers," *Journal of Social Studies* 29, no. 4 (1973): 40-41.