

HiCN Households in Conflict Network

The Institute of Development Studies - at the University of Sussex - Falmer - Brighton - BN1 9RE
www.hicn.org

Learning How (Not) to Fire a Gun: The Impact of Combatant Training on Civilian Killings¹

Ben A. Oppenheim², Juan F. Vargas³ and Michael Weintraub⁴

benoppenheim@berkeley.edu

juan.vargas@urosario.edu.co

mlw63@georgetown.edu

HiCN Working Paper 110 *updated*⁵

June 2013

Abstract: What is the relationship between the type of training combatants receive upon recruitment into an armed group and their propensity to abuse civilians in civil war? Does military training or political training prevent or exacerbate the victimization of civilians by armed non-state actors? While the literature on civilian victimization has expanded rapidly, few studies have examined the correlation between abuse of civilians and the modes of training that illegal armed actors receive. Using a simple formal model, we develop hypotheses regarding this connection and argue that while military training should not decrease the probability that a combatant engages in civilian abuse, political training should. We test these hypotheses using a new survey consisting of a representative sample of approximately 1,500 demobilized combatants from the Colombian conflict, which we match with department-level data on civilian casualties. The empirical analysis confirms our hypotheses about the connection between training and civilian abuse and the results are robust to adding a full set of controls both at the department and at the individual level.

Keywords: civil war, civilian abuse, survey instrument, demobilized combatants

JEL codes: D74

¹ The authors thank Juan Carlos Palou and María Victoria Llorente at *Fundación Ideas para la Paz* for generously sharing their survey data and Dario Romero for excellent research assistance.

² Department of Political Science, University of California-Berkeley

³ Department of Economics, Universidad del Rosario

⁴ Department of Government, Georgetown University

⁵ An earlier version of this paper appeared as a HiCN working paper in December 2011.

"Especially at the beginning, we made mistakes (by killing innocent civilians), since we had poor training. But we have matured as a fighting force."
Carlos Castaño, former leader of the Colombian paramilitary group *Autodefensas Unidas de Colombia* (AUC), in 1998.¹

Training is a crucial determinant of military behavior in wartime. It influences not only the effectiveness with which armed groups use force, but how, where, and against whom they employ violence. Lack of training is thought to increase the odds that civilians suffer collateral damage, and to lead to the deliberate targeting and killing of civilian populations.² Moreover, current military doctrine suggests that training should matter most in *irregular* wars in which military units operate among civilian populations.³ The US Army/Marine Corps Counterinsurgency Field Manual (FM 3-24) argues that "poorly trained leaders and units are more prone to committing human rights violations than well-trained, well-led units. Leaders and units unprepared for the pressure of active operations tend to use indiscriminate force, target civilians, and abuse prisoners."⁴ Although theory and doctrine have focused primarily upon the impact of training on state armed forces, it is reasonable to conclude that training would have similar impacts upon irregular and insurgent armed groups; indeed, it is striking that widely varying insurgent organizations around the world have placed great emphasis upon military training and political indoctrination.⁵

Despite a burgeoning literature on the "industrial organization" of armed groups, which has focused on the implications of armed groups' capacity to discipline and sanction foot soldiers,⁶ there has been a gap in research regarding variation in types of combatant training across non-state armed groups (and across sub-units of individual armed groups), as well as the consequences that such training has on the conduct of war.⁷ This gap is particularly noteworthy

¹ Robin Kirk. "A Meeting with Paramilitary Leader Carlos Castaño." *NACLA Report on the Americas* 31 (1998).

² See, notably, The U.S. Army/Marine Corps Counterinsurgency Field Manual. (University of Chicago Press, 2007), 6-13.

³ Rupert Smith. *The Utility of Force* (Alfred A. Knopf, 2005).

⁴ The U.S. Army/Marine Corps Counterinsurgency Field Manual, *ibid.* The Tagula Report, an investigation into the abuse of prisoners at Abu Ghraib prison, found that a the soldiers who abused the prisoners lacked proper training in the handling of detainees, or formal training covering responsibilities under the Geneva Convention for the 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.

⁵ 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 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.

⁷ 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). Arguing in a different direction, Dara Kay Cohen contends that in order to build "bonds of loyalty and friendship" among forcibly recruited fighters, armed

given that training, along with disciplinary measures, is a fundamental mechanism through which armed groups attempt to shape the behavior of individual combatants.⁸

This article explores the relationship between repertoires of training and the propensity for armed groups to kill civilians. In order to shed light on this issue, we first distinguish between two distinct forms of training: military and political/doctrinal. An analysis of the literature on armed group training and military sociology reveals two competing claims about how training influences the behavior of armed groups, particularly vis-a-vis civilian populations. One line of argument suggests that the principal function of training is to inculcate discipline in individual fighters. If this were true, the discipline gained from military training alone should be sufficient to reduce predation and civilian abuse, as long as commanders within the group order their troops to behave with restraint.

Another line of argument, which we develop in this paper, suggests that the *content* of training matters. The function of training is not simply to discipline combatants to sublimate their preferences, but instead to reshape those preferences in order to serve the aims of the group. In short, "becoming a soldier entails a process of embracing—learning—new preferences."⁹ Given imperfect monitoring of soldiers' behavior, indoctrination and training become essential to transforming the preferences of fighters, reducing the need for discipline and sanctions.¹⁰ If this were true, when civilian abuse is seen to be counterproductive to the war effort, and such beliefs and narratives are consistently and regularly communicated to combatants, we should expect to see more restraint exercised towards civilian populations.

This article formalizes and tests these hypotheses regarding the independent effects of military and political training on civilian abuse. It does so by exploiting variation in the reported intensity of political and military training across guerrilla and paramilitary groups in the Colombian civil war. The Colombian conflict offers a powerful context within which to examine the impact of training, given the number of contending non-state armed groups and their varying ideological and operational characteristics. In order to empirically evaluate the impact of training on civilian victimization, we calculate the intensity of training across subunits in two armed groups in Colombia by utilizing data gleaned from a survey of 1,485 demobilized guerrilla and paramilitary fighters from that conflict. We then match these survey data to panel data on civilian

groups typically do not turn to training, but rather allow their combatants to engage in sexual violence and, more specifically, gang rape. See Dara Kay Cohen, *Explaining Sexual Violence During Civil War*, PhD dissertation at Stanford University (2011).

⁸ 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).

⁹ Francisco Gutiérrez Sanín, "Telling the Difference: Guerrillas and Paramilitaries in the Colombian War," *Politics and Society* 3 (2006): 27.

¹⁰ Amelia Hoover Green, *Repertoires of Violence Against Noncombatants: The Role of Armed Group Institutions and Ideologies*, PhD dissertation at Yale University (2011): 9.

killings by armed groups to estimate the effect that different kinds of training has on civilian killings, after controlling for potentially confounding factors.¹¹

Our findings suggest that the specific forms and content of training matter greatly for the conduct of soldiers and carry implications for the loss of civilian life. Military training alone is insufficient to reduce civilian casualties; to the contrary, by increasing the capacity for soldiers to efficiently kill, absent political training, it appears to lead to more intense levels of civilian killing. Political training, on the other hand, strongly decreases the killing of civilian populations, even after controlling for military training, especially for groups whose political training stresses the importance of refraining from civilian abuse. Our statistical results are robust to the inclusion of a battery of control variables, including the supply of punishment towards combatants, another mechanism often considered to be crucial to preventing (or at least limiting) civilian killings.

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 disaggregate training into several conceptually distinct dimensions and test the impact of each on the incidence of civilian killings in one of the world's most protracted and still ongoing armed conflicts. Finally, we underline the potential contribution of individual-level survey data to our understanding of the dynamics of civil war. To the best of our knowledge, only one other study uses individual-level survey data of former combatants to systematically assess the correlates of wartime behavior,¹² even though such data provide a powerful opportunity to explore the factors that motivate or mitigate outcomes such as the killing of civilians. Our theory and findings also have policy implications. The United States government and other third party actors frequently offer training to counterinsurgent forces, and also have a long history of training insurgent organizations to contest opposing regimes: notable examples range from the Nicaraguan Contras in the 1980s, to Syrian insurgent factions currently rebelling against the al-Assad regime. Our findings suggest that the content of such training may have significant implications for the burden of war placed on civilians.

This paper proceeds as follows. The next section theorizes training of combatants in armed conflict. It identifies the distinct causal mechanisms through which military and political training should impact combatant behavior, and discusses the implications of each for civilian victimization. The third section describes our survey data and explains the research design. The fourth section presents the statistical results. The final section discusses the implications of our findings and concludes.

LEARNING HOW NOT TO FIRE A GUN

¹¹ We discuss the estimation strategy, survey details, and our research design in a subsequent section.

¹² Macartan Humphreys and Jeremy M. Weinstein, "Handling and Manhandling Civilians in Civil War," *American Political Science Review* 100, no. 3 (2006): 429–447.

Training is the bedrock of military organization. Recruits to formal and non-state armed forces spend significant time drilling, practicing, and absorbing information.¹³ This process has two basic manifest 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.¹⁴ The goal of training is to turn ordinary individuals into soldiers: as Janowitz argues, “professional socialization — that is, education and training — is considered essential to fashion and refashion the military man.”¹⁵

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.¹⁶ The former is developed through military and operational training, the latter through exposure to political training and doctrine. We expand on this distinction below, before drawing out two sets of testable hypotheses regarding the impact of training on combatants' behavior towards civilians in irregular war.

The production and effective 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.¹⁷

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.¹⁸ These processes are thought to serve an equally important set of latent functions: to acclimate soldiers to follow

¹³ 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.

¹⁴ Peter Karsten, ed., *The Training and Socializing of Military Personnel* (Taylor and Francis, 1998): ix.

¹⁵ Morris Janowitz, *On Social Organization and Social Control* (University of Chicago Press, 1991): 297.

¹⁶ 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.

¹⁷ Carl Von Clausewitz, *On War*, Chapter VIII, Book I (1909).

¹⁸ Tony Perry, “Marines Trained to React Quickly -- and Ethically,” *The Los Angeles Times* (July 6, 2006). Retrieved at: <http://articles.latimes.com/2006/jul/06/world/fg-training6>. For more 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.

orders and maintain discipline, and to build a sense of shared identity, trust, cohesion, and coordination within and among small group units.¹⁹ 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.²⁰

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 generally lead to both greater battlefield effectiveness and greater restraint in the use of force.²¹ The West Point cadet manual notes that "imposed discipline... will gradually be replaced with self-discipline."²²

Another perspective suggests that the process of military training may lead to *less* restraint. Shatan's psychological study of Vietnam veterans proposes a very different view, one in which "basic combat training... promotes obedience through humiliation and maltreatment." The result is that "the soldier learns to pattern himself after his persecutors," producing angry and abusive soldiers, more likely to abuse civilians.²³ Leed argues that "behavior in war is patterned on the drill field... the training officer treats the trainee in the same way that he wants the soldier to treat the enemy in battle... to escape the low and painful status of victim and target of aggression, the mantle of aggressor is assumed with more or less guilt."²⁴ Wood notes that military training is an attempt to strike a fine balance, given that "brutalization of recruits is intended to enhance aggression, which the discipline of drill is intended to control."²⁵ Yet Shatan's research suggests that the conditions of guerrilla (and counter-guerrilla) warfare may weaken control of aggression: "(in) traditional war tendencies towards savage behavior (remain) relatively compartmentalized and forbidden; in counter-guerrilla warfare, the reverse is the case: boundaries of expression of

¹⁹ 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, both to create small group loyalty and social ties sufficient to drive recruits to fight and even risk their lives for each other, and to prevent group disintegration through desertion or defection to the enemy. On this point, Siebold notes that cohesion is "generated by the interactions and experiences of the group members in the context of their daily military activities, combat and noncombat." See Guy L. Siebold, "The Essence of Military Group Cohesion," *Armed Forces & Society* 33, no. 2 (2007): 289.

²⁰ Colonel John R. Martin, "Training Indigenous Security Forces at the Upper End of the Counterinsurgency Spectrum," *Military Review* (November/December 2006): 59.

²¹ 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.

²² West Point Information for New Cadets and Parents (2013). Retrieved at: http://www.usma.edu/classes/SiteAssets/SitePages/2013/Info_4_New_Cadets_Class_of_13B.pdf, p. 11.

²³ Chaim Shatan, "The Grief of Soldiers: Vietnam Combat Veterans' Self-Help Movement," *American Journal of Orthopsychiatry* 43, no. 4 (1973): 646.

²⁴ Eric J. Leed, *No Man's Land: Combat and Identity in World War I* (Cambridge University Press, 1981): 105.

²⁵ Elisabeth J. Wood, "Armed Groups and Sexual Violence: When Is Wartime Rape Rare?" *Politics & Society* 37 (2009): 138.

violent impulses remain vague, and hence difficult to master, while compassion and sensitivity tend to be inhibited or even repressed.”²⁶

Both propositions are theoretically coherent; whether military training diminishes or increases civilian killings is ultimately an empirical matter. We therefore derive two contrary testable propositions from this debate over the impact of military training on combatant behavior towards civilians:

H1a: Greater exposure to military training should lead to decreased levels of civilian killing

H1b: Greater exposure to military training should lead to increased levels of civilian killing.

A second dimension of training 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 crystallized in a specific military doctrine. Doctrine, in 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.”²⁷ 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.²⁸

Political training and exposure to doctrine are designed to re-shape the preferences of individual combatants. As opposed to punishment and disciplinary measures, which simply condition combatants to sublimate their preferences to avoid an undesired effect, indoctrination is designed to alter preferences and introduce new ones. Kelman notes that through processes such as training, an agent can move from *compliance* with his group (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.”²⁹ Echoing Kelman, Gates and Nordås argue that the “level of direct observation of all activities of the agent (soldiers) by the principal (commanders) can therefore be relaxed in

²⁶ Shatan, *ibid*: 647.

²⁷ Deborah Avant, “The Institutional Sources of Military Doctrine: Hegemons in Peripheral Wars,” *International Studies Quarterly* 37, no. 4 (1993): 409–430.

²⁸ Morris Janowitz, “Changing Patterns of Organizational Authority: The Military Establishment,” *Administrative Science Quarterly* 3, no. 4 (1959): 473–493.

²⁹ Herbert C. Kelman, “Compliance, Identification, and Internalization: Three Processes of Attitude Change,” *Journal of Conflict Resolution* 2, no. 1 (1958): 53.

situations where recruits have been trained (or indoctrinated) to the point of full internalization.”³⁰ In other words, 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 punitive disciplinary measures, which could lead disaffected combatants to defect or desert.³¹

There is strong evidence that armed non-state actors and insurgent groups around the globe extensively employ political training and indoctrination. Clapham, reviewing a range of insurgent groups, notes that “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.”³² The clearest evidence comes from Marxist groups, in which ideological motivations play a central and overt 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.”³³ Maoist forces in Nepal have explicitly and successfully used ideology and political education programs to both generate and retain recruits.³⁴ Political indoctrination 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.³⁵ Gunaratna, in his analysis of Al Qaeda, notes that the movement placed greater emphasis on its particular brand of political-religious indoctrination, considering it “far more important than battlefield or terrorist-combat training.”³⁶ Political indoctrination is also known to be widespread in ethnic insurgent

³⁰ 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).

³¹ 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,” Prepared for the 2013 Annual Conference of the International Studies Association, San Francisco, CA, April (2013).

³² Christopher Clapham, ed. 1998. *African Guerrillas*. Oxford: James Currey, p. 10

³³ Ibid.

³⁴ “The Maoist leaders realized that continuous political indoctrination facilitated cohesion amongst the different individuals within the movement so that they all shared a common ideological background, thus deterring factionalization. A steady stream of ideological training also ensured that cadres would be amenable to the changing tactics and strategies of the leadership, because changes were motivated using texts and ideological discourse with which the cadres were familiar. Moreover, it also aided in retention, minimizing attrition rates by continuing to stress and educate the cadres about the importance of the ideology and the armed movement.” 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).

³⁵ See for instance: Juan E. Ugarriza, “Ideologies and conflict in the post-Cold War.” *International Journal of Conflict Management* 20, no. 1 (2009): 87, 90; Brian Michael Jenkins, “Countering al Qaeda: An Appreciation of the Situation and Suggestions for Strategy”, RAND Corporation (2002): 5, 4, 101, 173-4, 239.

³⁶ Rohan Gunaratna, *Inside Al-Qaeda* (Columbia University Press, 2002): 73.

movements, including Sri Lanka's Liberation Tigers of Tamil Eelam (LTTE), and among the many ethnic minority insurgent groups along Burma's frontiers.³⁷

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. For instance, Marxist (and particularly Maoist) insurgent groups' political narratives center upon the liberation of the peasantry. The doctrine of such groups flows from this core political narrative, and emphasizes the cultivation and exploitation of popular support to wage effective guerilla war against opponents with superior material resources.³⁸ For example, variation in elite preferences for Marxist-Leninist political ideology, which stressed the importance of refraining from indiscriminate violence against civilians, explains patterns of abuse in the Mozambican and Angolan civil wars.³⁹ 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.⁴⁰

Other groups, however, are motivated by virulently anti-civilian ideologies, which shape the conduct of their combatants. Such groups include the extreme cases of Rwandan Hutu *genocidaire* beliefs, but also include the Turkish and Greek nationalist ideologies that impelled those countries' state-building programs, where a nationalist ideology crystallized in doctrine sanctioned attacks on civilian ethnic minority populations, including looting, population clearance, and massacres.⁴¹ In Latin American civil wars, and most notably the case of Guatemala, right-wing governments and paramilitary groups were motivated by an anti-communist doctrine that emphasized the removal of enemies within the body politic; in these cases, intense anti-civilian activities was carried out, enabled by a doctrine that permitted the large-scale "mistaken" killing of innocent civilians suspected of being sympathizers or guerrillas as a more than acceptable political cost.⁴²

³⁷ 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).

³⁸ On differences between Marxist and non-Marxist insurgencies, see Stathis Kalyvas and Laia Balcells, "Did Marxism Make a Difference? Marxist Rebellions and National Liberation Movements," Working paper presented at American Political Science Association Annual Meeting (2010). Available at SSRN: <http://ssrn.com/abstract=1642509>

³⁹ Kai M. Thaler, "Ideology and Violence in Civil Wars: Theory and Evidence from Mozambique

and Angola," *Civil Wars* 14, no. 4 (2012): 546-567.

⁴⁰ 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).

⁴⁰pp.244-63.

⁴¹ Hugo Slim, *Killing Civilians: Methods, Madness, and Morality in War*, (Columbia University Press, 2010): 128-9.

⁴² 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); also, see Slim, *ibid.*, p. 130; Gabriel Aguilera Peralta and John Beverly, "Terror and Violence as Weapons of Counterinsurgency in Guatemala," *Latin American Perspectives* 7 (1980): 2-3, 91-113.

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 gross atrocities against the population it was nominally dedicated to liberating. In most cases, however, we suggest that doctrine will map onto political beliefs, but this should be rigorously examined and tested rather than assumed.

We derive two testable propositions regarding the impact of political training and indoctrination on the killing of civilians by armed groups.

H2a: In groups that are motivated by a pro-civilian ideology, greater exposure to political training and indoctrination should lead to decreased civilian killings.

H2b: In groups that are motivated by an anti-civilian ideology, greater exposure to political training and indoctrination should lead to increased civilian killings.

A final word regarding the effect of both military and political training on individual decision-making is necessary before we proceed to our empirical tests. One influential piece of conventional wisdom suggests that training is designed simply to bind the decision-making of individual soldiers by rendering them compliant to orders from superiors. Thus, its principal effect should be to homogenize decision-making at the lower unit level. If this is true, then individual combatants and small group units deliberately kill civilians only as much (or as little) as their superiors order them to do so. Training, as a result, should have no independent effect. This proposition (in both strict and weak formulations) has been the subject of considerable debate over centuries of jurisprudence on the armed forces, particularly following episodes of intense violence against civilians or other atrocities. Both “naturalist” and legal positivist thinkers reject this argument, and the notion that soldiers can elide moral agency.⁴³ Naturalists argue that moral sentiment cannot be simply stamped out by training: “the conditioned obedience expected in battle is compatible with the refusal to do what is immoral... military training may attempt to make obedience totally automatic, but it cannot, simply because of human nature.”⁴⁴ Positivists, on the other hand, note that members of military groups are also part of broader societies, and subject to their mores and norms: “murder, rape, pillage or torture... (are) clearly criminal because (they violate) common-sense rules of decency, social conduct, and morality.”⁴⁵

We draw on these arguments to suggest that training is not merely a proxy for the preferences of ranking officers who command fighters in the field. As armed forces clearly recognize, it has

⁴³ See especially Mark J. Osiel, “Obeying Orders: Atrocity, Military Discipline, and the Law of War,” *California Law Review* 86, no. 5 (1998).

⁴⁴ Richard T. De George, “Defining Moral Obligations: The Need For a Military Code of Ethics,” *Army* 34 (December 1984): 22-30.

⁴⁵ United States Army, *Your Conduct in Combat Under the Law of War: Field Manual 27-2* (1984).

independent effects. We examine the nature of these effects through an empirical analysis of the Colombian civil war. To do so, we first turn to a brief history of that conflict and the military and political training repertoires of the insurgent and paramilitary groups active in Colombia.

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.⁴⁶ Colombia provides fertile ground for testing hypotheses related to training and civilian victimization in irregular wars, given the multiplicity of active armed groups, their divergent ideological objectives, and the unusually long duration of the conflict, which is ongoing.

One of the longest-running insurgencies in the world, the Colombian conflict has featured a constellation of leftist and rightist armed “self-defense” groups, paramilitary organizations, criminal organizations, small insurgent groups, and large rebel armies. 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*, which was designed to stop the bloodshed.⁴⁷ Two of the left-wing armed groups that still exist today - the *Fuerzas Armadas Revolucionarias de Colombia* (FARC) and the *Ejército de Liberación Nacional* (ELN) - came into being as *La Violencia* was ending.⁴⁸ Eric Hobsbawm called *La Violencia* “probably the greatest armed mobilization of peasants...in the recent history of the western hemisphere,” responsible for approximately 200,000 deaths.⁴⁹

A Marxist group, the FARC was founded in 1964 in the department of Tolima after the government ordered the sacking of a peasant self-defense group that emerged during *La Violencia*.⁵⁰ Its explicit goals include large-scale land redistribution to right historical economic inequalities against the peasantry, as well as the overthrow of the Colombian government, which it advocates be replaced by a people's government. 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 -

⁴⁶ 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.

⁴⁷ 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.

⁴⁸ In this paper, we focus on the left-wing FARC and the right-wing paramilitaries, which we discuss below.

⁴⁹ Eric Hobsbawm, *Primitive Rebels: Studies in Archaic Forms of Social Movement in the 19th and 20th Centuries* (W. W. Norton Company, 1963). For a broad overview of *La Violencia*, see Marco Palacios, *Between Legitimacy and Violence: A History of Colombia, 1875-2002* (Duke University Press: 2006): 135-169. For a thoroughly documented history see Germán Gúzman Campos, Orlando Fals Borda, and Eduardo Umaña Luna, *La Violencia en Colombia* (Ediciones Tercer Mundo, 1962; and Charles Bergquist, Ricardo Peñaranda, and Gonzalo Sánchez, *Violence in Colombia: The Contemporary Crisis in Historical Perspective* (Scholarly Resources Inc, 1992).

⁵⁰ For a definitive history of the FARC, including the early formation of the *autodefensas* during *La Violencia*, see Eduardo Pizarro Leongómez, *Las FARC (1949-2011): De Guerrilla Campesina a Máquina de Guerra* (Grupo Editorial Norma, 2011).

it remained a relatively small fighting force of a few thousand until the early 1980s, when it embarked upon a massive geographical expansion, buoyed by profits from transshipment and taxing of coca. By the early 2000s, FARC counted between 16,000 and 20,000 combatants, with approximately half of those forces later killed or captured during the administration of Álvaro Uribe, which lasted from 2002-2010. Two rounds of peace negotiations with various rebel groups failed: one in 1982 under the Belisario Betancur administration and another in 1998 under the Andrés Pastrana administration.⁵¹

One of the defining features of the conflict has been the emergence and increasing lethality of anti-guerrilla paramilitary organizations.⁵² As the Belisario Betancur administration negotiated with the FARC in the early 1980s, extremist elements within the Colombian military began to support small self-defense organizations that had been protecting landed interests against the encroachments of the guerrilla. Their discontent was amplified when the Betancur administration gave its support to the FARC's goal of forming a legal political party, Unión Patriótica (UP).⁵³ With the collusion of the army establishment, paramilitary organizations carried out mass killings of UP politicians, including candidates running for office and those who had already been elected. Buoyed by drug money and political protection by politicians, local and regional paramilitary organizations joined together in 1997 under the umbrella of the *Autodefensas Unidas de Colombia* (AUC), led by Carlos Castaño. Paramilitaries continued to operate as illegal counterinsurgent forces until their collective demobilization under the Justice and Peace Law in the mid-2000s.⁵⁴

The structure of these two groups, their recruiting strategies, and the kinds of recruits they attract differ from one another,⁵⁵ yet both the FARC and the AUC use military and political training to prepare and indoctrinate their combatants.

⁵¹ A negotiated process between the administration of César Gaviria and smaller rebel groups in the late 1980s and early 1990s led to the demobilization of the Movimiento 19 de April (M-19) and the Ejército Popular de Liberación (EPL).

⁵² 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 Marc Chernick, "The Dynamics of Colombia's Three-Dimensional War," *Conflict, Security and Development* 1 (2001): 93–100.

⁵³ Mauricio Romero, *Paramilitares y autodefensas, 1982-2003* (Bogotá: Iepri-Planeta, 2002). For a history of the emergence and destruction of the UP, see Steven Dudley, *Walking Ghosts: Murder and Guerrilla Politics in Colombia* (Routledge, 2004).

⁵⁴ The law was approved in July 2005. It covers demobilized members of all illegal armed groups who are excluded from amnesty, and provides maximum prison sentences of 5-8 years in exchange for confession of crimes. The paramilitaries' demobilization reconstituted these groups into criminal networks (*bandas criminales* or BACRIM) that control the drug trade and continue to be a major driver of violence against civilians. See, for example, Área de Dinámicas del Conflicto y Negociaciones de Paz, "Siguiendo el conflicto: hechos y análisis" (Fundación Ideas para la Paz, January 2010).

⁵⁵ Ana Arjona and Stathis Kalyvas, "Recruitment into Armed Groups in Colombia: A Survey of Demobilized Fighters," in *Understanding Collective Political Violence*, Yvan Guichaoua, ed. (Palgrave Macmillan, 2011). See also Juan Esteban Ugarriza and Matthew J. Craig, "The Relevance of Ideology to Contemporary Armed Conflicts: A Quantitative Analysis of Former Combatants in Colombia," *Journal of Conflict Resolution* 57, no. 3 (2013): 445-477; and Enzo Nussio and Juan Esteban Ugarriza, "Reasons for Joining Armed Groups – Research Synthesis and

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.⁵⁶ 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.”⁵⁷ In addition to such military training, however, “indoctrination was also high on the agenda.”⁵⁸ 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.”⁵⁹ 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...”⁶⁰

We can also derive an understanding of the content of FARC's political training from the actual jobs performed by political officers across various armed movements within the Colombian conflict. The survey instrument we use for our statistical analysis - introduced in the next section - included a question that asked respondents to identify their rank and describe the three main functions that they performed. Respondents who self-identified as political officers described a number of 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.

External Validation Analysis," Presented at International Studies Association Annual Convention, San Francisco, CA (2013).

⁵⁶ Human Rights Watch, "You'll Learn Not to Cry: Child Combatants in Colombia," (2003). Accessed at <http://hrw.org/reports/2003/colombia0903/>

⁵⁷ 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>

⁵⁸ The Ejército de Liberación Nacional (ELN) similarly distinguishes between military and political training, placing value on both components. See Comandante Milton Hernandez, *Rojo y Negro: Una aproximación a la Historia del ELN* (1998).

⁵⁹ Human Rights Watch. "You'll Learn Not to Cry: Child Combatants in Colombia," (2003). Accessed at <http://hrw.org/reports/2003/colombia0903/>

⁶⁰ 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>

Training of paramilitary forces - both military and political - has proceeded quite differently when compared with that of FARC recruits.⁶¹ Military training of paramilitaries in Colombia has relied on close connections with segments of the armed forces in both the United States (especially in the 1960s), Colombia, and abroad.⁶² Open collusion between the Colombian military establishment and the paramilitaries helped train these illegal fighters,⁶³ while narco-traffickers provided local, geographically-isolated paramilitary groups with funding, political support, and additional military know-how.⁶⁴

The dominant ideology of the paramilitaries is anti-Communist, anti-*guerrilla*, pro-capitalist, pro-Christian, and pro-military. The paramilitary "pledge of allegiance" declares their goals as follows: "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."⁶⁵ Political training of paramilitary recruits in the *Magdalena Medio*, a key area of operation for the groups, proceeded in three stages. The first stage involved shedding fear of the *guerrilla* by teaching "the troopers the basics of the army's psychological operations and regulations," the second phase consisted of "moral and religious" training that aimed to counter the "atheist conception" expressed by the insurgents, while the third phase focused on "the history of the self-defence groups, the reasons for their struggle, and their relations with the authorities."⁶⁶ Political training within paramilitaries rarely stressed the need for *restraint* in dealings with civilians, but rather the importance of eradicating all vestiges of support for the *guerrilla*. The strategy of the paramilitaries was "to terrify the population into denying the Farc even a glass of water, killing those with even suspected links."⁶⁷ Indeed, many sources document

⁶¹ For a journalistic look inside paramilitary training schools, see "Las escuelas para matar de los 'paras'." *Verdad Abierta*, October 28, 2009). Accessed at <http://www.verdadabierta.com/justicia-y-paz/1909-las-escuelas-para-matar-de-los-paras>

⁶² "... paramilitary organizations [in Colombia] have evolved considerably since the 1960s, when U.S. military advisors first recommended the organization of 'indigenous irregulars' as a fundamental component of the Colombian counterinsurgency strategy, then aimed at defeating leftist guerrilla movements. A U.S. Special Warfare Team from Fort Bragg first proposed the strategy in 1962, and later that year a series of U.S. Special Warfare Mobile Training Teams worked with the Colombian armed forces to implement the recommendation." See Winifred Tate, "Paramilitaries in Colombia," *The Brown Journal of World Affairs* VIII, no. 1 (2001): 164.

⁶³ In the late 1980s, active and retired Colombian military officers, in concert with drug traffickers, hired Israeli mercenaries to train paramilitary fighters in the conduct of warfare. See, for example, "Captura de Yair Klein, el mercenario israelí que instruyó a paramilitares," *Semana* (2007). Accessed at <http://www.verdadabierta.com/la-historia/487-captura-de-yair-klein-el-mercenaria-israeli-que-instruyo-a-paramilitares>; "Colombia asks Israel to extradite Yair Klein." (YNet News, 2011). Accessed at <http://www.ynetnews.com/articles/0,7340,L-4020290,00.html>

⁶⁴ Robin Kirk, *More Terrible Than Death: Violence, Drugs, and America's War in Colombia* (Public Affairs, 2003).

⁶⁵ Quoted in Steven Dudley, *Walking Ghosts: Murder and Guerrilla Politics in Colombia* (Routledge, 2004): 122-123.

⁶⁶ 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.

⁶⁷ Jeremy McDermott, "Revealed: The secrets of Colombia's murderous Castaño brothers," *The Telegraph* (November 7, 2008). Accessed at:

the much wider and more intense use of indiscriminate violence or collective targeting of civilians by paramilitary groups when compared to insurgent groups,⁶⁸ with training intended to desensitize individuals to the commission of acts of severe violence.⁶⁹ Discipline within the paramilitaries was far more lax than within the FARC; paramilitary commanders were given significant operational autonomy, with the opportunity to seize assets for their own keeping, thereby encouraging predation. Despite a set of rules that prohibited stealing and killing civilians absent explicit orders to do so, lack of compliance was common, with individual troops abusing civilians “on their own initiative or whim.”⁷⁰

Given the ideology and doctrine espoused by the FARC and the AUC, we expect that political training will have different effects on the conduct of each group towards civilians. Given the FARC’s communist ideology, emphasis on liberating the peasantry from oppressive, feudal conditions, and the group’s strong doctrinal emphasis on cultivating popular support, we expect to find strong support for Hypothesis 2a. That is, *ceteris paribus*, FARC units with more political training should kill fewer civilians. Given the AUC’s emphasis on removing the communist “cancer” from the civilian population, and its relative de-emphasis on safeguarding civilian lives or achieving widespread popular support, we expect to find support for Hypothesis 2b. That is, *ceteris paribus*, AUC units that receive greater political training should kill more civilians.

The next section introduces our data and research design.

RESEARCH DESIGN

Between 2002 and 2008, more than 45,000 combatants in Colombia disarmed, demobilized, and reintegrated into civilian life. These ex-combatants were drawn from both leftist rebel groups such as the FARC and ELN, as well as right-wing paramilitary units, the AUC. The leftist rebels demobilized through a slow, individual process of demobilization following defections from the guerrilla ranks in the context of an escalation of government counterinsurgency initiatives following the election of President Álvaro Uribe in 2002. In contrast, the paramilitaries demobilized collectively, en masse, following a negotiated process with the government initiated in 2003.

<http://www.telegraph.co.uk/news/worldnews/southamerica/colombia/3391789/Revealed-The-secrets-of-Colombias-murderous-Castano-brothers.html>

⁶⁸ On “collective targeting,” see Abbey Steele, “Electing Displacement: Political Cleansing in Apartadó, Colombia,” *Journal of Conflict Resolution* 55, no. 3 (2011): 423-445.

⁶⁹ Children forcibly recruited to serve in the paramilitary ranks, for example, were required to commit horrific actions during training, including killing “captives in front of the other recruits during their training.” Human Rights Watch, “You’ll Learn Not to Cry: Child Combatants in Colombia,” (2003). Accessed at <http://hrw.org/reports/2003/colombia0903/>

⁷⁰ 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): 17.

The incentives provided by the government for demobilization included access to social services, education and training, cash assistance, support to initiate productive projects, and reduced prison terms. Following the establishment of the High Commission for Reintegration - in Spanish, *Alta Consejería para la Reintegración* (ACR)⁷¹ - in 2006, guerrillas who demobilized individually and paramilitaries who gave up arms collectively began to receive identical benefits in exchange for demobilization.

The survey data that we use to test our hypotheses were collected by *Fundación Ideas para la Paz* (FIP), a Colombian non-governmental organization. The survey, composed of 1,485 demobilized combatants, was administered using a stratified random sample of the entire population 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,⁷² in Antioquia,⁷³ Valle del Cauca, Nariño, and Bogotá. The sample was randomly drawn from the full list of ex-combatants who were 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,⁷⁴ some ex-combatants 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 their former groups. The first two problems are structural and our survey, like nearly all others, is unable overcome these.⁷⁵ However, factors that could cause combatants to disappear from the sample frame, such as entry into criminal activity, or highly successful economic reintegration, are unlikely to be systematically correlated with our independent variables of interest (exposure to training), and thus we judge that the threat to causal inference is minimal. In addition, the survey implementation was designed in order to mitigate respondents' fear of participation. Reintegration program staff who were acquainted with sampled respondents initiated contact to introduce the survey and the enumerator, thereby 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 (see below), thereby mitigating concerns about untruthful responses.

⁷¹ The High Commission has since been converted to a free-standing government department: *Agencia Colombiana para la Reintegración*, the Colombian Reintegration Agency.

⁷² With the exception of Córdoba and Sucre.

⁷³ With the exception of Urabá.

⁷⁴ Enzo Nussio, "How Ex-combatants Talk About Personal Security: Narratives of Former Paramilitaries in Colombia," *Conflict, Security & Development* 11, no. 5 (2011): 579–606.

⁷⁵ A number of 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, given the context and constraints. 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).

The survey asked respondents an array of questions related to their behavior prior to entering the armed group, the context and incentives that drove their recruitment, their experience while in the armed group, their decision to exit the armed group and, finally, their well-being and economic status following demobilization and the provision of demobilization-related benefits.

The survey also includes information on ex-combatants' modes of training and their locations across time. To test our chief hypotheses regarding the effect of training on civilian casualties, we use two key independent variables, drawn from a question that asked "What type of training did you receive?"⁷⁶ which then provided possible responses, including military and political training. Respondents could answer "yes" to all, some, or none of these options. *Military training* is constructed by calculating the percent of respondents from each group active in a given department who answered "yes" to having received military training. That is, if 15 of 20 FARC ex-combatants active in the department of Antioquia in 1998 reported having received military training, then *Military training: FARC* takes a value of 0.75 in that department-year. The same is true for *Political training*. Figures 1a and 1b depict the distribution of both types of training across Colombian departments for the FARC, while Figures 1c and 1d depict the same for the AUC.⁷⁷

Figures 1a-d About Here

It is reasonable to be concerned that those who leave insurgent groups might differ systematically from those who choose to carry on the fight. As such, there is a chance that although the survey sample is representative of the entire population of demobilized fighters, the population of insurgent combatants who demobilized individually may have received less political training and indoctrination, which rendered them less likely to remain in the armed group, particularly when under military pressure or duress. Our survey data also contain a modest sample of insurgent combatants who were *captured* (N=49) and were subsequently processed through the ACR's reintegration program. To rule out potential selection effects, we systematically compare captured insurgents with those who chose to demobilize across a range of dimensions, including the distribution of training, reported punishment, reasons for joining the armed group, and age at time of recruitment. The results are presented in Table 1. Most importantly, we find no statistically significant difference between captured and individually

⁷⁶ In Spanish, the question reads, "¿Qué tipo de entrenamiento recibió?"

⁷⁷ Quartiles for all maps are computed for departments that had proportions of less than 1. Departments with values of 1 were added to the fourth quartile.

demobilized combatants in terms of training and most other theoretically salient factors.⁷⁸ We also test for other potential determinants of capture, most notably whether captured combatants were spatially clustered. 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, but find no evidence of spatial clustering.⁷⁹

Table 1 About Here

The individual-level data on training and combatants' location and time in the armed group are matched to department-level civilian casualty data, which span the temporal period 1988-2005. The civilian casualty data were coded using events listed in the periodicals *Justicia y Paz* and *Noche y Niebla*, published quarterly by two Colombian non-governmental organizations, *El Centro de Investigación y Educación Popular* (CINEP) and the *Comisión Intercongregacional de Justicia y Paz*. The data are now maintained by Centro de Recursos para el Análisis de Conflictos (CERAC), a Bogotá-based think tank. The conflict data were gathered based on press reports from more than 20 daily national and regional newspapers as well as “reports gathered directly by members of human rights NGO’s and other organisations on the ground such as local public ombudsmen and, particularly, the clergy.”⁸⁰ The latter sources help to mitigate against the potential underreporting of events in hard-to-access locations, and allowed for the triangulation and cross-checking of figures and reports. Figures 2a and 2b visually display the distribution of armed group activity and civilian casualties, respectively, across departments in Colombia using these data.

Figures 2a-b About Here

⁷⁸ Note that 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 exclude paramilitaries from the analysis, and 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).

⁷⁹ The p-value of the Kolmogorov-Smirnov nonparametric test is 0.99.

⁸⁰ Jorge Restrepo, Michael Spagat and Juan F. Vargas, “The Dynamics of the Colombian Civil Conflict: A New Data Set,” *Homo Oeconomicus* 21 (2004): 404.

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 combatants took against civilians during the course of combat. Second, individuals are likely to underreport participation in behaviors that are, or are seen to be, immoral or criminal.⁸¹

Armed groups inculcate loyalty, adherence to group rules, and control over foot soldiers through a variety of measures, including punishment and training.⁸² While it is true that both punishment and training alter the behavior of individual combatants, we argue that they do so through distinct mechanisms. As we argue above, while indoctrination and training are intended to alter the preferences of combatants,⁸³ punishment alters preference *ordering* by encouraging agents to sublimate their own desires, while training introduces *new* preferences, which are ranked above prior desires. While there is strong evidence that training is applied with relative uniformity across individuals within armed group units, the supply of punishment is non-random, and appears to vary substantially across individuals and units. In addition, although the micro-data that we utilize in this research contain data on individual exposure to punishment, variation in punishment that we observe in the survey data may reflect “demand” for punishment (such as propensity of combatants to violate group rules) rather than supply.⁸⁴ Regardless, we demonstrate the robustness of our results to the inclusion of a variable that codes the percent of ex-combatants active in a given department-year who reported having received punishment.⁸⁵ We also include group-specific variables (*Total Combatants: FARC*; *Total Combatants: AUC*)

⁸¹ Common strategies to shield respondents from culpability and to obtain accurate estimates of engagement in such behavior include the use of the Unmatched Count Technique (UCT) or list questions. On the methodological benefits of using these techniques, see Elizabeth Coutts and Ben Jann, “Sensitive Questions in Online Surveys: Experimental Results for the Randomized Response Technique (RRT) and the Unmatched Count Technique (UCT),” General Online Research Conference in Vienna (2009); and Adam N. Glynn, “What Can We Learn with Statistical Truth Serum? Design and Analysis of the List Experiment,” Harvard University (2010). For an empirical example, see Jason Lyall, Graeme Blair, Kosuke Imai, “Explaining Support for Combatants during Wartime: A Survey Experiment in Afghanistan,” *American Political Science Review* (forthcoming); and Aila M. Matanock and Miguel García, “Fighting for Hearts and Minds: Examining Popular Support for the Military and Paramilitaries in Colombia,” Working paper (June 2011).

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 Amelia Hoover Green, *Repertoires of Violence Against Noncombatants: The Role of Armed Group Institutions and Ideologies*, PhD dissertation at Yale University (2011); and Francisco Gutiérrez Sanín, “Telling the Difference: Guerrillas and Paramilitaries in the Colombian War,” *Politics and Society* 3 (2006).

⁸⁴ For instance, given that the sample contains a large number of demobilized FARC combatants who voluntarily left the war, it is possible that this sub-group was particularly prone to receiving punishment. As noted above, our sample includes *captured* combatants, for whom this selection problem does not exist; these captured combatants can thus be treated as representative of FARC who did not voluntarily leave the armed group. We test whether individually demobilized FARC receive greater punishment, and find that a greater proportion of captured combatants (67.35 percent) receive punishment than individually demobilized (56 percent). While not definitive, this test suggests that demobilized FARC do not differ systematically from non-demobilized in terms of the supply of punishment.

⁸⁵ In Spanish, the question reads, “¿Recibió castigos durante su permanencia en el grupo?”

that code the number of respondents from our survey who were active in a given department-year.

In estimating our models, we control for a variety of department-level variables that are likely to serve as confounders to the unbiased estimation of the effect that training has on civilian casualties. The department level controls, described in detail below, are grouped into five different categories: geographic characteristics, conflict variables, economic attributes of the area, institutional presence and, finally, a municipal scale control.

First, we use geographic variables to insure that civilian casualties are not being driven by climatological or topographical peculiarities of individual departments. These geographic variables are the department's area, average elevation, average rainfall, soil quality and erosion, and an index of water availability. Second, we use measures of conflict incidence to control for the dynamics of the armed group activity, as well as counterinsurgency operations, in each department. More specifically, we use the number of attacks from each armed group, the number of clashes between illegal groups and the government, and the average murder rate in the department. Third, we use two economic variables that might drive armed group activity and civilian targeting. Our models include the average of the Unsatisfied Basic Needs poverty index (NBI) and the Gini coefficient for each department in Colombia. Fourth, we use measures of institutional presence to ensure that the number of civilian casualties is not being driven by the absence of state authority or institutions. Our institutional presence variables include the per capita number of courts, attorney offices and prosecutor offices in a given department. Finally, we include population as a municipal scale control.

EMPIRICAL RESULTS

All of the results from models reported below use the Ordinary Least Squares (OLS) estimator and include standard errors clustered at combatants' department level of activity.⁸⁶ The results reported below are robust to the inclusion of year dummies to control for secular trends in conflict dynamics. The unit of analysis is the department-year.

Table 2 assesses the effect of military training on civilian casualties for the FARC, allowing us to adjudicate between hypotheses H1a and H1b. As Model 1 shows, we find that there is no statistically significant relationship between the percent of FARC combatants with military training (*Military Training FARC*) and civilian casualties. The coefficient for military training is positive, though not significant, which suggests strong evidence against H1a, and weak and at best inconclusive support for H1b. We next examine in Model 2 the relationship between

⁸⁶ We hew to OLS estimates because OLS is the best linear approximation to the actual conditional expectations function, while non-linear models (notably event-count models, such as negative binomial) are highly sensitive to model specification. See Joshua D. Angrist and Jörn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion* (Princeton University Press, 2009).

FARC's political training and its commission of civilian killings. *Political Training FARC* shows a clear, negative effect upon civilian casualties. FARC units that offered a greater percentage of their combatants political training abused civilians less than those that did not, *ceteris paribus*.

Table 2 About Here

We might be concerned that groups use either military training or political training to generate loyalty among combatants. If this were true, then we should expect that when we control for the percentage of combatants who received military training, political training would no longer be meaningfully correlated with civilian casualties. We test this possibility in Model 3 and find that the negative effect of political training on civilian killings holds, and that military training remains insignificant.

Figure 1 uses estimates from Model 3 in Table 2 to calculate the predicted number of civilians killed by the FARC in a given department year, conditional on covariates.⁸⁷ As we can see, the predicted probabilities show that *Political Training FARC* is significantly associated with fewer civilian casualties. A FARC unit that provided political training to only 20% of its combatants is predicted to kill 36.1 civilians in a year,⁸⁸ while a unit that provided political training to 80% of its combatants is predicted to kill 29.2 civilians in a year,⁸⁹ a 19% decrease. Political training has a substantively important and negative effect on civilian killings by the FARC.

Figure 3 About Here

The results from regressing the two training variables on civilian casualties within the paramilitary subsample, including the standard battery of controls, are reported in Table 3. The findings differ from those in the sample of FARC ex-combatants. As with the FARC findings, in Model 1 we see that military training for the paramilitaries (*Military Training AUC*) has no statistically significant effect on civilian casualties. However, the coefficient is positive, which again provides strong evidence against H1a, and weak evidence in favor of H1b. Unlike with the FARC, political training appears to have no statistically significant effect on civilian killings in Model 2. When we include in Model 3 the percent of combatants who underwent political training alongside the proportion of those who underwent military training, military training remains positive but statistically insignificant, yet political training becomes negative and significant. In this specification, political training reduces civilian casualties for the

⁸⁷ Control variables are set at their means.

⁸⁸ The 95% confidence interval is 28.2 to 44.1.

⁸⁹ The 95% confidence interval is 26.4 to 32.0.

paramilitaries even after controlling for military training. Although we expected to find support for H2b, our results are inconclusive. We believe that this may reflect the organizational structure of the AUC itself, as well as changes in the AUC's doctrine over time. Recall that unlike the hierarchically-organized FARC, which has a strong and rigid command structure, the AUC was an umbrella group of many locally-organized paramilitary organizations, with divergent tactics, coalition partners, and tactical preferences. Some of these organizations were significantly more predatory and vicious than others, reflecting highly local factors, even after the groups allied under the AUC banner in 1997. We are therefore left with a suggestive but incomplete picture of the effect that political training has on civilian killings by the paramilitaries: political training appears to decrease the paramilitaries' killing of civilians.

Table 3 About Here

As above, we calculate the substantive effect of political training on civilian casualties, now among the subset of paramilitary combatants.⁹⁰ As shown in Figure 2, a paramilitary unit that provided political training to only 20% of its combatants is predicted to kill 40.6 civilians in a year,⁹¹ while a unit that provided political training to 80% of its combatants is predicted to kill 32.7 civilians in a year,⁹² a 19% decrease. Political training has a substantively important and negative effect on civilian killings by the paramilitaries, of roughly the same magnitude as the effect for the FARC.

Figure 4 About Here

To check the robustness of our results, we undertake a number of additional tests, displayed in Table 4. First, in Model 1, we include the FARC and AUC training variables alongside one another in fully-specified models. The findings reported above stand: FARC political training is associated with fewer civilian casualties. However, we also find some support for H1b, that military training among the AUC *increases* civilian casualties, as the coefficient for military training is positive and significant in this model specification.

As an additional robustness check, in Models 2, 3, and 4 in Table 4 we assess the provision of punishment within armed groups. As noted throughout, armed groups use a combination of tools to shape the behavior of combatants, including the use of disciplinary measures. This allows us to test whether political training and punishment were used as strategic complements. If the

⁹⁰ All predicted probabilities are obtained using estimates from model 3, the fully-specified model, in Table 3.

⁹¹ The 95% confidence interval is 31.4 to 49.8.

⁹² The 95% confidence interval is 30.2 to 35.2.

provision of political training and punishment are 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. Model 2 shows results for the FARC: the coefficient on *Punishment FARC* is positive, and indicates a significant correlation with civilian killings. *Political training FARC* remains negative and significant in the model alongside *Punishment FARC*, indicating that political training has an important and independent effect on FARC's levels of civilian killings, even after accounting for the provision of disciplinary measures.

Table 4 About Here

We now turn to the same robustness test for the paramilitaries, in Model 3 in Table 4. The *Punishment AUC* variable does not reach statistical significance, although its sign is positive. The negative relationship between *Political training AUC* and civilian killings remains in this model: subunits of the paramilitaries that received greater political training killed fewer civilians than those that received less political training. These findings for the paramilitaries are of particular interest, given that we know that the content of political training was not - at least for much of the 1990s - directed at the mitigation of harm against civilians. Political training appears to have an effect on civilian killings even when training does not absolutely proscribe abuse of civilians.

Finally, Model 4 combines the FARC and AUC punishment models. We see that *Political Training FARC* remains negative and significant, while *Military Training FARC* becomes positive and significant. This provides further support for H1b and H2a. *Punishment FARC* remains positive and significant in Model 4. None of the key independent variables for the AUC are significant in this model, although the coefficient on *Political Training AUC* is negative, and the coefficient on *Military Training AUC* is positive.

Table 5 presents a summary of the findings laid out above. With regard to the effect of military training, we find no evidence validating the expectations of various accounts suggesting that military training should independently reduce civilian casualties (H1a). Instead, we find weak support for H1b for the FARC and the AUC: for both groups, greater intensities of military training is positively associated with greater civilian victimization, though this result only reaches significance in a few models, when estimating the effect of FARC and AUC training together. Thus, we argue, that while H1a can be ruled out in the Colombian context, more evidence is needed to assess H1b. With respect to political training, we find strong evidence for H2a: for pro-civilian groups, greater political training is associated with a large and statistically significant reduction in civilian victimization. However, contrary to our expectations, we find no clear evidence for H2b. Instead, we find weak evidence suggesting that AUC political training is

associated with reduced civilian victimization. As suggested above, this may reflect regional and temporal variation in the content of AUC political doctrine.

Table 5 About Here

Finally, it is important to note that while the dependent variable used in this study, an incident count of civilian killings, provides a robust, longitudinal measure of violence, it does not measure other forms of violence against civilians, such as non-lethal violence (including sexual violence), intimidation, harassment, and many other forms of psychological abuse used by armed groups to control territory. As a result, we stress that the models presented above almost certainly *underestimate* the overall impact of training on civilian victimization, by focusing only on its most drastic observable form.⁹³ In particular, we may underestimate the effect of political training on the abuse of civilian populations: while military training is not designed to influence the propensity of fighters to harass, intimidate, or injure civilians, political indoctrination is configured not only to prevent civilian deaths, but also to reduce less drastic forms of civilian harm. Again, consonant with our analysis of the FARC's ideology and doctrine, we expect that the underestimate is significantly more likely, and also significantly larger, for the FARC.

CONCLUSION

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

This paper provides one of the first empirical analysis in the field of the impact of training on civilian killings. Our research suggests that repertoires of political training and indoctrination within armed groups helps explain variation in the use of deadly force against civilians. We present an argument that distinguishes between the functions of military and political training and draw out the testable implications of that argument. We then use regression techniques to

⁹³ We have used measures of civilian killings because we concur with Kalyvas that although "[h]omicide 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' ... in this sense, death is 'the absolute violence'..." See Stathis Kalyvas, *The Logic of Violence in Civil War* (Cambridge: Cambridge University Press, 2006): 20.

isolate the effect that different types of training of insurgent and paramilitary fighters have on civilian abuse and civilian fatalities in the Colombian conflict, after controlling for confounders. The empirical findings from this paper suggest that the conventional wisdom that military training generically improves combatant behavior may not be correct; instead, we find weak but suggestive evidence that military training may amplify civilian killing.

Political training and indoctrination - processes that inform how, when, and why force should be utilized - appear to have great impact on the extent to which armed groups kill civilians. Future research must assess whether the relationship between training and civilian victimization has external validity beyond the Colombian case. Yet given the strength of our findings within Colombia, and given the consistency of the relationship between political training across armed actors, we are optimistic that these results will travel well to other cases.

The abuse of civilians in civil war is a pressing policy issue due to the human costs borne by non-belligerents caught up in conflict. Our argument and empirical results suggest several lessons. First and most simply, groups with no clear body of doctrine or process of political training are likely to present a greater threat to civilian safety than groups that politically train their fighters. This may seem counterintuitive given existing findings showing that Marxist insurgencies are longer and more lethal than non-Marxist insurgencies.⁹⁴ Second, our results suggest that political training may be able to mitigate - but not eliminate - the potential for excess civilian casualties generated by armed groups' recruitment strategies: groups that recruit through material incentives, such as the paramilitaries in Colombia, are likely to present an increased threat to civilians, even when political training is in place, yet political training may be capable of restraining some of those abuses.⁹⁵ Third, this study demonstrates the importance of harnessing the collection of micro-level data in conflict zones, especially among demobilized combatants, to better understand the mechanisms driving wartime behavior, especially across groups within individual conflict zones and across subunits within armed groups. Studying repertoires of training, indoctrination, and codes of conduct internal to armed groups holds great promise for both advancing our understanding of conflict processes in civil war, and for helping policymakers develop innovative responses to protect civilians from armed non-state actors.

⁹⁴ Stathis Kalyvas and Laia Balcells, "Did Marxism Make a Difference? Marxist Rebellions and National Liberation Movements," (2010). Working paper.

⁹⁵ On the connection between recruitment strategies and civilian abuse, see Jeremy Weinstein, *Inside Rebellion* (Cambridge University Press, 2007). More in line with our own argument, Elisabeth Wood contends that "the distinct patterns of violence may reflect group strategy concerning training, discipline, and incentives and group ideology rather than distinct pools of recruits." See Elisabeth Elisabeth J. Wood, "Armed Groups and Sexual Violence: When Is Wartime Rape Rare?" *Politics & Society* 37 (2009): 140.

Figure 1a: Military training of FARC

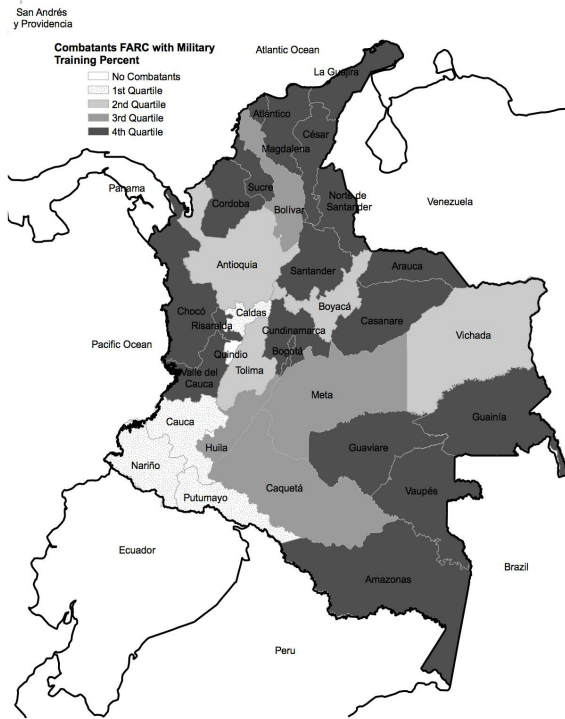


Figure 1b: Political training of FARC

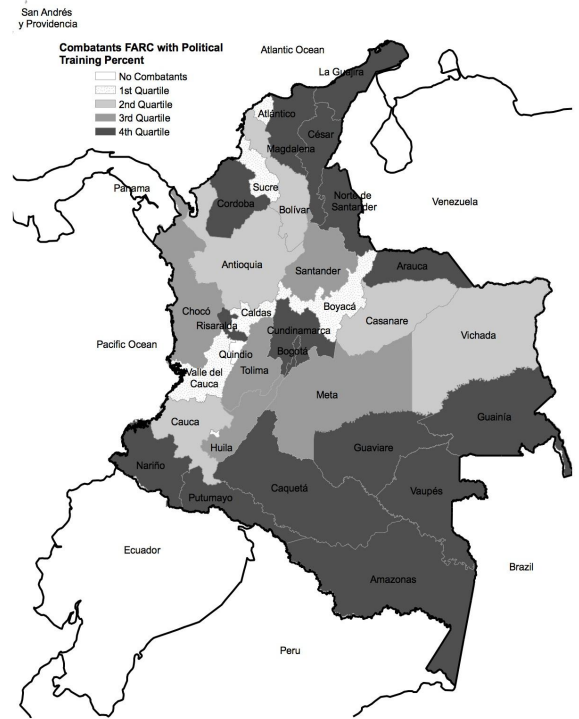


Figure 1c: Military training of AUC

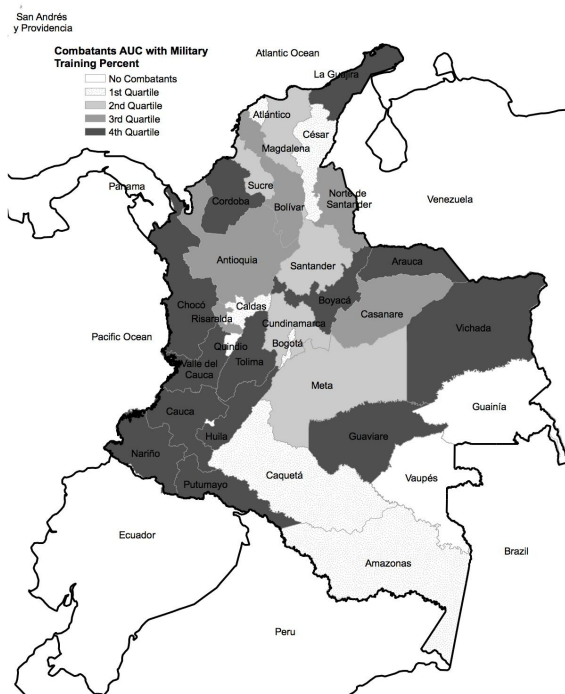


Figure 1d: Political training of AUC

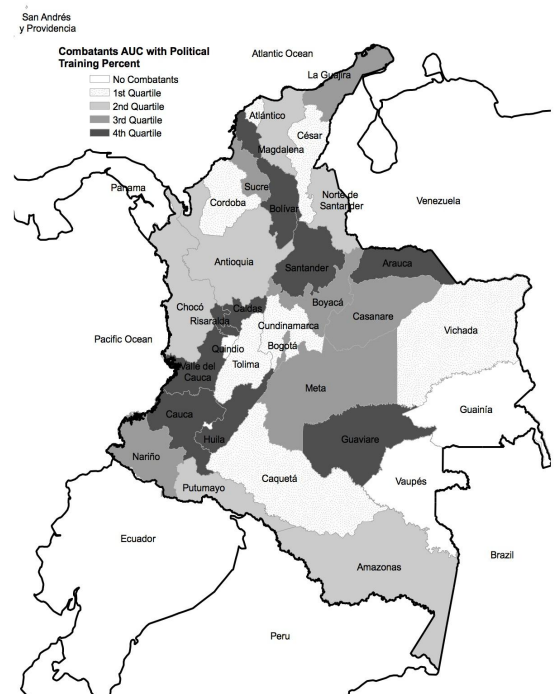


Figure 2a: Combatant activity

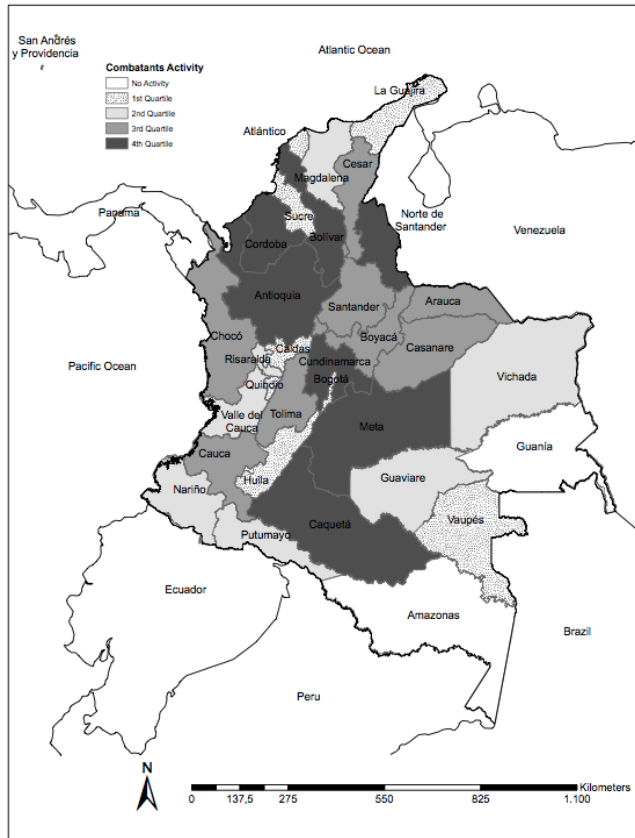


Figure 2b: Civilian victimization

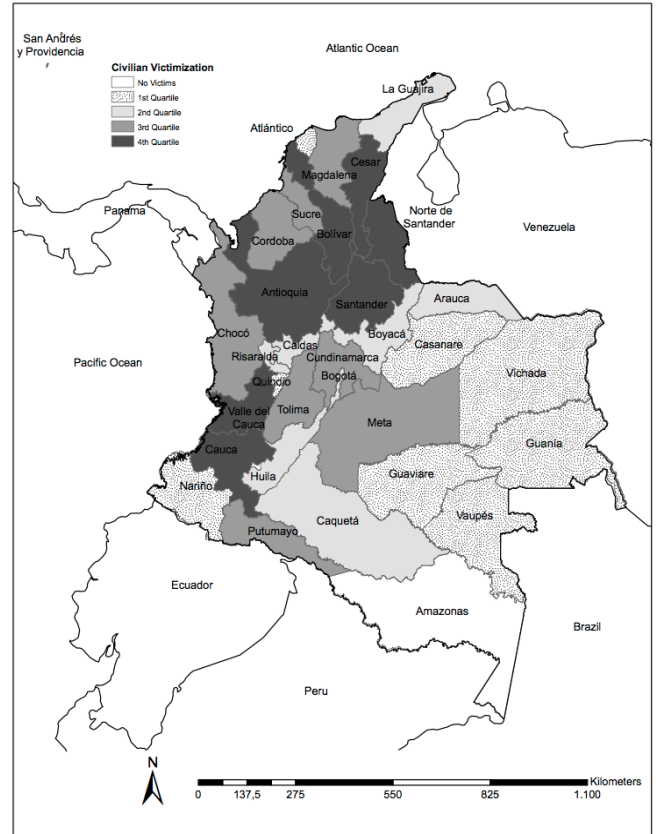


Figure 3: Predicted Number of FARC Civilian Casualties, by Levels of Political Training

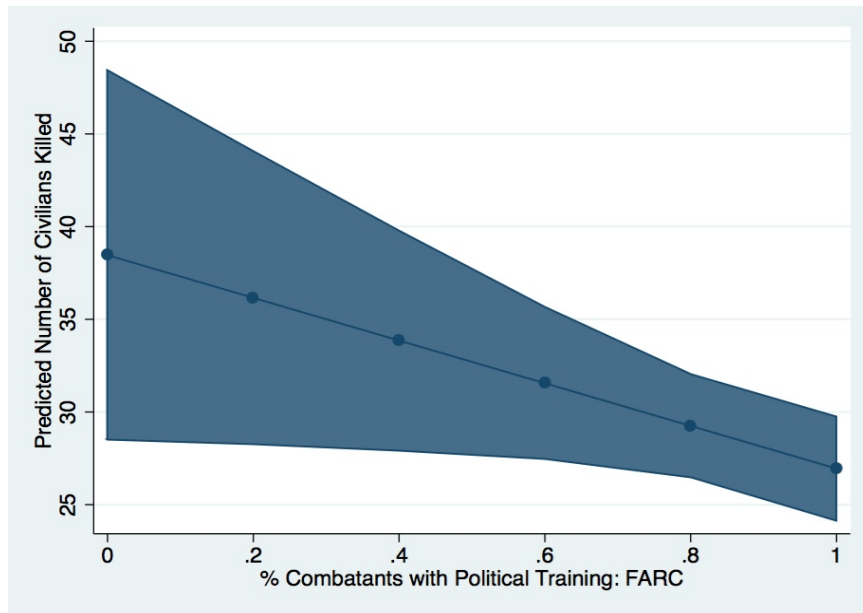


Figure 4: Predicted Number of AUC Civilian Casualties, by Levels of Political Training

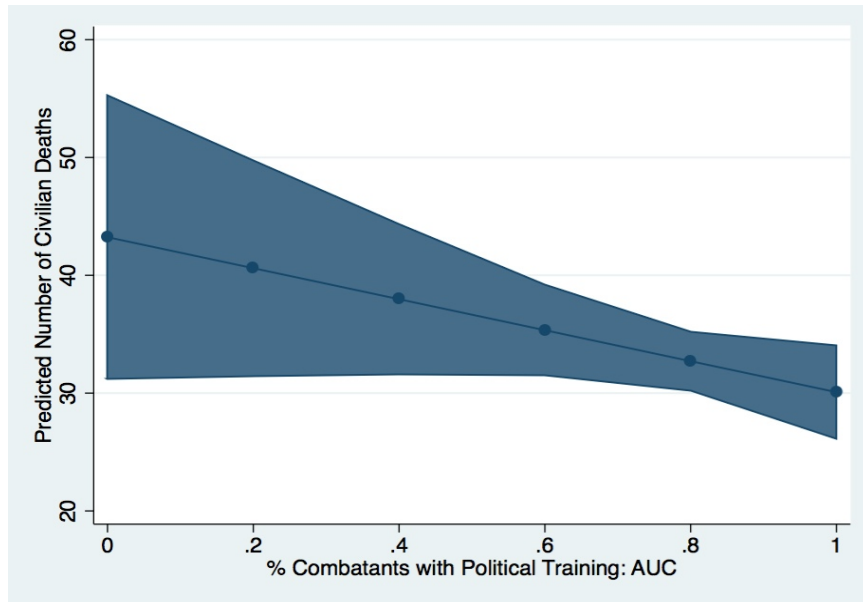


Table 1: Differences in Means Across Captured and Individually Demobilized Combatants

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)
N	582	

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

Table 2: FARC Training and Civilian Casualties

	Model 1	Model 2	Model 3
Military Training FARC	1.185 (6.508)		4.581 (8.189)
Political Training FARC		-10.95* (5.728)	-11.52** (5.468)
Total Combatants	-0.045 (0.186)	-0.038 (0.173)	-0.026 (0.180)
Homicide Rate	0.059 (0.041)	0.073* (0.042)	0.076* (0.041)
Guerrilla Attacks	0.245*** (0.075)	0.257*** (0.075)	0.254*** (0.074)
Paramilitary Attacks	5.274*** (0.263)	5.253*** (0.268)	5.256*** (0.270)
Government Attacks	1.106** (0.532)	1.104** (0.520)	1.107** (0.517)
Government-Guerrilla Clashes	0.081 (0.125)	0.077 (0.117)	0.073 (0.122)
Government-Paramilitary Clashes	-6.072*** (1.999)	-6.375*** (1.939)	-6.433*** (1.914)
Guerrilla-Paramilitary Clashes	0.177 (0.419)	0.099 (0.411)	0.096 (0.411)
Rainfall	-0.001 (0.002)	-0.001 (0.001)	-0.001 (0.001)
Water availability	0.331 (0.550)	0.271 (0.492)	0.252 (0.491)
Elevation	0.001 (0.003)	0.001 (0.002)	0.002 (0.002)
Area	0.607 (0.967)	0.715 (0.939)	0.663 (0.965)
Soil Quality	-2.602 (2.056)	-3.61 (2.302)	-3.435 (2.336)
Erosion	1.787 (2.207)	2.055 (2.189)	2.226 (2.251)
NBI	0.0986 (0.147)	0.142 (0.129)	0.164 (0.140)
Gini	25.74 (16.320)	27.46 (16.300)	28.10* (16.230)
Constant	-37.07 (29.290)	-26.97 (25.280)	-33.45 (28.830)
Observations	343	343	343
R-squared	0.916	0.918	0.918

Standard errors, clustered on department of activity, are in parentheses.

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

Table 3: AUC Training and Civilian Casualties

	Model 1	Model 2	Model 3
Military Training AUC	3.32 (7.852)		11.17 (8.684)
Political Training AUC		-8.3 (6.384)	-13.16* (7.563)
Total Combatants AUC	0.128 (0.134)	0.115 (0.132)	0.112 (0.131)
Homicide Rate	0.056 (0.052)	0.076 (0.057)	0.076 (0.056)
Guerrilla Attacks	0.319*** (0.078)	0.319*** (0.081)	0.330*** (0.075)
Paramilitary Attacks	5.016*** (0.199)	4.997*** (0.186)	4.991*** (0.183)
Government Attacks	1.049* (0.538)	1.050* (0.543)	1.071* (0.541)
Government-Guerrilla Clashes	0.021 (0.128)	0.0015 (0.123)	-0.012 (0.122)
Government-Paramilitary Clashes	-6.740*** (1.852)	-6.450*** (1.963)	-6.310*** (2.049)
Guerrilla-Paramilitary Clashes	-0.095 (0.395)	-0.037 (0.382)	-0.011 (0.373)
Rainfall	-0.004 (0.002)	-0.005* (0.003)	-0.005* (0.002)
Water Availability	0.961 (0.662)	1.09 (0.686)	1.01 (0.617)
Elevation	0.002 (0.003)	0.002 (0.003)	0.001 (0.003)
Area	0.716 (0.974)	0.869 (1.020)	0.873 (0.939)
Soil Quality	-4.261* (2.213)	-5.487** (2.227)	-5.382** (2.079)
Erosion	1.615 (2.461)	1.873 (2.454)	1.589 (2.248)
NBI	0.201 (0.170)	0.229 (0.159)	0.164 (0.164)
Gini	52.68* (30.880)	64.07* (34.960)	61.12* (32.180)
Constant	-75.65* (38.280)	-77.62* (38.790)	-73.49* (36.020)
Observations	265	265	265
R-squared	0.919	0.919	0.92

Standard errors, clustered on department of activity, are in parentheses.

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

Table 4: Robustness Tests

	Model 1	Model 2	Model 3	Model 4
Political Training FARC	-19.72*** (4.384)	-12.69** (5.646)		-23.63*** (4.693)
Military Training FARC	28.96 (19.44)	-0.327 (9.194)		30.20* (17.67)
Total Combatants FARC	0.0405 (0.243)	-0.055 (0.170)		0.121 (0.218)
Punishment FARC		8.111* (4.687)		14.10** (6.123)
Political Training AUC	-12.34 (9.372)		-13.11* (7.493)	-2.651 (8.746)
Military Training AUC	15.53* (8.273)		10.99 (8.703)	8.336 (7.975)
Total Combatants AUC	0.141 (0.126)		0.112 (0.130)	0.108 (0.137)
Punishment AUC			13.77 (38.21)	-10.06 (38.17)
Homicide Rate	0.107 (0.064)	0.067 (0.042)	0.080 (0.061)	0.094 (0.069)
Guerrilla Attacks	0.337*** (0.078)	0.274*** (0.075)	0.330*** (0.075)	0.367*** (0.080)
Paramilitary Attacks	4.957*** (0.203)	5.181*** (0.252)	4.989*** (0.187)	4.840*** (0.179)
Government Attacks	1.046* (0.514)	1.106** (0.511)	1.073* (0.543)	1.048* (0.529)
Government-Guerrilla Clashes	-0.009 (0.143)	0.091 (0.117)	-0.013 (0.122)	0.025 (0.130)
Government-Paramilitary Clashes	-7.423*** (1.755)	-6.565*** (1.856)	-6.354*** (2.077)	-7.461*** (1.666)
Guerrilla-Paramilitary Clashes	-0.240 (0.386)	0.170 (0.414)	-0.0197 (0.359)	-0.150 (0.382)
Rainfall	-0.005** (0.002)	-0.001 (0.001)	-0.005* (0.003)	-0.006*** (0.002)
Water Availability	1.33** (0.588)	0.322 (0.463)	0.992 (0.637)	1.67*** (0.449)
Elevation	0.003 (0.004)	0.001 (0.002)	0.001 (0.003)	0.006 (0.004)
Area	0.702 (1.35)	1.03 (0.894)	0.910 (0.967)	0.874 (1.21)
Soil Quality	-5.757** (2.570)	-3.834* (2.180)	-5.320** (2.157)	-6.043** (2.302)
Erosion	3.126 (2.543)	3.404* (1.928)	1.597 (2.312)	4.472** (1.736)
NBI	0.306 (0.213)	0.165 (0.132)	0.166 (0.167)	0.482** (0.180)
Gini	67.49** (28.67)	30.88* (15.71)	61.70* (32.45)	82.23*** (27.53)
Constant	-116.2** (48.10)	-38.42 (27.33)	-73.34* (36.71)	-158.1*** (40.81)
Observations	251	343	265	251
R-squared	0.923	0.919	0.920	0.925

Standard errors, clustered on department of activity, are in parentheses.

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

Table 5: Summary of Findings

Hypothesis	Finding
H1a: Greater exposure to military training should lead to <i>decreased</i> levels of civilian killing.	Strong evidence <i>against</i>
H1b: Greater exposure to military training should lead to <i>increased</i> levels of civilian killing.	Weak evidence <i>in favor</i>
H2a: In groups that are motivated by a pro-civilian ideology, greater exposure to political training and indoctrination should lead to <i>decreased</i> civilian killings.	Strong evidence <i>in favor</i>
H2b: In groups that are motivated by an anti-civilian ideology, greater exposure to political training and indoctrination should lead to <i>increased</i> civilian killings.	Weak evidence <i>against</i>

