Civilian Autonomy and Resilience in the Midst of Armed Conflict

by

Cassy L. Dorff

Department of Political Science
Duke University

Date: ____________________

Approved:

__________________________
Michael D. Ward, Supervisor

__________________________
Erik Wibbels

__________________________
Laia Balcells

__________________________
James Moody

__________________________
Erica Chenoweth

Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Political Science in the Graduate School of Duke University 2015
Abstract

Civilian Autonomy and Resilience in the Midst of Armed Conflict

by

Cassy L. Dorff

Department of Political Science
Duke University

Date: ____________________________
Approved: _________________________

Michael D. Ward, Supervisor

Erik Wibbels

Laia Balcells

James Moody

Erica Chenoweth

An abstract of a dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Political Science in the Graduate School of Duke University 2015
Abstract

In situations of armed violence and insecurity, how do civilians influence the political environment around them? In this dissertation, I present three different studies that broadly engage this question. In concert, the papers presented herein offer new insights on civilians’ relationship to armed conflict through a focus on victimization, participation, attitudes on resistance, and the effects of civilian resistance on aggregate levels of violence.

The first study explores the effects of victimization on political participation. I argue that previous answers to this question have overlooked a key variable for predicting civilian behavior: individual level social context. As a step forward in connecting social support networks to behavioral outcomes, I present the kinship network as a novel measure that captures an individual’s valuable and private social interactions. I find that survivors of criminal violence with strong ties to kinship networks are most likely to attend political meetings. By highlighting variation in behavior across victims, I challenge previous work which only examines differences in participation between victims and non-victims.

Motivated by the assumption that attitudes are a precursor to action, my second study examines civilian attitudes on the efficacy of resistance in regions of protracted violence. Using an original survey fielded in Mexico, I explore the conditions under which civilians are likely to view nonviolent or violent methods as useful tools for change. I first test whether several demographic factors—age, gender, income,
knowledge about civil resistance, and media consumption—influence attitudes toward resistance. Moving beyond these variables, I then test whether perceptions about government responsibility affect these attitudes. Specifically, I argue that civilian attitudes towards resistance methods are informed by which political actor civilians view as responsible for their security problems. I find that the predicted probability of viewing nonviolent action as more effective than violent action increases by 20.8% for those who attribute security responsibility to local authorities, compared to other actors. Using an embedded survey experiment, I then address the empirically relevant question of whether these attitudes about resistance correlate with action. I find that compared to those who do not view resistance as useful, respondents who view nonviolence as effective are “supportive types” who are more willing than others to support local resistance groups, regardless of the methods these groups employ. Together, these analyses provide important information for civilian organizers seeking to mobilize latent support for resistance. Moreover, they enrich our understanding of the ways in which communities can reduce violence in order to reclaim political control during armed conflicts.

Last, I present an aggregated analysis on the evolution of armed conflict in Mexico. The criminal war in Mexico is extremely complex: Drug Trafficking Organizations, citizens, government agents, amongst others, are all relevant actors within the dynamic evolution of the conflict. Existing research, however, typically ignores the interdependencies inherent to these networks. Using a new collection of machine-coded event data, I generate conflict networks for each year from 2004 to 2010. In doing so, I make three major contributions. First, I offer insights into the potential promise and pitfalls of using machine-coded data for country-level analysis. Next, after cleaning and improving upon the original data, I generate yearly networks, which capture a wide range of violent-related actors. Importantly, I demonstrate how these networks illustrate the interdependent nature of the Mexican conflict and present
new insights, such as how government coordination changes in response to cartel violence over time. Finally, I use a latent space approach to identify previously unobservable violence between government actors, criminal groups, and civilians. This research design serves as a platform for future research to investigate the effects of major civilian-led events—such as mass protests—on the evolution of armed conflict.
A la gente de México y su búsqueda por la justicia
“To pay attention, this is our endless and proper work.”

-Mary Oliver
## Contents

Abstract \hspace{2cm} iv  
List of Tables \hspace{2cm} xii  
List of Figures \hspace{2cm} xiv  
List of Abbreviations and Symbols \hspace{2cm} xvi  
Acknowledgements \hspace{2cm} xvii  

1 Introduction \hspace{2cm} 1  

2 Violence, Kinship Networks, and Political Behavior: Evidence from Mexico \hspace{2cm} 5  
2.1 Victimization and Political Action \hspace{2cm} 7  
2.2 Empirical Strategy \hspace{2cm} 12  
2.2.1 Survey Data \hspace{2cm} 13  
2.2.2 Variables \hspace{2cm} 14  
2.2.3 Estimation \hspace{2cm} 18  
2.2.4 Main Results \hspace{2cm} 19  
2.3 Conclusion & Implications \hspace{2cm} 24  

3 Civilian Survival in Armed Conflict: Attitudes Towards Resistance Strategies, Evidence from Mexico \hspace{2cm} 26  
3.1 Existing Research on Civilians in Violent Settings \hspace{2cm} 29  
3.1.1 Citizens’ Movements & Public Opinion \hspace{2cm} 31  
3.1.2 Responsibility Attribution \hspace{2cm} 34
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.3.2 Effectiveness of violent resistance</td>
<td>108</td>
</tr>
<tr>
<td>C.3.3 Effectiveness of Civil Resistance</td>
<td>109</td>
</tr>
<tr>
<td>C.3.4 Familiarity with On-going Campaigns</td>
<td>111</td>
</tr>
<tr>
<td>C.3.5 Education and Support for Nonviolence</td>
<td>112</td>
</tr>
<tr>
<td>C.3.6 Experimental Treatment: Support for a Local Group</td>
<td>114</td>
</tr>
<tr>
<td>C.3.7 Additional Variables of Interest</td>
<td>117</td>
</tr>
<tr>
<td>C.3.8 Participation in Civil Resistance</td>
<td>117</td>
</tr>
<tr>
<td>C.3.9 Urban and Rural Populations</td>
<td>118</td>
</tr>
<tr>
<td>C.3.10 Information about Civilian Organizing</td>
<td>119</td>
</tr>
<tr>
<td>C.3.11 Connections with Auto-defensa Members</td>
<td>119</td>
</tr>
<tr>
<td>C.3.12 Political Interest</td>
<td>120</td>
</tr>
<tr>
<td>C.3.13 Beliefs about Political Actors</td>
<td>120</td>
</tr>
<tr>
<td>C.3.14 Country Level Security Situation</td>
<td>121</td>
</tr>
<tr>
<td>C.3.15 Changes in Municipal Security</td>
<td>122</td>
</tr>
<tr>
<td>C.3.16 Victimization</td>
<td>122</td>
</tr>
<tr>
<td>C.3.17 Individual Influence</td>
<td>123</td>
</tr>
<tr>
<td>C.4 Conclusion and Lessons Learned</td>
<td>123</td>
</tr>
<tr>
<td>Bibliography</td>
<td>144</td>
</tr>
<tr>
<td>Biography</td>
<td>152</td>
</tr>
</tbody>
</table>
# List of Tables

2.1 Victimization data ................................................................. 15

2.2 Summary of demographic data .................................................. 18

2.3 Logit models predicting attendance at neighborhood association meetings and political party meetings. .......................................................... 20

2.4 Logit models predicting attendance at neighborhood association meetings and political party meetings. These models test the key interaction between kinship connectivity and victimization. .................................................. 23

3.1 State-level overview of national sample .......................................... 43

3.2 Breakdown of the population’s familiarity for the Movement for Peace with Justice and Dignity .......................................................... 48

3.3 Cross-tabulation presenting views about local authorities and attitudes towards nonviolent methods. Column percentages are calculated and shown in parentheses. .......................................................... 51

3.4 Model 1: Logit model of favorable attitudes on nonviolent resistance ........ 53

3.5 OLS model of a respondent’s “willingness” to support a local resistance group .......................................................... 61

4.1 Number of cases for select drug-related actors in raw ICEWS data .......... 74

4.2 List of updated actor names 2004-2010 .......................................... 81

A.1 Geographical region ................................................................. 97

A.2 Sample allocation ................................................................. 98

B.1 Education levels across treatment groups .................................... 101

B.2 Males and Females across treatment groups ................................ 102
B.3  Party ID across treatment groups ................................. 102
B.4  Crosstabulation of two variables: views on violent vs. nonviolent action 102
C.1  Civil resistance vs. violent resistance ............................ 108
C.2  Effectiveness of violent resistance ............................... 109
C.3  Crosstabulation of two variables: views on violent versus nonviolent action .............................................. 110
C.4  Belief in the effectiveness of Gandhi’s methods for Mexico .......... 111
C.5  Effectiveness of Sicilia’s movement ............................... 112
C.6  Respondents’ views on the efficacy of a local resistance group: National Sample (N=1000) ........................................ 115
C.7  Respondents’ views on the efficacy of the civil resistance group: oversample with proximity to auto-defense groups (N=300) ............ 115
C.8  Social connectivity & invitations to civil resistance events .......... 118
C.9  Civil resistance participation ...................................... 118
C.10 Access to information about civilian resistance efforts .......... 120
C.11 Relation to auto-defense member ................................ 120
C.12 Political interest .................................................. 120
C.13 Who is responsible for your well-being? .......................... 121
C.14 Perceptions of country-level security ............................ 122
C.15 Perceptions of municipal-level security .......................... 122
C.16 Victimization ..................................................... 123
List of Figures

2.1 Geographical distribution of survey sample .................................. 15
2.2 Histogram of kinship index ......................................................... 17
2.3 The effect of victimization and kinship networks on the probability of participation for attendance at political party meetings. ............... 22
3.1 Survey sample with the national sample shown in blue. Over-sampled populations proximate to “autodefensas” shown in purple. The over-sampled municipalities are within the states of Guerrero, Hidalgo, and Michoacán. .......................................................... 44
3.2 A map of Guerrero state. An over-sampled municipality proximate to self defense forces (shown in purple) is also a municipality with known self defense groups. To demonstrate the proximity of the sample to self defense groups, municipalities with known self defense forces are shaded gray. .......................................................... 45
3.3 Model 1’s predicted probabilities for attitudes towards nonviolence . 54
3.4 Coefficient plot comparing Model 1 and 2. Model 1 is shown in dark blue (the dependent variable represents attitudes on nonviolence) and Model 2 is shown in light blue (the dependent variable represents attitudes on violence). .................................................. 55
3.5 Correlation between item responses ............................................. 58
3.6 Predicted support scores varying support for nonviolent resistance . 62
4.1 Sinaloa Cartel’s territorial movements from 2006-2010 ................. 79
4.2 Original raw ICEWS data compared to updated, re-coded event data for the time period 2004-2010. The orange line represents the updated data and the grey line reflects original machine-coded data. .......... 80
4.3 The evolution of the Mexican criminal conflict, 2004-2005. Orange nodes are government actors, blue represents civilian actors and green corresponds to criminal organizations. The links (grey lines) are weighted by the number of conflictual events for that year. ................. 83

4.4 The evolution of the Mexican criminal conflict, 2006-2007. Orange nodes are government actors, blue represents civilian actors and green corresponds to criminal organizations. The links (grey lines) are weighted by the number of conflictual events for that year. ................. 84

4.5 The evolution of the Mexican criminal conflict, 2008-2009. Orange nodes are government actors, blue represents civilian actors and green corresponds to criminal organizations. The links (grey lines) are weighted by the number of conflictual events for that year. ................. 85

4.6 Eigen centrality at the yearly level (2004-2009) for both municipal police and federal police .................................................. 86

4.7 A comparison between the empirical network and the latent space in 2005. The left panel presents the original data network and right panel plots actors in the latent space. In both graphs, orange nodes are government actors, blue nodes represent a civilian actor, and green nodes are criminal organizations. Actors closer together in the latent space have a higher probability of interaction. ................. 91

C.1 A sample of the census block maps used by enumerators ............. 107

C.2 Distribution of opinions of resistance methods .......................... 108

C.3 Distribution Respondent Education ........................................ 113

C.4 The relationship between education and predicted probability of favorable views towards nonviolent action .......................... 113
List of Abbreviations and Symbols

Symbols

Below is a brief abbreviation and language guide provided for more accessible reading.

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPJD</td>
<td>The Movement for Peace with Justice and Dignity, originally formed and led by Javier Sicilia in Mexico.</td>
</tr>
<tr>
<td>PAN</td>
<td>Partido Acción Nacional (National Action Party)</td>
</tr>
<tr>
<td>PRD</td>
<td>Partido de la Revolución Democrática (Party of the Democratic Revolution)</td>
</tr>
<tr>
<td>PRI</td>
<td>Partido Revolucionario Institucional (Institutional Revolutionary Party)</td>
</tr>
<tr>
<td>CATWLAC</td>
<td>The Coalition Against Trafficking in Women and Girls in Latin American and the Caribbean</td>
</tr>
<tr>
<td>DTO</td>
<td>Drug Trafficking Organization</td>
</tr>
</tbody>
</table>

Spanish words

<table>
<thead>
<tr>
<th>Word</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>autodefensas</td>
<td>Auto-defense forces, e.g. armed civilian self defense groups.</td>
</tr>
</tbody>
</table>
Acknowledgements

This project was made possible by the support and generosity of several key institutions. First, thank you to Duke University, University of Denver, the Program for the Study of Democracy, Institutions, and Political Economy (DIPE), and the International Center for Nonviolent Conflict (ICNC). All of which, through some means or another, financially provided for my field research and data collection efforts. I specifically would like to thank Maciej Bartkowski, Hardy Merriman, Jack Duvall, Peter Ackerman, Erica Chenoweth and Michael D. Ward for making these contributions possible. The institutional support I found from smart people over at the Duke Network Analysis Center (DNAC) and the Duke Initiative on Survey Methodology (DISM) also deserve a heavy round of applause.

A special thanks to my witty and brilliant advisor, Michael D. Ward. This journey would not have been possible without Mike’s wisdom, humor, commitment, and guidance. During my first year at Duke, I was one of his lowest scoring students in his MLE class, yet he stuck with me through calculus, bayesian statistics, and the inevitable ups and downs of gaining computer science skills. Despite his own expertise and accomplishments, Mike never made me feel small or incapable of the challenges before me. From day one, Mike told me to pursue whatever research questions made me most happy and excited to get to work each day. I’m grateful that I listened to this advice. He fully supported my research at all stages and, in doing so, he set a prime example of the true meaning of mentorship.
Many thanks to my committee members: Erik Wibbels, Laia Balcells, James Moody, and Erica Chenoweth. Erik—with both his quick mind and good sense of humor—has sharpened my own mind in immeasurable ways. He has helped me leave Duke a well-rounded scholar and I am forever thankful for this. Many thanks to Laia for pushing me to think strategically about all aspects of my work and providing words of optimism when they were most needed. Thanks to Jim Moody who taught me my first social networks class and in doing so opened an entirely new world of thinking—now I can never go back! I feel incredibly fortunate to have shared space with him and everyone at DNAC over the years. Finally, I have deep gratitude for Erica Chenoweth who I’m so very glad I awkwardly approached one year at ISA. Her wisdom, encouragement, compassion, and incredibly detailed knowledge of political behavior across the globe has served as an invaluable resource for me during these few years.

Thank you to the many different individuals I encountered across field research. I appreciate all of those who were willing to share their opinions, their fight for justice, their stories, their insights. My path has been made more clear by witnessing your personal histories and I can only hope to continue to be a part of this process in the future. A special thanks to those at la Universidad Nacional Autónoma de Mexico (UNAM), el Centro de Investigación y Docencia Económicas (CIDE), the Center for Migrant Workers (CDM), Pontificia Universidad Católica de Chile, and Data OPM for your time and support.

This project certainly would not have been feasible without the kind words, keen judgements, and helpful brains of my colleagues at Duke University. Simply put, I have been blessed to be surrounded by brilliant people. A special thanks to Ben Barber for meandering existentialist debates and timely pep talks; to Simon Welsche for advice and laughs in whichever order was most vital (often over a beer and fries); to Dan Krcmaric whose passion for research and kindness in friendship will
not be forgotten; to my treasured friend Laura Lazarus Frankel for your honesty, analytical prowess, and ability to show up when it is most needed; to Cindy Cheng, Won Steinbech, Florian Hollenbach, Mark Dudley, Ana Guzman, Nils Metternich, Chris Desante—for all your support and patience. Thank you to Andreas Beger, with whom co-authoring has been both engaging and downright fun. Also a special thanks to Max Gallop, whose charming self-awareness and positive feminist vibes remain unrivaled. Thank you to Ben Radford for being one of the most generous and genuine people I’ve yet to come across, your many hours of help will not be forgotten (especially the next time I use SQL). Thank you to Shahyrar Minhas and Guadalupe Rojo for being some of the funniest and brightest pals I could possibly ask for. I also want to thank those who inspired me to do a Ph.D. in the first place. Thank you to Ami Pedahzur and Amanda Skuldt for your wisdom, continued encouragement, and good company.

This list would not be complete without a direct line of gratitude aimed at Sandra Ley Gutiérrez. Sandra is a compassionately fierce colleague and gifted comrade. I have a deep appreciation for her openness, patience, and encouragement. Sandra, thank you for working in concert with me to achieve our common goals, for allowing me to ask you so many questions about your homeland, to voice my concern over the on-going events in Mexico, and to discover the many nexus points that exist between my Texas roots and your own—I cannot thank you enough.

You people, you are my heroes. As I leave Duke, I hope to carry with me the spirit of generosity and intellectual rigor that you have instilled within me. Thank you.

I also must express an immense gratitude to the Durham community and to the many fierce minds that continually challenged me to keep my work relevant, thoughtful, and careful. Thank you to my fellow founders of QORDS: Meredith Hancock, Davis Hodge, and Harper Ragin. A special thank you to Harper for providing a
loving, generous spirit along with musical accompaniment through many late nights of contemplating the purpose of social science research. Thank you to Ashe Danger Phoenix, a revolutionary in our midst. Thank you to Mandy Genovese, Julia Colgrove, Danny Alas (and all the Scratch crew!), James Duggan, and E Henderson. A special thanks to Hanes Motsinger for your support and feedback on these projects. You folks are a force to be reckoned with.

Finally, thank you to my family for your unbounded love and support. Thank you to Iris Gottlieb; without our shared humor, consistent love, and mutual INTJ lifestyle I would feel much less rooted in this world. Thank you to Kari, “Reebaby” Rosenfeld, for understanding my constant propensity to (day)dream and for our kinship. Our minds may never settle down, but at least we have each other. Thank you to Kelsey Harmon, who is one of a kind. Kels is invaluable and has stuck it out with me through every turn, even acting as my most trusted editor along the way. I probably wouldn’t have finished this program if it wasn’t for the occasional life crisis phone call with her. Thank you also to Monica Lowe and Kenzie Haynes, having both of them as life long friends means more to me than they might know. Thank you to Mimie and Papaw for your pure and unconditional love. And, of course, I cannot do justice to the immeasurable amount of gratitude I have for my Texas family unit: to my Momma (Debbie Austin Dorff), my Dad (Bradford Wallace Dorff), and my brother (James Cody Dorff). Ya’ll are a real dream team! I know that it was hard to understand what exactly I was doing out in North Carolina all this time, but thank you for seeing me the whole way through. Ya’ll know how to encourage me at just the right moments. Thank you for showing me how to live a bold life and chase my dreams without hesitation. Thank you for inspiring me to be creative and boundless in my commitment to living each day as if it was my last. I love ya’ll and I wouldn’t be where I am today without your love.
Introduction

This project is motivated by the need to deepen our understanding of civilian behavior during armed conflict. If researchers can explain why and how civilians adapt different modes of political action during armed conflict, we will then uncover how the course of war can be altered by the power of the civilian. In essence, we will shift the perspective of study from war-affected civilians to how war is affected by civilians. More often than not, stories of armed conflict, war, or widespread criminal violence shine a spotlight on those actors who initiate injustices or wield power through collective violence against a given population. Recently, however, this narrative has begun to change. With the various uprisings across the previous 5 years—the Tunisian revolution, the Egyptian revolution, the Syrian Civil War, the Yemen revolt, the 2013 protests in Turkey, and the 2014 protests in Venezuela (just to name a few)—attention has shifted to recognize the power of mass populations to influence environments of extreme violence and repression.

Around the world we are witness to a diverse range of conflictual episodes: coups, civil wars, drug wars, refugee crises, border disputes. While our news feeds might suggest that the most common strategies available to civilians are to flee or to coop-
erate with whichever armed actor wields the greatest power, a truer picture reveals a vast range of civilian responses to violence. While mass mobilization is important, civilians might also create auto-defense forces, community watch groups, participate in civil society efforts, or organize nonviolent campaigns at a local level. The strategic landscape is vast and political science is only beginning to unpack these vital civilian efforts.

Utilizing the Mexican criminal conflict as the key case of interest, this project contributes to a nascent literature on civilian behavior in situations of armed conflict.\(^1\) In the first paper, *Violence, Kinship Networks, and Political Behavior: Evidence from Mexico*, I focus on the concept of “resilience” by assessing the relationship between victimization and political participation in Mexico in 2013. Previous literature in political science has frequently linked victimization to “positive” outcomes like increased political involvement.\(^2\) I show, however, that not all victims behave this way. In the literature on PTSD and trauma survival, researchers identify important conditions—such as family life—as predictors for why some individuals not only survive violent trauma but thrive and exhibit more pro-social behaviors compared to other survivors.\(^3\) Research in political science has thus far been unable to measure relevant contextual variables that might uncover why some individuals are ultimately encouraged to join political groups, or become more politically active following a traumatic experience related to systemic political violence. This article fills this gap and draws on research from psychology and sociology to demonstrate the importance of social context in understanding political life.

Second, I focus on the theme of “autonomy” by investigating public attitudes towards different modes of political resistance. Motivated by the assumption that

\(^{1}\) e.g. Lyall et al. (2013); Fair et al. (2013)

\(^{2}\) e.g. Bateson (2012).

\(^{3}\) For an overview see Johnson and Thompson (2008).
attitudes are a precursor to action, my second study, *Civilian Survival in Armed Conflict: Perceptions on the Efficacy of Resistance Strategies, Evidence from Mexico*, examines civilian attitudes on the efficacy of resistance methods in regions of protracted violence. The paper focuses on the question: under what conditions do civilians view nonviolent resistance as effective for changing their security situation? I also address the conditions under which civilians favor violent methods for change. To examine these questions, I conduct an original national survey experiment in Mexico during 2014 which provides a unique collection of data. I first test whether a wide range of expected factors such as age, gender, income, knowledge about civil resistance, or media consumption influence opinions about resistance. I then argue that respondents’ view of government responsibility is key for predicting civilian attitudes towards resistance.

Prior work on attribution of responsibility has looked at how attribution of responsibility in crisis situations—namely natural disasters—influences political behavior. I expand on these insights to incorporate insecurity and violence as a form of crisis situation wherein individuals’ perception of the governments’ responsibility is highly influential in whether civilians view violence or nonviolence as reasonable tools for changing their own personal security situation. I argue that civilians who view their local authorities as responsible for their security situation are most likely to view nonviolent resistance as useful. This is because nonviolence is a localizable solution that aims to increase government accountability, not dismantle it. Conversely, violent solutions are those which seek to overthrow, or completely replace government actors. I find that the predicted probability of viewing nonviolent action as more effective than violent action increases by 20.8% for those who attribute security responsibility to local authorities, compared to other actors. Using a survey experiment, I then address the empirically relevant question of whether these attitudes about resistance correlate with a willingness to take action. I find that that those
who view nonviolence as effective are supportive types who are more willing than others to support local resistance groups, regardless of the methods these groups employ. The results provide important implications for how civilian organizers can mobilize latent support for resistance and for understanding the ways in which communities might collectively reduce violence in order to reclaim political space during armed conflicts.

Finally, most research that adopts a micro approach to the study of internal conflict fails to connect to macro-level processes. In my final study, Dynamic Networks of Conflictual Events: The Mexican Criminal Conflict, I take a step back from my previous individual-level, survey-based approaches and provide an aggregate analysis of the Mexican armed conflict. The goal of this final paper is to establish a methodology and data that will allow me to examine the ways in which civilians actions—such as protests or vigilante efforts—affect conflictual dynamics over time. To do so, this paper explores how to build network data from machine-coded event data. After a detailed assessment of the promises and pitfalls of such event data for country-level analysis, I create yearly networks representing conflict between cartels, government actors, and civilians over time. Next, using a latent space approach, I am able to identify dependencies in the network that go unreported in the raw data, thus presenting a more thorough and complete model of the criminal conflict. Importantly, this data and network approach allow for further work to test the conditions under which violence between specific sets of actors might increase or decrease according to other key conditions such as civilian protests or elections cycles.

In concert, the papers presented herein offer new insights on civilians relationship to armed conflict through a focus on victimization, participation, attitudes on resistance, and the effects of civilian resistance on aggregate levels of violence.
Violence, Kinship Networks, and Political Behavior: Evidence from Mexico

Nepomuceno Moreno Nuñez was a 56-year old sidewalk seafood vendor before he became one of the most well known activists in the anti-crime movement in Mexico; he was inspired to take action after his 18-year-old son Jorge Mario disappeared in July of 2010. Nuñez participated in the Dialogue for Peace with President Felipe Calderón at the Castle of Chapultepec and gave the president documents about his son’s case, telling the president that he feared for his own security and the safety of his family. Tragically, in November of 2011, Nuñez was shot dead as he was crossing a street in Sonora, Mexico (CNN, 2011). Nuñez’s experience with violence motivated his dedication to activism but ultimately cost him his life.

A wide range of disciplines have approached the question of how victimization increases the likelihood of individuals like Nepomuceno to demonstrate social or political engagement.¹ Recent literature has made some progress in this area of study by incorporating more detailed measures on household attributes (Blattman and

¹ E.g. Clinical Psychology (Walsh, 2003); Psychology (Goldbaum et al., 2003; Ullman et al., 2007), Political Science (Blattman, 2009)
Miguel, 2010) and individual exposure to violence. While these analyses have shed light on the conditions linking victimization and behavior, further research is still required to explain why it is that surviving a violent experience encourages political participation at the individual level. I address these gaps and improve the literature in three main ways: (1) I focus not only on the variation in political participation between victims and non-victims but also variation in the participation of victims; (2) I present social structure, as captured by kinship ties, as a previously overlooked variable for predicting civilian behavior; and (3) I utilize empirical evidence from an on-going, evolving conflict rather than post-conflict data in order to address participation in areas of protracted and prolonged violence.

I first examine the question of whether victimization increases the likelihood of civilian participation in political, community settings. Drawing on literature from political behavior, psychology, and sociology, I then suggest that political scientists have overlooked individual social structure as an important variable in predicting survivors’ political behavior (Goldbaum et al., 2003; Litrownik et al., 2003). Literature on trauma survivors, war-torn communities, and PTSD suggest that social support influences individuals’ behavior following a traumatic event (King et al., 1998; Coker et al., 2002; Ullman et al., 2007). Specifically, I suggest that social support via social networks positively influences victims’ willingness to participate. I argue that civilian political behavior is conditional on the social support gained from kinship networks and that by examining individuals’ kinship networks we can investigate how social context plays a role in predicting behavior.²

Following a violent experience, social connectivity can foster a sense of purpose and security that motivates individuals to become involved in organizations and groups which have the potential to alter the conditions that led to the traumatic

² For the purposes of this paper, I use social context to refer to the reoccurring and reciprocal interactions between an individual and his or her immediate intra-personal relationships, and I use kinship as one key component of this social environment.
events those individuals experienced. While demographic variables such as age, gender, political orientation, and socio-economic status are all shown to be influential factors predicting when an individual chooses to become more or less politically active following a traumatic event, no study has yet to incorporate more nuanced behavioral measures of social context or family life. Existing studies in political science have yet to measure these attributes of individual social behavior and thus overlook a key variable that influences political outcomes. I present kinship networks as a novel measure of social context that helps to predict civilian behavior within regions where the potential for future violence is high. I first test the empirical finding from the literature: victims are more likely to be politically active than non-victims. I then test the argument that victims who are more connected to their kinship networks will be more likely to participate than those victims with lower kinship connectivity. I use an original cross-national survey in Mexico to investigate civilian response to violence at the individual level; the findings from this survey support the argument that an individual’s social interactions and personal networks are critical conditions affecting responses to conflict.

2.1 Victimization and Political Action

Conventional wisdom suggests that a traumatic event—such as being assaulted or losing a loved one to murder—instills fear in victims, producing insecurity, distrust, and a feeling of detachment towards one’s community. A common narrative is that survivors of violence or crime are more scared to go outside of their home or trust others. Take for example the basic brochure that the FBI circulates, entitled “Coping with Crime Victimization,” which walks through the potential effects of trauma related to crime, listing “fear, anxiety, wanting to withdraw or hide, difficulty making decisions” as common effects.

In contrast to this conventional wisdom, political scientists have found that di-
rect experience with war-time violence leads individuals to be more likely to vote and take political action within their community (Blattman, 2009; Shewfelt, 2009; Bellows and Miguel, 2009). Using survey data, Blattman (2009) investigates the long-term effects of exposure to violence on the political behavior of ex-combatants. He finds that an increase in witnessed violence is associated with an increase in the ex-combatant’s involvement in community leadership. Relatedly, Voors et al. (2012) find that individuals exposed to violence exhibit more altruistic behavior towards their neighbors and are more likely to take risks.

Studies focusing on civilian life after wartime also suggest that war experience influences political identities via polarization (Balcells, 2012). Notably, Bateson (2012) utilizes cross-national survey data on criminal victimization of civilians to link individual victimization to collective action and political participation. Bateson (2012) suggests that criminal victimization is a cause of political participation, with victims being more likely to attend marches, political meetings, and community meetings. Yet other studies find that people who have firsthand experience with violence, such as ex-combatants, experience difficulty reentering daily life, and are only partially reintegrated into society during post-war periods. Gilligan et al. (2011) find that rebel re-integration programs are effective in economic re-integration but fall short in political and social reintegration.

Much of this literature examines the puzzle of why survivors of violence or crime are more likely to become politically engaged than others. However, the literature overlooks the central question of why some victims of violence turn inwards, withdrawing from their normal activities and social lives (Marks and Goldsmith, 2006), while other victims seem emboldened by such violence, turning victimization into a cause for political participation and social engagement (Blattman, 2009). Thus these studies focus on explaining variation between the two groups (those who self-identify as survivors versus those who do not) but fail to acknowledge differences
within groups, i.e. what makes some victims more likely to participate than others.

When addressing the implications of victimization and personal resiliency, research from across disciplines paints a more complex picture, suggesting that prosocial behavior is not necessarily homogenous across all survivors of trauma. Research suggests that these outcomes are actually dependent on the social environment of the victim, whereby social support structures, from networks such as the family or the community, condition the survivor’s response to violence. For example, in studies on gender-based medicine and women’s health, researchers find that social support protects against the negative effects of partner violence on mental health (Coker et al., 2002). Studies on post-traumatic stress disorder (PTSD) show that severe experiences like war leave survivors with serious adjustment disorders and grief (Horowitz, 1997; Dyregrov et al., 2002), but that social support diminishes these deleterious effects (Seginer, 2008). For example, Johnson and Thompson (2008) point to social and family support as a key determinant for minimizing symptoms of PTSD and enabling survivors to reintegrate into their community.

In psychology, a long history of research has assessed the social and developmental challenges faced by survivors of physical and sexual abuse (Gold, 1986; Beitchman et al., 1992; Goldbaum et al., 2003; Litrownik et al., 2003). Gold (1986) finds that social support is a key variable predicting healthy social behavior in adults who experienced trauma in early childhood. In work on the determinants of trust, Alesina and La Ferrara (2002) find that the most important factors associated with low trust include a recent history of traumatic experiences and belonging to a minority group. These studies echo findings from research on how social context influences political behavior, which demonstrate that family and friend networks condition electoral participation (Abrams et al., 2010; Ames et al., 2012). These studies suggest that conflict scholars too must capture individual level social dynamics in order to effectively model the relationship between victimization and civilian political behavior.
Similarly, social cohesion tends to influence the impact of violence and crime on a community. In his early work on crime, Durkheim argues that individuals band together against a common enemy, a violator of the law, which increases the solidarity and strength of their network and often decreases overall perception of threat. Villarreal and Silva (2006) examine the effects of social cohesion and neighborhood disorder on crime using data from a survey of neighborhoods in Brazil. They find that preexisting levels of social cohesion in neighborhoods predict individuals’ perception of crime in those neighborhoods. Ross and Jang (2000) find that individuals who live in neighborhoods with high crime exhibit higher levels of fear and mistrust than those who live in low crime areas, but that strong ties with neighbors can help buffer the negative consequences of such crimes. It is evident that the way in which individuals respond to crime and violence is affected by social factors.

Interpersonal relationships are relevant to everyday life and characterize the ebb and flow of social interaction, discourse, and development. Social support is inherent to dense and reciprocal social networks. Social support via intrapersonal networks encourages resiliency, enabling survivors of violence to cope, create mechanisms of protection in their insecure environment, and ultimately find ways to channel their experience into productive and meaningful outlets. Studies on individual resilience have pointed to the ability of kin, close mentors, and friends to influence an individual to overcome difficulty from trauma. Taking political action can be one such outlet because it enables individuals to reclaim political space, attempt to decrease the likelihood of future victimization in their community, and gain empowerment in a situation where their agency has been directly violated by a violent action. This paper argues that individuals are more encouraged to engage in such behaviors when they have the social support of their family.

Furthermore, there is broader evidence that family networks specifically play a role...

---

3 e.g., Walsh (2003)
critical role in how individuals respond to insecure environments. Historiographies on the role of elite families in Latin America demonstrate that family networks in the nineteenth century grew stronger as a way to fill the gaps of the weak and insecure state system (Kuznesof and Oppenheimer, 1985; Balmori et al., 1984). At a more individual level, sociologists have described the family as a source of identity and solidarity that fosters a unique “cultural subsystem” in which individuals can participate and find security in (Kuznesof and Oppenheimer, 1985). Furthermore, the consequences of violence on families provides us with information about how violence affects macro-level processes.

This study is the first of its kind to incorporate kinship networks as a predictor of political behavior using data from a current, on-going armed conflict. Much of the research on kinship and family networks uses ethnographic or survey approaches to construct the network of interest (Schweizer and White, 1998). I suggest that measuring how often an individual survey participant communicates with each member in his or her family is a useful way to capture kinship dynamics and the importance of kinship relations to the individual. Given the evidence provided by literature on the dynamics of survival, I expect that when victims communicate often with their families, they engage in a process of sharing their experience of victimization and are more likely to turn their experience into action. By processing with their loved ones about the traumatic event, individuals feel supported and motivated to participate in their community and to be a part of changing their environment, instead of remaining a victim of it. Thus, I posit that kinship networks moderate the effect of victimization on political participation. In my analysis, I first test the finding from current literature that victimization is associated with increased participation in political groups. Second, I test the central hypothesis of this study: social context positively influences political behavior in armed conflicts. I expect that survivors of victimization who have higher connectivity to their kinship networks will be more
likely to engage in political community groups.4

**Hypothesis**: Victims who have strong social ties with family members will be more likely to participate in collective, political groups.

### 2.2 Empirical Strategy

Over the past seven years, Mexico has witnessed an unprecedented surge in violence. Competition among drug cartels has left thousands dead; according to several conservative estimates, the death toll during the Felipe Calderón presidency (2006-2012) is around 70,000. In addition to this devastating number, it is estimated that close to 30,000 have disappeared. Mexico shares a 2,000-mile border with the United States and faces huge gaps between rich and poor, north and south, urban and rural. Over 40% of the country’s population is poor (living on less than $2 per day), while close to 18% is extremely poor (living on less than $1 per day).

The tens of thousands of citizens killed in the last several years include drug cartel members, security forces, and innocent civilians. The ongoing violence is gruesome: kidnappings, beheadings, and rapes continue to take place in communities all over the country. According to the Trans-border Institute’s 2012 report, an average of 47 people were killed each day in 2011 (Ríos and Shirk, 2012). Furthermore, violence against families occurs routinely, and there is some evidence that children are disappearing and are recruited by cartels and gangs. The Coalition Against Trafficking in Women and Girls in Latin America and the Caribbean (CATWLAC) reported that Drug Trafficking Organizations (DTOs) are forcefully recruiting young girls.

While many are hesitant to label Mexico as a “failed state” or to characterize the on-going violence there in terms of civil war, it is obvious that the criminal war in Mexico is similar to other war-torn regions. Indeed, several have dubbed the

---

4 Here, victimization refers to criminal victimization.
Mexican conflict as a “criminal insurgency” (Sullivan and Elkus, 2008) or “narco-insurgency” (Brands, 2009). Because the conflict is on-going, Mexico provides a unique place to examine the implications of victimization for civilian life. Specifically, by surveying respondents before a conflict has subsided, we can understand whether some of the findings in political science have been biased by post-war environments that might encourage participation amongst victims in order to engage survivors in post-war reconstruction and rebuilding efforts. By investigating victimization in Mexico, this work has important implications for understanding the conditions under which civilians are likely to take political action during armed conflicts.

2.2.1 Survey Data

This study utilizes a national survey of 1,000 respondents collected in Mexico in July 2012. The survey was implemented in coordination with a survey team based in Mexico City, Mexico and investigates the social habits, political views, criminal victimization, daily life, and kinship networks of the 1,000 respondents interviewed through a stratified random sample.\(^5\) The survey was stratified according to urban and rural areas as well as levels of violence. This design was implemented to ensure that the sample was not biased by surveying only the safest locations in Mexico.\(^6\)

The structure of the survey was informed by data on organized-crime-related homicides provided by the Mexican newspaper, Reforma. This data is the most recent data available on violence and is some of the only data available that codes violence as related to drug trafficking organization (DTO) activity. Data covering the violence in Mexico has presented a challenge for researchers. While many consider the time frame of the conflict to begin in 2005, the most dramatic increase in violence occurred in 2008 when organized-crime-related homicides spiked to 6,873 killings, a

\(^5\) To the author’s knowledge this data on kinship networks is unique. Other data on general household characteristics such as income and health is also collected by the Mexican Life Survey.

\(^6\) Details of the survey design can be found in the Appendix.
surprising 142% increase from the year before (Rios and Shirk, 2011). Other jumps in violent activity have occurred: from 2009 to 2010 the number of killings associated with organized crime increased by 59%, reaching 15,273 deaths that year. Due to this variation, many sources often provide different death toll estimates. According to Rios and Shirk (2011), the Reforma data provides an appropriately coded and generally conservative estimate of violence.

The survey utilized herein was conducted from July 5 to July 8, 2012 through face-to-face interviews with structured paper-and-pencil questionnaires administered by trained interviewers. The population sampled was adults 18 years of age or older residing in housing units within the national territory of Mexico. The sampling frame is an area frame based on a listing of geographical units called electoral sections (secciones electorales), our primary sampling units, or PSUs. All land area in the country is divided into electoral sections, which constitute the basic territorial unit of single-member electoral districts for the registering of citizens to enroll as voters (padrón electoral). The sampling frame is based on electoral sections because the padrón electoral is the most updated and complete data readily available. The most recent release date was May 2012 and, according to official figures, the nominal list represents roughly 95.4% of the population 18 years of age or older in the entire country. The average respondent was 40 years old with a monthly household income of less than 5,040 pesos (roughly 387.64 USD). The sample consisted of 480 men and 520 women, with 31% of the respondents living in a rural area and 69% living in an urban area. The geographical distribution of the sample is shown in Figure 2.1.

2.2.2 Variables

Victimization and kinship are the key independent variables in the study. Victimization is coded in a binary format. It is obtained by asking the respondent to respond yes (1) or no (0) as to whether or not she or he has been a victim of the following
crimes in the last 12 months: Burglary, Business robbery, Theft of vehicle, Theft in public transportation, Gunshot wound, Extortion, Fraud, Kidnapping, and Sexual Abuse. Out of a sample 1000 respondents, 72.1% self-reported as non-victims and 27.9% self-reported as victims. Average (and median) demographic data on victims is reported below in Table 2.1.\(^7\)

Table 2.1: Victimization data

<table>
<thead>
<tr>
<th>Variable</th>
<th>Victims</th>
<th>Non-Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>38 years old</td>
<td>42 years old</td>
</tr>
<tr>
<td>Residency</td>
<td>10 or more years</td>
<td>10 or more years</td>
</tr>
<tr>
<td>Education</td>
<td>Secondary school</td>
<td>Secondary school</td>
</tr>
<tr>
<td>Men</td>
<td>52%</td>
<td>48%</td>
</tr>
<tr>
<td>Women</td>
<td>48%</td>
<td>52%</td>
</tr>
</tbody>
</table>

\(^7\) Using a basic Pearson’s Chi-square test, I check for whether there is any significant relationship between these basic demographic variables and victims vs. non-victims. I find no significant difference between the two groups. I also check as to whether victims are more likely to have moved residencies recently; there is no difference between the two groups.
**Kinship Connectivity**

Kinship connectivity is a variable constructed to capture individual level social context. It measures how often an individual communicates in person with each family member in his or her kinship network. To control for living dynamics versus communication, the respondent is asked about who they share a home with. The respondent is then asked to list how frequently he or she talks face-to-face with each member in their family. The respondent is asked these questions for their Mother/Step-mother, Father/Step-father, Sibling(s), Children, Grandparent(s), Aunt/Uncle, and Cousin(s). The respondent can communicate with each family member on a level from 0 to 6, with 0 being no communication and 6 indicating daily communication. From this survey question, I then construct an additive index that captures how much communication each individual has with his or her entire family, normalizing the index from 0 to 1. While this data is not a perfect network measure of all social interactions the respondent engages in, or a measure of all possible relationships relevant to the respondent’s life, it serves as an approximation for network connectivity within the family group, a key social group. The distribution of the resulting kinship index is shown below in Figure 2.2.

**Socio-demographic controls**

*Age* is recorded simply by asking the respondent his or her age and recording the number: the average age is 40 years old. The variable, *Residency*, measures how long the respondent has lived in their current residency. This is a categorical variable with 5 categories: less than a year, 1-3 years, 4-5 years, 6-10 years, and over 10 years. A summary of this data can be found in Table 2.2. I also account for levels of education: *Education* is an ordinal variable from low to high with 5 categories: no education, elementary, secondary, technical institute/high school, and college/more than college. A summary of this data can be found in Table 2.2. Another demographic control
variable, *gender*, is measured as a binary, self reported variable where 0=female and 1=male. There were 480 men and 520 women in the study. The variable *Income* is recorded as monthly income in pesos. Because of the correlation between income and education, income is not used in the analysis but is presented here for a full presentation of respondent attributes.\(^8\)

*Political Controls*

*Political Associations* is a variable created to control for party affiliations. To record this I include a binary variable on whether the respondent identifies with the PAN (Partido Acción Nacional) party, which is generally considered to be a right-wing party in Mexico and which held power from 2000-2012. The *Security Perception* variable maps into the respondent’s perception of local security by asking if they feel that the security situation in their neighborhood has improved a lot, improved some-

\(^8\) Income variables often suffer from a slightly higher non-response bias than education questions. For modeling purposes I chose to use education to limit the number of missing cases.
what, stayed the same, worsened somewhat or worsened a lot in the last 12 months. I also include an indicator on urban versus rural location, Region is a dichotomous variable where rural areas are coded as a 1 and urban areas are coded as a 0. Finally, most studies on participation include a control measure for political interest. The Political Interest variable simply asks how interested the respondent is in politics (the respondent is given the standard options ranging from “very interested” to “not at all”).

Table 2.2: Summary of demographic data

<table>
<thead>
<tr>
<th>Variable Residency</th>
<th>Categories</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residency</td>
<td>Less than a year</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>1-3 years</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>4-5 years</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>6-10 years</td>
<td>202</td>
</tr>
<tr>
<td></td>
<td>10+ years</td>
<td>565</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>995</td>
</tr>
</tbody>
</table>

| Education          | None             | 36    |
|                    | Elementary       | 215   |
|                    | Secondary        | 347   |
|                    | Tech/ highschool | 278   |
|                    | College +        | 121   |
|                    | Total            | 997   |

| Income (pesos)     | 0 - 5,040        | 526   |
|                    | 5,041 to 10,080  | 260   |
|                    | 10,081 to 16,800 | 36    |
|                    | 16,801 to 50,400 | 8     |
|                    | Total            | 830   |

I use two different dependent variables to assess the effect of victimization on participation in collective, political groups. The two types of group attendance analyzed here are attendance at neighborhood association meetings and attendance at political party meetings. This measure is a binary variable that captures whether the individual ever attends such meetings. Both types of meetings typically address political concerns such as security issues, the needs of the neighborhood, and public goods. In all models, attendance is coded as a binary variable where 1 represents having ever attended a meeting and 0 otherwise.

2.2.3 Estimation

Because the dependent variable in this study, participation, is a binary variable, I estimate logit models for both dependent variables. To calculate the likelihood of participation for respondent \( i \), the general model specification is:

\[
Y_i = \begin{cases} 
0 & \text{Does Not Participate} \\
1 & \text{Participates} 
\end{cases}
\]
\[
Pr(Y_i = 1) = \beta_0 + \beta_1 C_i + \beta_2 P_i + (\beta_3 C_i \cdot P_i) + \delta_i X_i + \epsilon_i
\]  (2.1)

where \( Y_i \) is a dummy variable taking on a value of 1 if the respondent attended a meeting and 0 otherwise; \( C_i \) is binary indicator where 1 represents a respondent who has been a victim of crime, 0 otherwise; \( P_i \) represents the kinship index variable; and \( X_i \) is a vector of control variables. The coefficient of interest is \( \beta_3 \), which captures the interaction between being a victim and level of kinship connectivity. I expect that this variable positively influences the likelihood of participation and that a victim with strong family ties will be more likely to have participated than a victim with weak ties.

2.2.4 Main Results

Table 2.3 reports the results from the first set of models, which test the general finding from the literature that victims are more likely to participate than non-victims. These models do not include any measure of social context. The purpose of these models is to underscore the finding from the literature that victimization is a strong and significant predictor across models, even after controlling for demographic and political variables. Unsurprisingly, residency—the measure of how long the respondent has lived in an area—is also significant in both models of participation. This suggests that the longer someone has lived in the neighborhood, the more likely he or she is to participate in local, collective political meetings. Education and Age are unsurprisingly significant controls in the model, indicating that older, more well educated citizens are more likely to attend meetings. The first two columns in the Table 2.3 demonstrate that even with political control variables included in the models, the victim variable remains a significant predictor of attendance in local neighborhood association meetings. A similar finding is reported in columns 4 and 5, which predict attendance in political party meetings.
Table 2.3: Logit models predicting attendance at neighborhood association meetings and political party meetings.

<table>
<thead>
<tr>
<th></th>
<th>Neighborhood 1</th>
<th>Neighborhood 2</th>
<th>Political Party 3</th>
<th>Political Party 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>-2.45***</td>
<td>-3.22***</td>
<td>-3.14***</td>
<td>-4.25***</td>
</tr>
<tr>
<td>Victim</td>
<td>(0.49)</td>
<td>(0.61)</td>
<td>(0.62)</td>
<td>(0.77)</td>
</tr>
<tr>
<td></td>
<td>0.60***</td>
<td>0.65***</td>
<td>0.45*</td>
<td>0.59**</td>
</tr>
<tr>
<td>Age</td>
<td>(0.16)</td>
<td>(0.17)</td>
<td>(0.20)</td>
<td>(0.21)</td>
</tr>
<tr>
<td></td>
<td>0.01*</td>
<td>0.02**</td>
<td>0.01</td>
<td>0.02**</td>
</tr>
<tr>
<td>Male</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td></td>
<td>0.08</td>
<td>0.20</td>
<td>-0.16</td>
<td>-0.05</td>
</tr>
<tr>
<td>Education</td>
<td>0.33**</td>
<td>0.36***</td>
<td>0.34**</td>
<td>0.41**</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.11)</td>
<td>(0.13)</td>
<td>(0.13)</td>
</tr>
<tr>
<td>Rural</td>
<td>0.15</td>
<td>0.15</td>
<td>-0.02</td>
<td>0.13</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.17)</td>
<td>(0.20)</td>
<td>(0.21)</td>
</tr>
<tr>
<td>Residency</td>
<td>-0.18*</td>
<td></td>
<td>0.13</td>
<td>-0.32***</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td></td>
<td>(0.09)</td>
<td></td>
</tr>
<tr>
<td>Security Perceptions</td>
<td>-0.13</td>
<td></td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td></td>
<td>(0.20)</td>
<td></td>
</tr>
<tr>
<td>Identifies with PAN</td>
<td>0.11</td>
<td></td>
<td>0.61*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.25)</td>
<td></td>
<td>(0.28)</td>
<td></td>
</tr>
<tr>
<td>Political Interest</td>
<td>0.47***</td>
<td></td>
<td>0.63***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td></td>
<td>(0.12)</td>
<td></td>
</tr>
</tbody>
</table>

N 876 838 873 835
AIC 1108.45 1030.78 782.04 712.33
BIC 1223.06 1220.02 896.56 901.43
\( \log L \) -530.23 -475.39 -367.02 -316.17

Standard errors in parentheses
\( ^{\dagger} \) significant at \( p < .10; *p < .05; **p < .01; ***p < .001 \)
Changes in N due to missing data

Next we turn to the key hypothesis from this study: victims who have strong social ties with family members are more likely to participate in collective, political groups. Because the hypothesis states that individuals who are both a victim and have a highly connected kinship network should be the ones most likely to participate, I include an interaction term in the models of Table 2.4. The first and third column in Table 2.4 represent a basic model showing the effect of the interaction without political control variables. The second and fourth columns include those political control variables that we would expect to influence an individual’s willingness to participate, such as the respondent’s perceptions of security in their area, whether the individual voted or not in the previous election, political interest, and party
identification. The results are shown both for predicting neighborhood association attendance and party attendance. The interaction is not shown as a significant predictor for neighborhood association attendance, though the standard errors are close to reaching significance and the inclusion of this interaction does improve the fit of the model overall. As expected, across both specifications for the political party meeting model, the interaction between kinship connectivity and victimization is positive and significant. Overall, all signs of the covariates are in the “expected” direction and suggest that those victims with more well connected kinship networks are more likely to participate.

While assessment of significant effects is useful, it does not portray a full picture of these results. Furthermore, effects of interaction terms are difficult to interpret within a logit context. To further explore these results, I present predicted probabilities given a set of covariates and explore substantive effects. When observing the effect of kinship on participation in party meetings among victims, I find that kinship connectiveness increases probability of participation by 5%, all else constant, when the other covariate values are set at their mean or median. The size of this result is consistent with other studies on political participation, which typically find effects under the 10% range. These predicted probabilities, of course, are contingent on the selected covariate values. Thus, it is of interest to analyze specific “real world” scenarios that can highlight the implications of the model.

The results of these models are made clearer by Figure 2.3, which shows the predicted probability of attending a party meeting for four different scenarios. Take two general scenarios. The first scenario, depicted in the upper left quadrant of Figure 2.3 represents a scenario in which the respondent is a self-reported survivor of a criminal and/or violent action and is a middle-aged (45 year old), highly educated

---

9 In a 2012 article on victimization and participation, Bateson (2012) makes a similar justification and also reports effects of a similar size.
Figure 2.3: The effect of victimization and kinship networks on the probability of participation for attendance at political party meetings.

For this case, we see that moving from the lowest level of kinship connectivity (0) to the highest level (1) results in a 22% increase in the likelihood of participation in a party meeting. This effect is quite strong.

The second scenario, represented in the top right quadrant, maintains the victim status but varies along demographic lines. This case represents the predicted probabilities for a young (25-year-old) male with lower education status. As kinship increases from 0 to 1 in this case, we see an 11% increase in participation. The effect remains substantial. The lower half of Figure 2.3 represents the same two scenarios.
Table 2.4: Logit models predicting attendance at neighborhood association meetings and political party meetings. These models test the key interaction between kinship connectivity and victimization.

<table>
<thead>
<tr>
<th></th>
<th>Neighborhood 1</th>
<th>Neighborhood 2</th>
<th>Political Party 3</th>
<th>Political Party 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>-1.82**</td>
<td>-2.60***</td>
<td>-2.60***</td>
<td>-3.63***</td>
</tr>
<tr>
<td></td>
<td>(0.56)</td>
<td>(0.66)</td>
<td>(0.71)</td>
<td>(0.83)</td>
</tr>
<tr>
<td>Victim</td>
<td>-0.04</td>
<td>-0.11</td>
<td>-0.70</td>
<td>-0.81</td>
</tr>
<tr>
<td></td>
<td>(0.51)</td>
<td>(0.53)</td>
<td>(0.64)</td>
<td>(0.68)</td>
</tr>
<tr>
<td>Kinship Index</td>
<td>-1.04**</td>
<td>-1.11*</td>
<td>-1.04†</td>
<td>-1.35*</td>
</tr>
<tr>
<td></td>
<td>(0.44)</td>
<td>(0.46)</td>
<td>(0.56)</td>
<td>(0.60)</td>
</tr>
<tr>
<td>Age</td>
<td>0.01*</td>
<td>0.02**</td>
<td>0.01</td>
<td>0.02**</td>
</tr>
<tr>
<td></td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
<td>(0.01)</td>
</tr>
<tr>
<td>Male</td>
<td>0.08</td>
<td>0.20</td>
<td>-0.18</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(0.15)</td>
<td>(0.16)</td>
<td>(0.19)</td>
<td>(0.20)</td>
</tr>
<tr>
<td>Education</td>
<td>0.34***</td>
<td>0.39***</td>
<td>0.37**</td>
<td>0.47***</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
<td>(0.11)</td>
<td>(0.13)</td>
<td>(0.14)</td>
</tr>
<tr>
<td>Rural</td>
<td>0.11</td>
<td>0.12</td>
<td>-0.01</td>
<td>0.15</td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.17)</td>
<td>(0.21)</td>
<td>(0.22)</td>
</tr>
<tr>
<td>Victim*Kinship Index</td>
<td>1.15</td>
<td>1.37</td>
<td>1.97*</td>
<td>2.48*</td>
</tr>
<tr>
<td></td>
<td>(0.80)</td>
<td>(0.84)</td>
<td>(1.00)</td>
<td>(1.06)</td>
</tr>
<tr>
<td>Residency</td>
<td>-0.18*</td>
<td>-0.33***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
<td>(0.09)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security Perceptions</td>
<td>-0.15</td>
<td>-0.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.16)</td>
<td>(0.21)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identifies with PAN</td>
<td>0.18</td>
<td>0.18</td>
<td>0.71*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.25)</td>
<td>(0.28)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Interest</td>
<td>0.47***</td>
<td>0.62***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.09)</td>
<td>(0.12)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

N: 870, 832, 867, 829
AIC: 1100.40, 1023.48, 775.52, 704.15
BIC: 1252.99, 1250.22, 928.01, 930.72
log L: -518.20, -463.74, -355.76, -304.07

Standard errors in parentheses
† significant at $p < .10$; *$p < .05$; **$p < .01$; ***$p < .001$
Changes in N due to missing data

for non-victims. Here we see that family ties have a different effect for non-victims in that stronger family ties actually lower participation. This finding echoes a similar finding by Alesina and Giuliano (2011), which suggests that kinship networks can offer an alternative institutional setting for investment and reciprocal benefits. In other words, those with strong family ties participate less in their communities because they require less support from these kinds of external institutional settings. These results show that there is an important and influential interaction between the two conditions of victimization and close kinship ties. Victims do not just turn
in-ward to the institution of family, but use it as a launching point to engage in pro-social political behavior outside of their family networks. These findings support the idea that social context matters for understanding the behavior of civilians during armed conflicts and suggest that families act as support groups for individuals, enabling them to become engaged in society rather than turn away from it.

2.3 Conclusion & Implications

In her Preface for Development in States of War, Deborah Eade opens with the statement: “It is now almost routine to begin an essay on conflict-related emergencies by stating that contemporary wars are fought not on demarcated battlefields, but in the towns, villages, and homes of ordinary people” (Eade et al., 1996). Today’s wars are characterized by mass violence against civilians. Efforts to understand recovery and resilience within war-zones cannot afford to ignore this fact. Humanitarian aid workers enter conflict zones with the complex, dangerous, and daunting task of attempting to support populations that have been subjected to great tragedy. Family and community networks can be an essential resource in trauma recovery and for mobilizing resilience with war-torn regions (Walsh, 2007).

The findings of this study suggest that recovery and political mobilization in these violent environments is contingent upon moving past individually focused recovery programs and towards programs that utilize the networks that are fundamental to political life. This study also has meaningful implications for understanding which populations are most at risk after a traumatic event: those without close family ties, or those whose families have, perhaps, been torn apart. While research investigating the causes of political violence is clearly important, the implications of violence on civilian life cannot be overlooked. Civilian behavior is intrinsically linked to important outcomes for healthy, stable societies and states: community collective participation, social capital, local market economics, functioning institutions and
fair democracy. Civilians create the critical mass behind each of these outcomes.

Previous political science literature has consistently linked victimization to “positive” outcomes like increased political involvement. Yet not all victims behave this way. Research in this field has thus far been unable to measure relevant contextual variables that uncover why some individuals are ultimately encouraged to join political groups or become more politically active following a traumatic experience. By drawing on research from psychology and sociology, I demonstrate the importance of social context in understanding political life.

Though the type of armed conflict that is currently on-going in Mexico might vary from numerous others in that the violence is decentralized in nature, the implications of this research extend elsewhere. Clearly, the Mexican case is similar to regions like Colombia and Peru, which have experienced various waves of decentralized criminal conflict. It is important to note that this study presents an important and easily implemented new framework for future surveys across different insecure environments. The essential idea—that social context matters for understanding political behavior during armed conflicts—can be extended to a variety of cases and will alter the field’s current notions about the link between victimization and participation in armed conflicts. In sum, this study encourages researchers to explore the moderating effects of social environments when studying the effects of political violence on political action.
In the first six months of 2014, Nigeria’s Islamist insurgency, Boko Haram, killed at least 2,053 civilians.\textsuperscript{1} Boko Haram continues to devastate the weak Nigerian state. In April of 2014, the global media quickly spread news of a deplorable event: 200 young girls were kidnapped by Boko Haram, the violent anti-government group operating in the region since 2002. This singular event is not unique: kidnappings, rapes, and killings are common in the current Nigerian political landscape. Civilians have endured much hardship as a corrupt and inefficient government continues to demonstrate a severe incapacity for improving the economic and security situation. In an attempt to hold the government accountable for its inability to provide security, civilians organized mass protests and demonstrations.\textsuperscript{2} Meanwhile, civilian vigilante groups have held a different actor accountable for the violence: the Boko Haram.

\textsuperscript{1} Human Rights Watch (2014)

\textsuperscript{2} Protests took place during the week of May 19th, 2014, a week during which several violent clashes occurred, including two bombings in the marketplace of the major city Jos (Cuddihy, 2014).
These vigilantes have taken dramatic steps to uphold justice in their communities by targeting violent offenders. While vigilantes have existed for several years in Nigeria, they are currently focused on securing justice for the missing girls by openly vowing to track down the perpetrators of the kidnapping.\(^3\) These civilian groups in Nigeria hold different actors responsible for the nation’s security situation and, in doing so, use different methods of engagement to hold those actors accountable for their wrong-doings. Civilians have taken similar actions during security crises in other regions. For example, in Mexico, civilians have organized both protests against the government as well as armed “auto defense” forces, which work to counter cartel-related violence; in Turkey, civilian-led village guard militias fight to protect villages from the violent Kurdistan Workers Party (PKK) movement; and in the West Bank settlers protest against government actions while vigilante groups operate to keep the settlements secure. In the midst of violence, why do civilians mobilize with different strategies of resistance? Why do civilians view one form of resistance as more useful than another?

In 2012, intentional homicide rates soared in places like Brazil, Myanmar, Mexico, and Venezuela.\(^4\) While these conflicts have not yet been characterized as civil wars, these regions are prone to ongoing civil unrest and violence against civilians. The current literature says little about how civilians obtain autonomy within these contexts. The ways in which civilian populations can influence the ebb and flow of internal conflicts remain an understudied question.\(^5\)

A deeper examination of civilian behavior is key to enhancing our understanding of intrastate conflict.\(^6\) The majority of the literature on intrastate conflict priori-

\(^3\) ABC News (2014)

\(^4\) According to the UN’s 2013 “Global Study on Homicide.”

\(^5\) Autonomy refers to the general range of possible actions civilians might take in order to protect themselves from conflict. This can include methods of self-governance as well as self-preservation.

\(^6\) An idea originally motivated by the seminal work of Kalyvas (2006).
tizes the behavior of state and anti-state challengers as drivers of conflict dynamics. This perspective overlooks the vast number of civilians who also engage with the conflict. The omission of theoretical and empirical investigation into the preferences, attitudes, and actions of civilians biases our understanding of how different actors influence the intensity, duration, and resolution of conflict. A common narrative of civilians facing civil conflict presents an individual with few options: she can either support an armed actor, remain silent, or face death. This narrative overlooks a range of creative and complex actions that civilians take to survive and reclaim security, including: fleeing, fighting back, organizing civil resistance campaigns, establishing councils of peaceful resistance, or attempting to avoid conflict altogether. These behaviors are nuanced and not mutually exclusive; their complexity should not disentitle them from the study of internal conflict.

Important work has begun to address the broad effects of war on civilian life, as well as connect survivors’ experience to political attitudes and actions. Understandably, however, observing civilian behavior within violent regions during the course of a conflict is often both dangerous and costly. Thus, researchers rarely study conflicts in real time and often rely on post-conflict analysis instead, which produces retroactive biases both in data collection and within the inferences drawn on actors’ preferences, attitudes, and actions.

To understand how civilians achieve autonomy and influence the evolution of conflicts we must first understand civilian opinions and preferences about available resistance methods during the midst of ongoing and protracted violence. This requires us to approach civilians as active players engaged in reclaiming political space, rather than as victims of the tragedies that surround them. Once we understand civilian attitudes on the efficacy of different available strategies, we can adapt our models and theories on the evolution of civil conflict to fully incorporate civilians. This study aims to fill these gaps by shifting the perspective to civilians and analyzing civilian
perceptions on resistance strategies.

This study contributes to existing work in three ways. First, I present new data on civilian opinions about resistance in a present day armed conflict. Second, I provide a sweeping test of whether a range of demographic and individual level attributes, such as age, gender, income, knowledge about civil resistance, and media consumption, influence attitudes toward resistance. Moving beyond these variables, I then outline how perceptions about government responsibility affect attitudes towards resistance. Specifically, I argue that civilian opinions of resistance methods are informed by which political actor civilians view as responsible for their security problems. I find that the predicted probability of viewing nonviolent action as more effective than violent action increases by 20.8% for those who attribute security responsibility to local authorities, compared to other actors. Third, using a survey experiment, I link civilian opinion to collective action by testing whether attitudes toward resistance correspond with a greater willingness to support local civilian groups.

3.1 Existing Research on Civilians in Violent Settings

The study of civil war and intrastate conflict comprises an important and developing literature within political science, with principal focus on the onset, evolution, and termination of civil conflict. Studies on conflict onset have focused on identities, ethnicities, and economic grievances as causes of conflict (Collier and Hoeffler, 2004; Fearon and Laitin, 2003; Cederman et al., 2010a,b). Research focusing on conflict evolution primarily theorizes about the behavior of rebel groups and state actors (Humphreys and Weinstein, 2006; Kalyvas, 2006; Fearon et al., 2007; Lyall, 2009; Weinstein, 2007). Related work on the micro-processes of civil conflict has assessed how the type of conflict varies across cases (Kalyvas, 2001; Kalyvas and Balcells, 2010; Lacina, 2006). Studies on civil war duration and termination typically focus on state-level attributes (Hegre, 2004; Karl et al., 2004; Buhaug and Gates, 2002).
and the characteristics of non-state challengers (Cunningham et al., 2009) to predict when a conflict will end.

While these studies have made critical progress in the field of intrastate violence, analyses on the intersection of armed conflict and civilian life are gaining relevance (Collier, 1999; Ghobarah et al., 2003; Lyall et al., 2013; Fair et al., 2013). Interestingly, investigations into the micro-processes of civil conflict highlight the wide variation in violence against civilians that rebels adopt during civil conflicts (Humphreys and Weinstein, 2006; Fearon et al., 2007; Lyall, 2009; Weinstein, 2007), including why armed groups target civilians (Balcells, 2010), strategies between non-state actors and civilians (Arjona, 2011), and how different targeting strategies influence civilian displacement (Steele, 2009). This focus on the effects of violence on civilian life is important but does not address the other side of the civilian puzzle, which is to assess how civilians can mobilize to change the course of war.

In sum, the bulk of the literature on intrastate conflict theorizes the behavior of state actors and anti-state challengers, leaving out the enormous number of civilians who also engage with the conflict. This omission of empirical investigation into the preferences, attitudes, and actions of civilians overlooks thousands of individuals who live in violent regions, struggling for survival and working to reclaim political space. This study was designed to develop our understanding of these dynamics from the perspective of the civilian by exploring when civilians are most likely to view various methods of resistance and action as effective for change.

Currently, researchers know very little about the conditions under which civilians adopt different types of resistance strategies during a conflict. One notable exception is Kaplan’s work, which investigates how local organizations foster the ability for civilians living in conflict zones to protect themselves from violence (Kaplan, 2013). Kaplan finds evidence that organized communities are, at times, successful in promoting security through a variety of nonviolent methods. This research furthers
our knowledge about civil war development and, particularly, how civilians might stake a claim in civil war evolution.

To guide further research on how civilians engage with political conflicts, a critical question of inquiry remains: when do civilians see resistance as effective? If we are to eventually understand why some individuals come together to resist collectively, we must understand the conditions under which various segments of the population see resistance as effective in the first place. Knowing this, we can then begin to explain why some who view resistance as effective ultimately organize against violence, while others do not.

This also has meaningful implications for activists and civil society organizations, who can mobilize more effectively by understanding which segments of a given population view resistance efforts as effective, and why. In their study on the success of civil resistance campaigns, Chenoweth and Stephan (2011) find that no campaign failed once it achieved the active and sustained participation of just 3.5% of a country’s total population. This finding indicates that if researchers seek to understand the ebb and flow of a given conflict, they should investigate the likelihood that civilian resistance will become a deciding factor in the outcome of that conflict. Logically, it follows that a necessary starting point is to establish research around the conditions under which civilians, living in a context of protracted violence, think that nonviolent, as opposed to violent, resistance is an effective tool for changing their situation.

3.1.1 Citizens’ Movements & Public Opinion

Minimal literature exists outlining civilian attitudes on resistance strategies in violent contexts. It is even more uncommon to specifically study the conditions that lead individuals to favor nonviolent strategies over violent ones. As such, I test a variety of relevant conditions intuited from the broader literature on civil resistance,
and establish a foundation for future work on the subject. I first outline several plausible factors related to opinions about resistance, including demonstration effects, age, and grievances. I then argue that the concept of responsibility attribution has been underutilized as an important condition for understanding civilian political resistance. As a foundation, I draw primarily on theories and histories related to nonviolent mobilization.

Nonviolent resistance has a long and varied history and has been utilized in numerous liberation movements across the globe, from Ghana to Kosovo (Bartkowski, 2013). But nonviolent methods are not limited to liberation movements; they have also been effective in demanding justice from governments and other powerful institutions, as evidenced in the Chilean Winter movement (2011-2013) or the iconic Flint Sit-Down Strike in 1936 against General Motors. In both cases, citizens used nonviolent methods to hold a more powerful governing body accountable for its responsibility to public needs. The civil resistance efforts against General Motors led workers to eventually secure representation through the creation of a powerful labor union. In Chile, students successfully formed mass protests in the streets to call for an overhaul of the country’s education system, critiquing the government for sustaining a system of education with an elitist bias.

A rich literature has accumulated around questions of why individuals organize collectively and, oftentimes, nonviolently. Gurr (1970) and Tilly (1978)’s classical theories promote the idea that people protest in order to express their feelings of relative deprivation or perceived injustice. Relative deprivation theory suggests that individuals compare their current situations with others and in doing so identify prevalent inequalities. Social psychology and social justice scholars have further explored the question of motivation to examine whether outcomes or attitudes matter most for predicting which individuals are likely to act. Specifically, social justice literature examines two concepts of justice: distributive justice and procedural jus-
tice. The latter relates directly to the comparative aspect of relative deprivation theory; namely, it focuses on the fairness of outcomes, whereas procedural justice refers to the fairness of the justice procedure itself (Smith et al., 1998). Thus, while distributive justice evokes questions about who is getting what, and why, procedural justice asks whether individuals feel they are treated well by the justice system and its representative authorities. Elaborating on this body of research, scholars with a more aggregate focus on social movement outcomes turn to additional factors to explain protest behavior, such as available resources and structural opportunities (Klandermans and Tarrow, 1988; McAdam, 1998).

These efforts to understand the determinants of civilian resistance and successful campaign mobilization (Sharp and Paulson, 2005; Ackerman, 2007) have been crucial to the fields of political science, sociology, and social justice. However, it is unclear how these insights about mobilization might inform a fundamental question driving the mobilization process within violent contexts: when do civilians view nonviolent resistance as effective? The majority of the literature on efficacy, or perceived-agency, focuses on whether or not activists believe a given movement will be effective (Van Stekelenburg and Klandermans, 2013). While this is a worthwhile question, by studying the perceptions of those already active in a movement, we learn much more about campaign efficacy than we do about whether the average citizen believes nonviolent campaigns to be an effective tool for resistance. Furthermore, the vast majority of the literature on mobilization and perceptions about political efficacy focuses on movements that do not take place in the context of an intrastate conflict. This is important to note: without studies on whether civilians view resistance methods as effective during an intense and insecure environment, we know little about the preconditions of mobilization in the midst of this type of violence.

In summary, the literature on protest and mobilization is diverse, but has yet to adequately address (1) general attitudes within a population towards the efficacy
of resistance methods for increasing security (2) whether these opinions influence civilian action or support for active groups in insecure areas exposed to protracted violence.

Existing research on civil resistance suggests a variety of potential mechanisms that could create favorable attitudes towards nonviolent resistance. A new, exploratory study focused on the determinants of favorable views on nonviolence cannot ignore the effect that gender, age, socioeconomic position, proximity to violence, or knowledge about on-going campaigns might have on civilian attitudes. However, providing a theoretical outline for each of these potential mechanisms is beyond the scope of this project. Instead, I focus primarily on how one key mechanism, attribution of responsibility, influences civilian opinions about resistance. In the empirical section, I will then return to provide a broader exploratory analysis on these other relevant conditions. With this design, I am able to both account for relevant variables generated from pre-existing studies, as well as explore an overlooked theoretical mechanism of interest: responsibility attribution.

3.1.2 Responsibility Attribution

Drawing on the existing behavior and public opinion literature on attribution, I argue that perceptions of nonviolent resistance methods are strongly related to attribution of government responsibility for security problems. Particularly relevant whether or not civilians blame government officials in the wake of conflict, or on-going government failure. Specifically, civilians who believe that local government authorities are the source of their security problems are more likely to also believe that nonviolent methods are an effective tool for improving the security situation in their area.

Attribution effects are a function of two primary mechanisms. First, successful attribution indicates that an individual is able to identify a target responsible for their current security problem and can then associate the tool that seems most useful
for engaging with that particular target. This “psychological adhesive” thus enables a
connection between events and actors.\(^7\) As demonstrated in studies conducted in the
aftermath of Hurricane Katrina, attribution is necessary for citizens in a democracy
in order to hold their elected officials and state representatives accountable.\(^8\) Javeline
(2003) argues that individuals who have greater specificity around assigning blame
are more likely to protest because attribution to a specific target decreases the costs
of collective action by making the success of protest itself more likely. In other words,
if a specific target can be identified, then protestors have a greater chance at getting
their grievances addressed.

In order to hold officials responsible, citizens must first make the connection
between what they experience and who is responsible for that experience. Those
individuals who view their local authorities as the source of responsibility for their
security have a clear view of whose actions must change in order to alleviate violence.
It is worth noting that protestors sometimes protest against a power they want to stay
in power. We see this time and time again in the historical record: individuals feel
frustrated with a state that fails to uphold its commitments, and so turn to nonviolent
methods to force states to honor those commitments. In this way, exchanges between
nonviolent resistance campaigns and authority can create a system of accountability.

Second, nonviolent resistance methods are versatile, and while they are often used
to overturn an existing political system (e.g. the Orange Revolution), they are also
used to force a system to be accountable and can provide a low-cost, localized method
of action. Such methods allow individuals to collectively assert pressure on failing
systems, and to draw attention to a problem. Civilians who hold local authorities
accountable for their security are more likely to engage those authorities directly
through nonviolent means. Whereas violent action is typically used to overthrow

\(^7\) The original use of this term is found in the work of Malhotra and Kuo (2008).
\(^8\) Malhotra and Kuo (2008); Maestas et al. (2008)
or push out preexisting power structures, nonviolent actions can be easily accessible at the local level and seen as away to foster accountability with existing power structures, not dismantle them.

Furthermore, because nonviolent methods can be used for both overthrowing power and reforming it, people who believe their local government is responsible for their security will be more likely to see nonviolent resistance as an effective tool for changing their situation. This argument is supported by the empirical record on the use of violence and nonviolence to achieve group goals. Organized violence is continually used to undermine authority, disrupt, or replace it. It is often targeted at the centralized source of power. In contrast, nonviolent methods are multi-purposeful. Nonviolent methods can be used in maximalist campaigns to remove a regime, but are also often used to pressure community leaders to respect the rights of their constituents, to strengthen civil rights movements, change labor law changes, organize justice courts, and promote education reform. Nonviolence can call attention to an issue and expose those responsible for managing the issue.

In highly insecure contexts, civilians that expect local authorities to protect them will ultimately work to strengthen, not weaken or dismantle authorities capacity to manage. The relevant counterfactual to this condition is that those who do not believe local authorities are responsible for their security situation will be more likely to take other actions. This would mean that people who do not hold their government responsible might be generally less inclined to action, or at least less inclined to take action that directly tries to repair or improve upon the current system.

The relationship between beliefs about accountability and attitudes towards resistance suggest the following hypothesis: individuals who believe local government authorities are responsible for their personal security situation are more likely to perceive nonviolent resistance as an effective means of improving their security situation.
Empirical Strategy

*The Mexican Case*

To explore the determinants of attitudes regarding civilian resistance, I examine the ongoing armed conflict in Mexico, which provides a relevant and timely case by which to study citizens attitudes of towards resistance. Over the past seven years, Mexico has witnessed an unprecedented surge in violence. Competition among drug cartels has left thousands dead; according to several conservative estimates, 80,000 people died during Felipe Calderón’s presidency. Adding to this devastating number, the Sistema National de Seguridad Pública estimates that close to 30,000 people have disappeared and the number of kidnappings has more than tripled since 2005. The narco-insurgency has created an insecure environment characterized by corruption and protracted violence.

Although this case does not fit the typical civil war conflict model (in which a group of actors wishes to overtake the state or secede from a given territory), the Mexican case is similar to other conflict zones around the world. For example, compare Afghanistan and the Mexican northern state, Chihuahua, which borders Texas and New Mexico. From January through September of 2011, 2,276 deaths were recorded in Chihuahua. During roughly the same time period, 2,177 civilians were killed in Afghanistan. The rates of violence are certainly high enough to be considered civil conflicts, but the actors in both countries take on characteristics that are similar to those of more conventional insurgencies. Namely, narco-traffickers seek power and authority through corruption and also territorial control. In doing so, they engage in conflict not only against government structures, but against other narco-traffickers.

In the last several years, different methods of collective resistance efforts by civil-

---

9 Mora (2012)
ians have taken root throughout the country. One of the best known movements is led by Javier Sicilia, a famous Mexican poet who mobilized protests and marches across the nation after his son was violently killed. Known as the Movement for Peace with Justice and Dignity (MPJD), the movement coordinated marches across insecure regions within Mexico and has gained both national and international media attention.

News reports indicate that auto-defense groups are present in 13 states and 68 Mexican municipalities. Their stated aims are to protect their communities from criminals and violence or to guard natural resources. Historically, self-defense groups are representative of indigenous communities who exercise their right to defend their homelands. Modern day self-defenses range from farmers with minimal arms to professionalized groups with assault rifles.\(^\text{10}\) Some evidence shows that the self-defense groups have gained support from their communities.\(^\text{11}\) While these self-defense efforts have raised concerns (specifically, that such groups could evolve into the execution squads or government-supported paramilitaries found in other conflicts, such as in Colombia), the general perception is that these groups are largely, local community-based movements.\(^\text{12}\) The Michoacán region illustrates why citizens have turned to arms to protect themselves against cartels in the absence of a functioning state. In the last few years, the Knights Templar (Cabelleros Templarios) have heavily operated in Michoacán, monopolizing the rich natural resources in the farming state. In February of 2013, self-defense groups formed to directly challenge the Knights Templar and take governance into their own hands.\(^\text{13}\)

This environment places civilians at high risk and is thus an important region of

\(^{10}\) This study will use the term “auto-defense group” and “self-defenses” as interchangeable translations of the term used in Mexico to refer to civilian self-defense groups, Autodefensas.

\(^{11}\) Asfura-Heim and Espach (2013)

\(^{12}\) Pelzer (2014)

\(^{13}\) Tuckman (2014)
inquiry for my study. As outlined in the previous section, I expect that those citizens in Mexico who feel that their local authorities are responsible for their security problems will be more likely to view nonviolent methods favorably.

In summary, I present the following hypothesis:

**Hypothesis 1**: People who believe that local authorities are responsible for their personal security are more likely to favorably view nonviolent resistance as an effective means of improving their security situation.

The remainder of this study proceeds as follows. First, as a final stage of my empirical strategy, I justify two additional components of the study: (1) A brief analysis on whether the conditions I outline for predicting support for nonviolence also apply to whether or not civilians support for violence; (2) I outline why it is important to examine whether civilian opinions predict the probability of support for local civilian groups. Second, I discuss the survey data and design. Third, I present the results of my exploratory analysis, which tests an array of conditions associated with opinions about resistance, as well as whether the specific mechanism of attribution plays a role in civilian attitudes. Last, I discuss the results of the survey experiment.

### 3.1.3 Violent Resistance

The conditions outlined in the previous section predict civilian attitudes about nonviolent resistance and are drawn from the literature on both civil resistance and organized collective action more broadly. At present, researchers understand little about the conditions under which individuals view different forms of resistance as effective. In order to contribute further to our understanding of civilian resistance, I leverage these same concepts to construct a model demonstrating that these conditions also are relevant for predicting views about violent resistance.
3.1.4 Do Views on Resistance Influence Action?

While understanding why some civilians view certain resistance methods as effective is an important first step, the logical next step is to address whether these views inform individuals’ willingness to take action. Complex, violent environments make the study of civilian opinion difficult, despite being critical for our understanding of civilian preferences and actions during armed conflict.

To address this empirical question, I analyze how attitudes on nonviolent resistance influence a respondent’s likelihood for supporting a local resistance group. It is unclear if attitudes about resistance provide us with a new mechanism for explaining actual resistance. As a conflict unfolds, collective civilian efforts can dramatically change the political landscape of conflict. To understand more about civilians’ influence in conflict dynamics, I assess how attitudes about methods play a role in predicting behavior. This is a previously unanswered empirical question, and I test whether those who view nonviolence as effective will have more favorable views towards supporting local civilian efforts. In this case, “support” references actions such as attending meetings, donating funds, or spreading the word about the group.

Specifically, in the second stage of the analysis, I test whether those who favor nonviolent methods over violent ones are only supportive towards groups who employ nonviolent methods, or if support for nonviolent methods translates to support for any form of local resistance.

Hypothesis 2: Those who perceive nonviolent resistance methods as effective are more likely to be supportive of a group that utilizes nonviolent methods.

3.2 Survey Methodology & Data

Along with a survey team based in Mexico City, I conducted a national survey that uses a probabilistic sample design, allowing us to make inferences about the universe
under study–namely, Mexican residents age 18 or older that lived in the Mexican territory at the time of the survey. We used the Electoral Sections from the Federal Electoral Institute (IFE) as a sampling framework. The probabilistic sample design selected households after a random selection of electoral sections. The electoral sections are the Primary Sample Units (PSU) and each case was randomly selected using a Probability Proportional to Size (PPS) systematic procedure with a random start. We selected a total of 130 PSU. We divided each PSU into blocks, then used a simple random sample selection procedure to identify two blocks for inclusion in the study. A total of ten interviews were conducted in each PSU. These constitute the Secondary Sample Units (SSU). We conducted a total of five interviews in each SSU.

In the field, we selected five households within each SSU using a systematic skip pattern (with a random start) and according to the household density in each SSU. These constitute the Tertiary Sample Units (TSU). In each TSU a single individual of 18 or more years of age was selected randomly using a last birthday method with quota control by gender and age (according to the 2010 census). The selection of these individuals constitutes the last phase of the multi-stage sample procedure.

Our methods produce a representative national sample consisting of 1000 valid interviews with an estimated margin of error of +/- 3.1% at a 95% confidence level. We also over-sampled three areas in close geographic proximity to communities where self-defense groups (grupos de autodefensa) are active.\(^\text{14}\) The sample size of this oversample is 300 valid interviews and has an estimated margin of error of +/- 5.7% at the same confidence level. To complete the 1300 interviews we contacted a total of 1857 households, which gives us a non-response rate of 30%.

The interviews were conducted from February 13, 2014 to March 03, 2014. All \(^\text{14}\) The over-sample was conducted within the states of Guerrero, Michoacán, and Hidalgo. The breakdown of the survey sample across states is shown in the Appendix.
were personal interviews conducted in the homes of the respondents, who were selected using the sample design described above. The questionnaire had an average duration of 25 minutes and in general the attitude of respondents was favorable, with willingness to participate and provide valid answers. In order to get Institutional Review Board approval for conducting sensitive research in such a violent region, I created a system that enabled enumerators to safely anonymize documents while in the field. First, no identifying information about the respondents was recorded. Additionally, we assigned each survey an eight digit number key and only wrote four digits of the key on each half of the survey instrument. After an interview was complete, the survey document (5 pages) was separated in half and mixed amongst the rest of the surveys to be reordered later according to the key. These measures ensured that no one outside the project would be able to identify respondents or understand the survey instrument. Each survey team leader also recorded whether they encountered any trouble in the field; the survey team recorded no serious hinderances to the survey process.
Table 3.1: State-level overview of national sample

<table>
<thead>
<tr>
<th>State</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aguascalientes</td>
<td>20</td>
</tr>
<tr>
<td>Baja California</td>
<td>30</td>
</tr>
<tr>
<td>Baja California Sur</td>
<td>10</td>
</tr>
<tr>
<td>Campeche</td>
<td>10</td>
</tr>
<tr>
<td>Chiapas</td>
<td>40</td>
</tr>
<tr>
<td>Chihuahua</td>
<td>30</td>
</tr>
<tr>
<td>Coahuila</td>
<td>20</td>
</tr>
<tr>
<td>Distrito Federal</td>
<td>90</td>
</tr>
<tr>
<td>Durango</td>
<td>20</td>
</tr>
<tr>
<td>Estado de Mexico</td>
<td>130</td>
</tr>
<tr>
<td>Guanajuato</td>
<td>50</td>
</tr>
<tr>
<td>Guerrero</td>
<td>130</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>130</td>
</tr>
<tr>
<td>Jalisco</td>
<td>70</td>
</tr>
<tr>
<td>Michoacán</td>
<td>140</td>
</tr>
<tr>
<td>Morelos</td>
<td>10</td>
</tr>
<tr>
<td>Nayarit</td>
<td>10</td>
</tr>
<tr>
<td>Nuevo Leon</td>
<td>40</td>
</tr>
<tr>
<td>Oaxaca</td>
<td>30</td>
</tr>
<tr>
<td>Puebla</td>
<td>50</td>
</tr>
<tr>
<td>Queretaro</td>
<td>10</td>
</tr>
<tr>
<td>Quintana Roo</td>
<td>10</td>
</tr>
<tr>
<td>San Luis Potosi</td>
<td>20</td>
</tr>
<tr>
<td>Sinaloa</td>
<td>30</td>
</tr>
<tr>
<td>Sonora</td>
<td>20</td>
</tr>
<tr>
<td>Tabasco</td>
<td>20</td>
</tr>
<tr>
<td>Tamaulipas</td>
<td>30</td>
</tr>
<tr>
<td>Tlaxcala</td>
<td>10</td>
</tr>
<tr>
<td>Veracruz</td>
<td>70</td>
</tr>
<tr>
<td>Yucatan</td>
<td>10</td>
</tr>
<tr>
<td>Zacatecas</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1300</strong></td>
</tr>
</tbody>
</table>

The survey was conducted at the municipal level. Table 3.1 reports the state-level representation. The complete survey data is from both a national sample (Figure 3.1) and an over-sample near contested regions containing local, armed, civilian self-defense forces. This sample is representative of the population. An example of the
Figure 3.1: Survey sample with the national sample shown in blue. Over-sampled populations proximate to “autodefensas” shown in purple. The over-sampled municipalities are within the states of Guerrero, Hidalgo, and Michoacán.

The over-sampled population’s proximity to auto-defense group is shown in Figure 3.2. The over-sample was successful in that the survey team was able to operate in regions in which auto-defense groups are active. In general, the instrument was created to measure the conditions that encourage an individual to consider violent or nonviolent methods, as well as the individual traits that are associated with preferences for these different methods. The over-sample was constructed in order to measure whether these conditions have different effects in places approximate to armed civilian action.
Figure 3.2: A map of Guerrero state. An over-sampled municipality proximate to self defense forces (shown in purple) is also a municipality with known self defense groups. To demonstrate the proximity of the sample to self defense groups, municipalities with known self defense forces are shaded gray.

3.2.1 Variables

Dependent Variables

Several different dependent variables are utilized in this study. The first dependent variable reflects a respondent’s confidence in, or perceived efficacy of, nonviolent resistance and is constructed from a survey question that presents the respondent with the following statement: “some people think that nonviolent civil resistance (such as strikes, protests, and boycotts) against the government is a more effective way to improve security than violent/armed action.” Then the respondent is asked whether they strongly agree, somewhat agree, somewhat disagree, or strongly disagree. These responses are collapsed into a binary variable that establishes a 0,1 indicator whereby 0 represents disagreement and 1 represents agreement.
The second dependent variable measures opinion on violent resistance. This question seeks to understand whether people agree with the statement “some people believe that violence against the government is the most effective way to improve their situation.” Then the respondent is asked whether they strongly agree, somewhat agree, somewhat disagree, or strongly disagree. These responses are used to create a binary variable in which 0 represents disagreement and 1 represents agreement. About 22% somewhat or strongly agree with the statement that violence is the most effective way to improve their situation. Yet about 70% somewhat or strongly disagree with this statement, suggesting that large portion of the population does not view violent resistance as a useful method for change.

The final modeling stage uses these first two dependent variables as independent variables to assess whether attitudes towards resistance influence respondents’ willingness to support local resistance groups. The survey question asks respondents about a hypothetical, local, civilian resistance group. The question provides the respondent with a “yes or no” checklist, shown below. This results in a set of five binary dependent variables shown below.

Would you be willing to (check all that apply)

- provide goods (such as food, supplies) to this group in order to help their cause
- attend meetings of this group in order to get involved and join the efforts
- donate funds to this group in order to support their actions
- spread the word about this group to friends, family, and neighbors
- attend any community events this group hosts
Key Independent Variable

The first condition, corresponding to Hypothesis 1, reflects a respondent’s attribution of security responsibility. Hypothesis 1 delineates the relationship between attribution of responsibility for one’s personal security and views on nonviolent resistance. I measure this first with the \textit{Personal Security Attribution} variable, constructed from the survey, which asks respondents who they believe is responsible for their “personal security.”\footnote{Prior to this question in the survey, the respondent is primed with questions assessing their personal security situation, such as whether or not they feel their personal security has worsened or improved in the last 12 months.} This is the most direct measure available from the survey to assess how individuals think about the relationship between their personal security problems and those responsible for their personal security. The enumerators circled whichever group the individual mentioned from the following list.\footnote{Thus, the answer to this question is unprompted, unless the respondent needs prompting.} The list the enumerator can select from includes: “The Government, The Army, The Federal Government, The Local Police, Organized Crime, Non-governmental Organizations, Auto-defense groups, Other, No one, Don’t know, No answer.”

For robustness, I include three additional measures of attribution from this table: “Organized Crime,” “The Government,” and “The Federal Police.” These were the most reported attribution groups; including them enables me to test a full battery of responsibility variables, while still assessing whether the attribution of one’s security situation to local authorities is a key predictor of attitudes on resistance.

3.2.2 Alternative Explanations

To test the idea that those respondents who disapprove of their local municipal government are more likely to view nonviolent resistance as effective, I include a measure of municipal-level governmental approval. This variable is measured using a five-point ordinal scale which ranges from “Approve a lot” to “disapprove a lot.”
The final set of independent variables correspond to controls for alternative explanations, such as demonstration effects and socio-economic (SES) variables. The variable, *MPJD Familiarity*, represents familiarity with Javier Sicilia’s Movement for Peace and Justice with Dignity. This is the region’s most current and widespread campaign that advocates distinctly nonviolent methods. This question asked, “How familiar are you with the work of Javier Sicilia / the Movement for Peace with Justice and Dignity?” The possible responses: “Very familiar, Somewhat familiar, A little familiar, Not familiar, DK/NA.” Surprisingly, almost 40% of the population is unfamiliar with this movement, and only about 5% reports being “very” familiar. The distribution of this variable is shown in Table 3.2.

Table 3.2: Breakdown of the population’s familiarity for the Movement for Peace with Justice and Dignity

<table>
<thead>
<tr>
<th>Familiarity with Sicilia Movement</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all familiar</td>
<td>38.15%</td>
</tr>
<tr>
<td>A little familiar</td>
<td>14.62%</td>
</tr>
<tr>
<td>Somewhat familiar</td>
<td>17.38%</td>
</tr>
<tr>
<td>Very familiar</td>
<td>4.92%</td>
</tr>
<tr>
<td>NA/DK</td>
<td>24.92%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

In cross-national studies on mobilization, income and education are often used to proxy an individual’s perceived grievances. The basic concept behind the classic grievance story is that individuals are motivated to rebel against governments—or those with power—due to perceived injustices Gurr (1970). While the grievance story is typically rooted in theories of violent resistance, it has been applied in social movement theories (Tilly, 1978; McAdam, 1998; McAdam et al., 2003). If we believe that grievances inspire action, it is logical that they should also apply to the opinions that motivate those actions. I test whether income and victimization, as proxies of the grievance theory, are associated with greater support for nonviolent or violent action. I make the assumption here that individuals in the most oppressed or least privileged
positions endure greater grievances and thus show greater support for resistance.\textsuperscript{17} To present a robust assessment of the correlates of attitudes towards resistance, I also include controls on media as well as political information consumption, income, age, and gender. These variables are explicated below.

Here, I utilize the variables \textit{Education}, \textit{Lightbulbs}, and \textit{Victim} to control for SES and grievances. \textit{Education} is a categorical variable capturing the levels “none,” “primary,” “secondary,” and “higher education.” \textit{Lightbulbs} is a count of the number of lightbulbs in a given household. This variable proxies income, which commonly suffers from high non-response bias in survey studies. Third, \textit{Victim} captures whether the respondent self-identifies as a survivor of a violent and/or criminal act. In our survey, the victimization measure is a blind self-report. Respondents were given a card with list of crimes and asked to confirm whether they had ever experienced any of the crimes present on the card.\textsuperscript{18} Enumerators could not see the respondents answers. Each respondent was given two cards: the first card was a list of more minor crimes such as robbery, fraud, and theft. The second card contained a list of more distinctly violent crimes such as assault, sexual assault, and kidnapping. Roughly 36\% of respondents experienced minor crimes and 16\% experienced more violent crimes. I use a binary indicator to capture whether or not the respondent reports having survived either type of crime or violent attack.

The variable \textit{Oversample} is a binary variable in which 0 represents a case drawn from the national sample and 1 a case from the over-sample. The over-sample contained 300 cases near self defense groups in Mexico. Next, I control for media consumption. There is a diverse literature surrounding media consumption and political knowledge (e.g, Prior (2005)), and it is intuitive that media consumption might have

\textsuperscript{17} Here I do not make the claim that these conditions will effect only support for nonviolent resistance over other kind of resistance.

\textsuperscript{18} A second question then asks if this victimization occurred within 1-3 months, 3-6 months, 6-12 months, with the last 2 years, or more
an effect on views about resistance. The Mexican media covers both civil resistance efforts and armed resistance efforts. At the time of the survey, a rise in local armed civilian resistance groups were gaining attention in media outlets. Out of all our survey questions about media, the one with the highest response rate was about newspapers. Because owning a TV can signal status, many individuals did not respond to whether they watch TV. Thus, the newspaper (a widely distributed an accessible form of media) is used here to measure media consumption and is referred to as *Newspaper media*. I also include party identification, age, and gender as control variables. In this case, I simply use a binary indicator of whether or not the respondent identifies with the left-of-center PRD (*Partido de la Revolución Democrática*) or not. *Age* is a self-reported numeric variable and *gender* is a self-reported binary variable, whereby female is randomly assigned the value 1 and male the value of 0.

### 3.3 Main Results

Because the dependent variable in this study is a binary variable, I estimate logit models for both dependent variables. The logit results are shown in Table 3.4. The first hypothesis states that individuals who believe that their local authorities are responsible for their security should be more likely to view nonviolent methods as an effective tool for changing their security situation. First, I demonstrate the basic relationship between these two variables in Table 3.3. Using the Pearson’s Chi Square test, I find that I can reject the null hypothesis that these two variables are independent ($\chi^2=10.75$, $p=0.001$ with 1 degree of freedom). We can see that a minority of the total population (24%) views local authorities as responsible for their security situation. Of that 24%, 53% also view nonviolent methods as effective. Interestingly, of those who do not view local authorities as responsible (76% of the total population), 58% also do not view nonviolent methods as useful.

I now turn to the results from the logit models, shown in Table 3.4, with attitudes
Table 3.3: Cross-tabulation presenting views about local authorities and attitudes towards nonviolent methods. Column percentages are calculated and shown in parentheses.

<table>
<thead>
<tr>
<th>Civil Resistance Effective</th>
<th>Local Authorities Responsible</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>517</td>
<td>652</td>
</tr>
<tr>
<td></td>
<td>(58%)</td>
<td>135</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>381</td>
<td>536</td>
</tr>
<tr>
<td></td>
<td>(42%)</td>
<td>155</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>898</td>
<td>1188</td>
</tr>
<tr>
<td></td>
<td>(76%)</td>
<td>290</td>
<td></td>
</tr>
</tbody>
</table>

Towards nonviolent resistance as the dependent variable.\textsuperscript{19} In the first model, I find support for Hypothesis 1, which suggests that those individuals who believe their local authority (in this case local police) are responsible for security in their area are significantly more likely to also view nonviolent methods as effective for changing their current improving security. I also find that people who think that criminal organizations are responsible for their personal security are less likely to view nonviolence as effective. I find that attributing security responsibility to the government more broadly as well as the federal police does not have a strong effect, though the inclusion of these variables does improve the fit of the model overall. I find little support for the idea that approval of the municipal government is an influential factor. An alternative story might suggest that successful attribution to local authorities is not as important as perceptions of government efficacy, and that perhaps this measure is simply picking up on views of efficacy rather than responsibility. This would follow Arceneaux (2003)’s work which would suggest that if a respondent attributes responsibility to the local government and believes that the government is doing a poor job of keeping the peace, then they might be more likely to believe resistance is key strategy for change. However, I rerun this model with an interaction between views on the municipal government’s performance and

\textsuperscript{19} These results hold when adding fixed effects at state-level.
attribution, and do not find convincing support for this argument.

I find support for the “demonstration effect” concept, that respondents with greater familiarity of the Movement for Peace with Justice and Dignity are more likely to view nonviolent resistance as effective. This suggests that Javier Sicila’s movement has had a positive influence on civilian attitudes towards the efficacy of civil resistance methods.

Next, the results reveal little support for the role of grievances and SES factors. Victimization and Lightbulbs do not seem to play a major role in predicting views on nonviolence. However, education has a negative effect, suggesting those with a lower education are most likely to view nonviolence as useful. This finding is counterintuitive. Conventional wisdom would suggest that those with higher education would view nonviolent methods as more useful than violent ones. One plausible explanation is that those who have higher education, and higher income, are more able to pay for their protection by employing guards and other armed services. Two control variables are also influential predictors: party identification and age. Party Identification has a positive influence on viewing nonviolent resistance as effective. This finding is not too surprising, in Mexico those who are politically supportive of the PRD (Partido de la Revolución Democrática) are considered a “left-of-center” political party. The results also suggest that younger respondents have slightly more favorable attitudes towards nonviolent resistance.
Table 3.4: Model 1: Logit model of favorable attitudes on nonviolent resistance

<table>
<thead>
<tr>
<th>Model 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>1.19**</td>
</tr>
<tr>
<td>Personal Security Organized Crime</td>
<td>-0.51*</td>
</tr>
<tr>
<td>Personal Security Government</td>
<td>-0.09</td>
</tr>
<tr>
<td>Personal Security Federal Police</td>
<td>0.33</td>
</tr>
<tr>
<td>Personal Security Local Police</td>
<td>0.48**</td>
</tr>
<tr>
<td>Victim</td>
<td>0.14</td>
</tr>
<tr>
<td>Lightbulbs</td>
<td>-0.00</td>
</tr>
<tr>
<td>Education</td>
<td>-0.23*</td>
</tr>
<tr>
<td>Approval of Municipal Government</td>
<td>-0.06</td>
</tr>
<tr>
<td>Familiarity MPJD</td>
<td>0.16**</td>
</tr>
<tr>
<td>Newspaper Media</td>
<td>-0.08</td>
</tr>
<tr>
<td>PRD</td>
<td>0.57**</td>
</tr>
<tr>
<td>Oversample</td>
<td>-0.22</td>
</tr>
<tr>
<td>Age</td>
<td>-0.01**</td>
</tr>
<tr>
<td>Gender (female)</td>
<td>-0.04</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>AIC</th>
<th>log L</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1020</td>
<td>1378.94</td>
<td>-629.47</td>
</tr>
</tbody>
</table>

Standard errors in parentheses

† significant at \( p < .10 \); * \( p < .05 \); ** \( p < .01 \); *** \( p < .001 \)

\[ \text{These results hold when adding fixed effects at state-level.} \]
To further explore these findings, I present predicted probabilities generated from the model. Below in Figure 3.3, I present the effects of responsibility attribution, education, and familiarity with the MPJD movement. We see that those who attribute responsibility to local police are about 12.5% more likely to also view nonviolent methods as effective (a roughly 20.8% increase). Conversely, those who attribute responsibility to organized criminal groups are 15% less likely to view nonviolent methods as more effective than violent ones. Familiarity with the MPJD movement also has a clear effect: comparing those groups that know nothing about the movement to those who report as “very familiar” results in roughly a 20% increase in the probability of viewing nonviolence as effective. Last, we see the negative effective of education, those with the highest level of education are 20% less likely to view nonviolent resistance as effective.

In the next stage of the analysis, I apply these same modeling specifications to

---

21 These are calculated when all covariates relevant to the model are held at their respective mean and modes.
predict attitudes towards violence, which helps us understand the difference in the formation of attitudes towards different modes of resistance. This analysis adds to the broader on-going discussion of mobilization and tactical choice (e.g Cunningham (2013)), and demonstrates that different individual-level conditions are associated with support for one tactic over another. The model is an exact replication of that shown above, but the dependent variable changes to represent whether people agree or disagree with the statement, “some people believe that violence against the government is the most effective way to improve their situation.” The comparison between the two models are shown in Figure 3.4 below.

![Coefficient plot comparing Model 1 and 2](image)

**FIGURE 3.4:** Coefficient plot comparing Model 1 and 2. Model 1 is shown in dark blue (the dependent variable represents attitudes on nonviolence) and Model 2 is shown in light blue (the dependent variable represents attitudes on violence).

These findings reveal that the story of attribution is complex. Recall that the theoretical idea behind attribution expects that those who identify their local authorities
as responsible for their personal security issues will be more likely to view nonviolence as an effective tool for improving their security situation. We see here that the two variables that were influential predictors for nonviolent support, personal security attribution to local authorities (positive effect on support for nonviolence) and criminal organizations (negative effect), are not influential when it comes to predicting views on the efficacy of violent resistance. Instead, it is meaningful for a respondent to attribute security responsibility to the federal police instead of local police. Here, those who attribute responsibility to federal police are more likely to view violent resistance as effective.

This finding is not in discord with the implications of the attribution story, though it does highlight the nuanced nature of the relationship between attribution and attitudes towards resistance. It shows that there is a link between local problems and local solutions: those who place responsibility in their local authorities think that they can use nonviolence to be a part of that change and improve security. Yet those who attribute their personal security problems to a higher, and in some sense more distant power, are more likely to favor higher-risk and higher attention-seeking methods such as violent action. Thus, in general, those who attribute their security issues to federal authorities might associate successful change with different, more risk-seeking methods than others. While these findings support the general argument that attribution is influential in predicting attitudes towards resistance strategies, future research could further unpack these findings to assess whether there is a connection between attribution and the desire for a specific political outcome, such as overturning the government versus demanding political actors to change their behavior.

Importantly, the “demonstration effects” of the MPJD movement diverge between models. Here, familiarity with the MPJD has differing effects on support for the two methods of resistance. In the first model we saw that those who are most familiar
with the MPJD were associated with viewing nonviolence as effective. The second model shows that the relationship with attitudes towards violence is the opposite: respondents most familiar with the movement are the least likely to view violence as effective. This is important, as it suggests organizers potentially have the ability to shift views by spreading information about their efforts. We also see differences in education, suggesting that education does not have the same effect on attitudes towards resistance.

In the comparison model, none of the grievance and SES variables reach significance, though the control variables “PRD,” “Newspaper,” and “Gender” have an effect; and overall inclusion of these variables improve model fit. Similar to the model on nonviolence, those who identify with the PRD are likely to favor violent resistance, suggesting that perhaps those identified with this party are more likely to view any form of resistance as positive. Gender is associated with a decrease in favorable attitudes towards violent methods, suggesting that women are slightly less likely to view violence as effective.

The over-sample results are noteworthy. In the “violence” model individuals living close to self defense groups are more likely to view violence as effective. The opposite is true for the “nonviolence model.” In this case, those living near self defense forces in Michoacán, Guerrero, and Hidalgo are less likely to view nonviolence as effective. This suggests that proximity to organized groups influences opinion formation about the utility of violence. Those who are living near self defense groups see violence as a useful tool for improving their security situation. This also implies that for nonviolent organizers, regions with well-developed armed civilians groups will prove most difficult for campaign mobilization.
3.3.1 Attitudes and Actions: Support for Local Resistance

How do attitudes towards resistance influence action? To assess this, I utilize an experiment embedded within the survey instrument. The dependent variable in this section is hypothetical action rather than retroactive self-reported action. Considering Mexicans’ sensitivity around sharing whether or not they have ever supported a resistance group, a hypothetical approach allows them to speak freely without worrying about admitting past actions—actions which could possibly associate them with risky activities. Furthermore, it ensures that the respondent is not biased by thinking about a real, pre-existing armed group. As described previously, the dependent variable here is “support” for a local civilian group, whereby the respondent is read aloud a description of a local group and then provided a list of potential ways to support the group. The possibilities include “provide goods,” “attend meetings,” “donate funds,” “spread the word,” and “attend an event.”

**Figure 3.5**: Correlation between item responses
Using this 5-point item response, I create a factor variable to represent one continuous trait. This factor score measures the respondent’s “willingness to support” a local group. The factor analysis reveals that these different item scores are correlated, and ranked in such a way that attending an event is a more “difficult” action than donating food or goods. This measures the different ways, varying by risk, that an individual could potentially take to support a group. The correlation between the variables is shown above in Figure 3.5. Confirmatory factor analysis reveals that one factor is sufficient to represent this “willingness trait.” The final variable is thus a continuous measure and centered around zero.

At the end of the survey, respondents are given one of three treatments. Each treatment is presented as a short newspaper article describing a local civilian group. Treatment one is an article that describes an armed group who uses weapons offensively to “improve the security situation in local areas.” Treatment two describes an unarmed group, with the same goals, but who use only nonviolent methods—including strikes and protests, but also nonviolent mediation methods to achieve security goals. Treatment three describes a “mixed method” group, one that is armed only for defensive purposes and utilizes nonviolent methods to achieve their goals. Below is treatment two, a description of a nonviolent, unarmed civilian group.

“Recently, a new civil resistance group has emerged. They are known as the OCIV and their mission is to improve the security situation in local areas. These civilians have organized protests, blockades, coordinated unarmed patrols, and used nonviolent methods in order bring justice and security to their area. According to one of the leaders of the group, Angel Polomo, ‘We aim to bring justice and peace to the region through political organizing and engaging as mediators between violent actors in our community. We also have created early warning systems to notify

\[\text{22 The table presenting the factor loadings can be found in the Appendix.}\]
our community members of the onset of danger."

Hypothesis 3, which states that positive attitudes towards nonviolent methods should increase a respondent’s willingness to support a nonviolent group, suggests an interaction effect between treatment two and positive views of nonviolent resistance. The idea here is that those who read about a nonviolent group, and who also believe nonviolent methods are most effective, will be the most willing to support the group. I thus include attitudes towards resistance, the treatment received, and three control variables in the model to predict the respondent’s willingness to support/aid the group. The three control variables included are Victim, Age, and Oversample.

Two important controls, victimization and the over-sample indicator are influential predictors across all models. \(^{23}\) Broadly interpreted, victimization is associated with support for all kinds of possible participation except for donations. Conversely, respondents in the over-sampled population are less likely to support the resistance group; revealing that those who live in the most contentious, high-risk areas and are most proximate to various on-going resistance efforts are the most likely to decline support.

I expected that those who favorably viewed one form of resistance as most effective would be most supportive of groups employing that same method, thus linking attitudes to action (hypotheses 2). Yet I find very little support for this, as tested by an interaction between the treatment and the respondent’s attitudes towards nonviolent resistance. \(^{24}\) Interestingly, views on nonviolent methods are an influential and positive predictor across different treatments. Those who have favorable attitudes

\(^{23}\) The over-sample here is included as a variable in the regression framework rather than by weighting in the sample. Typically surveys that include over-sampled populations use this extra sample as a weight according to the true population. In this case, the best practice would be to weight the over-sampled population so that it is representative of the total number of individuals who actually reside near auto-defense groups. This approach, however, is made impossible by a lack of data on these defense forces.

\(^{24}\) I also repeat the analysis with the disaggregated version of the variables and on the whole these results hold.
Table 3.5: OLS model of a respondent’s “willingness” to support a local resistance group

<table>
<thead>
<tr>
<th>OLS Results</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>0.10</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
</tr>
<tr>
<td>OverSample</td>
<td>-0.26*</td>
</tr>
<tr>
<td></td>
<td>(0.05)</td>
</tr>
<tr>
<td>Victimization</td>
<td>0.14*</td>
</tr>
<tr>
<td></td>
<td>(0.04)</td>
</tr>
<tr>
<td>Treatment Nonviolent</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
</tr>
<tr>
<td>Treatment Violent</td>
<td>0.08</td>
</tr>
<tr>
<td></td>
<td>(0.08)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.00*</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>Views on CivRes</td>
<td>0.21*</td>
</tr>
<tr>
<td></td>
<td>(0.07)</td>
</tr>
<tr>
<td>Treatment Nonviolent:CivRes</td>
<td>-0.01</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
</tr>
<tr>
<td>Treatment Violent:CivRes</td>
<td>-0.10</td>
</tr>
<tr>
<td></td>
<td>(0.10)</td>
</tr>
<tr>
<td>N</td>
<td>1160</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.06</td>
</tr>
<tr>
<td>adj. $R^2$</td>
<td>0.05</td>
</tr>
<tr>
<td>Resid. sd</td>
<td>0.71</td>
</tr>
</tbody>
</table>

towards nonviolent methods are more likely to be “supportive” types regardless of whether they read about a nonviolent or violent group. The predicted value scores are shown below. The positive effect is substantial and is illustrated in Figure 3.6.

In sum, these findings suggest a new insight: while citizens might express clear attitudes about which method of resistance they view as most effective, respondents who regard nonviolence resistance as useful are more likely to support local resistance, whether it is violent or nonviolent. This is an important finding for those who try to organize in local areas, and for understanding the conditions under which mobilization occurs. It reflects the idea that proximity to civilian resistance groups influences civilian’s willingness to help the movement, as those who see nonviolent
methods as influential also are more willing to support local groups who are taking a stance, regardless of the methods used.

3.3.2 Internal and External Validity

One oddity with this particular design is that weights are not used to explore the implications of the over-sample. Traditionally, this is how over-sampled are utilized in survey data. The over-sample is treated as it is here due to the lack of data on the true population of auto-defense groups. In weighting, one must construct the weights (positively or negatively) according to the actual population available. With time, hopefully this particular aspect of the design can be improved.

Another possible threat to the internal validity of these findings comes from the one-shot experimental design. In this case, multiple experiments are needed to adequately assess the value of this experimental treatment. At present, this is not feasible. However, the general finding that attitudes do not cleanly reflect action is noteworthy enough to support further research on this topic, and future iterations.
Although the data presented in this study is unique to Mexico, this survey instrument can be replicated elsewhere to provide a cross-national assessment of attitudes on resistance. While studying such questions in areas of mass violence or high-intensity war would be fruitful, many non-traditional conflicts with low to medium intensity violence provide appropriate cases for study. This study extends to cases like India, or Thailand, where insurgencies, civilian clashes, and nonviolent campaigns all contribute to the flow of conflict. If these results hold true in other countries, they would suggest that more people favorably view resistance than is commonly thought. These findings also suggest that there are differences between those individuals that support nonviolent resistance versus violence resistance, and that organizers who hope to utilize the former have strong latent support. Furthermore, these findings demonstrate that citizens are interested in actively changing their security situations.

3.4 Conclusion & Implications

This study has important implications for organizers on the ground in contentious areas. First, it has offered insight to essential questions about attitudes towards resistance and has addressed whether people support civil resistance in Mexico. About 41% of the population agrees that civil resistance methods, such as strikes, protest, and blockages against the government are the most affective way to improve their situation. About 49% of the population agrees that “nonviolent civil resistance (such as strikes, protests, and boycotts) against the government is a more effective way to improve security than violent/armed auto-defense groups.” This finding suggests that there is a high favorability towards nonviolent methods and latent potential for the success of civil resistance campaigns in Mexico.

This study has addressed whether information about civil resistance increases
support for nonviolent methods; it does. The results demonstrate that those who are somewhat or very familiar with the MPJD are more likely to view civil resistance as more useful than violent resistance. Similarly, those who are not very familiar with Sicilia’s movement are less likely to view civil resistance as effective. This finding is robust when including the over-sampled regions near armed, self defense groups.

Additionally, this study demonstrates that responsibility attribution influences support for nonviolent resistance. Specifically, when an individual feels that the local police are responsible for security, they are more likely to view nonviolent methods as *more effective* than violent methods. Last, the results from the over-sample and experimental treatment caution researchers to carefully draw connections between attitudes and actions. The results reveal that this connection is not as straightforward as expected: those respondents who favorably view nonviolent methods are actually more likely to support any local group (regardless of methods used) by providing goods, donating funds, and sharing news about the resistance group.

Finally, the findings presented herein suggest caution towards the strategic security policies of the Mexican government. Sending thousands of federal police and military units into highly contested regions has been a staple of the U.S.-supported Mexican policy to fight Drug Trafficking Organizations. While identifiable successes have occurred, such as the capture of cartel leaders Vicente Carrillo Fuentes and Hector Beltran Leyva, the lack of focus on repairing localized institutions and fostering accountability between local politicians and local populations—could backfire for the federal government. This study would suggest that the less accountability between local governments and their constituents, the more citizens view armed action against violent actors as a useful method for creating political change.
Network analysis is a critical tool for capturing dependencies inherent to the development of social phenomenon. The concept of social network analysis began as early as the 1930s with Jacob Moreno’s *Who Will Survive?* and has developed into a rich and diverse field. In Political Science, network analysis has now been utilized to study a diverse range of topics: trade, intergovernmental organizations, sanctions, internal conflict, political behavior.¹ Yet, unfortunately, a majority of studies in Political Science still rely on the standard dyadic framework. To understand the rise and fall of internal conflicts and global crises, it is incumbent upon researchers move beyond infrequently updated count data towards measures indicating which actors commit which violent actions, and at what time. This kind of data is often beyond the scope of social scientists’ resources. However, combining new efforts in machine learning with the structural insights gained through network approaches

¹ For examples, see Dorussen and Ward (2010), Cao (2009), Cranmer et al. (2014) and for an overview of network analysis in Political Science see Ward et al. (2011).
could provide an egress from these limitations.\textsuperscript{2} The possibility for data to be effectively and frequently harvested from a wide collection of international news outlets carries powerful potential.

In this paper, I adopt a network approach to map the evolution of violence in the Mexican criminal conflict. To begin, I use area-expertise to identify key problems in the algorithms which generate machine-coded event data and provide solutions for efficient improvements. I then demonstrate the utility of machine-coded event data for conflict analysis at the country level using the Mexican case. Next I construct a dynamic, evolving network which represents actors related to the conflict during 2004-2010. Last, I demonstrate how the latent space approach reveals relationships in the data that are not directly observable from newspaper reports. In doing so, I highlight how dependencies captured by the network approach reveal unobserved relationships between key actors and create a platform for future research on the relationship between civilian efforts and the evolution of conflict. Through this process, I set the foundation for future research to answer the question: can civilians influence the evolution of armed conflict?

4.1 Data’s Day: The Potential of Machine-Coded Event Data

Before explaining the creation of network data for the Mexican conflict, I provide a brief overview of machine-coded data in political science. I specifically compare the processes behind machine-coded and human-coded data. I then explain how area-experts can work with machine-coded data to provide new insights for improvement. Political scientists have long relied on text documents, such as historical accounts, newspapers, and biographies, to collect data on their subjects. Today, this process regularly requires hundreds of thousands of dollars in resources to employ teams of graduate and undergraduate students to read information and hand-code it into

\textsuperscript{2} An early example of such data and methods is the KEDS project (Schrodt et al., 1994).
spreadsheets. To do so, the team relies on the creation of a codebook, a selection of rules that create a uniform system for human coders to code information into the required format for quantitative analysis. This process is not unlike that used for machine-coded data in the sense that a general set of rules is required to parse through large bodies of text, delineating which parts of the text are related to the subject of interest, and which parts reveal the political story we seek to explain. One of the biggest differences between machine- and human-coding is that machine-coding can be done quickly and efficiently, enabling researchers to study important political events that are unfolding today rather than only collect data on events that occurred decades ago. Incorporating machine-coding into the political science methods “tool box” enhances the abilities of human-coders to produce accurate data and eliminates political scientists’ reliance on massive funding support for large-scale text analysis. Although machine-coding lacks the careful intellect of the human mind and may never be able to replicate a human-coder’s careful reading and ability to detect culturally specific nuances in the text, it is a valuable tool for enhancing researchers’ data collection efforts.

For these tools to become more standard in research on conflict, political scientists must refine these tools for our own purposes. One key way of doing this is to combine regional expert knowledge with advancements in machine-coding. Automated text methods are often not in the wheelhouse of area experts or field researchers; instead, it is typically the case that computationally intensive researchers are not in the same group as those doing interviews in the field. It is this intersection between field experts’ regional knowledge and automated text analysis that holds great potential for advancement. In concept, I join these two approaches together by focusing on a single country-case and utilizing both expert knowledge and machine-coded methods to produce a new set of event data.³

³ For a complete discussion on the “promise and pitfalls” of automatic content analysis methods
4.2 The Mexican Case

The Mexican case is the key country case for this study. The internal war in Mexico is a criminal conflict, driven by territorial disputes over trafficking routes and land and collusion between government officials and Drug Trafficking Organizations (DTOs). Drug trafficking is not a new phenomenon but over the last decade it has has been at the root of a complex conflict affecting all levels of Mexican society. After the fall of the Colombian cartels in the 1990s, the landscape of violence related to drug trafficking completely shifted in Mexico as cartels gained new territorial control. Since this time, Mexican drug cartels have become the largest foreign supplier of methamphetamine and marijuana to the United States, effectively dominating the drug market. In fact, estimates claim that the drug trade employs over half a million people and generates roughly 4% of Mexico’s annual GDP.\(^4\)

Although Mexican drug cartels have controlled the drug trade for decades, it was not until the 2006 election of Felipe Calderón that drug-related violence began to soar and civilians found themselves under fire. In 2006, Calderón became president and ushered in a new policy against the cartels. With support from the United States, the Mexican government initiated a massive campaign to combat drug-related violence. Violence soared and between 2006 and 2011 and homicides nearly tripled from 10,452 to 27,213.\(^5\) Sending armed actors into an already armed, violent, and competitive situation, Calderon’s strategy became known as a failure. It did not address the fundamental needs of civilians or establish trusted local institutions where citizens could seek support in the realms of justice and security. Instead, these policies complicated the security situation even more and created an unstable environment for reporters, government officials, and civilians.

\(^4\) Shirk (2011)
\(^5\) According to Mexico’s National Statistics Institute (INEGI).
The failure of “Calderón’s War” is partially attributable to the fact that DTOs are complex, with overlapping rivalries, family histories, splintered subgroups, and territorial disputes that drive their violent methods of political action. DTOs are also engaged in extensive corruption networks across different levels of the government and throughout the Mexican territory. The influx of federal troops into areas of high criminal activity added further complication to pre-existing corruption. Because police in Mexico receive low pay (about $9,000 to $10,000 a year), their loyalty can often be bought by cartels; however, when bribery doesn’t work, cartels routinely punish government officials with violence. Since combat and corruption between federal troops and cartels began, over forty mayors and numerous government officials have been murdered while increasing numbers of missing persons have been reported across Mexico as a result of cartels’ increasing use of kidnapping. Government corruption, civilian victimization, and a silenced media are severe problems deeply embedded in the conflict.

Because of the cartels’ brutal methods of punishment and gain, journalists and other forms of citizen representatives have been hesitant to report on these events. Journalists have not only been afraid to report out of fear that they might be punished; in fact, they have been targeted and killed numerous times. In 2010, Carlos Santiago, an intern photographer for the Mexican newspaper El Diario, based in Ciudad Juarez, was shot and killed. This was the second journalist from El Diario to be targeted. The other was Armando Rodríguez, a writer who worked the police beat and was killed in front of his own home. Following these deaths, the newspaper’s editor drafted a plea to drug traffickers asking why they were being targeted. The article was published on the front page of the paper. Then, on April 28, 2012, Regina Martínez, a journalist for the national news outlet Proceso, was found dead

---

6 Nathaniel (2013)
7 For a full interview with the editor see Gladstone (2010).
in her home in Xalapa, Veracruz. This series of murders is indicative of a larger phenomenon across Mexico. According to the International Press Institute and the Mexican journalists’ group “Periodistas de a Pie,” 103 journalists have been killed between 2000-2015 and 25 have disappeared. Since 2010, Mexico has been considered as deadly for journalists as Iraq; yet, these crimes continue with impunity. The Mexican case thus presents a relevant, timely, and difficult case for measuring the evolution of nuanced relationships between different violent actors. This study describes how the investigation of these relationships is possible.

4.2.1 Data Challenges in the Mexican Case

The quality of data on the Mexican criminal conflict remains mixed and generally suffers from underreporting. We know that there have been several key actors in this conflict over the years, including the Gulf Cartel, Juarez Cartel, La Familia Michoacana, Los Zetas, Sinaloa Cartel, and the Tijuana Cartel. However, because Mexican drug cartels are often in conflict with one another and infiltrated by government officials, it is difficult to attribute responsibility for homicides or other violent events to one cartel or actor versus another. Although the noisiness of this data might seem daunting, it presents an opportunity for researchers to explore how they may improve data and knowledge about violent situations in contexts where it is often dangerous to do the costly on-the-ground “legwork” that is generally necessary to accrue such information.

At present, the majority of data on violence in Mexico is based on homicide rates. Homicide data is produced from four main sources: Mexico’s National Institute of Statistics and Geography (INEGI), the National System of Public Security (SNSP), the Mexican Federal Government, and La Reforma. In the beginning of the conflict (typically demarcated by Calderón’s assumption of the Presidency), national newspapers carried death counts related to drug violence. *La Reforma* continues to
maintain drug-related homicide data; however, transparency behind the methodol-
ogy of this data collection remains uncertain. It is not known, for example, how
the newspaper decides whether a homicide is drug-related or not. Mexico’s INEGI
has data based on death certificates, which allows one to acknowledge the manner
of death (such as bullet wound). This data, however, is unable to attribute which
homicides are linked to crime and which are unrelated. The National System of
Public Security also has crime data based on local prosecutor reports, but its re-
liability is questionable due to the mixed incentives for governments to accurately
report information. Finally, the federal government also has released data known as
the “Database of Alleged Homicides Related to Organized Crime.” This database
has information on executions and violence against authorities. Altogether, these
data present several difficulties: first, they are not updated in real-time. To better
understand the heterogenous evolution of civil conflict, researchers need to be able
to describe conflict dynamics as they unfold. A further, major criticism is that these
data do not further our understanding about who is directly or indirectly responsible
for these crimes.8

Acknowledging the shortfalls of pre-existing data, my analysis improves upon
existing data by providing cleaned actor event data. While I can only provide a
rough estimation of actors involved in each conflictual event, this is a considerable
advancement from the current status quo of knowing little to no information about
which actors are engaged in which events in Mexico.9

8 This information summarizes an article will fuller details on the subject in Letras Libras. See
Ley (2012). Melissa Dell uses this government data to assess whether or not PAN victories divert
drug traffic to alternative routes predicted by the shortest paths in a networked trafficking model.
The aim of Dell (2011), however, is not to create actor-based event networks.

9 The only other data similar to this format is from a project of machine-coded data of spanish
newspapers created by Javier Osorio and Alejandro Reyes. This data is not yet publicly available.
4.3 ICEWS Data and the Mexican Criminal Conflict

The primary motivation for this study is to leverage machine-coded reports to construct a network of armed actors that represents conflict over time in Mexico. In order to construct this network study, I use the ICEWS actor-coded event data. The ICEWS event data is part of a larger project designed to operate as a crisis warning system for policymakers.\textsuperscript{10} This database has enabled policymakers and researchers to forecast conflictual events around the world.\textsuperscript{11} The machine-coded event data are gleaned from natural language processing of a continuously updated harvest of news stories, primarily taken from Factiva\textsuperscript{TM}, an open source archive of news stories from over 200 sources around the world. The baseline event coder is called JABARI, a java variant of TABARI (Text Analysis By Augmented Replacement Instructions) which has been developed by Philip Schrodt and colleagues.\textsuperscript{12} This approach combines a “shallow parsing” technology of prior coders with a richer exploitation of syntactic structure.\textsuperscript{13}

The models create each data point by obtaining three components of the news story: the sender of the event (i.e., who initiated the action), the receiver or target of this action, and then the event type itself. I subsetted this data according to relevant “violent” cameo codes in order to gain access to all events relating to any armed actors such as rebels, insurgents, government, and the police. These events, in essence, capture any type of violent conflict between different actors. The event type itself is coded according to the Conflict and Mediation Event Observation

\begin{footnotesize}
\begin{enumerate}
\item[10] For a summary, see O’Brien (2010).
\item[12] (see \url{http://eventdata.psu.edu/})
\item[13] This has increased accuracy (precision) from 50% to over 70%, as demonstrated in a series of ongoing (informal) evaluations of its output by human graders. Peak human coding performance is reported to be around 80% (King and Lowe, 2003).
\end{enumerate}
\end{footnotesize}
The main distinguishing feature of CAMEO is its use of mediation related event codes. CAMEO does not assume that a meeting is a peaceful interaction, for example, but is able to decipher whether meetings between actors are related to mediation, or negotiation. CAMEO also includes four categories for violence (structural violence, unconventional violence, conventional force, and massive unconventional force) as well as a rich system of sub-categories.

To begin to understand how to leverage the ICEWS data for country-level network analysis, I have taken a subset of data from the larger ICEWS corpus. I constructed a SQL query to gain data subsetted according to all four “violent” cameo codes as well as any actions related to all armed actors such as rebels, insurgents, government, and the police. Through the process of reviewing and cleaning the ICEWS data in preparation for my analysis, I’ve encountered two key problems with the data. The first problem relates to the vague nature of the actor names in the data, which I improve upon via manual re-coding. The second problem I identify incentivizes ICEWS programmers to improve the parsing algorithm used in the creation of the original data. This original raw, deduplicated, data from 2004-2010 contains 187 observations relating to events between armed actors. While there are many unique actor names, the bulk of these descriptions are likely too vague for network construction. For example, the majority of cases relating to criminal violence use descriptors such as: “Armed Gang,” “Armed Opposition,” “Attacker,” “Hitman,” “Drug Gang,” “Armed Band,” and “Criminal.” A number of other cases have actor names such as “Men” or “Citizens” as well as Military descriptors. There are unique actor names available, but these are a redundant list of general actor names such as shown in Table 4.1. This would seem to suggest that the original actor names in the data are not fine grained enough to construct a cogent network over time. For example, the Gulf Cartel is reported several times, but the bulk of the reports on

---

14 See Gerner et al. (2009) for the full summary of the project.
actors related to criminal events are listed as “criminals.”

Table 4.1: Number of cases for select drug-related actors in raw ICEWS data

<table>
<thead>
<tr>
<th>Actor Name</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>as Sender</td>
</tr>
<tr>
<td>Armed Gang</td>
<td>29</td>
</tr>
<tr>
<td>Armed Band</td>
<td>11</td>
</tr>
<tr>
<td>Armed Opposition</td>
<td>4</td>
</tr>
<tr>
<td>Attacker</td>
<td>5</td>
</tr>
<tr>
<td>Criminal</td>
<td>10</td>
</tr>
<tr>
<td>Drug Gang</td>
<td>7</td>
</tr>
<tr>
<td>Hitman</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>67</strong></td>
</tr>
</tbody>
</table>

The second major issue of concern relates to the number of conflictual events in the data. Surprisingly, the highest number of conflictual events in a given month is 12. This is much lower than we would expect. These events are unable to tell us about the intensity of the event itself. One event could capture 100 deaths and another, only 1. While these results are in part a product of machine-coded newspaper stories in that one story is equivalent to one event, the result is also a function of the algorithm used to parse stories into events. At present, only the first few lines of each individual story is used to create an event, yet a singular story can potentially contain counts of deaths, a sublist of events, or other nuanced data of interest. After manually reviewing the data, I found that oftentimes news stories are not individual stories but are instead a bulletin or list of conflict stories from a given region.

An example is shown below in which I highlight when there is the start of a new story imbedded with the original listed story. As is visible, this one story actually contains 5 violent events within 3 different Mexican states. States are typically denoted by all capital letters. In this case, the states are Sonora, Chihuahua, and Nuevo Leon.

The following is a selection of crime, narcotics, and security highlights
from regional press along Mexico’s northern border on 30 May: OSC
reports that during a recent National Conference of Governors Sonora
Governor Eduardo Bours endorsed President Felipe Calderón’s proposal
to create a new model to fight organized crime. He also stressed that
federal, state, and municipal authorities must join efforts, regardless of
political affiliation, in order to be successful in this endeavor. On be-

half of the governors, Bours praised President Calderón’s determination
to purge institutions that fail to protect the population and issued a
call to fight corruption. [Hermosillo Critica Periodismo en Sonora (Inter-

Root URL as of filing date: http://www.critica.com.mx]

Armed Group Attacks Municipal Police Station – Nogales El Diario de Sonora reports
that on 29 May, a group armed with fragmentation grenades and high
caliber weapons attacked the Public Security Secretariat of the San Pe-

dro Municipality in Nuevo Leon, injuring at least five policemen. The
report adds that this incident occurred despite the arrival of 150 Federal
copmen and even though the Army continues patrolling the metropoli-
tan area. [Nogales El Diario de Sonora (Internet Version WWW) in Spanish– Daily from Nogales, Sonora State. Root URL as of filing
date: http://www.eldiariodesonora.com.mx] CHIHUAHUA Two Police-
men Killed in Ciudad Juarez – Chihuahua Tiempo La Noticia Digital
reports the murder of two policemen identified as Enrique Martinez and
Israel Chairez, in Ciudad Juarez. The report adds that more than 70
bullets were fired at the policemen, who were inside an official vehi-
cle. [Chihuahua Tiempo La Noticia Digital (Internet Version-WWW)
in Spanish – Daily from Chihuahua, Chihuahua State. Root URL as of filing date: http://www.tiempo.com.mx] NUEVO LEON Governor An-
nounces New Strategies against Crime – Monterrey El Porvenir reports that Governor Natividad Gonzalez Paras has announced that agreements have been signed with federal and state authorities to implement new strategies to fight organized crime. Gonzalez Paras urged the communities and media to cooperate. “A new phase in the fight against organized crime will begin in the State of Nuevo Leon, especially in the metropolitan area of Monterrey and zones used as routes for drug trafficking,” he said. [Monterrey El Porvenir (Internet Version WWW) in Spanish – Daily from Monterrey, Nuevo Leon State. Root URL as of filing date: http://www.elporvenir.com.mx] Man Murdered in Monterrey – Monterrey El Porvenir reports that unidentified men in two cars shot and killed Eugenio Arevalo Garza, 41, in Ancir, southern Monterrey on 29 May. Jesus Martinez Gonzalez Duque, 36, who was accompanying him, was seriously wounded. The report notes that this was the 74th murder this year. Police Chiefs Summoned to Urgent Meeting – Monterrey El Porvenir reports on an urgent meeting of police chiefs with State Public Security Secretary Antonio Garza Garcia to discuss the new actions to be taken to reinforce security after the attack on the San Pedro Police Station. OSC found no fileworthy material in the following sources: Mexicali La Cronica de Baja California, Tijuana El Sol de Tijuana, Ciudad Juarez El Diario, Monterrey El Norte, Reynosa El Manana de Reynosa, Tampico Milenio Diario de Tampico.

To improve on these issues, I subset the data to include the raw text available from the larger ICEWS database. Then, using a subset of cases from 2004-2010, I reviewed each individual case. This task includes two main goals: to label events as they relate to specific drug cartel actors in the area and to address aggregation problems in the data. In addition, I coded for duplicate cases. I identified that this data has fewer duplication issues than previously found in other ICEWS data (such as protests) but has a number of complex aggregation and parsing problems.
After manually recoding the data, the number of observations increases by 105 cases. This demonstrates that there is likely a high pay-off in reconfiguring the algorithm employed for parsing the data to search for more than one available city name in a given news story. In many cases, a higher number of listed city names signals a bulletin of events, rather than one conflictual event. This suggests that the algorithm needs to be adapted to include a “check” which searches for whether one or more state names match a pre-existing list of Mexican state names. At present, the algorithm searches only the first few lines of the story and then stops, thus attributing the event to whichever state name is first listed. Once it is identified, it then codes the event under this regional name and moves on. If, however, the algorithm is altered to search for whether the text contains one or more of these regional names, it can then identify which text stories are actually a nested series of events rather than a singular event. Adding this fixed search procedure to the deductive parsing methods currently employed would enhance the accuracy of the data overall by recording a higher, more accurate number of events, as well as increase the variation of location. Figure 4.2 depicts the shortfalls in the original raw ICEWS data.\textsuperscript{15}

In addition to correcting for the number of conflictual events over time, I also correct for the vague coding descriptors found in the original data. To do this, I read the stories and coded whether a specific criminal group, cartel, or cartel member was mentioned. I then code the new actors’ names and list any relevant actor involved in the conflictual event. A variety of other news sources, blogs, and area expert knowledge were used to complete this new set of actor codings. If I could not locate any resources that allowed me to identify which cartel, or actor, was involved in the event, I utilized a pre-existing data set containing the locations of cartels over time.\textsuperscript{15} After reviewing the raw data manually, it is clear that typically state and municipality names are only used in reference to other conflictual events, not in reference to the same story about one event. A caveat here, which remains to be investigated further, is whether or not this pattern is unique to the Spanish language newspapers and Mexican reporting, or whether it replicates across country contexts. So far, it seems the problem operates in a similar structure in the Chinese context.
This data set was created by Viridiana Rios and Michele Coscia and records locations of cartels down to the municipal level. An example of the territorial changes for the Sinaloa Cartel are shown in Figure 4.1.\textsuperscript{16} Exploiting online newspapers and blogs, they develop a mechanism that uses unambiguous query terms to classify the areas in which criminal organizations operate.

\begin{flushleft}
\footnotesize\textsuperscript{16} Maps and data provided by Viridiana Rios, which can be accessed online, see Coscia and Rios (2012).
\end{flushleft}
Figure 4.1: Sinaloa Cartel’s territorial movements from 2006-2010
Table 4.2 shows the newly coded actor names for actor types. The final data set improves the data by providing a richer picture both in terms of the number of events captured, as well as the relevant actors. The new data reveals a maximum of 26 conflictual events in a given month compared to the previous 13. The new data has a total count of 290 unique events compared to the former 187 original cases. Also, the data better reflects spikes in violence during the time periods when cartels were engaged in some of the heaviest and deadliest territorial disputes. Take, for example, the spike in the data between 2007 and 2008 shown in Figure 4.2, and then again the higher levels of violence from 2008 to 2009. The spike around mid-2007 is present in both the original data and newly re-coded data, though the severity of the jump is more accurately depicted by the new data.

![Conflictual Events Over Time](image)

**Figure 4.2**: Original raw ICEWS data compared to updated, re-coded event data for the time period 2004-2010. The orange line represents the updated data and the grey line reflects original machine-coded data.
The trajectory of the data between 2008 and 2009, however, differs significantly. In the original data it would seem that during this time violence is only slightly higher than before the 2007 spike. With the new data we are able to see that violence is much higher than the pre-2007 levels and seems to be following an increasing pattern. Perhaps most importantly, this new data allows for the creation of network data that allows future research to explore how other political events of interest influence the evolution of this network.

Table 4.2: List of updated actor names 2004-2010

<table>
<thead>
<tr>
<th>Actor Names</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army</td>
<td>13</td>
</tr>
<tr>
<td>Beltran-Leyva Cartel</td>
<td>12</td>
</tr>
<tr>
<td>Business</td>
<td>1</td>
</tr>
<tr>
<td>Citizen</td>
<td>62</td>
</tr>
<tr>
<td>City government</td>
<td>7</td>
</tr>
<tr>
<td>Federal government</td>
<td>2</td>
</tr>
<tr>
<td>Federal police</td>
<td>35</td>
</tr>
<tr>
<td>Gulf cartel</td>
<td>13</td>
</tr>
<tr>
<td>Indigenous</td>
<td>2</td>
</tr>
<tr>
<td>Juarez cartel</td>
<td>12</td>
</tr>
<tr>
<td>La Familia</td>
<td>15</td>
</tr>
<tr>
<td>Los Zetas</td>
<td>15</td>
</tr>
<tr>
<td>Military</td>
<td>9</td>
</tr>
<tr>
<td>Municipal government</td>
<td>6</td>
</tr>
<tr>
<td>Municipal police</td>
<td>40</td>
</tr>
<tr>
<td>Navy</td>
<td>2</td>
</tr>
<tr>
<td>Sinaloa cartel</td>
<td>13</td>
</tr>
<tr>
<td>Special forces</td>
<td>2</td>
</tr>
<tr>
<td>State government</td>
<td>5</td>
</tr>
<tr>
<td>State police</td>
<td>16</td>
</tr>
<tr>
<td>Tijuana cartel</td>
<td>3</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>290</strong></td>
</tr>
</tbody>
</table>
4.4 Creating a Conflict Network in Mexico

In the final stage of the analysis, I create sociomatrices for each year of the cleaned data. These sociomatrices can be thought of as a summary of interactions between all actors involved in conflictual events within a year. Given that there are \( n \) actors in a year I construct an \( n \times n \) sociomatrix \( Y \). The number of conflictual dyadic interactions for any actor \( i \) and \( j \) is simply the number of events between those two actors during each given year. The resulting matrix is an undirected, symmetric matrix, as represented below.

\[
\begin{bmatrix}
  \text{actor}_i & \text{actor}_j & \text{actor}_k & \text{actor}_l & \text{actor}_m \\
  \text{actor}_i & 0 & 2 & 0 & 0 \\
  \text{actor}_j & 2 & 0 & 0 & 2 & 1 \\
  \text{actor}_k & 0 & 0 & 0 & 0 & 4 \\
  \text{actor}_l & 0 & 2 & 0 & 0 & 4 \\
  \text{actor}_m & 0 & 1 & 4 & 4 & 0
\end{bmatrix}
\]

These matrices reveal a variety of interesting dynamics in the data, as shown in the network graphs of Figure 4.3, Figure 4.4, and Figure 4.5. First, Figure 4.3 shows the network graph for the first two years of the data. Beginning as early as 2004 to 2005, there is a substantial increase in the number of actors in the network. We observe that “Citizens” has a high degree in both networks or, rather, that the Citizen node is linked to a high number of other nodes within the group. In both of these networks we also see that the municipal police are the most heavily involved in these conflictual events, whereas other levels of government, such as the federal police, play a minor role in this time period.

These dynamics shift in 2006 and 2007, shown in Figure 4.4. Here we see that both federal agencies and municipal forces are active in the conflict. Citizens are also entangled in these events, and the number of total actors increases from 12 in 2005 to 16 in 2006. There is a strong triad forming between citizens, federal police,
Figure 4.3: The evolution of the Mexican criminal conflict, 2004-2005. Orange nodes are government actors, blue represents civilian actors and green corresponds to criminal organizations. The links (grey lines) are weighted by the number of conflictual events for that year.

and municipal police. We also observe a jump in the number of cartels involved in the network, as new actors such as La Familia Michoácana, the Mexican Mafia, and the military begin to take part in the conflict. Notably, this network also shows that the federal police and municipal police are now both highly active. This reflects a change in the government policy at that time. By 2006 Calderón was elected president and implemented a militarized strategy, sending federal police and troops into the most contested regions. By 2007, the network has 18 actors and we see that the relationships become more complex as cartels begin to interact with one another. This sufficiently reflects what we now know to be true: following Calderón’s 2006 efforts, violence increased due to grueling competition between newly fragmented cartels.

In 2008, similar dynamics are in motion, but it is difficult to decipher the various roles played by the different levels of government. Earlier, both federal and municipal governments seem similarly involved, but by 2008 and 2009 the municipal government
Figure 4.4: The evolution of the Mexican criminal conflict, 2006-2007. Orange nodes are government actors, blue represents civilian actors and green corresponds to criminal organizations. The links (grey lines) are weighted by the number of conflictual events for that year.

has a broader connectivity to diverse actors while the federal police seems to become more limitedly engaged with the Sinaloa Cartel. Overall, density increases across these networks overtime. Finally, the years 2008 and 2009 demonstrate how often citizens are caught in the mix of the violence. A consistent link across networks is that of civilians who seem to be caught in the crosshairs of much of the violence.

To further assess how different levels of government change their role in the network over time, Figure 4.6 presents the eigenvalue centrality for each actor. Eigenvector centrality is calculated by assessing how well connected an actor is to the other actors of the network. Specifically, those with the highest eigenvector centrality are well-connected to other actors who are also well-connected across the network. In this case we can consider an actor with high eigenvector centrality to be a key player in the conflict.

Figure 4.6 reveals an interesting story of coordination between different levels of government. In 2004 both the municipal police and the federal police have similar
levels of eigen centrality. In 2005 they both decrease, with a larger decrease for the municipal police. In 2006 we see that both actors have very high centrality, indicating a deep involvement in the conflict. This reflects the Calderón strategy: sending federal forces into local areas to help bolster security enforcement and combat the cartels. We then see these two actors diverge. Federal police stay highly central in the network in 2007 while the municipal forces seem to back down. At this year these two actors experience the biggest gap in centrality, signaling that coordination between the two levels of governments decreases as federal forces take over combat operations relative to municipal security forces.

By 2008, we see a stark shift as municipal forces are once again involved in the conflict while federal forces seem to back down. This is particularly interesting because at this time it becomes well known to the public and to the government that Calderón’s strategy has largely failed, causing more violence rather than stemming it. Figure 4.6 shows that after federal forces are very active from 2006-2007, in
2008 they then recede and the municipal police become more active in the network. Finally, the year 2009 shows closer centrality scores than 2008 and 2007, signaling that perhaps these two levels of government begin to cooperate again.

Without the re-structuring of the event data into networks we would not be able to see the ways in which different levels of governments interact over time. This approach offers a more complete picture of these dynamics than has previously been possible and enables future research to examine what factors influence government coordination within the network.

4.5 Latent Space Analysis

A further analysis of these networks allows us to answer questions about the probability of interaction between actors in a network. While there are several approaches to social network analysis, I employ the latent space approach. Latent space approach is most useful when the main goal is to understand the role of individual actors in the network. Specifically, the latent space approach can identify interactions that

**Figure 4.6:** Eigen centrality at the yearly level (2004-2009) for both municipal police and federal police
are unobserved in the raw data. This approach is presented by Hoff et al. (2002) and has been used in political science in several applications.\footnote{For examples regarding political conflict see Dorff and Ward (2013) or Metternich et al. (2013)}

The essential idea of the latent space is to capture third-order dependence. A common example involves relationships within a triad $i, j, k$. If we know that $i$ considers $j$ a friend and $j$ is a friend of $k$, then the probability that $k$ will also be a friend of $i$ is likely to be higher than for a random person outside of this triad, since $i$ and $k$ are at least indirectly connected in the friendship network by virtue of their separate linkages to $j$. Thus, information about the relationships in the first two dyads of a triad can usually reveal something about the relations in the third dyad. Third-order dependence, or the “unobserved,” latent social space then becomes a highly useful concept. The latent space can be thought of as a probability space, whereby observation of two links, $i$-$j$ and $j$-$k$, suggests that $i$ and $k$ are not too far away from each other in this social space and therefore are also likely to have a link between them. Since third-order dependence is an expression of the underlying probability of a link between two actors, we do not observe the complete set of all of these network characteristics, but we can infer them from the pattern of dyadic linkages. If we can map out the latent positions of each actor in the “social space,” we can then assume that the ties in the network are conditionally independent.

Formally, if we are interested in modeling an $n \times n$ sociomatrix that contains dyadic data, we might do so with a typical linear regression approach:

$$y_{ij} = \beta' x_{i,j} + \epsilon_{i,j}. \quad (4.1)$$

While this approach is certainly common, it assumes the errors, $\epsilon_{i,j}$ are independent. In employing the General Bilinear Mixed Effects modeling (GBME) approach, we alter the assumption of the errors and instead assume that the errors $\{\epsilon_{i,ji} \neq j\}$
have a covariance that is exchangeable under identical permutations of the indices $i, j$. We then assume normality, which implies that the residuals can be represented as a linear random-effects model with sender ($a_i$) and receiver ($b_j$), and dyadic $y_{ij}$ effects:

$$
\epsilon_{ij} = a_i + b_j + \gamma_{i,j}
$$

$$
\begin{bmatrix}
  a_i \\
  b_i
\end{bmatrix} \sim N \left( \begin{bmatrix} 0 \\
  0 \end{bmatrix}, \begin{bmatrix}
  \sigma_a^2 & \sigma_{ab} \\
  \sigma_{ba} & \sigma_b^2
\end{bmatrix} \right)
$$

$$
\begin{bmatrix}
  \gamma_{i,j} \\
  \gamma_{j,i}
\end{bmatrix} \sim N \left( \begin{bmatrix} 0 \\
  0 \end{bmatrix}, \begin{bmatrix}
  \sigma_{\gamma_i}^2 & \rho \sigma_{\gamma_i}^2 \\
  \rho \sigma_{\gamma_i}^2 & \sigma_{\gamma_j}^2
\end{bmatrix} \right).
$$

This allows us to estimate the following moments:

$$
E(\epsilon_{i,j}^2) = \sigma_a^2 + \sigma_b^2 + \sigma_{\gamma}^2
$$

$$
E(\epsilon_{i,j}\epsilon_{j,i}) = \rho \sigma_{\gamma_i}^2 + 2\sigma_{ab}
$$

$$
E(\epsilon_{i,j}\epsilon_{i,k}) = \sigma_a^2
$$

$$
E(\epsilon_{i,j}\epsilon_{k,j}) = \sigma_b^2
$$

$$
E(\epsilon_{i,j}\epsilon_{k,i}) = \sigma_{ab}.
$$

where $\sigma_a^2$ represents dependence among dyadic observations with a common sender, $\sigma_b^2$ represents dependence among measurements having a common receiver, and $\rho$ is the correlation of measurements within a dyad, or reciprocity. To adjust for other types of data, such as the count data used here, the error structure can be altered so that the dyadic data are conditionally independent given the random effects but are unconditionally dependent.\textsuperscript{18}

\textsuperscript{18} Where $g(\cdot)$ is the inverse-link function. This is a summary of the full specification provided in Hoff and Ward (2004) and Hoff (2005).
\[ \theta_{i,j} = \beta' x_{i,j} + a_i + b_j + \gamma_{i,j} \]
\[ E(y_{i,j} | \theta_{i,j}) = g(\theta_{i,j}) \]
\[ p(y_{1,2} \ldots y_{n,n} | \theta_{1,2} \ldots \theta_{n,n-1}) = \prod_{i \neq j} p(y_{i,j} | \theta_{i,j}). \] (4.4)

Following Hoff (2005), we can define the unobserved, K-dimensional vector \( z_i \) for each node \( i \) in the network. By modeling the interaction of two nodes as an increasing function of their proximity in the latent space, we include patterns of transitivity, balance, and clusterability into the network. Formally, we can incorporate this into the model by adding the inner product \( z_i' z_j \) to the linear predictor:

\[ \epsilon_{ij} = a_i + b_j + \gamma_{i,j} + z_i' z_j. \] (4.5)

I calculate latent positions for all actors in each yearly network. I will focus on the 2005 results to highlight the findings from the latent analysis. In Figure 4.7, I compare the network generated from the raw event data to the latent space network generated from the GBME. The left panel depicts the network according to the raw, empirical data. The right panel plots the latent space positions for each actor in the network. Recall, nodes closer together in the latent space tell us that there is a high probability of interaction between these two nodes. If there is not a link drawn between two closely positioned nodes in the original network (left panel), then the latent space is likely capturing an unobserved link between actors (right panel).

In the empirical network (left panel) the placement of the nodes are not meaningful; only the links in between the nodes are of interest. In latent space, however, the placement of these is extremely meaningful and represent the aforementioned probability space. Placing the two graphs side by side yields an easy visual comparison between the information provided by the raw data and those insights gained from the latent space.
In 2005, shown in Figure 4.7, we observe clear clusters of actors in the latent space. In the empirical network, on the left, we see that civilians are caught in many violent events; yet, in this network the link between citizens and state police is weak in comparison to the other ties. The clustering in the latent network, however, suggests that the state police and citizens are likely involved in more conflictual events than is observed in the raw data. We see a similar story for the Sinaloa Cartel in the empirical network, where we observe a link between the Sinaloa Cartel and the federal government, but the latent positions then reveal a triadic structure between the Sinaloa Cartel, the army, and the federal government. This signals a high probability of interaction between these three actors. This finding tells us that the army is likely involved in violent events with the Sinaloas, despite the fact that this link is not reported in the data. Interestingly, the latent space also shows that this triadic cluster is least likely to interact with citizens, the Gulf Cartel, and the state police. This is noteworthy in that it suggests that at this time federal actors were more involved in managing disputes with the Sinaloas—a widespread criminal organization—while state police were more involved in conflict with the Gulf Cartel, which was a more regionally concentrated organization during this period. In 2005 the Sinaloa Cartel was in control of much of the Veracruz region, but had a widespread influence across Mexico. This was a year of great influence for the Sinaloa Cartel as they eliminated competition, primarily in the areas of the Arizona border region. During this time they became a key target of federal level armed agencies, a reality which is captured by the latent network.

The latent space also distinguishes a cluster between the municipal police, Tijuana Cartel, and city government. This is especially noteworthy because the raw data only reveals a link between the Tijuana Cartel and citizens, yet the latent space tells a fuller story whereby the Tijuana Cartel has the highest probability of interaction with the municipal police and city government. In 2005 the Tijuana Cartel
concentrated almost all of its operations in Baja California, drawing the attention of local government security groups. The latent space analysis suggests that the main government actors involved in conflict with the Tijuana Cartel were indeed local governments, not federal entities.

Finally, these clusters tell us a broader story about government coordination. During this time period, we can see that those government actors that have the highest probability of interaction are at the same level of government, i.e., the federal government is likely to coordinate with the army; the municipal police is likely to be involved in the same events as the city government; and the special forces are most likely to interact with the federal police. By assessing the dependencies in the data, the latent space demonstrates changes in cooperation and conflict in a way that cannot be identified by the original network data alone.

![Figure 4.7](image-url): A comparison between the empirical network and the latent space in 2005. The left panel presents the original data network and right panel plots actors in the latent space. In both graphs, orange nodes are government actors, blue nodes represent a civilian actor, and green nodes are criminal organizations. Actors closer together in the latent space have a higher probability of interaction.
Overall, these results show that the authorities should be cooperating with one another more than is evident in the actual raw stories from the ICEWS data. The distance between authorities in the latent network shows that this is likely true. Particularly in Figure 4.7 we see that the authorities are fairly spread out, clustered nearest to armed actors in four different groups. Here, the latent space is able to tell us not just about unobserved conflict, but about unobserved cooperation between authorities.

4.6 Conclusions and Future Research

By restructuring original raw ICEWS data, I provide original data and demonstrate the utility of using network analysis to map the criminal conflict in Mexico. I examine the ways in which this process can be improved upon for future iterations, and the benefit of using generalized bilinear mixed effects models to reveal hidden information about the original data itself. This provides a major improvement on pre-existing data and generates future avenues of research on how political events—such as protests and elections—influence the evolution of conflict networks.

There are several main conclusions to draw from this study. First, there are important takeaways for future research regarding the Mexican conflict itself. At present, the future of the Mexican criminal conflict is indeterminate. Civilian death counts remain high, and it is unclear whether government strategies are working. This study presents key findings about cooperation between different levels of government and highlights the ways in which this coordination changes over time. Questions regarding why these changes occur remain unanswered. The original motivation of this study was to create a platform for future research to explore whether civilian actions influence conflict at an aggregated level. With the inclusion of data on protests events, I can now directly test this relationship. I can model whether or not mass protest campaigns in one time period effect activity in the network during
the next time period. There are, however, other lines of inquiry that this study can support. In the last few weeks, the Mexican government has captured several key leaders from the cartels. Recently in the northeastern state of Monterrey, the leader of Mexico’s notorious Zetas drug cartel was captured during a raid. The Zetas, a cartel originally formed as the armed wing of the Gulf Cartel, has now become one of the most technologically sophisticated and brutal cartels in the region. How will the arrest of this criminal leader affect violence between the Zetas and other cartels? Or how do these government strategies impact violence involving civilians? Critically, this study sets the stage to test the conditions under which violence between specific sets of actors increases or decreases.

Second, this study makes a significant data contribution: this data approach can enhance the broader study of civil conflict. Using area-expertise to improve machine-coded data produces a replicable strategy across countries throughout the world. Machine-coded data allows for this kind of cross-cutting replicability, enabling researchers to rely on similar news sources in different regions, employ consistent methods of parsing and cleaning, and create national-level dynamic data as I have done here. The implications for this are notable: thus far in political science, country-level data is often limited by its uniqueness, i.e., researchers focus on regional data sets with details about a specific pre-determined set actors and related events (such as the Armed Conflict Location & Event Data Project (ACLED) data project).\textsuperscript{19} Larger projects such as the Uppsala Conflict Data Program (UCDP) data collection project are focused only on armed conflict, and are updated with less frequency.\textsuperscript{20} The analysis shown here demonstrates that this kind of data can provide critical and timely information on crisis events.\textsuperscript{21}

\textsuperscript{19} See Raleigh et al. (2010) for data details.

\textsuperscript{20} For a discussion of both ACLED and UCDP see Eck (2012).

\textsuperscript{21} There are efforts at Duke’s Wardlab to create similarly fine-grained data in other regions such
Finally, this study shows how the creation of network data, and particularly the use of latent space models, can actually identify meaningful connections between actors that are not directly observable in the original data. This approach provides information about unobserved conflict and cooperation—a critical advancement in an age of media bias and underreporting of events in violent contexts. In this case, I show that while the raw data does capture the general ebb and flow of the Mexican drug war, the latent space analysis shows a richer and more complex picture of how cooperation and conflict changes over time. Of particular importance, I demonstrate how different levels of government cooperate at different stages of the conflict. I also show which government entities are most likely combat which cartels. For example, my findings for 2005 reveal that the Army was the most likely actor to face conflict with the Sinaloa Cartel, despite that this direct link is not reported in the original data. When these dependencies in the data are ignored, researchers cannot deeply investigate how, and why, violent actors change behavior over time. As the promise and value of a frequently updated and detailed machine-coded dataset remains high, future work should build upon the insights found in the creation of network data and the use of latent space models. Utilizing these approaches allows researchers to track critically important events quickly and effectively, and to produce knowledge that can support efforts by civilians, governments, activists, and policymakers to deescalate conflicts.
Appendix A

Details on Mexican Survey (2013)

This data corresponds with Chapter 2 and provides survey data details. This survey was a larger project funded and designed by Sandra Ley Guitierrez.

The data were collected by the survey firm, Buendá and Laredo in Mexico during July 5, to July 8 2012. The interviews were face-to-face interviews with structured paper-and-pencil questionnaires administered by trained interviewers. The population sampled were Mexican adults 18 years of age or older that reside in housing units within the national territory. The data will be made publicly available at the author’s website.

Sampling Frame

The sampling frame is an area frame based on a listing of geographical units called electoral sections ("secciones electorales"), our primary sampling units or PSUs. All land area in the country is divided into electoral sections, which constitute the basic territorial unit of single-member electoral districts for the registering of citizens to enroll as voters (padron electoral). The sampling frame is based on electoral sections since they are the most updated and complete data readily available. The most
recent release date was May 2012, and according to official figures,1 the lista nominal represents roughly 95.4% of the population 18 years of age or older in the entire country. Information from the Geoelectoral Information Catalog, acquired in May 2012 from the Federal Electoral Institute, augmented with the following sources was assembled to create the sampling frame:

- Catálogo de claves de entidades federativas, municipios y localidades (INEGI, 2010).
- Catálogo de informacion Geoelectoral (IFE, May 2012).
- Padrón electoral y lista nominal por sexo, rango de edad y sección (IFE, May 2012).
- Catálogo de Manzanas (IFE, May 2012).
- Planos por Sección Individual, (IFE, May 2012).

Sampling Frame

In order to achieve a representative sample of approximately 1,000 adults age 18 and older, Buendía & Laredo conducted a multistage area probability sample design. The selection of each respondent requires a four step sampling process described below. **First stage: selection of PSUs.** Each PSU in the sampling frame is assigned to a non-overlapping sample stratum based on regions defined by their level of violence and urban/rural status. Strata based on region encompass four categories ranked from 1 to 4, in which 1 represents regions with the lowest level of violence and 4 represents regions with the highest level of violence. The states are listed according to each strata in Table A.1.

Strata are also defined according to the state of urbanity (Urban/Rural and mixed) of the electoral sections:
### Table A.1: Geographical region

<table>
<thead>
<tr>
<th>Geographical Region</th>
<th>States</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong></td>
<td>Yucatán, Tlaxcala, Campeche, Querétaro, Guanajuato</td>
</tr>
<tr>
<td></td>
<td>Puebla, Oaxaca, Hidalgo, Baja California Sur, Aguascalientes</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>Tabasco, D.F., Chiapas, Estado de México</td>
</tr>
<tr>
<td></td>
<td>Quintana Roo, Veracruz, Baja California, Sonora, San Luis Potosí</td>
</tr>
<tr>
<td><strong>Level 3</strong></td>
<td>Michoacán, Morelos, Jalisco, Zacatecas</td>
</tr>
<tr>
<td></td>
<td>Nayarit, Tamaulipas, Colima, Coahuila</td>
</tr>
<tr>
<td><strong>Level 4</strong></td>
<td>Nuevo León, Guerrero, Sinaloa, Chihuahua, Durango</td>
</tr>
</tbody>
</table>

a) Urban section: It is located in an urban locality and it is formed by well defined blocks. Urban sections have street names and count with a series of public services such as tap water and electricity. Usually both street names and public services are officially recognized by the local authorities. These sections are graphically represented on the sectional urban map.

b) Rural section: A rural electoral section is constituted by one or many rural localities that on their own cannot form an electoral section. These sections are characterized by the preeminence of open places that are dedicated to primary economic sectors. The public services in these localities are either limited or inexistent.

c) Mixed section: These sections are geographical areas that are divided by a series of blocks that form part of an urban locality; however, one or many rural localities are also present. Due to the fact that these sections are a combination of the characteristics described in urban and rural sections, it is common to witness an interaction of spaces dedicated to primary economic sectors and housing units.

Hence, altogether, stratification comprises the sub-populations shown below:

**Second stage: Area segments sampling.** In urban electoral sections, blocks are our second-stage sampling units (SSUs). A block is defined as a geographic space delimited by streets or avenues. Within each sampled PSU, two blocks are
selected drawing a simple random sample without replacement through a second stage of selection from the Catalogo de Manzanas (IFE). Then, SSUs are identified and assigned to interviewers through cartographic maps extracted from the Planos por Seccion Individual (IFE). Human settlements in selected areas (SSUs) are identified and assigned to interviewers through the Google-IFE app2, which offers a map/satellite/terrain view of all electoral sections in the country (see below). Housing units that are widely separated from others may be left out of the eligible units.

**Third stage: Sampling of housing units.** A housing unit is defined as a house, apartment, mobile home, group of rooms, or single room that is occupied (or, if vacant, is intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from any other persons in the building and which have direct access from the outside of the building or through a common hall. Housing units may not be easily seen when walls or other barriers are present. For example, housing units in multi-units structures are difficult to identify. The presence of mail boxes, utility meters (water, gas or electricity) and multiple entrances are used as observational clues on the presence of multiple units. However, hidden entrances, gated communities, or locked buildings may be missed.

Once selected blocks in urban electoral sections are identified, housing units per block were selected using a systematic method by means of a spiral method and
clockwise walking. Eight interviews are conducted in each electoral section (four per SSU). Each block is covered starting by the northeast corner using a sampling interval of 3 housing units, while the blocks are walked clockwise. Once a questionnaire was completed, the interviewer moves to the next side of the block; therefore only one interview is conducted on each side of the block.

In multi-story buildings the selection process of households was conducted in the same way as in regular households. The maximum number of interviews to be applied inside the same building is four. However, this is only when the building occupies a whole block. When the building is located on one side of the block, the maximum number of interviews to be applied inside the building is one. After getting the interview, the interviewer will not only have to move from the building but from that side of the block as well. If in the household selected no one opened the door or if the family members refused to attend the interviewer, the household had to be replaced by the one next to it. If again no member of the family was available to attend the interviewer, he had to move to the next house and so on.

**Forth stage: Respondent selection.** Each sample housing unit is then contacted in person by an interviewer. Within each cooperating sample household, the interviewer conducts a short screening interview with a knowledgeable adult to determine if household members meet the study eligibility criteria. A household includes all the persons who occupy a housing unit. The occupants may be a single family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living arrangements. If the informant reports that one or more eligible adults live at the household, the interviewer prepares a complete listing of household members and proceeds to randomly select a respondent. The respondent is selected by listing all eligible respondents in the household (starting from the youngest one) and then matching the number of eligible persons (row) with the last digit of the questionnaire number (column) using a table of random numbers.
For instance, if a household with 4 eligible persons was selected and the questionnaire number was 578, the chosen respondent would be Jim (see below). The last digit of the questionnaire number is 8 (column) while the row number is 4. The combination of Row 4 and Column 8 gives the cell with the value of 1, which is the number of Jim in the list of eligible respondents. If the questionnaire number had been 872, the selected respondent would have been Meredith.

**Weighting procedure**

The final analysis weights are the product of the sampling selection weight and a post stratification factor: \( w_f = w_s \cdot w_p \). The sample selection weight factor is the reciprocal of the probability that a population element was chosen to the sample.

\[
    w_s = \frac{1}{\prod_{n=1}^{J} f_j}
\]

Where \( w_j \) is the probability of selection in stage \( j = 1, \ldots, J \). Then, the sampling weights, \( w_s \), were adjusted to reproduce the total number of electors per region. We also use a post stratification factor to improve the quality of the survey estimates incorporating known information on the full survey population. Post stratification forms several postsrata of respondent cases.
Appendix B

Supporting Tables for Chapter 3

This appendix corresponds with Chapter 3. It provides a few tables referencing the survey experimental design and balance.

**Treatment Balance.** The following three tables display the balance of the three treatment groups across the variables of education, sex, and party identification. The treatments groups have no significant difference between them across these variable sets.

Table B.1: Education levels across treatment groups

<table>
<thead>
<tr>
<th></th>
<th>Treatment 1</th>
<th>Treatment 2</th>
<th>Treatment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>23</td>
<td>15</td>
<td>23</td>
</tr>
<tr>
<td>Primary</td>
<td>135</td>
<td>126</td>
<td>124</td>
</tr>
<tr>
<td>Secondary</td>
<td>206</td>
<td>213</td>
<td>188</td>
</tr>
<tr>
<td>Higher</td>
<td>76</td>
<td>85</td>
<td>86</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>439</td>
<td>421</td>
</tr>
</tbody>
</table>
Table B.2: Males and Females across treatment groups

<table>
<thead>
<tr>
<th></th>
<th>Treatment 1</th>
<th>Treatment 2</th>
<th>Treatment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>217</td>
<td>217</td>
<td>211</td>
</tr>
<tr>
<td>Female</td>
<td>223</td>
<td>222</td>
<td>210</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>439</td>
<td>421</td>
</tr>
</tbody>
</table>

Table B.3: Party ID across treatment groups

<table>
<thead>
<tr>
<th></th>
<th>Treatment 1</th>
<th>Treatment 2</th>
<th>Treatment 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>366</td>
<td>376</td>
<td>349</td>
</tr>
<tr>
<td>PRD</td>
<td>59</td>
<td>49</td>
<td>56</td>
</tr>
<tr>
<td>NA</td>
<td>15</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Total</td>
<td>440</td>
<td>439</td>
<td>421</td>
</tr>
</tbody>
</table>

Table B.4: Crosstabulation of two variables: views on violent vs. nonviolent action

<table>
<thead>
<tr>
<th>Civil Resistance Effective</th>
<th>Violence Effective</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>550</td>
<td>83</td>
<td>633</td>
</tr>
<tr>
<td></td>
<td>63 %</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>323</td>
<td>192</td>
<td>515</td>
</tr>
<tr>
<td></td>
<td>37%</td>
<td>70%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>873</td>
<td>275</td>
<td>1148</td>
</tr>
<tr>
<td></td>
<td>76%</td>
<td>24%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C

Complete Survey Instrument for Original 2014 National Mexican Survey

This appendix first summarizes other aspects of the data not entirely covered by the analysis in Chapter 3. Much of this is drawn for a report written for ICNC, the main funder of the survey project. The aim is to include other information of interest relevant to the larger project. I first summarize several key variables and other key findings before then providing the entire survey instrument. The survey instrument included below are the translated English version for the 2014 Mexican Survey. The Spanish version is available upon request. This survey was funded by Duke University, University of Denver, and the International Center for Nonviolent Conflict (ICNC). The pilot was conducted by the lead investigator, Cassy Dorff, in coordination with the survey firm Data OPM based in Mexico City.

C.1 Executive Summary

• Do people support civil resistance in Mexico?

  About 41% of the population said they agree (somewhat or strongly) with
the idea that civil resistance methods, such as strikes, protest, and blockages against the government are an affective way to improve their situation. Similarly, about 49% of the population reported to agree with the idea that nonviolent civil resistance is a more effective method of to improving security than violent action. This finding suggests that there is a high level of favorability to nonviolent methods, and latent potential for the success of civil resistance campaigns in Mexico.

• Does information about civil resistance increase support for it?
Yes. In further statistical modeling on the correlates of support for nonviolent resistance, the results show that those who are somewhat or very familiar with Javier Sicilia’s movement (the Movement for Justice with Peace and Dignity) are significantly more likely to view civil resistance as more useful than violent resistance. Similarly, those who are not very familiar with Sicilia’s movement are less likely to view civil resistance as effective. This finding holds within the oversample of regions near auto-defense groups. Furthermore, those who are invited to a civil resistance event/action by a family member or close friend are more likely to attend. This suggests information about events carries a heavier weight when transmitted by those individuals who share close ties to the respondent; 30% of those invited to an event by a family member or close friend actually report attending a civil resistance event. Comparatively, of those who never were personally invited, only about 2% attended an event.

• How does civil resistance start amidst conflict?
The survey results and preliminary regression analysis suggest three key factors for understanding how civil resistance might begin within violent settings: (1) information about current campaigns increases the view that civil resistance is effective, and thus potentially increases latent support for campaigns; (2) infor-
mation disseminated through trusted networks such as family and close friends activates participation; (3) attribution of security responsibility to local authorities is associated with the belief that civil resistance is more effective than violent resistance. Those who view local authorities as responsible for their personal security situation are more likely to perceive nonviolent resistance as an effective means of improving their security.

Do opinions about resistance methods predict a respondent’s willingness to support local, civilian-organized resistance groups?

The results from the oversample and experimental treatment suggest that those who support local resistance groups or view them as effective are likely “supportive types” who favorably view locally organized groups regardless of the tactics they employ. After further statistical analysis, the results show that those respondents who said that they believe nonviolent methods are effective are more likely to support any local group (regardless of methods used) by providing goods, donating funds, and sharing news. However, respondents who said that they view violent methods as effective are also more likely to provide goods, donate funds, and share news about a local resistance group regardless of methods employed. One key difference, however, is that those who responded favorably to violent methods are also more likely to attend meetings or events of a resistance group, regardless of method employed. What this might suggest is that while citizens hold beliefs about which method is truly effective, or most effective; those who regard either form of resistance as useful are more likely to support local resistance in ways that are low-risk such as donating funds.
C.2 The Mexican Case

Methodology

In coordination with a survey team based in Mexico, I conducted a national survey using a probabilistic sample design.\(^1\) The Universe under study consists of individuals of 18 or more years of age that are Mexican residents and live in the Mexican territory at the time of the survey.

We used the Electoral Sections from the Federal Electoral Institute (IFE) as a sampling framework. The sample design is probabilistic to the selection of household with multiple stages. The electoral sections are the Primary Sample Units (PSU). These were stratified by five levels of violence and within these strata were randomly selected using a Probability Proportional to Size (PPS). A total of 130 PSU were selected. A total of 10 valid interviews were conducted in each PSU.

Within each PSU, neighborhood blocks were enumerated. The map of the blocks are shown in Figure C.1. After enumeration, two blocks were selected randomly using a simple random selection procedure. These constitute the Secondary Sample Units (SSU). In each SSU, a total of five interviews were conducted. The five households were selected using a systematic skip pattern with a random start and according to household density in each SSU. These constitute the Tertiary Sample Units (TSU).

In each TSU a single individual of 18 or more years of age was selected randomly using a last birthday method with quota control by gender and age (according to the 2010 census). The selection of these individuals constitutes the last phase of the multi-stage sample procedure. The national representative sample consists of 1000 valid interviews and has an estimated margin of error of +/- 3.1% at a 95% confidence level. There is also an oversample of selected places with geographic proximity to

\(^1\) The survey team was with Data OPM, a public opinion firm based out of Mexico City. The key point person on the project was Pablo Paras.
communities were there are self-defense groups (grupos de autodefensa). The sample size of this over-sample is 300 valid interviews and has an estimated margin of error of +/- 5.7% at the same confidence level.²

**C.3 Opinions on Resistance**

Variables that capture views on nonviolent and violent actions serve as the key dependent variable from the study. Figure C.3 reports the distribution of responses to three different questions that capture the respondent’s views on different modes of action. These three variables are discussed below.³

**C.3.1 Civil Resistance vs. Violent Resistance**

This question asked, “some people think that non-violent civil resistance (such as strikes, protests and boycotts, against the government is a more effective way to improve security than violent/armed auto-defense groups. Do you agree, disagree,

---

² The oversample was conducted within the states of Guerrero, Michoacan, and Hidalgo.

³ For the remainder of the report, and figures and tables shown are generated using the complete sample (National sample + Oversample) unless otherwise noted.
et al. with this statement?" We can see from Table C.1 that about 49% of respondents believe civil resistance is *more* effective than violent resistance. This is a considerable finding, and reflects overall strong feelings of approval on the efficacy of nonviolent methods.

Table C.1: Civil resistance vs. violent resistance

<table>
<thead>
<tr>
<th>Civil vs. violent resistance</th>
<th>percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat agree</td>
<td>33.62%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>15.62%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>17.62%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>22.38%</td>
</tr>
<tr>
<td>NA/DK</td>
<td>10.77%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

C.3.2 Effectiveness of violent resistance

This question seeks to understand whether people agree with the statement “some people believe that violence against the government is the most effective way to improve their situation.” The results in Table C.2 show that about 22% of respondents...
somewhat or strongly agree with this statement, that violence is the most effective way to improve their situation. Yet about 70% somewhat or strongly disagree, suggesting that large portion of the population does not view violent resistance as a useful method for change.

Table C.2: Effectiveness of violent resistance

<table>
<thead>
<tr>
<th>Violent Resistance Effective</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somewhat agree</td>
<td>16.15%</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5.69%</td>
</tr>
<tr>
<td>Somewhat disagree</td>
<td>22.00%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>47.62%</td>
</tr>
<tr>
<td>NA/DK</td>
<td>8.53%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

C.3.3 Effectiveness of Civil Resistance

This question seeks to understand whether people agree with the statement “some people believe that civil resistance, such as strikes, protest and blockades against the government is the most effective way to improve their situation.” About 41% somewhat or strongly agree with this statement but about 51% somewhat or strongly disagree with this statement and do not view nonviolent methods as effective. Overall, compared to the previous question about violent resistance, these results demonstrate that more people view nonviolent methods rather than violent methods as the most effective way to improve their situation.

Importantly, the results from these questions reveal that there is widespread support for nonviolent methods and more support for nonviolence compared to violence. An additional insight comes from comparing the two questions relating to violence and nonviolence against one another. The crosstable below shows that many have overlapping support for each method. This complex relationship is illustrated by the table below (this data is for the combined oversample and national sample). Here we see that those who view violence as effective are also likely to view nonviolence as
effective. However, the highest percentage of people view neither method as useful, the second highest percentage is for those who view only nonviolent resistance as effective (of the 76% of the population who view violence as ineffective, 37% view violence as useful). This analysis supports the notion that researchers should begin to consider choices between modes of action as a spectrum of options including an array of nonviolence and violence, instead of conceptualizing these choices as strictly binary.

Table C.3: Crosstabulation of two variables: views on violent versus nonviolent action

<table>
<thead>
<tr>
<th>Civil Resistance Effective</th>
<th>Violence Effective</th>
<th>No</th>
<th>Yes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td></td>
<td>550</td>
<td>83</td>
<td>633</td>
</tr>
<tr>
<td></td>
<td></td>
<td>63%</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td>323</td>
<td>192</td>
<td>515</td>
</tr>
<tr>
<td></td>
<td></td>
<td>37%</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>873</td>
<td>275</td>
<td>1148</td>
</tr>
<tr>
<td></td>
<td></td>
<td>76%</td>
<td>24%</td>
<td></td>
</tr>
</tbody>
</table>

In further regression analysis, I use a binary (0,1 or yes, no) version of the variable that explores whether the respondent views nonviolent resistance as more useful than violence. Using this as a dependent variable, I explore a multitude of possible relationships amongst gender, age, victimization, education, approval of government, attribution of responsibility for security, and media consumption. The most robust finding across multiple specifications is that those who attribute the responsibility of security situation to their local authorities (in this case, police) are more likely to view nonviolence as effective. Conversely, those who attribute the responsibility of their security situation to organized crime are less likely to view nonviolent methods as more useful than violent actions. Victimization, government approval,

4 The total percentages here are slightly different than noted in the previous table which listed the responses only for views about civil resistance. This is because “No Response” and missing data was not included in the total percentages of the cross-tabulation.
media consumption, and gender are not robust across model specifications. However, education and age have a significant influence. Age has a negative association suggesting older individuals are less likely to view nonviolence as more effective than violence. Finally, the role of education and familiarity with on-going campaigns is further explored below.

C.3.4 Familiarity with On-going Campaigns

This question asked “How familiar are you with the story of Mahatma Gandhi?” The responses included: “very familiar, somewhat familiar, a little familiar, not familiar, or don’t know.” Almost 40% of Mexicans were unfamiliar with Gandhi’s story. A similar question was asked about a more local movement, the Movement for Justice with Peace and Dignity led by Javier Sicilia. Surprisingly, almost 40% of the population is unfamiliar with this movement and only about 5% reports as being “very” familiar.

Respondents who answered that they were familiar with Gandhi’s story were then asked whether they believed these methods could be effective in changing the situation in Mexico. As shown in Table C.4 those who knew about Gandhi’s story, about 30 % strongly believed these methods could be used effectively in Mexico.

<table>
<thead>
<tr>
<th>Can Civil Resistance influence Mex</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot</td>
<td>31%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>32%</td>
</tr>
<tr>
<td>A little</td>
<td>18%</td>
</tr>
<tr>
<td>No</td>
<td>14%</td>
</tr>
<tr>
<td>No answer</td>
<td>2%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Respondents who answered that they were familiar with the Movement for Peace with Justice and Dignity were asked “how effective was Javier Sicilia / The move-
ment for Peace with Justice and Dignity?” About 14% felt the movement was very effective, and 45% felt it was somewhat effective.

Table C.5: Effectiveness of Sicilia’s movement

<table>
<thead>
<tr>
<th>Effectiveness</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not effective</td>
<td>9.66%</td>
</tr>
<tr>
<td>A little effective</td>
<td>27.93%</td>
</tr>
<tr>
<td>Somewhat effective</td>
<td>44.48%</td>
</tr>
<tr>
<td>Very effective</td>
<td>13.79%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>4.14%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

In further regression analysis, complete with relevant control variables, familiarity with the MPJD movement has a clear effect: a comparison of respondents who know nothing about the movement to those who are very familiar with the movement results in a roughly 20% increase in the probability that nonviolence will be viewed as an effective means of resistance.

C.3.5 Education and Support for Nonviolence

First, Education is a categorical variable capturing the levels “none,” “primary,” “secondary,” and “higher education.” The distribution of this variable is shown in Figure C.3.5. In further regression analysis, I find that education is negatively associated with views about nonviolent methods. The figure below demonstrates this association.\(^5\) This graphic illustrates the predicted probability of viewing nonviolent methods as effective (y-axis) according to different categories of education. The findings show that those who fall into the lowest education category are the most likely to view nonviolence as useful. The finding of education is slightly counterintuitive. Conventional wisdom might suggest that those with higher education would view nonviolent methods as more useful than violent ones. However it is possible that in this case, more educated people are exposed to Marxist ideology that sees violence

---

\(^5\) The full model results are not shown here
as essential to achieving revolutionary goals or other political ideologies that view nonviolence as ineffective. Another plausible explanation is that those who have higher education and income are more able to pay for their protection by employing guards and other armed services.

**Figure C.3**: Distribution Respondent Education

**Figure C.4**: The relationship between education and predicted probability of favorable views towards nonviolent action
At the end of the survey, respondents were given one of three treatments. The treatments were used to determine potential support for a local group. Each treatment was presented in the format similar to a short newspaper article describing a local civilian group. Treatment one was an article that described a group which was armed, and used their arms offensively to “improve the security situation in local areas.” Treatment two included a description of a similar group, with the same goals, but who used only nonviolent methods— including strikes and protests, but also nonviolent mediation methods, to achieve security goals. The third treatment described a “mixed method” group, one which was armed only for defensive purposes and utilized nonviolent methods to achieve their goals. Below is Treatment 2, a description of a nonviolent, unarmed civilian group.

“Recently, a new civil resistance group has emerged. They are known as the OCIV and their mission is to improve the security situation in local areas. These civilians have organized protests, blockades, coordinated unarmed patrols, and used non-violent methods in order to bring justice and security to their area. According to one of the leaders of the group, Angel Polomo, ‘We aim to bring justice and peace to the region through political organizing and engaging as mediators between violent actors in our community. We also have created early warning systems to notify our community members of the onset of danger.’”

A further question then assesses the same idea but asks about whether the respondent views the “methods of the group” effective for changing the security situation at the National level. Table C.6 demonstrates whether individuals are more or less likely to view a groups’ efforts as effective, depending on which treatment they were given. Treatments are broken down by responses as to whether the respondent believes that
the groups’ efforts are effective at changing the local security situation.

The most intriguing result from this portion of the survey is the low effect of the treatment in both sample groups. The type of method used in the treatment “violent, nonviolent, or mixed” does not appear to have a significant effect on whether or not the respondent views the group as effective in improving the security situation. Comparing the National Sample to the oversample, we see evidence that a respondent’s proximity to auto-defense groups decreases their views that a nonviolent group is effective. Further, as illustrated in Table C.6, we see that in the National Sample, those given the nonviolent treatment were the least likely (20.5%) to view a civilian group as “not effective.” Contrarily, the results from the over-sample in Table 10 indicate that those who received the non-violent treatment were most likely (27.5%) to view their group as ineffective.

Another key question that arises from the experimental treatment is: how do attitudes on resistance influence action? To assess this, we turn to a second question following the experimental treatment. Thus, the question reports hypothetical action of support. Considering Mexicans’ sensitivity around sharing whether or not
they have supported a resistance group or efforts, this hypothetical approach allows respondents to answer freely without worrying that admitting past actions could associate them with risky activities. As described previously, the variable here is “support” for a local civilian group, whereby the respondent is first read a description of a local group and then asked to check a list of items they would be willing to do for the group. The possible responses are shown below. Importantly, the respondents are allowed to check as many options as they see fit, and many of these outcomes correlate. For example, we do in fact see the highest correlation between attending an event and attending a meeting, but a lower correlation between attending a meeting and providing food.

Using this 5-point item response, I create a factor variable to represent one continuous trait. This factor score measures the respondent’s “willingness to support” a local group. The factor analysis reveals that these different item scores are correlated, and ranked in such a way that attending an event is a more “difficult” action than donating food or goods. This intuitively maps on to the intent of the measure: to capture different types of support along and underlying understanding of risk. The correlation between the variables are shown above in Figure 3.5. Confirmatory factor analysis reveals that one factor is sufficient to represent this “willingness trait.” The final variable is thus a continuous measure and centered around zero. In additional modeling not detailed here, I use this new continuous measure of support as the dependent variable to assess which conditions lead to higher support.

In this analysis of support for a local group, I also assess whether positive opinions of nonviolence methods are associated with an increase in a respondent’s willingness to support a nonviolent group. Specifically, I hypothesize that those persons, who learn about the actions of a nonviolent group and believe that nonviolent methods are effective, should express the most willingness to support the group. Included in this modeling phase are control variables for victimization, age, and whether or not
the respondent resides inside the region of the oversample. Through this assessment, I find that victimization and the oversample indicator are two important variables that are influential predictors. Broadly interpreted, being a victim is associated with support for all kinds of possible participation except for donations. Conversely, being within the oversampled population is associated with a decrease in overall support for local groups. This reveals that those who live in the most contentious, high-risk areas, and are most proximate to various on-going resistance efforts, are the most likely to decline support to a civilian group.

In conclusion, it was expected that those who viewed nonviolence as most effective and received the nonviolent treatment, would be most supportive of that group. Yet, I find little support for this. Instead, those who believe that nonviolent methods are more likely to be “supportive” types.

C.3.7 Additional Variables of Interest

Access to civil resistance events. This question aims to understand whether people are influenced to attend civil resistance events via the invitation of someone they trust, someone close to them within their social network. We see below that the two most common responses are yes, someone very close invited the respondent, or no one at all. The question in the survey asks: “Did someone invite you to participate in a protest, march, demonstration against violence or security in the last 12 months?” The possible responses are: “No one invited me; Yes someone close (family or friend), Other, NS or NA.” These results are shown in Table C.8.

C.3.8 Participation in Civil Resistance

A question on the survey records a self-reported frequency of the respondent’s participation in nonviolent actions. The question asks “in the last 12 months, how many marches, strikes, protests, or blockades against the violence or insecurity have you
Table C.8: Social connectivity & invitations to civil resistance events

<table>
<thead>
<tr>
<th>Invitation</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family or close friend</td>
<td>17.9%</td>
</tr>
<tr>
<td>No answer</td>
<td>2%</td>
</tr>
<tr>
<td>No one invited me</td>
<td>73.7%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1.2%</td>
</tr>
<tr>
<td>Other</td>
<td>5.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

participated in?” The respondent answers by providing a count. As is evident, the majority of respondents report no participation, nearly 2%-4% report attending one or two events. These frequencies are shown in Table C.9.

Table C.9: Civil resistance participation

<table>
<thead>
<tr>
<th>Participation in Nonviolent Actions</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>One</td>
<td>3.63%</td>
</tr>
<tr>
<td>Two</td>
<td>2.46%</td>
</tr>
<tr>
<td>Three</td>
<td>0.64%</td>
</tr>
<tr>
<td>Four</td>
<td>0.53%</td>
</tr>
<tr>
<td>Five</td>
<td>0.21%</td>
</tr>
<tr>
<td>Six</td>
<td>0.53%</td>
</tr>
<tr>
<td>Seven</td>
<td>0.11%</td>
</tr>
<tr>
<td>Eight</td>
<td>0.11%</td>
</tr>
<tr>
<td>Nine or more</td>
<td>0.00%</td>
</tr>
<tr>
<td>None</td>
<td>83.44%</td>
</tr>
<tr>
<td>NC/NS</td>
<td>8.33%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

C.3.9 Urban and Rural Populations

This variable captures urban and rural breakdown as coded by the enumerators. This breakdown is representative of the population at large. While Mexico has large rural territories, approximately 50% of the population lives in one of the 55 metropolitan areas in the country. In sum, about 78.84% of the population of the country lives in urban areas, meaning that only 21.16% live in rural areas. At this stage, there is little support for the idea that civilian opinion dramatically differs between rural
and urban populations. While there is a slight difference between the two groups for some variables, further statistical analysis controlling for multiple variables at once demonstrates that the rural-urban divide does not provide much leverage for predicting whether a respondent will view nonviolent resistance as more useful than violent resistance. Basic cross-tabulations between the urban indicator and knowledge of MPJD, approval of municipal government, or political interest reveal an insignificant difference between the populations. Attribution of responsibility to local authorities—for example, if the respondent believes that their local police authorities are the ones actually responsible for their security situation—is one of the only variables of interest that reveals a significant difference between urban and rural populations. The survey shows that those who are in urban areas are more likely to view local police as responsible for their security situation.

C.3.10 Information about Civilian Organizing

The survey asks two questions about how often the respondent hears or reads about actions of civil resistance and information about auto-defense groups. At the time of the survey, auto-defense groups had been heavily covered by the media, subsequently, one might expect that citizens would have had a higher intake of information about auto-defense groups. However, the data shows that citizens consume slightly more information about civil and violent resistance at weekly and monthly intervals than they do in the day-to-day. In total, the numbers are actually quite similar across the two categories, perhaps indicating that those who have better access to information are simply more likely to consume information about both types of resistance.

C.3.11 Connections with Auto-defensa Members.

This question simply asks if the respondents knows anyone who is active in an auto-defense group. The vast majority of respondents report that they do not know anyone
Table C.10: Access to information about civilian resistance efforts

<table>
<thead>
<tr>
<th>Information Access</th>
<th>Civil Res</th>
<th>Autodef</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>22.00%</td>
<td>23.77%</td>
</tr>
<tr>
<td>1-2x per week</td>
<td>26.38%</td>
<td>23.77%</td>
</tr>
<tr>
<td>1-2x per month</td>
<td>18.69%</td>
<td>16.38%</td>
</tr>
<tr>
<td>Almost never</td>
<td>27.38%</td>
<td>30.00%</td>
</tr>
<tr>
<td>NA/DK</td>
<td>5.53%</td>
<td>6.07%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

active in an auto-defense group. This is shown below in Table C.11.

Table C.11: Relation to auto-defense member

<table>
<thead>
<tr>
<th>Relation</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>92.54%</td>
</tr>
<tr>
<td>Yes</td>
<td>5.31%</td>
</tr>
<tr>
<td>NA/DK</td>
<td>3.16%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

C.3.12 Political Interest

This variable measures the respondent’s political interest. In both the total combined sample, the majority of the total population reports having little to know interest in politics. The question simply asked, “How Interested in politics are you?” The results are shown in Table C.12.

Table C.12: Political interest

<table>
<thead>
<tr>
<th>Political Interest</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A lot of interest</td>
<td>5.56%</td>
</tr>
<tr>
<td>Some interest</td>
<td>15.28%</td>
</tr>
<tr>
<td>Little</td>
<td>35.04%</td>
</tr>
<tr>
<td>None</td>
<td>43.16%</td>
</tr>
<tr>
<td>Don’t know/No answer</td>
<td>0.96%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

C.3.13 Beliefs about Political Actors

This question tried to assess how individuals view the responsibility of political actors. The motivation here is to capture whether respondents’ beliefs about who cares
for their well-being might map onto political participation outcomes. Unfortunately, this question suffered from high non-response (39.74% responded either don’t know, or did not answer the question). The question asked, “Which of the following groups do you believe is interested the most in your personal well-being?” The possible responses to choose from were: “Neighborhood Associations; state government; federal government; municipal government; auto-defense groups; civil society groups.” These results are shown in Table C.13. Besides the non-response group, the other most common response was that 23.61% of individuals believed the federal government is responsible for their well-being.

Table C.13: Who is responsible for your well-being?

<table>
<thead>
<tr>
<th>Wellbeing</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neighborhood associations</td>
<td>4.81%</td>
</tr>
<tr>
<td>State Government</td>
<td>9.19%</td>
</tr>
<tr>
<td>Federal Government</td>
<td>23.61%</td>
</tr>
<tr>
<td>Municipal Government</td>
<td>13.89%</td>
</tr>
<tr>
<td>Auto-defense Groups</td>
<td>3.85%</td>
</tr>
<tr>
<td>Civil Society Groups</td>
<td>4.91%</td>
</tr>
<tr>
<td>NC/NS</td>
<td>39.74%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

C.3.14 Country Level Security Situation

This question assessed the respondent’s view on security situation of the Mexican state. It asks, “In the last year, do you believe the security situation in the country has improved or worsened?” Possible respondents included: “Improved a lot; improved some; stayed the same; worsened some; worsened a lot; NS/NC.” The results are shown in Table C.14. Roughly 30% of the population believes that the security situation, at the country level, has “worsened a lot.” Roughly 20% of the population believes that the country’s security situation has “improved somewhat” or “a lot.”
Table C.14: Perceptions of country-level security

<table>
<thead>
<tr>
<th>Country Security</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worsened somewhat</td>
<td>23.61%</td>
</tr>
<tr>
<td>Worsened a lot</td>
<td>30.24%</td>
</tr>
<tr>
<td>Stayed the same</td>
<td>24.89%</td>
</tr>
<tr>
<td>Improved somewhat</td>
<td>17.74%</td>
</tr>
<tr>
<td>Improved a lot</td>
<td>2.24%</td>
</tr>
<tr>
<td>NC/NS</td>
<td>1.29%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

C.3.15 Changes in Municipal Security

This question asked the respondent if the security in their municipality, has worsened or improved in the last 12 months. The breakdown in the total sample is also reflected in the subsample.\(^6\) We see that about 37% of the population felt their municipal-level security situation had stayed about the same, while about 23% believed it had somewhat worsened.

Table C.15: Perceptions of municipal-level security

<table>
<thead>
<tr>
<th>Municipal Level Security</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worsened somewhat</td>
<td>22.00%</td>
</tr>
<tr>
<td>Worsened a lot</td>
<td>16.00%</td>
</tr>
<tr>
<td>Stayed the same</td>
<td>35.77%</td>
</tr>
<tr>
<td>Improved somewhat</td>
<td>21.31%</td>
</tr>
<tr>
<td>Improved a lot</td>
<td>2.92%</td>
</tr>
<tr>
<td>NS o NC</td>
<td>2.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

C.3.16 Victimization

The victimization measure in the survey was a blind self report. The respondent was given a card that the enumerator could not see and was asked to confirm whether they had ever experienced any of these crimes. The first card (card A), was a list of more minor crimes such as robbery, fraud, and theft. The second card (card

\(^6\) For this reason I show the entire sample breakdown below in Table C.15.
B) contained a list of more distinctly violent crimes such as assault, sexual assault, and kidnapping. Roughly 36% of respondents have experienced a lower intensity crime and 16% reported having experienced a high risk crime. The cross-tabulation here shows that there is no significant difference with respect to favorability towards nonviolence across victims and non-victims.

Table C.16: Victimization

<table>
<thead>
<tr>
<th>Victim</th>
<th>Card A</th>
<th>Card B</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>63.15%</td>
<td>81.62%</td>
</tr>
<tr>
<td>NA/DK</td>
<td>1.07%</td>
<td>2.15%</td>
</tr>
<tr>
<td>Yes</td>
<td>35.77%</td>
<td>16.23%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

C.3.17 Individual Influence

This question tried to get at the heart of civilian action by placing different mechanisms—civil resistance, voting, armed resistance—as options within one question. As Table ?? shows below, non-response was extremely high. The question asks, “Which is the main way in which you think you could influence the most to make a change?” The choices provided were: “Vote to elect parties or candidates that defend your position; 2) Participate in non-violent mobilization (protests, sit-ins, blockades, strikes, etc); 3) Join auto-defense groups and engage in counter-violence against armed actors; 4) It is not possible to influence to; make things change, it doesn’t matter what you do. The results show that most believe voting is the best way to influence their situation. Importantly, 10% believe that participating in nonviolent methods is the most influential action they can take.

C.4 Conclusion and Lessons Learned

While there are many new insights gleamed from these survey results, a major avenue for discourse is to consider (1) the challenges inherent in conducting research in high-
risk regions and (2) future improvements and investigation.

This survey took many rounds of careful discussion with Duke University’s Institutional Review Board. At the outset, a primary concern was how to keep respondents safe. Understandably, an immediate issue was that a mal-intended individual or political actor could forcefully acquire the survey respondents’ information and questionnaire answers. In the case of Mexico, a very real concern was the potential kidnapping of survey enumerators. In a case like this, the motive for kidnapping would likely be out of distrust and confusion, i.e. one political actor believes the survey enumerator is collecting information about them or about a competitor. To overcome these challenges, we required the enumerators to wear identification badges and to be completely transparent about their identity. Additionally, the enumerators only transported survey responses for as short a time as possible, thus keeping a low number of survey forms with them at all times and instead transferring them to a central location whenever possible. The surveys were also completely anonymized. No identifying information other than basic demographic information was recorded. For example, the enumerator never requested the address or the name of the respondent. The surveys included a randomized numeric key. Prior to going into the field, each survey instrument was given an 8-digit key that was recorded in an encrypted file. Then, 4 random numbers of the 8 digits were printed on the actual paper survey instrument itself. Immediately after recording the respondent’s answers to the survey, the enumerator would shuffle the papers and mix the responses so that if they were confiscated or lost, no one survey could properly reorder the responses without the key.

This study demonstrates that research on sensitive questions can be conducted in high-risk areas. There are, however, numerous areas of future improvement. Additional surveys should further investigate support for violence and nonviolence as a type of spectrum, rather than a strict binary. It is crucial that we further investigate
competing modes of struggle in a diverse range of settings and for a dynamic range of goals: civilian autonomy, political control, and policy change. This work serves as a first step in this direction, but future research must work further to link individual characteristics such as risk-taking disposition, previous history of collective participation, and exposure to extreme violence, with favorable attitudes towards different methods of action.

Prior to this investigation, it was unclear whether or not citizens had much faith in the different available methods of resistance when faced with an unstable and insecure sociopolitical environment. This study demonstrates that civilians in violent contexts are indeed often aware of the different campaigns and collective efforts, and view them as useful tools to change or improve their own situation. Furthermore, information about nonviolent efforts is influential. Not only is this information associated with more favorable views towards nonviolent action, it is also associated with less favorable views of violence; this suggests that activists can powerfully influence the discourse around methods of civilian autonomy.
We would like to begin by asking you about general opinions you may have on different topics. This is important for helping us understand how different people in Mexico feel about the issues. Your responses will be kept strictly confidential and no one will be able to link them back to you once the survey is complete. You can stop taking the survey at any time.

**POLITICS**

1. How interested are you in politics?
   1) A lot
   2) Somewhat
   3) A little
   4) Not at all
   98) DK
   99) NA

2. In how many protests, marches, walks, or blockades against violence and insecurity have you participated in the last 12 months?
   ______ (fill in)
   98) DK
   99) NA

**Party identification**

3. Regardless of whom you have voted in the past, which party do you identify with the most?
   1) PAN
   2) PRI
   3) PRD
   4) Otro
   5) Ninguno *(Spontaneous Response)*
   98) DK
   99) NA

**Approval**

4. In general how would you rate your approval/disapproval of way in which (...) does his/her job?

<table>
<thead>
<tr>
<th>(...)</th>
<th>Approves</th>
<th>Disapproves</th>
<th>DK</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly</td>
<td>Somewhat</td>
<td>Strongly</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Somewhat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Thinking about the last 12 months, would you say your personal economic situation has improved or worsened?
1) Improved a lot  
2) Improved somewhat  
3) Stayed the same (Sp.)  
4) Worsened somewhat  
5) Worsened a lot  
98) DK  
99) NA

6. Which of the following groups do you think takes the most interest in your personal well-being? (READ OPTIONS)
1) federal government  
2) state government  
3) local government  
4) local council / neighborhood association  
5) auto-defense groups  
6) civil society groups  
7) DK  
8) NA

SECURITY
Evaluations of national security and responsibility attribution
7. Thinking about the last 12 months, would you say that the country’s security (...) has improved or worsened?
1) Improved a lot  
2) Improved somewhat  
3) Stayed the same  
4) Worsened somewhat  
5) Worsened a lot  
98) DK  
99) NA

8. Who would you say is responsible for the fact that the country’s security [ANSWER FROM previous question, improved, worsened...] Check all that apply
The Government
The Army
The Federal Police
The local police
Organized crime
Non-governmental Organizations
Civilian Autodefense groups
Other____
None
DK
NA

Evaluations of local security
9. Now I am going to ask you about your evaluation of the security in your state, municipality, and neighborhood. Using a scale from 1 to 5, with 5 being the worst and thinking about the last 12 months, would you say that the security in your (...) has improved or worsened?

<table>
<thead>
<tr>
<th>(...)</th>
<th>Improved a lot</th>
<th>Improved somewhat</th>
<th>Same (Sp.)</th>
<th>Worsened somewhat</th>
<th>Worsened a lot</th>
<th>DK Sp.</th>
<th>NA Sp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) (..) State</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>c) (..) Municipality</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>d) (..) Neighborhood</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>

Evaluations of personal security and responsibility attribution
10. Thinking about the last 12 months, would you say that your personal security has improved or worsened?
1) Improved a lot
2) Improved somewhat
3) Stayed the same
4) Worsened somewhat
5) Worsened a lot
98) DK
99) NA

11. And who would you say is responsible for the fact that your personal security [ANSWER FROM previous question, improved, worsened..] Check all that apply
The Government/authorities
The Army
The Federal Police
The local police
Organized crime
Non-governmental Organizations
Civilian Autodefense groups
Other ______
None
DK
NA

12. Do you agree/disagree with the following statement, “the majority of people feel safe in this city/town?”
1) Strongly Agree
2) Somewhat Agree
3) Agree a little
4) Do not agree
98) Do not know
99) No answer

Access to Information on Civil Resistance
13. How familiar are you with the story of Mahatma Gandhi?
1) Very familiar
2) Somewhat familiar
3) Little familiar
4) Not familiar
98) Do not know
99) No answer

14. If the respondent answers (1) or (2) then ask:
Do you feel that the resistance actions made by Mohandas Gandhi would be helpful to change the political situation in Mexico?
(1) Very helpful
(2) Somewhat helpful
(3) Not at all helpful

15. How familiar are you with the work of Javier Sicilia / the Movement for Peace with Justice and Dignity?
1) Very familiar
2) Somewhat familiar
3) Little familiar
4) Not familiar
98) Do not know
16. If the respondent answers (1) or (2) then ask:
How effective was Javier Sicilia / The movement for Peace with Justice and Dignity?
(1) Very effective
(2) Somewhat effective
(3) A little effective
(4) Not at all effective
(98) Do not know
(99) No answer

**Media**

17. Please tell me how frequently you get information through:

<table>
<thead>
<tr>
<th></th>
<th>Never/Almost never</th>
<th>Once or twice a month</th>
<th>Once or twice a week</th>
<th>Daily</th>
<th>DK</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Radio</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>b) Televisión</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>c) Newspapers</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>d) Twitter or Facebook</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>e) Church</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e) civil society groups (such as neighborhood and community groups)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>

18. How often do you hear or read information about civil resistance actions (protests, strikes, boycotts, sit-ins, etc) taking place?
1. Never/Almost Never
2. Once or twice a month
3. Once or twice a week
4. Daily
5. DK
6. NA

19. How often do you hear or read information about civilian autodefense groups?
1. Never/Almost Never
2. Once or twice a month
3. Once or twice a week
4. Daily
5. DK
6. NA

20. Do you know anyone who is active in an autodefense group? [If yes proceed to follow up question]
1. Yes
2. No

21. IF yes, what is your relationship to this person?
1. Family
2. Friend
3. Neighbor
4. Colleague

VICTIMIZATION
22. Now I am going to ask you questions about your personal experiences with crime and safety. First, I am going to read to you a list of crimes. Please tell me if you have been a victim of any of these crimes. You don’t need to tell me which crime you were a victim of, just let me know if you have been a victim of any of them. [show card A, if Yes, go to follow up question below]
1) Yes
2) No
98) DK
99) NA

23. Thinking about the crime most recent, did this take place:
1) During the last 3 months
2) During the last 3-6 months
3) During the last 6-12 months
4) During the last 12 months to 2 years
5) More than 2 years ago
98. Do not know (DK)
99. Do not answer (NA)
24. Has a relative or close friend been a victim of any of these crimes [card A]?  
1) Yes, one relative or close friend  
2) Yes, more than one relative or close friend  
3) No  
98) DK  
99) NA

25. Did this take place:  
1) During the last 3 months  
2) During the last 3-6 months  
3) During the last 6-12 months  
4) During the last 12 months to two years  
5) More than 2 years  
98. Do not know  
99. Do not answer

26. Now, I am going to read to you another list of crimes. Please tell me if you have been a victim of any of these crimes. You don’t need to tell me which crime you were a victim of, just let me know if you have been a victim of any of them. [show card B, if yes proceed to follow up question]  
1) Yes  
2) No  
98) DK  
99) NA

27. Did this take place:  
1) During the last 3 months  
2) During the last 3-6 months  
3) During the last 6-12 months  
4) During the last 12 months to two years  
5) More than 2 years  
98. Do not know  
99. Do not answer

28. Has a relative or close friend been a victim of any of these crimes [card B, if yes proceed to followup question]?  
1) Yes, one relative or close friend  
2) Yes, more than one relative or close friend  
3) No  
98) DK  
99) NA

29. Thinking in the most recent crime, did this take place:  
1) During the last 3 months  
2) During the last 3-6 months
3) During the last 6-12 months
4) During the last 12 months to two years
5) More than 2 years
98. Do not know
99. Do not answer

30a. Now we are going to talk about families in Mexico and the way in which they live together. I will read a list of different kinds of relationships, and you can tell me whether any of these relationships compose your family.

30b. [For each family member listed, ask:] How often do you talk in person with X family member: daily, 4-6 times a week, 1 to 3 times a week, 1 to 2 times a month, 1 or 2 times a year, or never?

30c. [For each family member listed, ask:] How often do you talk to X family member via electronic communication: daily, 4-6 times a week, 1 to 3 times a week, 1 to 2 times a month, 1 or 2 times a year, or never?

<table>
<thead>
<tr>
<th>Family member</th>
<th>Yes</th>
<th>No DK/NA</th>
<th>Personal</th>
<th>Elec/Telef</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mom / stepmother</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Father / stepfather</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>A brother or sister</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Grandparent</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Aunt/Uncle</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Cousin</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
<tr>
<td>Wife/husband</td>
<td>1</td>
<td>2</td>
<td>97</td>
<td></td>
</tr>
</tbody>
</table>

31. At some point, most of us has experienced fear of becoming victims of crime. Some crimes probably make us feel more fearful than others. We are interested in learning about the fear that people feel towards different types of crimes. Please tell me if you have a lot, some, little or no fear of:

<table>
<thead>
<tr>
<th></th>
<th>A lot</th>
<th>Somewhat</th>
<th>Little</th>
<th>None</th>
<th>DK</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Being assaulted</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>
### Political sophistication

Moving away from that topic, I’d now like to ask you some basic questions about yourself and life in Mexico. First, we would like to ask you about your experiences with various issues. Please indicate if you have experienced any of the following:

<table>
<thead>
<tr>
<th></th>
<th>b) Being extorted</th>
<th>c) Being a victim of fraud</th>
<th>d) Being wounded with a gun</th>
<th>e) Being kidnapped</th>
<th>f) Being a victim of sexual abuse</th>
<th>g) Being assassinated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>

32. Have you relocated your home and/or family in the last 12 months due to security issues?
   (1) Yes
   (2) No
   (98) Don’t know
   (99) No answer

32b. Would you relocate your home/family if you had the opportunity?
   (1) Yes
   (2) No
   (98) Don’t know
   (99) No answer

**Political sophistication**

Moving away from that topic, I’d now like to ask you some basic questions about yourself and life in Mexico. First, we would like to
know how much information about politics and about the country is transmitted to citizens.

33. What is the name of the president of the United States of America? (Spontaneous response)
   (1) Barack Obama
   (2) Other answer ______
   (98) Don’t know
   (99) No answer

34. How many states does Mexico have?
   Fill in the response ______
   (98) Don’t know
   (99) No answer

35. How long does the Mexican president stay in office?
   Fill in the response ______
   (98) Don’t know
   (99) No answer

36. What is the name of the president of Venezuela?
   Fill in the response ______
   (98) Don’t know
   (99) No answer

POLITICAL EFFICACY

37a. Do you feel that people in this municipality respect the rule of law?
   1. Yes
   2. No
   (98) Don’t know
   (99) No answer

37b. Do you feel that government of this municipality respect the rule of law?
   1. Yes
   2. No
   (98) Don’t know
   (100) No answer

38. Which is the main way in which you think you could influence the most to make a change? (SINGLE RESPONSE)
   1) Vote to choose parties or candidates that defend your position
2) Participate in non-violent mobilization (protests, sit-ins, blockades, strikes, etc)
3) Join autodefense groups and engage in counter-violence against armed actors
4) It is not possible to influence to make things change, it doesn’t matter what you do
98) Don’t know (DK)
99) No answer (NA)
39 (new). Tell me if you have changed your behavior in the following activities due to fear of being a victim of organized crime:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Sí</th>
<th>No</th>
<th>NS/NC</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Stopped visiting friends or family who live far away</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>b) Stopped going out at night/enjoying night life</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>c) Leaving very early</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>e) Using public transportation</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>f) Carrying cash</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

39 (original). **Non-electoral participation**
Thinking about the last 12 months, have you (…)?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Sí</th>
<th>No</th>
<th>DK</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) organized petitions to government to improve your neighborhood’s security?</td>
<td>1</td>
<td>2</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>b) participated in a committee to improve the security of your community?</td>
<td>1</td>
<td>2</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>c) participated in a committee to improve public services for your community (such as water, health, or park services)</td>
<td>1</td>
<td>2</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>d) participated in civil resistance efforts (such as protests, march, strikes, sit-ins or blockade) against violence and insecurity?</td>
<td>1</td>
<td>2</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>
40. How afraid would you be of becoming a victim of organized crime if you (…)

<table>
<thead>
<tr>
<th></th>
<th>A lot</th>
<th>Somewhat</th>
<th>A Little</th>
<th>Not at all</th>
<th>DK</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Participated in the solution of problems of insecurity in your neighborhood?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>b) Went out to vote in a given election?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>c) Participated in a non-violent form of protest (i.e. demonstrations, strikes, boycotts, etc) against violence and insecurity?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
<tr>
<td>d) Participated</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
<td>99</td>
</tr>
</tbody>
</table>
General Opinion on civil resistance in achieving goals

41. Now we’d like to ask you a few questions about resistance. For each of the following sentences, please tell me whether you personally agree, “Some people think that violence against one’s government is an effective way of achieving one's goals”

- Strongly Agree
- Somewhat Agree
- Somewhat Disagree
- Strongly Disagree
- Don’t know
- Don’t answer

42. Please tell me whether you personally agree/disagree, “that nonviolent civil resistance and organizing (such as strikes, protests, boycotts, and sit-ins) against one’s government is an effective way of achieving one’s goals.”

- Strongly Agree
- Somewhat Agree
- Somewhat Disagree
- Strongly Disagree
- Don’t know
- Don’t answer

Specific Opinions on NV VERSUS Violent methods for resolving conflict

43. Some people say that nonviolent methods, such as strikes, protests, demonstrations, and marches, are more effective in improving your security than armed or violent self-defense.

Do you

- Strongly Agree
- Somewhat Agree
- Somewhat Disagree
- Strongly Disagree
- Don’t know
- Don’t answer

Specific opinion on tactics. The Respondent will receive one of three treatments:
I am going to read you a short news description of action being taken by Mexican citizens to change the security situation in their area. Please then answer the questions that follow.

A. TREATMENT ONE
Recently, a new civilian auto-defense group has emerged. They are known as the OCIV and their mission is to improve the security situation in local areas. These civilians have taken up arms, organized armed patrols, blockades, and coordinated searches of violent offenders in order to bring justice and security to their area. According one of the leaders of the group, Angel Polomo “Our guns are only for defensive purposes and self-protection. We aim to bring justice and peace to the region not through arms but political organizing and engaging as mediators between violent actors in our community. We also have created early warning systems to notify our community members of the onset of danger.”

B. TREATMENT TWO
Recently, a new civil resistance group has emerged. They are known as the OCIV and their mission is to improve the security situation in local areas. These civilians have coordinated unarmed patrols, and used non-violent methods such as peaceful protests, sit-ins, hunger strikes and boycotts in order to bring justice and security to their area. According one of the leaders of the group, Angel Polomo “We aim to bring justice and peace to the region not through arming ourselves but through political organizing and engaging as mediators between violent actors in our community. We also have created early warning systems to notify our community members of the onset of danger.”

C. TREATMENT THREE
Recently, a new civilian auto-defense group has emerged. They are known as the OCIV and their mission is to improve the security situation in local areas. These civilians have taken up arms, organized armed patrols, blockades, and coordinated searches of violent offenders in order bring justice and security to their area. According one of the leaders of the group, Angel Polomo “Our guns are help us defend ourselves and also allow us to directly and actively engage in counter-violence actions against armed groups. We aim to bring justice and peace to the region through these actions.”

Do you feel that these methods are likely to be effective in bringing positive change to the security situation in your local area?

☐ Yes, very effective
☐ Somewhat effective
☐ A little effective
Do you feel that these methods are likely to be effective in bringing positive change to the security situation at the national level?

- Yes, very effective
- Somewhat effective
- A little effective
- Not effective
- No, not effective at all
- Don’t know
- No answer

Would you be willing to (check all that apply)

- provide goods (such as food, supplies) to this group in order to help their cause
- attend meetings of this group in order to get involved and join the efforts
- donate funds to this group in order to support their actions
- spread the word about this group to friends, family, and neighbors
- attend any community events this group hosts

SOCIODEMOGRAPHICS & CONTROLS

VOT1. Who did you vote for president in the 2012 elections? [Do not read list]

1. Enrique Peña Nieto – Compromiso por Mexico (PRI, PVEM)
2. Andrés Manuel Lopez Obrador (Movimiento Progresista (PRD, PT, Movimiento ciudadano)
3. Josefina Vázquez de Mota – PAN
4. Gabriel Quadri de la Torre – Nueva Alianza
5. Other
97 Do not know
98. No Response
99. No vote

Gender (record)

1. Male
2. Female

What is your age in years? _______

Marital Status
What was the highest level of education you completed?
1) Incomplete elementary school
2) Complete elementary school
3) Incomplete secondary school
4) Complete secondary school/equivalent
5) Commercial school/ training
6) Technical training
7) Incomplete High school
8) Complete highschool
9) Incomplete University
10) Complete University
11) Masters
12) Doctorate
13) No schooling
98) DK
99) NA

Adding up the income of all the people that live with you in your house, approximately what is the monthly income in your household (IN PESOS)?
1) 0 a 1,680
2) 1,681 a 3,360
3) 3,360 a 5,040
4) 5,041 a 6,720
5) 6,721 a 8,400
6) 8,401 a 10,080
7) 10,081 a 11,760
8) 11,761 a 13,440
9) 13,441 a 16,800
10) 16,801 a 50,400
11) 50,400 ó más
98) DK
99) NA

Estimate the approximate income of your total household, including your own:
1. Hasta $800 6. $16,001-$30,000
2. $801-$2,400 7. $30,001-$40,000
3. $2,401-$4,000  8. Más de $40,000
4. $4,001-$8,000  98. No sabe
5. $8,001-$16,000  99. No contestó

What is your religion?
1) Catholic
2) Protestant
3) Muslim
4) Jewish
5) None
6) Other
98) DK
99) NA

How many lightbulbs are in your home?

¿How long have you been living in this neighborhood?
1) Less than a year
2) 1-3 years
3) 4-5 years
4) 6-10 years
5) 10 or more years
98) DK
99) NA

CARD A
Burglary
Business robbery
Theft of vehicle
Theft in public transportation

**CARD B**
Gunshot wound
Extortion
Fraud
Kidnapping
Sexual abuse
Bibliography


Cassy Lynn Dorff was born May 5, 1988 in Midland, Texas, USA. She holds a B.A. degree in Government from the University of Texas at Austin (2010), as well as a MA and Ph.D degree in Political Science from Duke University (2015).

During her time at Duke she received funding from the International Center for Nonviolent Conflict (ICNC), the Program for the Study of Democracy, Institutions, and Political Economy at Duke (DIPE), the Political Instability Task Force, and the University of Denver. She is also a member of the Crisis Prediction Project (CRISP) under the direction of Michael D. Ward. Her current publications are listed below.


From 2015-2016 she will be a post-doctoral research fellow at the Siè Chêou-Kang Center for International Security and Diplomacy at the University of Denver. In the fall of 2016 she will begin her tenured-track faculty position in Political Science at the University of New Mexico.