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The Specter of Violence: Perceptions of Violence and Political Behavior in Mexico

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The Specter of Violence:
Perceptions of Violence and Political Behavior in Mexico

By

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Professor Ruth Berins Collier, Co-Chair
Professor David Collier
Professor Harley Shaiken

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Abstract

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Violence stemming primarily from organized crime plagues Mexico. The sharp increase in criminality and insecurity, particularly since the start of the war on drugs in 2006, is one of the most significant developments for the country since the turn of the century. Officially recorded crimes, which are estimated to represent only one tenth of all crimes committed, have grown by 70% in the last two decades. The homicide rate in particular has exploded: between 2000 and 2018 the rate nearly tripled, climbing from eleven murders per 100,000 inhabitants to twenty-nine. Two hundred and fifty thousand deaths since 2006 are considered directly attributable to the drug war. This violence has led to the internal displacement of 345,000 Mexicans as of 2019, an increase of 431% from a decade prior, and more than 35,000 disappearances.

A surge of scholarly research on the causes of bloodshed in the country have highlighted the growing intractability of public security issues and have raised questions about the efficacy of various policy initiatives aimed to curtail the violence. Yet, little attention has been paid to how violence is understood by the populace and to the political consequences of those perceptions. This dissertation addresses that deficit by using large-scale survey data with embedded experiments to systematically address two driving questions: 1) how do Mexicans perceive violence? and 2) how do perceptions of violence affect engagement in electoral politics?

Using data from an original survey of 17,451 Mexican voters contacted six weeks prior to the 2018 presidential election, I examine the ways in which Mexicans perceive violence, specifically asking a random subsection of respondents to estimate levels of homicide and kidnapping in their state. I find that misperceptions of violence are nearly universal, with underestimation of homicides and overestimation of kidnappings being dominant. Yet, misperception within each type of violence is not uniform: A fifth of respondents overestimated homicides and nearly a quarter underestimated kidnappings. Elite discourse and media coverage of violence interact with different cognitive biases and adaptations to shape the way that information is assimilated. The salience of violence, more than actual, objective levels of violence, drive these misperceptions. Moreover, perceptions of violence in one's state often reflect violence levels of years prior, indicating that these perceptions are relatively stable, slow to update, and even dramatic recent

changes in violence levels have little effect on people's beliefs.

In exploring the heterogeneity in perceptions of violence, I find that a number of state-level and individual-level factors influence how respondents interpret the violence around them. Respondents along both the northern and southern border were more likely to overestimate homicide. Those living along the southern border were substantially more accurate in their assessment of kidnapping than those along the northern border or living in the interior; they still tended to overestimate kidnapping, but not to the same extent as their peers elsewhere. Those living in more wealthy and/or in more economically unequal states were also more substantial overestimators of violence than their peers in either poorer or more equal states. At an individual level, one's level of education and the attention paid to political processes drive overestimation of violence, supporting the hypothesis that exposure to media and elite messaging, as well as retention of that information, are key drivers in overestimation of violence. Additionally, support for leftist candidate and current president Andrés Manuel López Obrador was highly correlated with overestimation of violence.

These misperceptions have serious political consequences. I use both experimental and observational data to explore how perceptions of violence, and its two key driving components, actual violence and the salience of violence, alter political attitudes and behaviors. In doing so, a clear picture emerges: the citizens of Mexico who experience violence the most strongly are hiding in fear, expressing uncertainty over their electoral decisions, and withdrawing from political life. Insecurity has dramatically decreased citizens' the sense of personal safety. It has led them to retreat from electoral politics in clear ways: they are less likely to participate in elections, are more indecisive about who to vote for when they do chose to engage, and feel alienated from political parties. They are also more likely to reject reforms and tolerate societal ills, including corruption and criminal organizations themselves, than those whose overall experience of violence is less heightened. Fear, apathy, and uncertainty drive this withdrawal.

While the majority of scholarly research on the effects of violence on political behavior has focused on the relationship between actual violence levels and participation and vote choice, researchers have largely missed that perceptions of violence, not violence itself, are the key driver of these processes. Now, a decade and a half after the start of the militarized war on drugs in Mexico, the death toll has reached new highs for three consecutive years, with no signs of tapering off. The specter of violence hangs over Mexico and is pushing citizens backward in retreat.

For my beloved grandfather,

the one and only Arnold Buss.

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List of Abbreviations

PAN	National Action Party (Partido Acción Nacional)
PRD	Democratic Revolutionary Party (Partido de la Revolución Democrática)
PRI	Institutional Revolutionary Party (Partido Revolucionario Institucional)
SESNEP	Executive Secretary of the National System of Public Security
TCO	Trans-National Criminal Organization

Acknowledgments

First and foremost, I would like to thank my dedicated committee for mentoring, guiding, and encouraging me throughout this formidable journey. Laura Stoker spent countless hours pushing me to find the story in my data, revising my drafts, and telling me she believed in me, all of which I desperately needed. Her support began well before my committee even formed and has been unwavering to the end. Without her boundless generosity and faith in me I could not have finished this project. Ruth Berins Collier has been a steadfast ally and brilliant mind, pushing me to think more deeply, conceptualize more fully, and analyze more comparatively. From her writing workshops to our many conversations in her office and over Zoom, her coaching has been invaluable. David Collier has been my cheerleader from day one. He took me under his wing when I first arrived at UC Berkeley and his optimism and advocacy have made all the difference. Harley Shaiken and the deeply rich and collegial atmosphere he has fostered at the Center of Latin American Studies have been an incredible resource in my education and professional development.

I am indebted to the extraordinary community of Collier Latin Americanists at Berkeley, past and present, who shared ideas and drinks with me in that beautiful sunroom on Shattuck Avenue, gave me couches to crash on in foreign countries, and inspired me through this journey. The depth and breadth of the Collier mafia drew me to Berkeley, sustained me while I was there, and has given me a network of colleagues and friends that reaches around the world. They are without a doubt the best gang I have ever had the privilege to join.

The bonds you form in the trenches of graduate school are like no others. We all have made the same bold and slightly crazy life choice, and spend the better part of a decade wondering together what on earth we were thinking. Ben Bartlett deserves special mention for keeping me sane and mollifying me with dim sum. My friendships with Andrew Bertoli, Chris Chambers-Ju, Alice Ciciora, Sarah Garding, Jason Klocek, Deirdre Q. Martin, Anne Meng, Gerasimos Tsourapas, and Kim Twist among many others made the experience immeasurably better.

This project could not exist without considerable financial backing from across UC Berkeley, including departmental and campus wide fellowships and a travel grant from the Center for Latin American Studies. These funds were supplemented by being a Graduate Student Instructor and Research Assistant, democracy-threatening political consulting, my grandpa slipping me extra cash on visits, and my husband subsidizing the many rare steaks and bottles of prosecco which the writing process absolutely required.

Teaching was a particularly rewarding part of my time as a graduate student. In the front of the classroom I found my home. Years spent teaching with M. Steven Fish fostered that passion; from him I learned the art of capturing an audience’s attention and using it to beat the seven criteria of Dahl’s Polyarchy into young, impressionable minds.

Behind every great academic department are a team of unsung heroes. The administrators past and present of the Charles and Louise Travers Department of Political Science have been a wellspring of unending assistance, encouragement, and even the occasional therapy Golden Retriever in the office. Staff in the department and across the campus make the world of academia possible.

Every aspect of my education has been wholly entrusted to the public school system. I am indebted to the hundreds of educators who I learned from along the way. My high school history

teacher, Michael Vandierdonck, taught me never to trust a government. Early forays into research started as an undergraduate at UC San Diego. I thank Marisa Abrajano's for giving me my first taste of the research process and teaching me how to read a regression table. If Scott Desposato had not turned to me at the SSB coffee cart and told me that being a comparativist meant more travel, I may have never found my way to Berkeley nor my life and my work in Mexico.

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Pursuit of education is one of the defining traditions of my family. My mother, Carolyn Phinney, raised me to believe in my own potential, to push myself hard, and to never take 'no' for an answer. I get my moxie from her. My father, David Buss, has a love of knowledge and books that was contagious and seldom have we shared a meal without discussions of psychology, biology, or a host of other fields. Ryan Buss, my brother, played an important role in multiple stages of this project, from helping with data coding to reminding me to take care of myself. He has been my emotional support human for longer than three decades, whether he wanted to be or not.

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My paternal grandfather Arnold, to whom this dissertation is dedicated, is the original Dr. Buss and my eternal teacher. Always prepared with a printed handout for us to discuss, my grandfather has challenged me to think logically, articulate clearly, and debate vigorously, all while reminding me to embrace this crazy species of ours, not to be merely rational. He is my true north.

My dear husband Carlos de Legarreta, who I met in Mexico City while conducting research for this dissertation, has been infinitely patient, gently encouraging me toward the finish line without judgment or reproach. Thank you for giving me the space to be unsure, to waver, and to find my way back to this project. This winding journey has been made so much richer by having you at my side.

Finally, to Mexico. One of my life's greatest love stories has surely been with you. May your people, of which I am now one, know peace and life without fear.

Chapter 1: Introduction

Violence stemming primarily from organized crime plagues Mexico. The sharp increase in criminality and insecurity, particularly since the start of the war on drugs in 2006, is one of the most significant developments for the country since the turn of the century. Officially recorded crimes, which are estimated to represent only one tenth of all crimes committed, have grown by 70% in the last two decades.[1] The homicide rate in particular has exploded: between 2000 and 2018 the rate nearly tripled, climbing from eleven murders per 100,000 inhabitants to twenty-nine.[2] Two hundred and fifty thousand deaths since 2006 are considered directly attributable to the drug war.[3] This violence has led to the internal displacement of 345,000 Mexicans as of 2019, an increase of 431% from a decade prior,[4] and more than 35,000 disappearances.[5]

A surge of scholarly research on the causes of bloodshed in the country have highlighted the growing intractability of public security issues and have raised questions about the efficacy of various policy initiatives aimed to curtail the violence. Yet, little attention has been paid to how violence is understood by the populace and to the political consequences of those perceptions. This dissertation addresses that deficit by using large-scale survey data with embedded experiments to systematically address two driving questions: 1) how do Mexicans perceive violence? and 2) how do perceptions of violence affect engagement in electoral politics?

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1 *Incidencia Delictiva del Fuero Común 2000.* (n.d.). Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP).
Incidencia *Delictiva del Fuero Común 2019.* (2020). Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP).

2 Dalby, C., & Carranza, C. (2019, January 22). InSight Crime's 2018 Homicide Round-Up. *InSight Crime.*

3 de Córdoba, J., & Montes, J. (2018, November 14). 'It's a Crisis of Civilization in Mexico.' 250,000 Dead. 37,400 Missing. *Wall Street Journal.*

4 *Internal Displacement in Mexico.* (n.d.). International Displacement Monitoring Centre.

5 de Córdoba, J., & Montes, J. (2018, November 14). 'It's a Crisis of Civilization in Mexico.' 250,000 Dead. 37,400 Missing. *Wall Street Journal.*

overestimators of violence than their peers in either poorer or more equal states. At an individual level, one's level of education and the attention paid to political processes drive overestimation of violence, supporting the hypothesis that exposure to media and elite messaging, as well as retention of that information, are key drivers in overestimation of violence. Additionally, support for leftist candidate and current president Andrés Manuel López Obrador was highly correlated with overestimation of violence.

These misperceptions have serious political consequences. In the second part of this dissertation, I use both experimental and observational data collected from my original survey to understand how perceptions of violence, and the two key driving components of perceptions, actual violence and the salience of violence, are affecting how Mexicans participate in their democracy. In doing so, I look at self-reported perceptions of violence, objective state levels of violence, and an experimental manipulation which simultaneously increased the salience of violence and provided accurate information to respondents about the level of homicide and kidnapping in their state.

Embedded within the survey was a Violence Experiment, with a "tell-ask" design, in which one quarter of respondents were asked to estimate homicide and kidnapping levels and another quarter were told about the homicide and kidnapping levels in their state. The other half of respondents served as a control group. For those in the "tell" condition, I both corrected their beliefs about violence and brought violence to the top of their mind in an artificial setting. This artificial construction mimics the numerous natural settings in which violence becomes highly salient to someone: they have a friend or family member fall victim to a violent crime, mass media or a political candidate focuses their attention on public security in their community, constantly reminding people of the extremity of violence, or a criminal organization may display a dismembered body in a public location.

In triangulating these three dimensions of violence, perceptions, objective realities, and salience, a clear picture emerges: the citizens of Mexico who experience violence the most strongly are hiding in fear, expressing uncertainty over their electoral decisions, and withdrawing from political life. Insecurity has dramatically decreased citizens' the sense of personal safety. It has led them to retreat from electoral politics in clear ways: they are less likely to participate in elections, are more indecisive about who to vote for when they do chose to engage, and feel alienated from political parties. They are also more likely to reject reforms and tolerate societal ills, including corruption and criminal organizations themselves, than those whose overall experience of violence is less heightened. Fear, apathy, and uncertainty drive this withdrawal.

While the majority of scholarly research on the effects of violence on political behavior has focused on the relationship between actual violence levels and participation and vote choice, researchers have largely missed that perceptions of violence, not violence itself, are the key driver of these processes. Now, a decade and a half after the start of the militarized war on drugs in Mexico, the death toll reaches new highs each year. Each of the last three years has been more violent than the last, achieving the title of most violent year in in Mexican history since the Revolution at the turn of the 1900s. The citizenry are suffering from battle fatigue and are disengaging from the democratic process.

In this introduction, I first delve into relevant background information about Mexican politics and history, discussing the main political parties and the emergence of extreme levels of drug-trafficking related violence over the past decade and a half. Then I walk through the organization of this dissertation, summarizing key elements from the subsequent six chapters. As

this dissertation has two distinct substantive sections, understanding perceptions of violence and looking at their consequences, I review the pertinent existing literature on each of those driving questions in the chapters were they are most relevant.

1.01 21st Century Electoral Politics

Mexican politics is marked by the uninterrupted seven decade reign of the Institutional Revolutionary Party (PRI), which dominated in 20th century. Since relinquishing its autocratic rule in 2000, three different parties have held the highest executive power: the National Action Party (2000 – 2012), the PRI (2012 – 2018), and Morena (2018 to present).

During the decades of its hegemony, the PRI was a catch-all, ideologically flexible party which had leaders ranging from progressive, albeit isolationist, leftists to neo-liberal conservatives. The PRI has continued to compete in the 21st century, now as a democratic and ideologically moderate party, advocating for moderate social reforms and economic expansion through decreased regulation. On the right side of the ideological spectrum, the PAN has maintained conservative opposition to the PRI since its formation in the 1940s, fueled by support from religious conservatives and business elite.

On the left, the Democratic Revolution Party (PRD) held the position of main progressive party from its formation in the late 1980s to 2014.[6] After a fissure within the PRD over its cooperation with newly-elected President Enrique Peña Nieto (PRI) in 2012, its former standard-bearer and current president of Mexico, Andrés Manuel López Obrador (popularly known by his initials, AMLO),[7] broke from the party and took much of the membership with him. He created the National Regeneration Movement party (Morena),[8] which currently holds the role of most powerful party on the left, controls the presidency, and holds a majority in both the upper and lower chambers of the legislature.

One of the hallmarks of the PRI's autocratic reign in the 1900s was relative peace and social stability. Multi-level government coordination under the PRI umbrella facilitated that stability through effective pact-making with trans-national criminal organizations (TCOs), colloquially known as drug cartels, to ensure low levels of violence within Mexico. This helped counter the absence of legal dispute resolution mechanisms in these illicit markets; that absence commonly leads to violence as an instrument for market regulation, particularly in competition over trade routes (Friman, 2009). While erosion of the coordination between the PRI and TCOs was in many ways a natural consequence of democratization and party alternation, it brought about substantial increases in violence (Ríos, 2015a). By 2004, drug-trafficking related violence began to seriously challenge the state. Bloody conflict of the decade and a half prior had been typified by organized crime dyads fighting each other over trafficking routes. The election of Calderón in 2006 would usher in an era in which the Mexican military joined that fight, dramatically increasing its human cost.

Trans-national criminal organizations have been commonly referred to as cartels in

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6 The PRD still exists but suffered mass exodus from its leadership as well as rank and file when former PRD standard bearer López Obrador left the party to start Morena. The PRD formed an alliance with the conservative PAN in the most recent presidential election which took place in July of 2018. The PRD only won 5% of the popular vote nationally.

7 This acronym nickname is neutral and used by supporters and detractors alike.

8 Morena, while typically spelled in lowercase, is an acronym for *Movimiento Regeneración Nacional* and also is an adjective describing a woman of dark complexion.

Mexico largely because they frequently enjoyed state protection and territorial monopolies sanctioned unofficially by the government under the PRI. While other researchers often use the term "drug trafficking organizations" or DTOs (Ley, 2014), I use the term trans-national criminal organization throughout this project as it more accurately describes the activities of these groups. These organizations extend outside of drug production and smuggling and no longer hold cartel-like monopoly over territories nor the same level of state protection. Much like corporate conglomerates, these organizations have diversified their activities over time in Mexico. Initially focused on the production, preparation, and transportation of illicit substances, TCOs have branched out into human smuggling, arms trafficking, and extortion. Especially as areas of the United States have legalized marijuana, these alternate sources of income have become more important. These organizations are also fundamentally multi-national in their nature, not only operating in Mexico but extending into other countries or interacting across borders with other organized criminal groups. Because of their trans-nationality, borders and ports are particularly important areas of competition between rival TCOs.

In the 2006 election, Felipe Calderón, from the incumbent party[9] PAN, declared victory. Calderón opposed Andrés Manuel López Obrador (then a member of the PRD), the outgoing mayor of Mexico City, and Roberto Madrazo (PRI), a former governor and party president. This election was a far less decisive a victory than in 2000, and widespread ballot irregularities and reports of fraud led to weeks of turmoil throughout the country.[10] By official tally, Calderón won 35.9% of the popular vote and López Obrador won 35.3%, with less than 250,000 votes separating them nationally.

López Obrador refused to accept the loss of the election. There were reports of fraud around the country, from uncounted ballot boxes found in dumpsters to purged voter rolls in areas that where López Obrador had had a commanding lead in the polls. His supporters took to the streets in droves, with an estimated three million people attending the largest of the protests in Mexico City's main square four days after the election. Ballot recounts took place in 9% of the precincts in the country but official results were not overturned.[11] Shortly before the official swearing in of the new Mexican President, Felipe Calderón, López Obrador staged his own swearing in ceremony declaring himself the rightful winner of the election and taking a public oath of office with much of the traditional pomp and circumstance of a Mexican inauguration ceremony. A majority of the country, including many of his supporters who believed the election had been stolen, believed this stunt served to undermine Mexico's fledgling democracy. On December 1st, 2006 Felipe Calderón took the official oath of office amid vocal protests and shouting from opposition parties before quickly exiting the Chamber of Deputies without giving the traditional inaugural address.

As one of Calderón's first acts as president, he declared war on drug trafficking and launched a 4,000 troop military incursion in to his home state of Michoacán. Many viewed this newly declared war as a method for legitimizing his presidency (Álvarez Béjar, 2007; Chabat, 2010), especially given that combating drug trafficking was neither discussed widely during his presidential campaign nor mentioned frequently in his party's official platform.[12] By the end of

[9] The Mexican constitution does not allow re-election for the presidency, and until 2018 did not allow re-election for any other national or state level public office.

[10] Systematic review of the election indicate that all three main parties violated election laws during their campaigns but that there was no evidence of fraud in the counting of the votes (Aparicio 2009).

[11] Tobar, H., & Boudreaux, R. (2006, July 8). Mexican Leftist's Strategy Involves Another Recount. *Los Angeles Times*.

[12] *Plataformas Electorales.* (2006). Instituto Nacional Electoral (INE).

Calderón's *sexeño*, or six year term in office, 60,000 Mexicans would die in the conflict.[13] This number had been negligible under his predecessor Vicente Fox. Military expenditures increased 340% between 2000 and 2008 (Camp, 2010). This militarization marked a radical shift from decades of unofficial government brokered peace deals between rival TCOs where these organizations had effectively divided the country up among themselves and, in exchange for government non-interference in business, violence was kept at a minimum.

Regardless of whether or not Calderón's military strategy was effective at reducing the movement of drugs, it clearly resulted in a dramatic increase in the death toll of the conflict (Calderón et al., 2012; Trejo & Ley, 2013; Vilalta, 2013). These deaths were not exclusive cartel members and military personnel: civilians have been caught in the cross-fire, literally and figuratively. No comprehensive data exist on civilian casualties. Yet news reports of atrocities against civilians are common and include such horrors as babies being shot while in their mothers' arms,[14] university students being abducted and murdered,[15] and high school birthday parties ending in mass casualties.[16] Insecurity has also lead to the internal displacement of hundreds of thousands of Mexicans, nearly all civilians, as well as sharp increases in asylum petitions by those seeking to flee the violence.

Were trans-national criminal organizations once enjoyed relative monopolies over specific territories, the military was now battling them for control of those geographies. This territorial competition led directly to bloodshed (Dell, 2011). Confrontations between the military and TCOs in turn led to increased skirmishes between the organizations as well as they sought new territories of control to make up for ground lost to the military. Yet this is not solely a story of drug-trafficking related violence; insecurity in one area has spillover effects into other domains. Mexico has also seen a massive increase in domestic violence incidence which is often attributed to growth in impunity and shifting norms related to violence.[17]

Violence across Mexico's thirty-two federal entities[18] first peaked in 2011 and began to wane in the years that followed (see Figure 1.01 and 1.02). In the 2012 presidential election, Enrique Peña Nieto (PRI) ran against Josefina Vázquez Mota (PAN) and Andrés Manuel López Obrador (PRD). Peña Nieto, running on a platform of economic growth and a return to social stability, was elected president, thus marking the return of the PRI to power under a more fully democratic system. Peña Nieto, known popularly by his initials EPN, won the most votes with 38%, López Obrador came in second place with 32%, and Vázquez Mota came in third with 25% of the votes. The PRI also won a plurality of the seats in the Senate, which is entirely replaced every six years, and the lower house, the Chamber of Deputies, which is entirely replaced every three years.[19]

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13 Miroff, N., & Booth, W. (2012, November 27). Mexico's drug war is at a stalemate as Calderon's presidency ends. *The Washington Post.*

14 Sims, A. (2016, February 4). A 7-month-old baby has become a symbol of a country's desperate war against drugs. *The Independent*.

15 Lastiri, D. (2020, June 30). Cartel leader 'El Mochomo' was arrested in connection with the disappearance of 43 students from Ayotzinapa. *El Universal*.

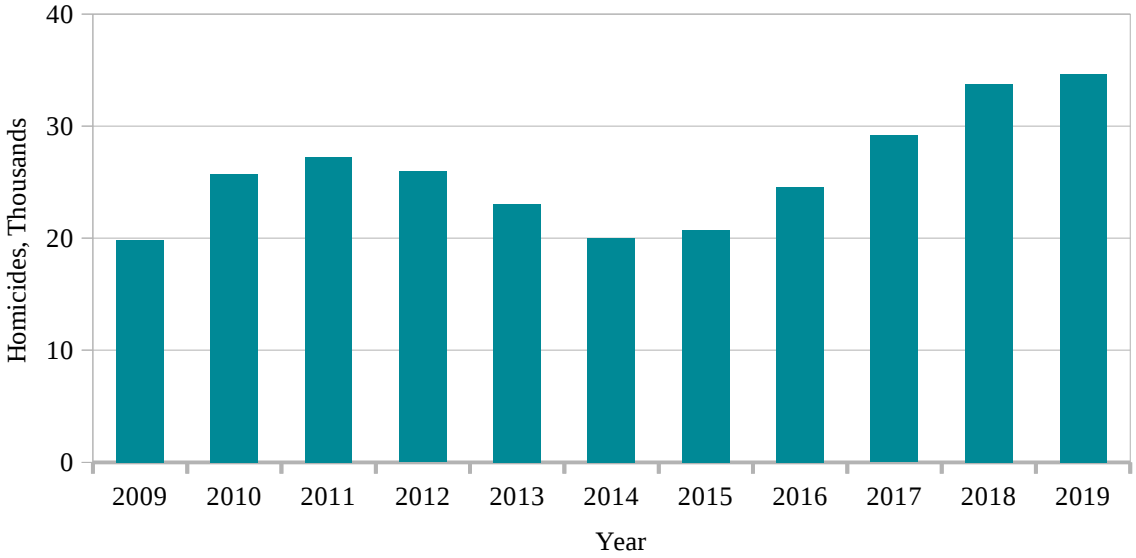
16 Cardona, J. (2010, February 1). Gunmen kill 14 at high school party in Mexico. *Reuters*.

17 *Mexico Peace Index 2018* (No. 56). (2018). Institute for Economics and Peace.

18 Mexico has thirty-one states and a federal district.

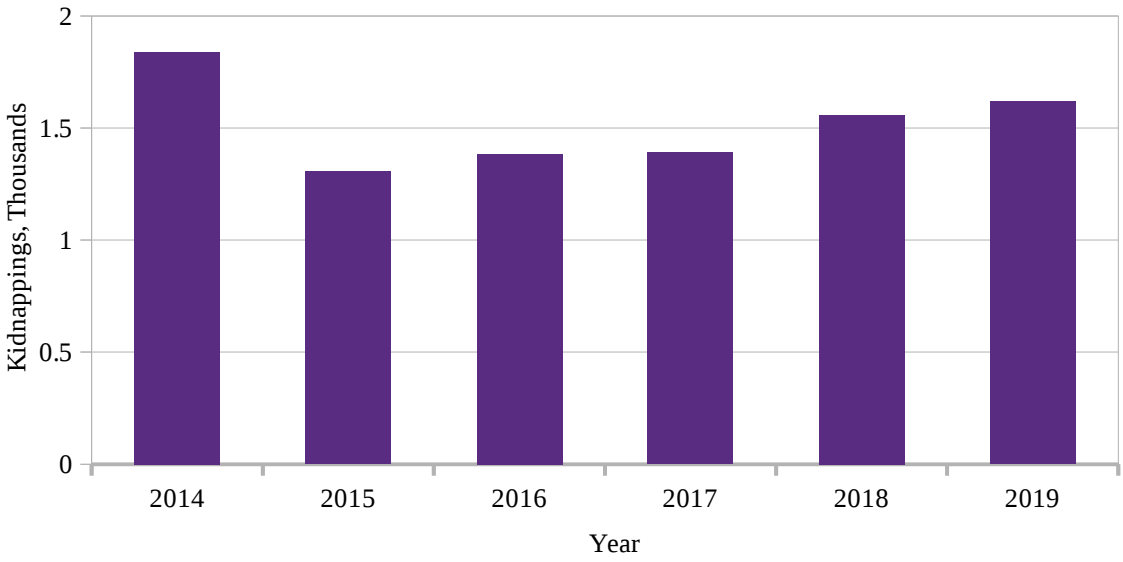
19 Until 2018, all elected offices from city mayors to the president had strict single term limits. Those limits were relaxed for some legislative offices in 2018.

Figure 1.01 Homicides in Mexico By Year[20]



Note: This figure indicates the number of homicides recorded per year in Mexico. Source: The Executive Secretariate of the National Public Security Systema (SESNSP), 2009 - 2019.

Figure 1.02 Kidnappings in Mexico by Year[21]



Note: This figure indicates the number of kidnappings recorded per year in Mexico. Source: The Executive Secretariate of the National Public Security System (SESNSP), 2014 - 2019.

Again, López Obrador protested the results of the election but without the widespread support he enjoyed in aftermath of the 2006 election. Shortly after taking office, Peña Nieto and

[20] The ways that homicides were counted changed in 2009, making figures from previous years of the Calderón administration and prior not comparable.

[21] Note that fewer years of comparable data were available for kidnapping than for homicides.

the leaders from two main opposition parties, the PAN and the PRD, signed *Pacto por México*, a far reaching policy plan for Peña Nieto's administration. This agreement included a number of pro-market reforms with some of the biggest changes coming in the education and energy sectors, including a proposal to allow foreign oil companies to operate in Mexico for the first time since the 1940s. The pact was both lauded as an impressive cross-party compromise to make the country more economically competitive and criticized as an agreement made behind closed doors, without public scrutiny and review.[22]

Peña Nieto's presidency was marked by an initial decrease in homicide levels followed by unprecedented highs. Mexico recorded 16.2 murders per 100,000 inhabitants in 2016, 22.5 per 100,000 in 2017, and 25.8 per 100,000 in 2018.[23] Kidnapping levels peaked early in his presidency, decreased in 2015, and then slowly began to climb again through out the rest of his term. The variation in kidnapping levels was much more limited than that of homicide levels. Opacity plagued Peña Nieto's *sexeño*. The structure of public homicide data was changed to make it impossible to know which deaths were attributable to confrontations with and between organized criminal groups and legislation was passed restricting open access to information.[24] The PRI had failed spectacularly their promise to return Mexico to the stability enjoyed during autocratic PRI dominance in the 20th century.

Toward the end of his term, Peña Nieto's approval ratings were at an all-time low and public repudiation of his tenure came from those on the left and the right.[25] The 2018 election marked a new era for Mexican politics. Andrés Manuel López Obrador won the presidency with an overwhelming majority after two previous unsuccessful attempts at seeking the highest office in the country. A populist leftist candidate, López Obrador promised to bring safety nets to lower classes, economic growth through reduction in corruption, and a novel way of addressing violence, largely through de-prioritizing direct confrontations and instead granting amnesty for members of trans-national criminal organizations.[26] López Obrador and his supporters optimistically refer to his win as the start of the *Cuarto Transformación* or Fourth Transformation, comparing his election to other moment of sweeping purges in corruption including the Mexican Revolution.[27]

Under López Obrador, tragically, violence has not abated. Homicides in 2019 were the highest on record and 2020 is set to surpass that record.[28] It is now estimated that over 250,000 Mexicans have died in the war on drugs just since 2006. For comparison, estimates of the death toll in five decades, a period of time three times longer, in Colombia puts estimated deaths at just over 200,000.[29] The Global Peace Index ranks Mexico as 26th from the bottom in terms of levels of peace globally, and 3rd from the bottom in Latin America, with only Colombia and Venezuela

[22] Ackerman, J. M. (2012, December 3). Pacto por México: acto fallido. *Proceso Portal de Noticias.;* Editorial Board. (2013, March 24). A model to end Washington gridlock: Mexico. *Christian Science Monitor.*

[23] Gagne, D. (2017, January 16). InSight Crime's 2016 Homicide Round-up. *InSight Crime.* Calvel, T. (2018, January 19). InSight Crime's 2017 Homicide Round-Up. *InSight Crime.* Dalby, C., & Carranza, C. (2019, January 22). InSight Crime's 2018 Homicide Round-Up. *InSight Crime.*

[24] Wilkinson, D. (2018, October 16). Violence and Opacity under Peña Nieto. *Los Angeles Times.*

[25] Ortega, A. (2018, November 24). #FinDeSexenio | Peña Nieto termina su gobierno reprobado por la mayoría. *ADNPolítico*.

[26] This amnesty proposal is discussed in greater detail in Chapter Six.

[27] Salinas León, R. (2019). *AMLO and the "Fourth Transformation" in Mexico* (41.6; Policy Report). Cato Institute.

[28] Grant, W. (2020, July 12). Could this become Mexico's bloodiest year on record? *BBC News.*

[29] Miroff, N. (2016, August 24). The staggering toll of Colombia's war with FARC rebels, explained in numbers. *Washington Post.*

being less peaceful.[30]

1.02 Upcoming Chapters

How are the people of Mexico understanding this violence? How does violence affect the citizens of Mexico and how they interact with their government? The rest of this dissertation provides answers to these questions.

In Chapter Two, I discuss the original survey I carried out which is the primary source of data in this project. In a 17,451 person national sample of Mexican registered voters from May of 2018, I collected both observational and experimental data on the ways in which Mexican citizens perceived violence and the effects of violence on their behavior. This survey included multiple overlapping experiments. The first one was an experiment on violence with a "tell-ask" design, which I call the Violence Experiment. In this, I measured perceptions of violence in one random subsample and corrected perceptions in a second, which forced violence to the top of mind for respondents and provided them with accurate information about violence levels. In addition, I measured a variety of outcomes to understand the effects of a greater context of insecurity – be it objective violence levels,[31] subjective perceptions of violence, or the salience of violence – on the political behavior of Mexicans. Some of the outcomes were measured through explicit survey questions. These included questions about one's sense of security, candidate preferences, party affiliation. Others were measured through list experiments, which are a means for measuring opinions on sensitive topics. The list experiments provide two estimates of support for the PRI as well as measurement of tolerance of moderately corrupt politicians and support for granting amnesty to members of organized crime.

In the third chapter, I focus on the relationship between actual (objective) violence and perceptions (subjective) of violence. Misperception of both homicide and kidnapping are nearly universal, but not symmetric: Mexicans simultaneously underestimate homicide levels and dramatically overestimate kidnapping levels. Homicide has increased dramatically over the past six years in Mexico, yet perceptions lag behind these changes. Perceptions of homicide more closely reflected actual homicide levels in previous years, indicating that one's ideas about the safety of their state are based on a longer time horizon, and not recent events. Across both types of violence, those who lived in the states with the highest homicide and kidnapping levels were on average the most inaccurate in their perceptions of both types of violence. However, those in the highest homicide states tended to dramatically underestimate homicide, while those in the highest kidnapping states tended to dramatically overestimate kidnapping. The salience of both of these types of violence likely drives individual differences in perception, as Mexico has tremendous subnational variation in news coverage, elite discourse, and actual risk between the two types.

In the fourth chapter, I examine societal, exogenous correlates of violence misperception. State-level factors, including economic strength, levels of inequality and poverty, region, living along the border, and political party dominance all influence individual level perceptions of violence. Notably, there is wide variation in misperception across states. Those who lived in wealthier states or states with higher levels of inequality were more likely to overestimate violence, as were those who lived in northern border states or in states which the PRD (leftist

[30] *Global Peace Index 2020.* (2020). Institute for Economics and Peace.

[31] Throughout this project I refer to "actual violence," in contrast to perceived violence, to distinguish between a more factual assessment of violence and citizens' estimations of violence.

party) and their 2012 presidential candidate, López Obrador dominated.

In the fifth chapter I examine individual-level factors in predicting violence over or underestimation. These include demographic variables, political participation, candidate and party preferences, and recent direct experiences with crime and corruption. Having a college education or higher and paying high levels of attention to the 2018 election were both associated with consistent and substantial overestimation violence, supporting the hypothesis that attention to the media drives overperception. Political participation generally was not associated with fluctuations in violence misperception, except that those who intended to abstain from the 2018 election were considerable overestimators of violence. Consistent with state-level findings in Chapter Four, supporters of López Obrador and his new party Morena overestimated violence more dramatically than supporters of other candidates or parties. With respect to personal experiences, the greater number of times one was solicited for a bribe, the more likely they were to overestimate violence. Yet, surprisingly, the number of times one was the victim of a crime was not associated with variation in perceptions of violence.

Chapter Six turns to the effects of perceptions of violence and its precursors, actual violence and the salience of violence, on political behavior. Across a variety of outcomes, high perceptions of violence and high salience of violence led Mexicans to retreat from political life. Respondents in higher violence areas indicated they were more afraid in their homes and workplaces and are less willing to answer sensitive questions regarding violence. Those with high perceptions of violence or for whom violence was highly salient were less likely to plan on voting in the 2018 elections, more uncertain over which candidates to support if they did plan to vote, and less willing to punish incumbents for negative outcomes, resisting the logic of retrospective voting. They also rejected reforms at higher rates and expressed significantly higher tolerance for corruption and for granting criminal organizations amnesty.

The seventh and final chapter concludes the project with an overview of findings and a discussion of potential avenues for future research. Violence is a cancer which has metastasized throughout Mexico. Where once only specific pockets of the country – port cities and the northern border mainly – were known for their extreme violence, murder and kidnapping have grown in magnitude and spread over the last fourteen years. Future research must continue to focus on the effects of this spread, delving into the long term political consequences of persistent insecurity.

Chapter 2: Methodology

How do Mexican citizens perceive violence? How do those perceptions affect their political attitudes and preferences? In order to address these two driving questions, I ran a large scale door-to-door survey of the Mexican population in 2018, just six weeks before the presidential election.[32] This survey of nearly 18,000 respondents provides the main source of data for this dissertation. In this chapter I describe the survey itself, including question wording, experimental designs, and construction of additional measures. I also discuss limitations to design the design.

2.01 The Survey

Through this survey, I sought to measure attitudes toward and support for presidential candidates as well as to understand citizen perceptions of violence and corruption. It was conducted door-to-door with handheld tablets from May 8 – 15, 2018. A total of 17,451 people from all 32 federal entities of Mexico were surveyed with a response rate of 42%.[33] Mexico has a over 200,000 electoral *secciones* or precincts. These *secciones* have populations ranging from dozens of people to tens of thousands. Each section was weighted by its size and 2,000 sections were then sampled with the goal of collecting a representative cross-section of localities nationwide. Once those sections were chosen, two street intersections were randomly selected within the district and surveyors were sent to those intersections. From there, surveyors were randomly assigned a cardinal direction to walk in, whereby they knocked on every third door to ask for participation in the survey. When apartment buildings were found, they were randomly assigned a floor on which to begin, knocked on the third door, then went up three floors and down three floors from their starting point to repeat the process.[34]

States ranged in number of respondents from 124 (Baja California Sur) to 1,865 (Estado de México). States averaged 15.6 respondents per 100,000 inhabitants, with a range of 7.2 respondents per 100,000 (Guerrero) to 21.3 respondents per 100,000 (Baja California). Across the whole population of 120 million Mexicans, 0.015% were surveyed. Figure 2.01 shows each state's number and proportion of respondents and more details are given in Appendix 2.01.

The number of *secciones* sampled per state were approximately proportional to the state's population, but across the board in more violent states surveyors reported a lower response rate[35]

[32] I was the sole author of the survey that was designed and implemented while I served as the Director of Research for a Mexican public opinion consultancy based in Mexico City, Mexico. The data were generously donated by the firm to the author for use in this research and the firm wishes to remain anonymous. Some analysis of the data have appeared in local newspapers across Mexico and were used internally in senatorial, gubernatorial, and presidential campaigns in the 2018 Mexican General Election. As research that was conducted by a company, anonymized, and donated to the author, UC Berkeley's Committee for Protection of Human Subjects has officially designated the research "not human subjects research (NHSR)."

[33] This response rate indicates the percentage of individuals contacted who completed the survey. It does not include those who did not answer their door or other scenarios in which contact was attempted but not achieved.

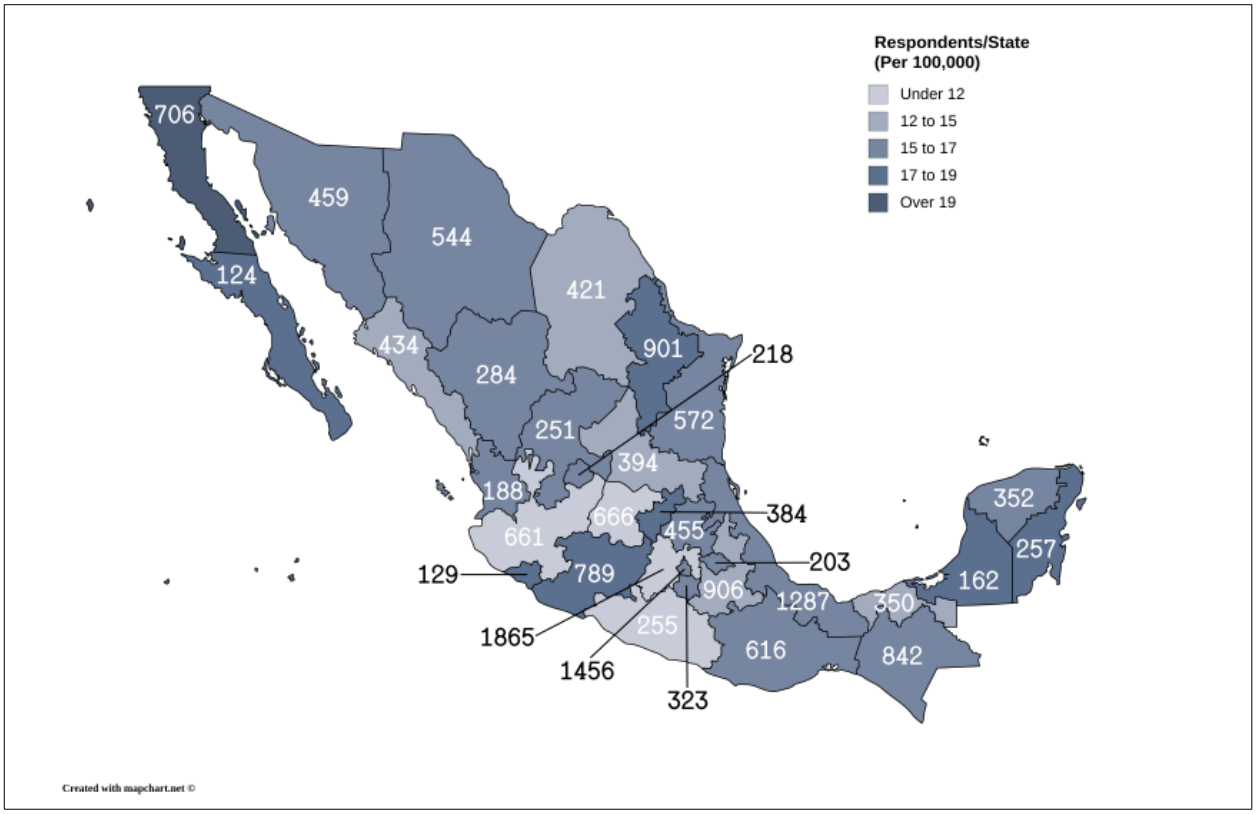
[34] The randomization of *sección* street corner, direction to walk in, and initial starting floor for an apartment building were all done through software to avoid human biases. For smaller apartment complexes, such as ones with only one or two apartments per floor, surveyors selected the apartment with the highest number or letter on the floor.

[35] The sub-contracted organization which carried out the survey did not provide a per-state response rate, but informally reported a lower response rate in several high violence states, including Guerrero.

as well as more on-the-ground problems, including being stopped by police, asked for permits that were not legally necessary, or being told by potential respondents that it was unsafe to survey in that area at that time. This is consistent with the experiences of other national survey projects.[36]

Respondents were asked for their voluntary participation and were not compensated. They were told that they would be asked a number of questions about the 2018 general election and their political preferences and that the survey was non-partisan and not affiliated with any specific candidate. Those who were under the age of eighteen and those who did not have a national voter ID card (called the *tarjeta del Instituto Nacional Electoral)* were excluded from participation.[37] Moreover, respondents were also excluded if they reported that either they or a close friend or family member worked in any of the following: surveys and/or market research, politics, and journalism and/or media.

Figure 2.01 Survey Respondents per State



Multiple overlapping experimental manipulations were carried out in this survey simultaneously, with respondents receiving two experimental assignments during the course of their participation (these experiments will be described in further detail below). The survey was

[36] Most notably the annual governmental survey on similarly sensitive matters in Mexico, the National Survey on Victimization and Perceptions of Public Security, (ENVIPE).

[37] This card is a prerequisite to voting and the deadline for applying for the card in time for the election had passed several months prior to the survey being conducted. The government does not release the percentage of the eligible voting age population that holds this card, but as the card is used as a primary identity document and does not need to be renewed, holding of this card is nearly universal across Mexico among voting age citizens.

divided in to six sections after the initial screening questions: demographic questions, political behavior, Violence Experiment, candidate, party, and policy preferences, list experiments, and economy, insecurity, corruption. Respondents were asked between fifty and sixty questions and the average response time was seventeen minutes.

2.01a Demographic Variables

Survey respondents were asked a number of background and demographic variables. These included their age, their gender identity, and their highest level of education. For education, respondents were asked about the highest level of education they had completed, with a range of twelve options that were consistent with the Mexican educational system's completion points. These responses on educational attainment were distilled in to four internationally comparable categories: primary education, secondary education, preparatory education (which is considered advanced secondary education) and technical school, and college and beyond.[38] Appendix 2.02 shows the scoring of this and all other variables analyzed in this dissertation. Participants were also asked if they had ever lived abroad, what region they lived abroad in, and how many years they had spent abroad. Lastly, they were asked to classify the area in which they lived as either urban, suburban, small city, or rural.

2.01b Political Behavior

In addition to key demographic and background variables, respondents were asked both about previous political participation and about intended participation in the 2018 race. To understand previous participation, respondents were asked about their behavior in the 2012 election as well as engagement in political activities outside of the voting booth that occurred in the twelve months prior to the survey.

First, they were asked whether or not they voted in the 2012 presidential election and, if they said they had voted, for whom they voted in that election. Respondents selected from the top three candidates, Enrique Peña Nieto (PRI), Josefina Vázquez Mota (PAN), and Andrés Manuel López Obrador (PRD), "other," or "I do not remember." Then, they were asked about seven different types of non-electoral political behavior: talking to friends and family about politics, attending a meeting of a political party or candidate, participating in a strike or march, contacting an elected official or governmental representative,[39] volunteering or working for a party or candidate, volunteering or working for a civic or community organization, and working in an informal manner toward resolving a community problem. With each of these seven activities, respondents were asked if they had participated zero times, once, or more than once within the past twelve months. With these seven variables, I created an index of informal participation in which answers to all seven questions were added together for a range of possible scores from zero to twelve. Then, I categorized respondents into low (0 – 2), medium (3 – 7), and high participators (8+).

In this section, respondents were also asked about their intended participation in the 2018 election and how closely they were following the election. First, respondents were asked if they planned on voting in the 2018 election, with potential responses being "I definitely will not

[38] Education is compulsory in Mexico through secondary school. Preparatory education (*preparatoria)* is a three year school that is classified as higher secondary education. Its international equivalents are the final two years of American high school or the one to three years of "sixth form" in the United Kingdom.

[39] This question prompted respondents to think about all types of communication, including but not limited to tweeting at, calling, or writing a letter to an elected individual or representative of the government.

vote," "I may vote," and "I will vote." For those who selected that they did not intend to vote, they were given six options to select from to explain why they did not plan on voting: "I am not eligible to vote or I do not have a voting credential," "I feel that my vote does not make a difference," "my work schedule does not allow me to vote," "I feel that I do not know enough about the candidates to vote," "it is complicated to get to my polling station," "I do not like any of the candidates," and "another reason not listed here." Second, respondents were asked how closely they were following the election: none, a little, or a lot. No questions about what candidates or parties the respondents currently supported were asked until after the first experimental manipulation, the Violence Experiment.

2.01c The Violence Experiment

The first experiment I employ, called the "Violence Experiment" uses a "tell-ask" design in order to both measure and manipulate perceptions of violence among respondents. The "tell-ask" name comes from Stoker & Hochschild, (2004), in their work on perceptions of the income gender gap in the United States.[40] This design yields information about perceptions of violence from a random subset of respondents while also introducing a treatment to manipulate people's beliefs about the levels of violence – operationalized as the number of homicides and kidnappings – in their state. Respondents were assigned to one of three conditions: control, "tell", or "ask," as shown in Table 2.01.

In the "tell" condition, respondents were given accurate information about the amount of homicide and kidnapping in their state in 2017 as recorded by the Executive Secretary of the National System of Public Security (known by its Spanish initials SESNEP). The text shown to them (translated) was as follows: "According to the Secretary of Governance, in 2017 [number of homicides] and [number of kidnappings] were registered in [state of respondent]. Thinking about your state, has 2018 been more violent, less violent, or equally violent than the past year?" Out of 17,451 respondents, one-quarter or 4,393 were assigned to the "tell" condition. Across the thirty-two federal entities, between 22% and 34% were assigned to "tell."

In the "ask" condition, respondents were asked three questions on one single screen. First they were asked "How many people do you think were murdered in your state in 2017? Please estimate if you are not sure." They were given a free response box in which only numbers between zero and 100,000 could be entered. Then they were asked "How many people do you think were kidnapped in your state in 2017? Please estimate if you are not sure." followed by an identical free response box with the same numerical limitations. Third, they were asked an identical question to those in the "tell" condition: "Thinking about your state, has 2018 been more violent, less violent, or equally violent than the past year?" One-quarter of respondents or 4,331 were assigned to the "ask" condition. Across the states, between 21% and 28% were assigned to "ask."

A pure control was used in which respondents were neither assigned to "tell" nor "ask" and, thus, were not prompted to think about homicide or kidnapping in any way. This allowed us to observe respondents' answers when they are not primed to think about violence. Half of all respondents totaling 8,727 individuals were assigned to the control group. Across the states, between 44% and 54% of respondents were assigned to control.

[40] Experimental designs which provide accurate information to correct misperceptions have been implemented in a number of studies in political science, including Kuklinski et al., 2000; Gilens, 2001; Ahler, 2014; Thorson, 2016.

Table 2.01 Explanation of Conditions in Violence Experiment

	Treatment
Ask	• Respondents were asked how many people they believed were murdered in their state in 2017 • Respondents were asked how many people they believed were kidnapped in their state in 2017 • Respondents were asked if they believed 2018 to be thus far more, less, or equally violent as 2017
Tell	• Respondents were told how many people were murdered in their state in 2017 • Respondents were told how many people were kidnapped in their state in 2017 • Respondents were asked if they believed 2018 to be thus far more, less, or equally violent as 2017
Control	• Respondents were neither asked nor given any information about homicide and kidnapping and were not asked to compare violence levels in 2017 to 2018

Using the “tell” treatment served to manipulate beliefs about the level of violence in their state without deception. Instead of being given misleading or inaccurate information, respondents are asked to provide information which they should believe to be true – in this case, government statistics on homicides and kidnappings per state in the year prior. Relative to the control group, respondents in the “tell” condition had been primed to think about violence, received accurate information about violence levels, and had violence made salient to them through being informed.

Relative to the “ask” group, respondents in “tell” received accurate information about violence levels, and had violence made salient to them through being informed. However respondents in the “ask” condition were primed to think about violence. In the “tell” condition, beliefs about violence are corrected, but whether or not they are corrected upward, informing them of more violence than they perceived, or downward, letting them know they are overestimating violence, depends on the prior perceptions of each respondent. The “tell” condition, in this sense, may have mimicked a part of every day experiences in highly violent communities, effectively bringing the issue to the front of their mind and driving home the salience and severity of this societal ill.

The “tell-ask”experimental manipulation can present a compound, or bundled, treatment problem. In both the “tell” and the “ask” conditions, respondents were primed to think about violence. Provided that the manipulation functions as intended, in the “tell” condition the respondents’ beliefs about levels of violence in their state were manipulated AND the certainty they had over those beliefs is also altered. In the “ask” condition, we do not know with what degree of certainty respondents believed their answers to be true. In comparing these treatments, “we estimate an average treatment effect of being *fully informed* of the true state of the world” (Ahler, 2016). The certainty that respondents had over the accurateness of their information could have potentially altered their responses to questions about the dependent variables of interest. Because of this, I used multiple independent variables to assess the ways in which

violence affected key outcomes, looking at the effects of actual levels of violence (observational), perceptions of violence (observational), and heightened salience of violence (experimental).

Moreover, in this particular execution of this experimental design, respondents in both "ask" and "tell" were prompted to think about two forms of violence: homicide and kidnapping. Contrary to expectation that respondents would misperceive both types of violence in the same direction on both types of violence, a full 58% of the "ask" sample, or 1,900 respondents, overestimated one type of violence while underestimating the other type of violence, as will be further discussed in Chapter Three. Because of random assignment to the conditions, we can safely assume a similar proportion of respondents in the "tell" condition were also mixed over and underestimators, despite not being asked directly about their perceptions. Thus, many in the "tell" condition had their beliefs about one type of violence raised while lowering their belief on the other type of violence.

The design of the Violence Experiment allowed me to measure the extent and direction of misperception directly among those in the "ask" condition, which I then used to test hypotheses about the relationships between perceptions and actual levels of violence (Chapter Three), external state-level contextual factors (Chapter Four), and individual characteristics and behaviors (Chapter Five). In Chapter Five, several of the variables examined were measured in the survey after random assignment in the Violence Experiment, such as candidate preference in the 2018 election. In that chapter, I compare those in the "ask" condition, who are the focus of that chapter, to the control condition to demonstrate that the correlations I discuss are not a byproduct of assignment to the "ask" condition. In Chapter Six, I juxtapose respondents in the "tell" and control conditions to understand how violence affects vote choice, partisanship, and policy preferences. In this project, respondents in the "ask" and "tell" conditions are never directly compared.

In order to verify whether or not respondents were properly randomized, I ran a series of analysis of variance (ANOVA) tests on treatment assignment and individual-level variables including gender, age, urbanness, completion of secondary education, and political participation in the 2012 election. All of these questions were asked prior to the introduction of the experimental treatments. As shown in Table 2.02, the ANOVAs indicate that there was no statistical difference between the three conditions, as would be expected by virtue of random assignment.

Table 2.02 Violence Experiment Randomization Check

	Control	*Ask*	*Tell*	*ANOVA*
Female	49%	48%	49%	p=0.895
Mean Age	41	41	41	p=0.550
Urban	55%	55%	55%	p=0.870
Secondary Education	34%	35%	35%	p=0.767
Voted in 2012	64%	64%	63%	p=0.654
Lived Abroad	10%	9%	9%	p=0.392
Definitely Plan on Voting	65%	64%	64%	p=0.269

In this experimental manipulation, respondents were necessarily clustered by state. While respondents in each state received the same type of intervention, the intervention itself varied because violence levels varied – for example, respondents in Aguascalientes were told that there were eighty-three homicides and six kidnappings that occurred in their state in 2017. Respondents in Baja California were told there were 2,317 homicides and thirteen kidnappings reported in their state in the same year. One issue that can arise in clustered random sampling is that the observations within a given cluster may be systematically more similar than those in different clusters (Wears, 2002). In effect, the cluster (the state) becomes the unit of analysis, not the individual. Because of this, I use state-level clustered standard errors when analyzing the effects of violence and perceptions of violence on individual characteristics and when looking at the effects of the "tell" treatment throughout this dissertation.

Manipulations of perceptions of violence in previous research have been extremely limited. Fair et al. (2018) manipulate perceptions of relative violence through randomly assigning respondents to receive information on whether or not Pakistan is more or less violent than a neighboring country. Ardanaz, Corbacho, and Ruiz-Vega (2014) provide objective crime data and information on declining homicide rates in Bogota, Colombia via a flyer to a subset of respondents and measured whether or not receiving accurate information would alter their level of fear and attitudes toward the police. They found that such a treatment improved citizens' sense of security, but that this effect was concentrated among those who had weak priors about crime in the first place. Neither of these studies measured perceptions of violence themselves.

Fear of crime has been the subject of considerable conceptualization and measurement work across the social sciences (Rountree & Land, 1996). In this case, likely, neither those in the "tell" nor the "ask" conditions are experiencing an increase in fear but rather are triggering a more cerebral assessment of violence. If I were telling or asking about municipal or neighborhood level violence, fear might be a more likely response. Unfortunately, reliable municipal-level kidnapping data was not possible to obtain; these data are sometimes publicly released but the federal annual homicide data set includes many entries where the city is left blank and only the state is recorded.

2.01d Candidate, Party, and Policy Preferences

Immediately following the Violence Experiment, respondents were asked a battery of questions relating to their candidate preferences, party and ideological alignment, as well as policy priorities and questions about their attitudes toward different arenas of government. These are the key outcomes I analyze in Chapter Six to illustrate the ways in which violence has led Mexican citizens to withdraw from political engagement.

Respondents were asked three questions about their support for presidential candidates: who their first choice candidate was, who their second choice candidate was, and who they would never consider voting for. The main five candidates all appeared, along with their party or coalition affiliations, followed by an option of "None of the above" or "I don't know." The names of the five candidates appeared in random order on every screen. José Antonio Meade Kuribreña ran on behalf of the centrist Revolutionary Democratic Party (PRI) in coalition called "*Todos por México"* or "All for Mexico" with the New Alliance party (PANAL) and the Green Party (*Partido Verde*). Ricardo Anaya Cortes ran on behalf of the rightist National Action Party (PAN) in a coalition called "*Por México al Frente*" or "For Mexico to the Front" in partnership with the leftist Revolutionary Democratic Party (PRD) and center-left Citizen's Movement Party

(*Movimiento Ciudadano*). Andrés Manuel López Obrador ran on behalf of the leftist party Morena in a coalition called "*Juntos Haremos Historia"* or "Together We Make History" along with the socialist Labor Party (*Partido del Trabajo*) and the Christian conservative Social Encounter Party (PES). Two independent candidates ran for president as well and appeared in this portion of the survey: Margarita Zavala[41] and Jaime "El Bronco" Rodriguez Calderón. Each candidate appeared on the tablet screen similarly to how they would appear on a ballot, with their party and name stylized to look like a Mexican ballot.

After being asked who they would support as their first choice candidate, respondents were asked about the depth of this support. They were prompted "You indicated that you plan to vote for ____. With which of the following phrases are you most in agreement?" There were four options: "I still have not decided who I will support in the elections," "I am not sure how much I support this candidate, but I may vote for him/her July 1st election," "I largely support this candidate and I am fairly sure I will vote for him/her in the July 1st election," and "I fully support this candidate and I will vote for him/her in the July 1st election."

Respondents were then asked a series of questions about which presidential candidate they believed to be best for dealing with eight main issue areas. Only the top thee candidates, Meade, Anaya, and López Obrador, were given as options, as well as the options of "None" and "I don't know." The issue areas were employment and the economy, insecurity and violence, corruption, climate change and the environment, healthcare, education, poverty alleviation and social programs, and governmental reforms.

Following questions about the presidential candidates, they were asked who they supported for governor, if they were in one of the nine states having a gubernatorial election, who they supported for the senate and the congress, as well as who they supported for the state legislature. Then respondents were asked about approval of the then-current president Enrique Peña Nieto and of their governor, if their state was not holding a gubernatorial election. Respondents were asked to rate the general performance of the president or the governor. This was asked on a five-point scale, ranging from "very good" to "very bad."

The survey asked respondents about their political party and ideological identifications as well. There are nine nationally registered political parties in Mexico, and respondents were asked which, if any, they felt most identified with. The order of the parties was randomized for each respondent. After being asked their party identification, they were asked how strongly they identified on a five-point scale from "Not identified" to "Strongly identified." Then they were asked to place themselves on an eleven-point left-right political scale, with zero being far left and ten being far right.

A "max-diff"[42] design was used to ask respondents about which of eight different policy arenas was their highest priorities and which were their lowest priorities: these were the same eight policy arenas that respondents were asked about when asked about presidential candidates: the economy, insecurity, corruption, climate change and the environment, healthcare, education, poverty alleviation and social programs, and governmental reforms. In a max-diff design, respondents evaluate four of the eight options at a time, selecting the policy arena they are most concerned about and least concerned about. They are shown multiple sets of four policy arenas which are randomly selected from the set of eight, eventually showing respondents all possible pairs of issues. These comparisons can then be used to effectively rank order the preference of

[41] Margarita Zavala dropped out of the race the day after the survey concluded.

[42] *MaxDiff and gamification: Improving survey research with games.* (2014). [Research Game Library Paper Series]. Insight Meta.

the individual. This is considered to be a more accurate assessment of preferences than a traditional rank order question. Unfortunately, a programming error made by the survey app developers made these responses unusable.[43]

Finally, respondents were asked about who and what they though were to blame for problems in seven of the eight issue areas asked about in previous questions: the economy, insecurity, corruption, climate change and the environment, healthcare, education, and poverty alleviation and social programs. As survey time was limited and a number of originally included questions had to be cut, they were not asked who they thought was to blame with issues with institutional reforms. They were given a wide array of response options, of which they could chose as many as they wanted. Available options of where blame should be placed included: the President, the legislature, the judiciary, the federal government, the state government, the municipal government, the US or other foreign countries, the Mexican citizenry, the media, political parties, armed forces and/or the police, corporations, unions and interest groups, other, "none of the above," or “I don’t know.”

2.01e List Experiments

The second round of experimental manipulations involved list, or item count, experiments to allow me to retrieve accurate information on topics where respondents might have incentives to hide their true preferences. Sensitive information, including unpopular political opinions, can be elicited through this method, thus limiting issues of social desirability bias (Corstange, 2009). Respondents were assigned to either a control group or to one of six list experiments. Analysis of four of these six experiments are included in Chapter Six; the other two experiments fall outside the scope of this project. Each treatment group, as well as the control, had a minimum of 2,400 respondents.

The control group was given a list of four sentences and asked how many, not which, of the sentences they agreed with. The four control items used, shown in Table 2.03, were all pro-reform items, covering policies that crossed political lines. The first control item, “The minimum wage should be increased across the country,” was a pro-reform proposition adopted by all three main candidates in the 2018 election, with the leftist candidate López Obrador (Morena) proposing the largest increase and placing it in more prominence in his political agenda. The second control item, “Foreign oil companies should be allowed to operate in Mexico,” was a key policy tenant of then president Peña Nieto’s (PRI) 2012 campaign which he implemented during his tenure. This policy was widely supported by the centrist PRI and rightist PAN, but leftist Morena party officials opposed the departure from the seventy year standard of not allowing foreign oil companies to operate on Mexican soil.

The third control item, “Corrupt politicians should be severely punished,” cut across the political spectrum, with those on the left (Morena) and right (PAN) pushing this issue to the forefront more than those in the centrist PRI. PRI candidate Meade sought to distance himself from the overtly corrupt sitting president, a member of his own party, but did not highlight this as much in his campaign. Fourth, “The voting age should be lowered to sixteen,” was also a pro-reform policy, but not one being widely discussed by any party. Taken together, these four pro-reform policies represented ideas from all spans of the ideological spectrum.

[43] The survey subcontractors did not use commercially available software such as Qualtrics, but rather had their own custom built survey APK.

Table 2.03 Control Items in List Experiments

1. The minimum wage should be increased across the country.
2. Foreign oil companies should be allowed to operate in Mexico.
3. The voting age should be lowered to sixteen.
4. Corrupt politicians should be severely punished.

As seen in Table 2.04, two of the four relevant experimental items measured were aimed at revealing closeted *priístas*: quiet supporters of the incumbent party. These items were "The PRI should remain in the presidency." and "Support for the PRI should not be so heavily criticized." Since having it's first democratic exchange of the presidency in 2000, many Mexicans who previously supported the PRI when it was only viable party turned against the party publicly, not only choosing to support candidates from other parties but also denouncing the past sins of the PRI. These detractors included numerous former PRI standard-bearers. Support for the PRI continued to be out of favor through the 2006 election where the candidate of the party that once reigned for seven decades came in third place with only 22% of the vote.[44] Given this public turn away from the PRI, it was important to measure both overt and covert support.

The third group was indirectly asked about endorsement of a policy proposal that came from Andrés Manuel López Obrador: granting some form of amnesty to members of criminal organization organizations. This item was worded as "Cartels should be given amnesty."[45] This policy was sharply and immediately criticized across the political spectrum as an impulsive idea from a populist candidate.[46] With theatrical flourish, in a debate held several months later, independent candidate Jaime "el Bronco" Rodríguez challenged what he viewed as López Obrador's lax stance on crime, including this policy, and proposed the alternative of cutting off the hands of criminals as punishment.

The fourth prompt was aimed at understanding support for the idea that a moderate level of corruption was tolerable. The item was: "Moderately corrupt politicians should be tolerated if they demonstrate good results." This list experiment was added at the last minute, two days prior to the start of the survey. Unfortunately, a statement related to corruption also appeared in the control list (See item #4 on Table 2.03). Yet despite those in this treatment category being shown two list items that are in effect, statements in opposite directions, analysis of this experiment yielded interesting results, which are described in Chapter Six.

Table 2.04 Treatment Items in List Experiments

1. The PRI should remain in the presidency.
2. Support for the PRI should not be so heavily criticized.
3. Cartels should be given amnesty.
4. Moderately corrupt politicians should be tolerated if they demonstrate good results.

Respondents were randomly assigned to one of the seven conditions, shown in Table 2.05, with equal chance of assignment into each condition. This randomization occurred after the

[44] Primer: Mexico Elections 2006 (washingtonpost.com). (2006). *Washington Post.*

[45] To make the question universally understandable I used the colloquial term 'cartel.'

[46] Pskowski, Martha. 2018. "The Radical Amnesty Plan of Mexico's Next President." The New Republic, July 2, 2018.

introduction of the Violence Experiment and one-quarter of those assigned to each list experiment were also assigned to "tell," one-quarter were assigned to "ask," and one-half were assigned to control within the "tell-ask" framework.

Table 2.05 Assignment of Respondents to Experimental Conditions

		Violence Experiment			Total
		Control	*"Ask"*	*"Tell"*	
List Experiments	*Control*	1,265	588	599	2,452
	PRI Remain	1,231	632	602	2,466
	PRI Support	1,212	582	641	2,435
	Tolerate Corruption	1,337	607	700	2,644
	Cartel Amnesty	1,205	613	603	2,422
	Other List Experiments[47]	2,477	1,309	1,248	5,035
Total:		8,727	4,331	4,393	**17,451**

To analyze each of the four experiments I use difference-in-means tests and multivariate regression analysis procedures in line with those outlined by Imai (2011) and Blair and Imai (2012). The difference in means between the average number of items endorsed by control group (out of the four control items) to the treatment group (the four control items plus the one treatment item) shows the percentage of respondents which support the item. As a stage of further analysis, I regress the number of items endorsed on whether or not one was assigned to control or a treatment condition as well as other key independent variables, such as state level of violence, assignment to one of the three conditions in the Violence Experiment, or perceptions of violence, for example. Through these multivariate regression analyses, I am able to understand the correlates of endorsement of the treatment list item.

Post-randomization checks indicate that the randomization was successful. ANOVA tests reveal that there were no statistical differences between the respondents on four demographic questions and three behavioral questions, as shown in Table 2.06.

The setup of experiments in this survey provides overlapping manipulations. The list experiments occur after assignment in the Violence Experiment, allowing me to show how violence, perceptions of violence, and informing respondents about violence all affect responses to those sensitive questions. In Chapter Six, I compare respondents in "tell" to those in the control condition of the Violence Experiment on a variety of partisan and attitudinal measures as well as with respect to their responses to the list experiments. For example, as discussed in that chapter, I expect that by increasing the salience of violence to respondents and informing them of violence levels, as done in the "tell" condition of the Violence Experiment, I will be making respondents more accommodating toward TCOs. I am able to evaluate this by analyzing how the results from the third list experiment differ between the "tell" and control groups.

[47] Analysis of these experiment are not in in the scope of this project and they will be excluded from further discussion.

Table 2.06 List Experiment Randomization Check of the Relevant List Experiments

	Control	*PRI Remain*	*PRI Support*	*Cartel Amnesty*	*Tolerate Corruption*	*ANOVA*
Female	48%	49%	49%	48%	49%	p=0.642
Mean Age	41	41	41	41	41	p=0.682
Urban	56%	54%	56%	54%	55%	p=0.386
Secondary Education	36%	34%	34%	35%	33%	p=0.260
Voted in 2012	63%	66%	63%	64%	63%	p=0.171
Lived Abroad	10%	9%	8%	9%	10%	p=0.263
Definitely Plan on Voting	63%	65%	65%	64%	64%	p=0.849

2.01f Economy, Insecurity, and Corruption

The final section of the survey asked respondents to think about the economy, insecurity, and corruption. Respondents were asked, for all three of these themes, how they believed the current situation compared to the situation twelve months prior, with available responses ranging from the current situation was "much worse" to "much better" on a five-point scale. Then they were asked to forecast the future, thinking about how they believed the country would look twelve months from that point for all three of those areas. The available responses were the same: a five-point scale ranging from "much worse" to "much better." Regarding the economy, respondents were also asked to rate their satisfaction with their own personal economic situation on a five-point scale from "very unsatisfied" to "very satisfied."

A series of questions sought information about how secure one felt in a variety of localities. Respondents were asked "In terms of security, tell me how you feel in your _____?" The available responses ranged from zero to four, with zero being "very insecure" and four being "very secure." Six locations were given: your home, your street, your work or school, your neighborhood, your city, and your state. All of these responses were re-scaled to be between zero and one so that a one unit increase on the variable represented moving from feeling "very insecure" to feeling "very secure" in each given location. I created a new variable of overall security by averaging responses from these six questions.

Lastly, respondents were asked about their personal experiences with crime and corruption. They were asked "Have you been the victim of a crime in the last twelve months? That is to say, have you been the victim of a robbery, theft, aggression, fraud, blackmail, extortion, threats, or another type of crime in the last twelve months?" For those who answered yes, they were then asked if in the last twelve months they had been the victim one or two times, between three to five times, or more than six times.

A similar question was asked about corruption: "In the last twelve months, has a government functionary or a member of the armed forces or police solicited a bribe or a "little bite"?[48] Note: we are not asking if you paid the bribe or "little bite," only if it was solicited from you." For those who answered yes, they were then asked if in the last twelve months they had

[48] This is the translation of the colloquial Spanish expression for bribery.

been the solicited one or two times, between three to five times, or more than six times.

After the survey questions concluded, a final screen appeared thanking participants for their time and participation and providing an email address that they could send questions to if they had any doubts or concerns or if they wanted to know more about the survey. No questions were submitted to that email address.

2.02 Advantages and Limitations

To date, this survey was one of the largest ever private surveys done in Mexico. Simultaneous to the 17,000 person door-to-door surveys conducted within one week in May 2018, a telephone survey of more than 20,000 individuals took place. Due to time restrictions, the experimental portion of this survey was removed from the telephone survey and thus those data will not be included in this analysis. This survey was designed and carried out by a private consulting and polling firm with the information then sold to national and sub-national political campaigns in Mexico. As such, a number of question choices were shaped and constrained to reflect the needs of those campaigns.

Doing a door-to-door survey allowed for a longer survey as well as a more representative sample. Pre-tests of the telephone number data bases held by consulting firm skewed urban and left, and random digit dialing surveys were not an available option. Because the survey was carried out door-to-door, randomization could not occur at the individual level, but rather happened at the level of the *sección* or precinct. Homeless populations were missed entirely and surveyors attempting to visit those living in gated and guarded buildings or communities were subject to the whims of the guards. These factors likely cut out both the extreme high and extremely low ends of the socioeconomic spectrum.

One crucial way in which geographic location affected this survey is through the way the survey was executed. The survey was dispatched across all thirty-two Mexican federal entities simultaneously, with nearly all states having different field teams. The sub-contractors hired to carry out the survey in turn sub-contracted the survey to local field teams. To minimize error introduced by this, I led a day long, in-person training in Mexico City of all field captains (of which there were typically two to five per state, depending on the size of the state). The field captains were all given the same instructions and heard each other's questions. The same model and version of tablet with identical custom survey software were used nation wide, and identical written instructions were provided to each individual pollster. Nevertheless, the variation in field operators must be acknowledged.

The survey also excluded those who were not in possession of a national voter registration (INE) card, the *tarjeta de la Institución Nacional Electoral*, meaning that they were not registered to vote. This card serves as effectively permanent registration and only needs to be updated when one moves. The sub-contracting firm who carried out the survey did not record the number of people who answered that they did not have that card, making it uncertain how many were excluded for this reason. The exact percentage of the population that are eligible for but do not have an INE card is not available, but it is likely less than 10% of eligible Mexicans.[49] Any

[49] The figure is unknown because the Mexican government does not release this data and it is not easily calculable from the data that are released. Making four conservative assumptions, I calculate that an absolute minimum of of 89% of all Mexicans who are eligible to register to vote (ie. hold the INE card) do register. First and second, I assume that 99% of those living in Mexico hold Mexican citizenship and that the percentage of non-citizens in Mexico is identical to those who are citizens. Mexico has 90 million inhabitants over the age of 18 and estimates

findings about variation in perceptions of violence, or how violence and perceptions of violence affect political behavior are only generalization to those who have already taken the step to register to vote. Undoubtedly, those who have completed the step of obtaining this card are systematically different than those who have not.

Beyond practical limitations of the survey, a number of methodological limitations should be addressed. While much of this survey relied on experimental manipulation, omitted variable bias must be considered as a relevant threat to understanding even correlational relationships between non-experimental variables. Because of the coding issue described above, data were not available on which policy arenas respondents believed to be of highest and lowest concern. As the survey was originally designed for a presidential campaign, many of the survey questions were aimed specifically at understanding how the public viewed that particular candidate and their party. Direct questions about political efficacy and trust in institutions would have enhanced our understanding of the various ways in which violence, perceptions of violence, and the salience of violence are leading citizens to retreat. Assessment of respondents' attitudes toward democracy more generally would also have given us insight into the ways in which violence is shaping their political realities. One might expect that increased perception of violence would erode trust and foster antidemocratic sentiment: citizens use the performance of governmental bodies as proxies for their assessment of the overall institutional structure. Unfortunately, I am unable to test this hypothesis.

This survey was used as a key data source for the two interrelated questions driving this dissertation: how are the citizens of Mexico perceiving violence and how is violence affecting their political behavior? Through the responses of more than 17,000 eligible voters in Mexico, I look at the complex and diverse correlates of perceptions of violence in Chapters Three, Four, and Five. In Chapter Six I turn to the second puzzle and examine how violence is affecting political behavior, by looking at the effects of violence itself, perceptions of violence, and the salience of violence. I find that high perceptions of violence and high salience of violence have led the citizens of Mexico backward in fear, retreat, and uncertainty.

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of the foreign born population range from one to four percent. Third, I assume that the age distribution of the twelve million strong Mexican diaspora is identical to that of inhabitants in Mexico. Fourth, I assume that zero eligible Mexicans abroad possess the INE card. Undoubtedly, many do and the National Electoral Institute made a special effort in the 2018 election to reach out to Mexicans abroad to help them register and receive their ballot. Likely the real percentage of eligible voters who are registered to vote is over 90%.

Chapter 3: Quantifying and Understanding Perceptions of Violence

Judging by both international and domestic media coverage, one might imagine that violence is so pervasive in Mexico that the average citizen would be better off not leaving their home. Indeed, many citizens are responding to the specter of violence by dramatically altering their daily behaviors, even if they live in relative safety (Díaz-Cayeros et al., 2011). Do citizens accurately perceive the level of violence around them?

This first driving question of this research project , explored in Chapters Three, Four, and Five, aims to understand how Mexicans are perceiving violence. The focus is descriptive, not causal, in its nature. Perception is the process by which we assimilate information, interpreting the vast amount of data available from our environment and forming an understanding of it. As Walter Lippman (1922) so aptly explains, "The real environment is altogether too big, too complex, and too fleeing for direct acquaintance... [People] live in the same world, but they think and feel in different ones." The data people glean from their environment are both reflections of what is available to them, as rarely are people exposed to identical sets of information in this world, and how they filter the information they do receive.

Citizens are informed about violence levels from a variety of sources, with some of the most potent ones including media, political elites, friends and family, and from their own personal experiences. These messages are not always accurate and the cognitive processes that govern the absorption of this type of information can introduce bias in to an individual's understanding of violence. The interplay of the realities of violence, received information about violence from media and political leaders, and cognitive biases and shortcuts theoretically lead individuals to systematically and substantially inaccurate estimations of violent crime levels in their area.

Throughout this project, I focus on two types of violence: homicide and kidnapping. These two are among the most visible types of violence in Mexico and the most extreme types of violence that have dramatically worsened since the start of the war on drugs in 2006. Within these two types of violence, I delve into the interrelated concepts of perception of violence and misperception of violence. Perceptions of violence are directly measured from one-quarter of respondents in the survey discussed in Chapter Two: those assigned to the "ask" condition of the Violence Experiment. These participants were asked directly both how many homicides and how many kidnappings they believed to have occurred in their state in the year prior to the survey, 2017. The amount of their misperception is that number, minus the officially recorded statistic for their state.

Within the Violence Experiment, a total of 4,331 individuals assigned to the "ask" condition were asked to estimate the number of homicides and kidnappings in their state in 2017. This was followed up by a question about whether or not hey believed that figure represented an increase or a decrease from the year prior, which forced respondents to consider their answers for a moment longer instead of quickly moving on to other questions. among the respondents assigned to the "ask" condition, 848 chose not to estimate homicides and 951 chose not to estimate kidnappings.[50] Most of those who chose not to estimate one type of violence also chose not to estimate the other type of violence, but 207 individuals who estimated homicide chose not to estimate kidnapping and 104 individuals who estimated kidnapping chose not to estimate

[50] Response rate to this question was 80% for homicide and 78% for kidnapping.

homicide levels. As discussed in greater detail in Chapter Six, non-response itself was positively correlated with actual violence levels ($p<0.001$ for both types of violence): those who lived in more violent areas were less likely to share their perceptions of that violence.

In this chapter and going forward, violence levels, actual (objective) and perceived (subjective), will be discussed with respect to the frequencies of homicides or kidnappings that occurred or were believed to have occurred, rather than as rates or proportions. Well-established findings from behavioral economics and psychology have repeatedly concluded that individuals tend to be insensitive to base rates (Kahneman & Tversky, 1973) and that framing questions in frequentist terms gives respondents the greatest chance of being accurate in their response (Cosmides & Tooby, 1996), reducing the potential for the question framing itself to lead to systematic misestimation. When violence rates are compared to perceptions of violence, the direction of the relationship is the same as when looking at violence levels.[51]

Misperception is indeed prevalent and systematic. Mexican citizens are in fact dramatically misunderstanding violence, yet the relationship is more complex than hypothesized: most citizens underestimate homicide but overestimate kidnapping. While the underestimation of homicide is generally moderate, the average respondent overestimated kidnapping by more than ten times the actual amount. This indicates that homicide and kidnapping are being perceived in fundamentally different ways. How can we understand how each are being understood and why they are different?

3.01 Forming Perceptions

Numerous studies have measured systemic misinformation and misperception in the political world (Douglas J. Ahler, 2014; Bode & Vraga, 2015; Kuklinski et al., 2000; Lewandowsky et al., 2012). A number of important emotional responses as well as cognitive biases and shortcuts can feed these misperceptions. In looking at perceptions of violence, I draw significantly from the research in an adjacent domain: fear of crime. Much of the literature on fear of crime operationalizes the concept of perception to mean fear and concern (Lee & Mythen, 2017). This literature has looked at how individuals assess their risk and why certain types of crime and violence distress the public. Yet little work has been done on how individuals perceive violence specifically, a subtype of crime, and separately from their own personal risk. This difference in framing leads to different puzzles: how are citizens processing and absorbing messages from political elites, the media, and their own social networks? How do their own cognitive biases affect the intake of this information? What influence do these perceptions have on their political behavior?

One of the most prevalent findings from the fear of crime literature is that individuals routinely overestimate their risk (Hale, 1996). This body of research has focused on three main sources of fear of crime: psychological and behavior factors, such as media attention and emotional attributes (Farrall et al., 2006; Hatemi et al., 2013), and societal level influences, such as comparative crime rates and economic instability (Dammert and Malone 2003), and individual-level factors, such as socio-demographic characteristics and personal experiences (Ferraro, 1995; Sidebottom & Tilley, 2008; Stanko, 1995). Lee and Mythen (2017) describe a ‘risk-fear paradox’ in which those least at risk are most disproportionately fearful.

Theoretical insights from evolutionary psychology predict systematic overestimation of

[51] See Appendix 3.1 for graphs.

risk as well, from an adaptive bias perspective. Specifically, Error Management Theory proposes that when there is informational uncertainty, the asymmetric costs of Type I errors (false positives) versus Type II errors (false negatives) over evolutionary history leads to systematic cognitive biases in favor of Type I errors (Haselton & Buss, 2000; Haselton & Galperin, 2011). In violent contexts, individuals will be biased toward overestimating personal threat rather than judging it accurately, because of the high cost of missed detection. Evidence from Mexico's National Survey of Victimization and Perceptions of Public Security, known by its Spanish initials ENVIPE, supports this argument, indicating that those even in relatively safe areas are dramatically changing their behavior to avoid potential exposure to violence (Díaz-Cayeros et al., 2011). Yet does this overestimation of risk translate to an overperception of the violent acts itself?

The behavioral economics literature indicates that a number of other systematic cognitive biases and heuristics, or shortcuts, could lead to systematic misperception of the frequency of violent acts as well, but without a clear prediction of the direction of that misperception. Under the broad umbrella of representativeness heuristics, inaccuracy could stem from misconceptions of chance and insensitivity to both base rates and the predictability of events which in turn could lead people to underestimate, rather than overestimate, violence (Tversky & Kahneman, 1974). The availability heuristic indicates that systematic errors are made in estimation when some events are more easily accessible, or available, in one's mind than other events. This availability is facilitated by recentness of exposure to the event. For example, if a person has a family member who was recently the victim of a violent crime then violence would likely figure more prominently in their mind and they may overestimate the actual likelihood of violence and their personal risk. In this case, the bias would likely be due to the retrievability or imaginability of the event (Tversky & Kahneman, 1974). The availability heuristic lends itself to the prediction that as both overt and subtle social and political cues of violence increase, rather than violent acts themselves, so will overestimation of violence.

The objective level of violence in one's state likely has an important relationship to citizens' perceptions and misperceptions of violence as well. The incidence of crime in one's area can affect how much one thinks about violence in a number of ways: a greater level of violence likely also means greater media coverage of crime, more frequent overt signs of insecurity such as police sirens and boarded up windows, increased discussion of crime among political elite, potentially greater police presence, and more frequent discussions of insecurity among neighbors, families, and friends. Moreover, the more widespread violence is, the greater likelihood that individuals will have had personal experience with violent crime or someone in their social sphere will have. All of these cues to violence are likely both operating directly to influence perceptions of violence as well as being filtered through cognitive biases.

Media coverage of violence feeds into a number of these causal pathways and numerous studies across disciplines and countries have demonstrated that increases in media attention to violence leads to increased fear (see Chiricos, Padgett, and Gertz 2000; Romer, Jamieson, and Aday 2003; Weitzer and Kubrin 2004; Wu et al. 2019). One would logically expect that media coverage of violence would be highly correlated with actual violence levels, but there are strong reasons to suspect that in Mexico that pattern is not as robust. Mexico is considered to be the most dangerous country in the world for journalists[52] and threats made to press in order to suppress reporting of violent crimes have increased dramatically in the last decade and are

[52] Kelly, M. L. (2019, September 10). Mexico Surpasses Syria As The Most Dangerous Country For Journalists. NPR.Org.

endemic[53], especially in the areas that see the most violence. This has meant that in many areas, the coverage of violence has not been proportional to its incidence.

The Mexican government has a strong vested interest in minimizing the appearance of violent crime for both economic and political reasons. Foreign tourists spent more than 22.5 billion dollars (USD) in Mexico in 2018.[54] Even as other parts of the economy have contracted, the tourism sector has continued to grow and accounts for nearly 10% of Mexico's GDP.[55] Reports of shootouts and violent criminal activity at important tourist destinations, such as Acapulco, have repeatedly threatened this key economic sector. Moreover, the Mexican government itself has published on the detrimental role of crime, specifically homicide and theft, on reduction in foreign direct investment across the country,[56] threatening economic opportunities and growth for the middle income nation. Between losses in foreign direct investment and tourism and the myriad other industries affected, estimates indicate that that violence cost Mexico 249 billion dollars (USD) in 2017, the equivalent of 21% of the country's GDP.[57]

While many of these social ills are caused by the violence itself, the appearance of violence also contributes and creates strong incentives for those in power to hide or minimize the extent of crime and violence across the nation while simultaneously incentivizing their competitors to discuss their rivals alleged mishandling of security issues. The more citizens understand the violence going on around them, the greater likelihood they will view their government as impotent, if not complicit. In fact, 82% of Mexicans believe that data released by their government has been manipulated in some way.[58] These incentives to minimize the appearance of violence by the government have also led to further suppression of journalists, as the government itself has been implicated in spying on journalists[59] and using or withholding government advertising money to pressure papers to not print stories of crime and corruption.[60]

In his seminal work, Zaller (1992) argues that citizen's stated opinions reflect elite driven opinion, mediated by awareness which determines the salience and consistency of relevant considerations when forming opinions. Increased political awareness leads to increased exposure and comprehension of political messages emanating from political elites. These political messages are resisted by citizens when they are inconsistent with political predispositions and that inconsistency is perceived. The more recently a consideration has been brought to the forefront of the subject's mind, the more likely it will be retrieved for use – in a similar vein of logic to the availability heuristic.

People in extremely high violence areas may also become desensitized to crime and individuals may even actively avoid thinking about crime levels as a way of cognitive protection (Di Tella et al., 2019). This desensitization has typically been measured through exposure to the media (De Choudhury et al., 2014; Scharrer, 2008). Inundation with violent images and reporting

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53 Vulliamy, E. (2015, April 11). "They want to erase journalists in Mexico." The Guardian.

54 *Results of Tourism Activity.* (2018). Secretaría de Turismo.

55 OECD. (2017). *Tourism Policy Review of Mexico*. OECD.

56 Cabral Torres, R., Mollick, A. V., & Saucedo, E. (2018). *The Impact of Crime and Other Economic Forces on Mexico's Foreign Direct Investment Inflows* (Working Paper No. 2018–24).

57 *Mexico Peace Index 2018* (No. 56). (2018). Institute for Economics and Peace.

58 Ibid.

59 Ahmed, A., & Perlroth, N. (2017, June 19). Using Texts as Lures, Government Spyware Targets Mexican Journalists and Their Families. *The New York Times.*

60 Ahmed, A. (2017, December 25). Using Billions in Government Cash, Mexico Controls News Media. *The New York Times.*

psychologically overwhelms individuals and inures them to violence, acclimatizing their minds to such toxic news.

Cumulatively, cognitive and social forces can work in opposite directions, at times making violence highly salient to citizens and at others minimizing its importance.

3.02 Homicide

At the time, 2017 was the most dangerous year in Mexican history since the revolution a hundred years prior. Homicide in Mexico is largely driven by spatial competition between competing trans-national criminal organizations (TCOs) and the government itself. Sharp increases in homicide rates across the country have been largely driven by attempts by trans-national criminal organizations to eliminate rivals (G. Calderón et al., 2012). Two key finding emerge from looking at the data on perceptions of homicides. First, respondents systematically misperceive homicide. Those in low high states, on average, overestimate homicide levels while those in high homicide states average overestimation of violence. Overall, most respondents underestimated homicide levels. Second, perceptions of homicide lag behind real world changes, with most respondents perceptions being more in line with homicide levels in years prior.

As shown in Table 3.01, respondents averaged 1,175 officially recorded homicides[61] per state, with states varying widely in homicide levels from forty-six (Yucatán) to 2,529 (Guerrero).[62] Figure 3.01 shows a map of actual homicide levels for 2017 throughout Mexico. Without removing or rounding extreme outliers, respondents on average estimated that 1,745 people had been killed in their state in 2017. These responses ranged from zero to 100,000 which was the limit imposed in the survey.[63] Misperception, or the amount by which the respondent deviated in their perception from the official statistics, was nearly universal. Only ninety-nine respondents, or 3% of the sample, estimated a homicide level within +/-5%[64] of the objective level for their state. The difference between actual homicide levels and perceived homicide levels is statistically significant ($p<0.001$).

The majority of respondents underestimated homicide levels, with 76% of respondents underestimating and only 21% overestimating homicide levels in their state. Yet, the average misperception across respondents is one of overestimation since those who overestimated homicide levels did so by a large magnitude.

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61 The number of respondents attempted to be surveyed from each state was proportional to its population. On average, 14.6 individuals were surveyed from every 100,000 people. However, states ranged in the number surveyed from 7.2 per 100,000 (Guerrero) to 21.3 per 100,000 in Baja California. States ranged in number of respondents from 124 in Baja California Sur to 1,869 in Estado de Mexico.

62 See Appendix 3.01 for number of homicides per state. Data from: *Informe de Víctimas de Homicidio, Secuestro y Extorsión 2017*. (2018). Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP). They refer specifically to *homicidios dolosos* or intentional homicides of each state that year. *Homicidios culposos*, or instances of manslaughter, are excluded.

63 For this question, the tablet screen showed a blank text box in which respondents could enter a number. Respondents were not told they could not exceed 100,000 in their estimate, but if they attempted to enter a number greater than 100,000 it would prompt them that that was the limit.

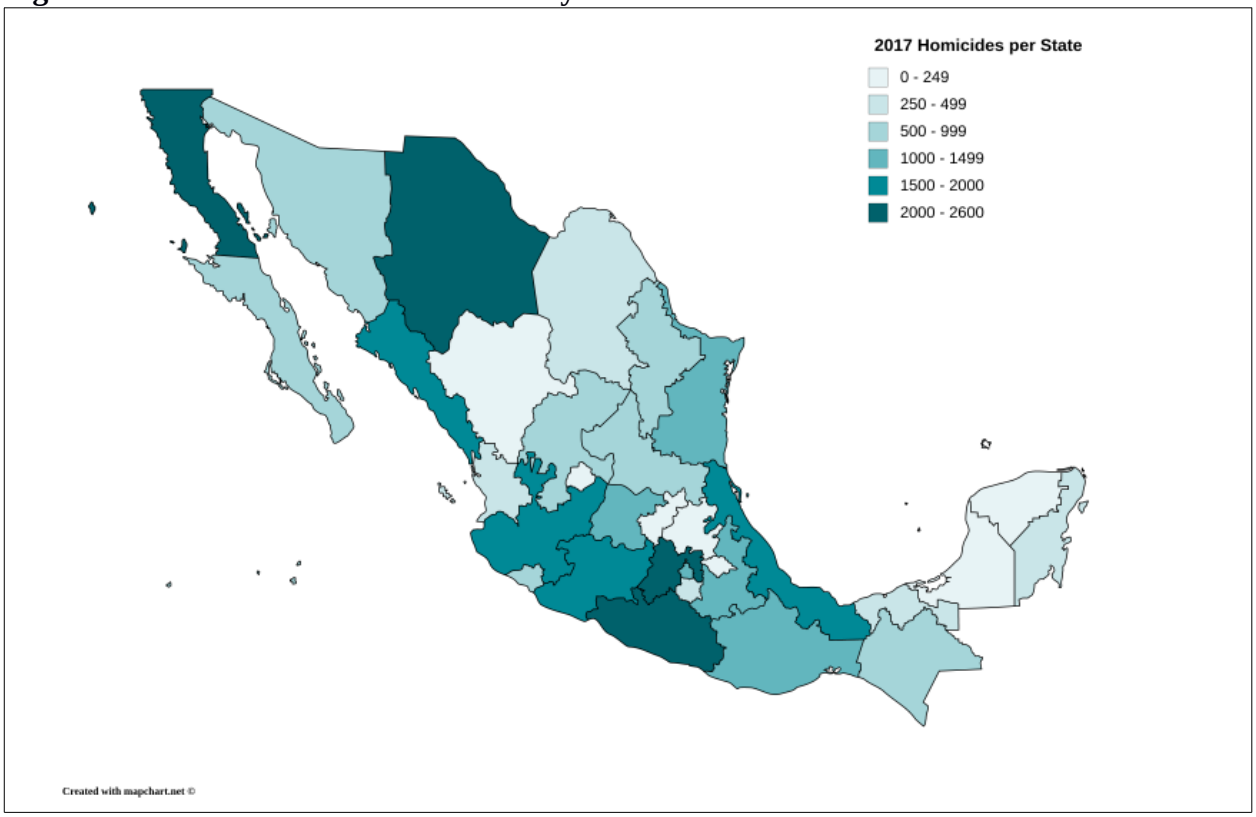
64 Using a more inclusive definition of accuracy of +/-10% yields nearly identical results, with 136 respondents or 4% (versus 99 respondents and 3%) achieving accuracy in their homicide estimation.

Table 3.01 Actual Versus Perceived Homicide, Unadjusted

	Average: Homicide/State	*Range: Homicide/State*
Actual, For Sample	1,175	46 – 2,529
Perception	1,745	0 – 100,000
Misperception (Perception minus Reality)	+570 (49% overestimation)	-2,529 – 99,349

Note: Of the 4,331 respondents who were asked to estimate violence levels in their state, 3,483 gave their estimation for homicide for a response rate of 80%.

Figure 3.01: 2017 Homicides in Mexico by State



Respondents ranged in the extent of their misperception of homicide from underestimating by 2,529 homicides to overestimating by 99,349. In order to eliminate the effects of extreme outliers, I created a new variable of adjusted perceived homicide levels. First, I measured the z-score for the magnitude of the misperception of each type of violence.[65] For those with a z-score lower than three, their given estimation was used in the new variable without modification. For those whose response received a z-score greater than three, their answers were rounded down to be equivalent of an answer with a z-score of three.[66] That is to

[65] Z-scores were taken for the magnitude of the misperception instead of the raw answer in order to control for states with extremely high or low violence levels. The severity and direction of misjudgment is the primary dependent variable for this project.

[66] Note that all extreme outliers were in the direction of overestimation, as a z-score of three in the direction of underestimation would imagine a respondent believed there to be a negative number of homicides or

say, responses that were within three standard deviations of the mean, i.e. those with a z-score greater than three, remained unadjusted, but those whose homicide misestimations were more than three standard deviations away from the mean were assigned a response of their state's actual level of homicide plus 27,430.[67]

As an example, the most extreme outlier for homicide estimation was a respondent from Nuevo Léon. He indicated that he believed there were 100,000 homicides in his state in 2017. Adjusting his response to be that of a respondent with a z-score of three changes his adjusted estimation of homicides in his state to 28,211. These extreme outliers were a very small percentage of overall respondents and accounted for only 1.2% of those who estimated homicide levels. With these adjustments, average homicide misperception was an overestimation by five murders. These perceptions were not statistically different from the official statistics (p=0.845).[68]

In areas where violence was higher, perceptions of violence were higher as well, yet homicide perceptions did not rise in lock-step with actual homicides. Perceptions of homicides were positively correlated with official statistics of homicide (r=0.527, significant at p<0.001): the more violent one's state was, the more violent they thought it was. For every hundred additional homicides a state experienced, perception of homicide increased by an average of fifty-two homicides. This is to say that while perceptions of homicide levels do increase as objective homicide levels increase, that perception increases less steeply than reality. These findings are demonstrated in Figure 3.02. In this figure, the black dotted line shows the trend line while the red line shows what accurate perceptions would look like. From this, one can see that those in low homicide states are averaging overestimation while those in high homicide states are averaging underestimation.

Table 3.02 Actual Versus Perceived Homicide, Adjusted

	Average: Homicide/State	*Range: Homicide/State*
Actual, For Sample	1,175	46 – 2,529
Perception, Adjusted	1,180	0 – 29,959
Misperception (Perception minus Reality), Adjusted	+5 (0.01% overestimation)	-2,529 – 27,430

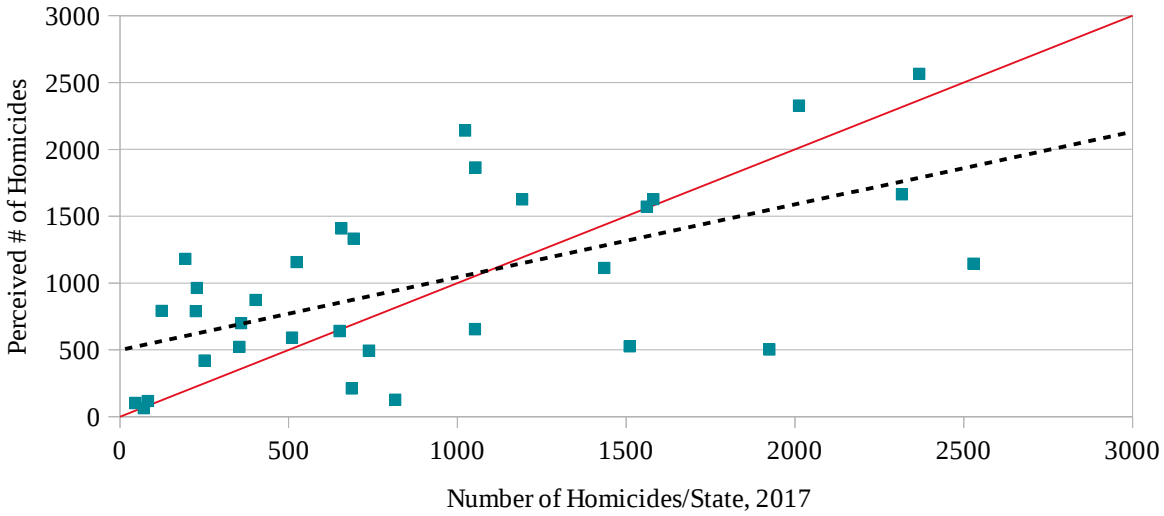
While those in the lower homicide states were on average dramatic overestimators, those in higher homicide states were more likely to underestimate indicating that those in states exposed to very little homicide are behaving consistently with these predictions while those in high homicide states are not. This tells us that the effects of homicide on perceptions of homicide are not uniform. The overperception of homicide is negatively correlated with actual levels of homicide (p<0.001). As seen in Figure 3.02, the lines of perception and actuality cross at just over one thousand homicides per state.

kidnappings.

[67] An alternative way to calculate this would be to take the z-score for respondents by state versus nationally. This alternate method yields nearly identical results: $r(3,483)= .93$, $p<.001$.

[68] These adjusted scores will be used throughout the rest of this project.

Figure 3.02 Perception of Homicide by Number of Homicides per State in 2017



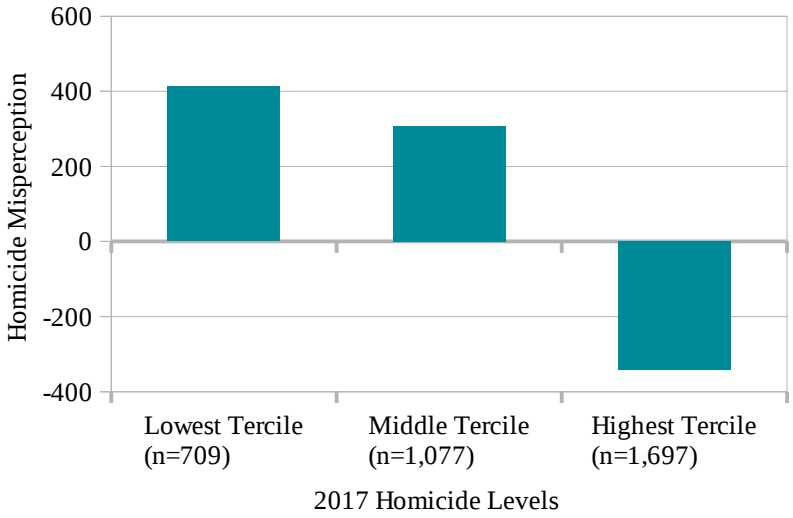
Note: This figure indicates the average perception of homicides by the number of homicides that occured in that state. The black line represents the trend line. The red line represents accurate perception of homicide. An F-test of the differences in mispercetion across homicide rates was significant (p<0.001). Source: The Executive Secretariate of the National Public Security System (SESNSP).

In order to more clearly see this pattern, I clustered states into terciles based on their homicide levels in 2017 as shown in Figure 3.03. States in the lowest tercile for homicide had fewer than 402 homicides, states in the middle tercile had between 403 and 1,053 homicides, and states in the highest tercile had more than 1,054 homicides. For homicide, those in the lowest and middle terciles overestimated homicides at similar amounts (the difference these terciles was not statistically significant, p=0.508). However, those in the highest tercile underperceived homicide significantly when compared to the two lower terciles (p<0.001).

States also varied widely in the overall percentage of respondents who overestimated violence levels. For homicide, respondents from Veracruz and Yucatán were the least and most likely to overestimate homicide, respectively, with 2% of respondents from Veracruz and 66% of respondents from Yucatán overestimating homicide in contrast to a state average of 21% overestimating. Veracruz was the fifth most violent state state in 2017, with 1,924 homicides recorded, and Yucatán had the least homicides recorded – only forty-six. As with the magnitude of overestimation, the frequency of overestimators was inversely correlated with homicide (p<0.001); as homicide levels increased, the percentage of respondents who overestimated violence decreased (see Figure 3.04).

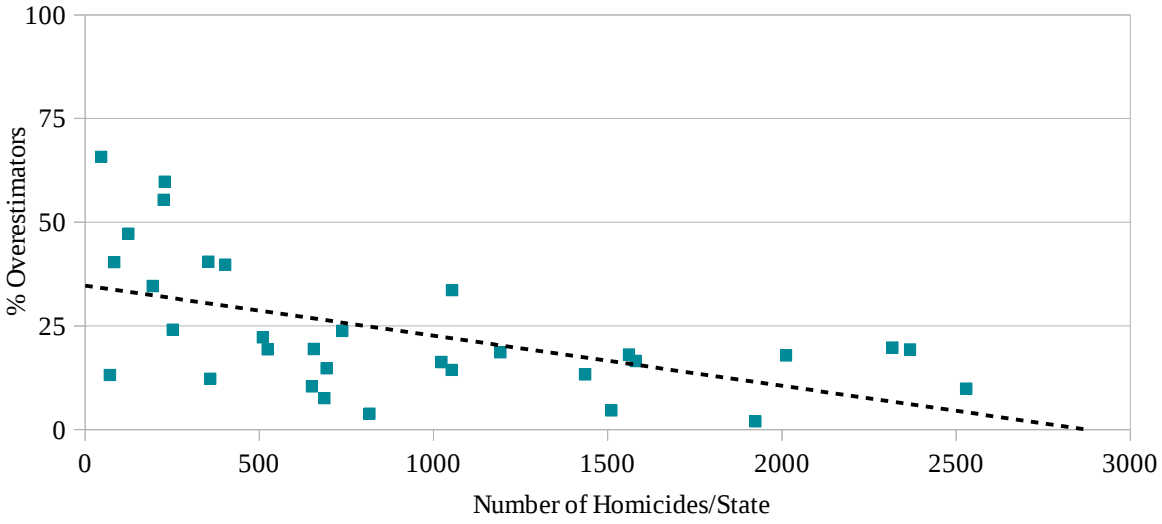
There are two key elements to these findings: first, most respondents underestimated homicide and second, those that did not underestimate homicide were more likely to be from low violence states. These findings are contrary to the predictions from evolutionary psychology and the fear of crime literatures which predicted that perceptions of homicide would be biased toward systematic overestimation, particularly in more violent areas.

Figure 3.03 Misperception of Homicide by 2017 Homicide Tercile



Note: This figure indicates the average misestimation of homicides by the homicide level tercile. An F-test of the differences in mispercetion across terciles was statistically significant (p=0.009). Source: The Executive Secretariate of the National Public Security System (SESNSP).

Figure 3.04 Percentage of Respondents in Each State Who Overestimated Homicide



Note: This figure indicates the percentage of respondents who overestimated homicide levels by the number of homicides that occured in that state. The black line represents the trend line. An F-test of the differences in overestimation rates across homicide levels was significant (p<0.001). Source: The Executive Secretariate of the National Public Security System (SESNSP).

Media and elite focus on homicide is likely a main driver of perceptions of homicide. As the number of homicides increase, so will the many overt signs of this type of violence including police sirens and caution tape. In higher violence areas, citizens are more likely to be directly affected perhaps even having a loved one or a friend fall victim. Media coverage and elite discourse around this often bloody type of violence will be more prominent in high homicide

areas as well. Yet, this media attention is not directly proportional to the number of homicides in a state. Residents of low homicide states still live in a country with a systemic violence problem, even if their region is not hit as hard. They still receive national news and hear national politicians focusing on these issues. This baseline in national news is present regardless of how violent one's state is.

Moreover, many places with extreme violence have also endured both government and organized crime driven attempts to suppress media attention. Attempts by the government to minimize discussion of violence to limit the economic destruction of this blight have been well documented, as describe earlier in this chapter. In many cities and downs where organized crime is deeply embedded, politicians themselves facilitate or even instigate violence against journalists and active suppression of news coverage of the violence.[69] Entire newspapers have closed in response to these attacks.[70]

Attacks on traditional journalism have meant that many in the highest violence areas are relying on citizen journalists and social media for reliable news, which operates with limited information which is often perceived as less reliable. Non-traditional journalists have not been exempt from such terror. In 2014, a citizen journalist who reported on crimes in Reynosa via Twitter had her own murder live-tweeted on her account by a criminal organization.[71] Reporting in Mexico's most dangerous areas, whether formally or informally, can be tantamount to signing your own death warrant. In many of these areas, self-censorship has become a norm.

These twin phenomena of national media coverage of violence, even in low violence states, and suppression of journalism in high violence states have led to a reality in which exposure to news about violence in Mexico is not proportional to how violent one's state is. The availability heuristic indicates those who are most recently primed to think about violence to be the ones most likely to overestimate it. This asymmetric news coverage of violence may explain some of the variation in perceptions of violence, as media exposure is one of the primary factors which might bring violence to the top of one's mind.

Another key element of variation in perceptions of homicide is likely due to variation in sensitization to violence. Constant exposure to high levels of violence can inure one to the stress and absorption of those very events. For those living in these low violence states, when homicides do occur they likely carry disproportionate weight in one's mind. On the other hand, in high violence states, residents become tragically accustomed to violence. As these findings indicate, those in high violence states are aware they live in high violence states, but are systematically wrong about just how dangerous those states are. The people living in these areas know that violence is endemic, but in effect loose track of the magnitude of the problem.

Another important finding regarding perceptions of homicide was that part of the variation in misperception is explained by changes in homicide levels from the year prior. Those in states that experienced dramatic increases in homicides – more than 250 or more homicides than the year prior – underestimated homicide levels significantly while those in states that experienced more moderate increases or even decreases in homicide levels were on average moderate overestimators of homicide. The difference between misperceptions in states with large increases in homicide levels versus those with moderate increases or even decreases was

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69 Woodman, S. (2019). Terrorising the truth: Journalists on the US border are too intimidated by drug cartels to report what is happening. *Index on Censorship*, 48(1), 11–13.

70 Zorthian, J. (2017, April 3). Norte de Ciudad Juarez Shuts Down After Journalist Murders. *Time Magazine.*

71 Alexander, H. (2014, October 23). Mexican citizen journalist has her own murder posted on her Twitter account. *The Telegraph.*

statistically significant (p<0.001).[72]

Perceptions of violence do not form in a single moment, but rather are developed over extended periods. Individuals are conscious of the levels of violence their area experiences, but also how those levels have changed over time. Respondents were asked specifically about how many homicides they believed to have occurred in 2017, the year prior to the survey. Perceptions of homicide were positively correlated with 2017 homicide figures, but were actually better predicted by 2016 homicide figures (r=0.622, significant at p<0.001) indicating that perceptions lag behind actual changes in violence levels and that people are not rapidly updating their beliefs about violence in their area. This is consistent with findings Chile where decreases in crime rates did not lead to decreases in fear of crime (Dammert 2012).

In looking at the relationship between perceptions of violence and changes in violence between 2016 and 2017, a striking finding emerges: respondents in areas where violence decreased were perceiving higher levels of violence than in places where it increased or stayed the same. Changes in state homicide levels between 2016 and 2017 varied widely. Estado de México experienced the largest decrease in homicides between those years, with levels falling by 400 deaths, and Baja California experienced the largest increase in homicides, with 1,165 more homicides in 2017 than in 2016. Controlling for 2016 homicide rates, decreases in violence between 2016 and 2017 are correlated with dramatic increases in perceptions of homicide (r=2.164, significant at p=0.023). Increases in violence were not a statistically significant predictor of perceptions of violence (p=0.420).

These findings indicate that perceptions of violence, in effect, lag behind actualities of violence and that citizens are relatively insensitive to fluctuations in violence. While increases in homicide rates in 2017 were correlated with increases in perceptions of homicide for that year, respondents perceptions of homicide were more closely aligned with actual homicide rates in 2016 than 2017, despite the survey taking place in May of 2018 and that respondents were specifically prompted to think about 2017 violence levels. Moreover, respondents in states that had become safer over time did not update their beliefs, continuing to perceive very high homicide rates. Living in a state that had become even less safe did not affect homicide perceptions at all.

Overall, on average Mexicans are underestimating rather than overestimating homicide levels. Yet, those in the lowest violence levels did average overestimation, with the frequency and extent of overestimation decreasing as homicide levels themselves increased. Moreover, perceptions of homicide lagged behind changes in actual homicide levels. Perceptions of homicide were more closely tied to actual homicide levels for 2016 than they were for 2017, and respondent were relatively insensitive to changes in violence. Those whose states experienced the biggest leaps in homicide levels were the greatest underestimators, continuing to think of their state as the less violent version from the past.

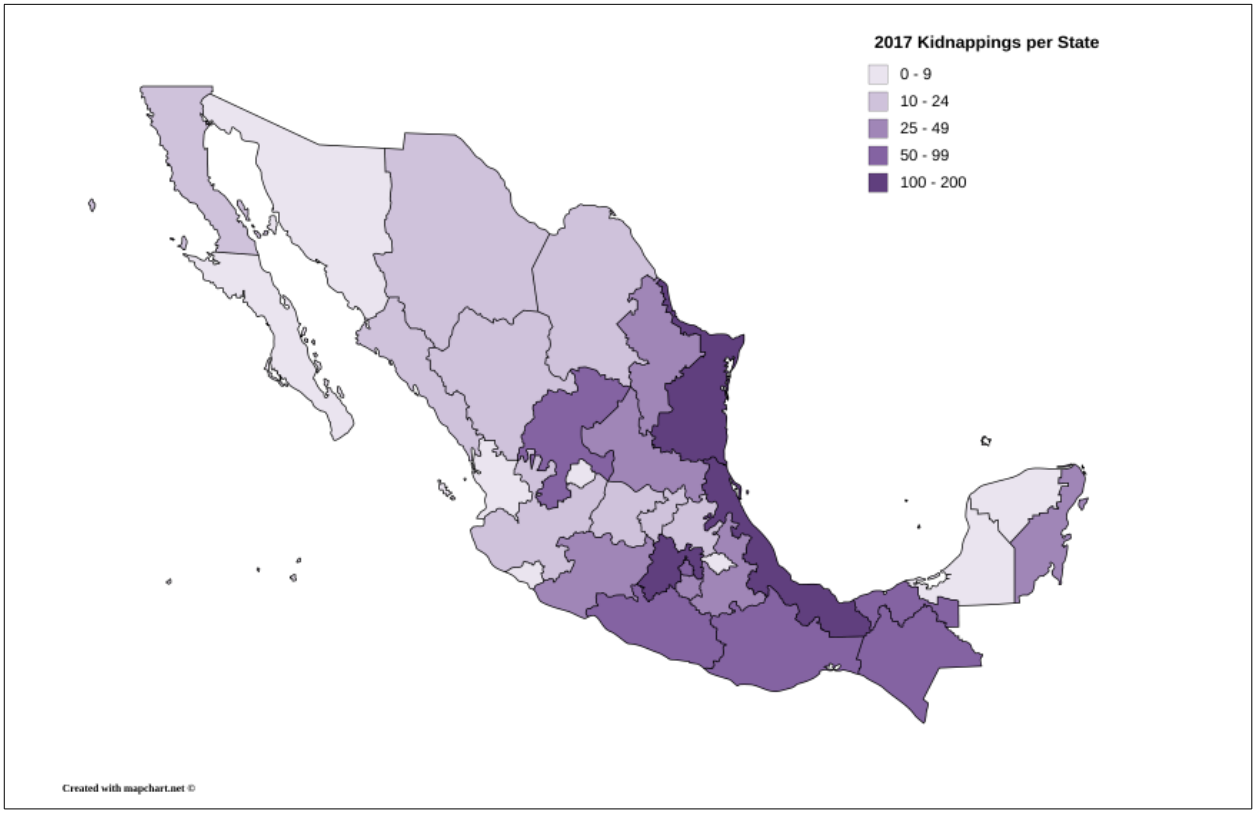
3.03 Kidnapping

Like homicide, kidnapping is one of the most visible and pernicious types of violence affecting Mexico. Unlike homicide, it is far less frequent and is driven largely by socio-economic need, rather than spatial competition. Respondents averaged an actual kidnapping level sixty-

[72] See Appendix 3.02 for graph.

four kidnappings per state in 2017.[73] States ranged in their official kidnapping levels from zero (Yucatán) to 199 (Tamaulipas) as seen in Figure 3.05. On average, without removing or rounding extreme outliers, respondents estimated that 990 people kidnapped in their state in 2017, which is more than ten times the official government figure. This gap between perception and reality is statistically different from zero (p<0.001). As with homicide estimation, responses ranged from zero to 100,000 which was the limit imposed in the survey.[74] Misperception, or the amount by which the respondent differed in their perception from the official statistics, was nearly universal.

Figure 3.05: 2017 Kidnappings in Mexico by State[75]



In sharp contrast to homicide, the number of respondents who overestimated kidnapping was markedly larger as was the magnitude of their overestimations. Demonstrated in Table 3.03, a full 73% of respondents overestimated kidnapping occurrences, while 23% underestimated them, and 3% were accurate, guessing within +/-5% of the official statistic. Respondents ranged in the magnitude of their misperception, their deviation from the official statistic, of kidnappings from underestimating by 199 to overestimating by 99,985 occurrences.

73 These kidnapping statistics are from the Mexican National Institute of Statistics and Geography (INEGI).

74 The same restriction imposed for homicide estimates was imposed for kidnapping estimates.

75 See Appendix 3.01 for number and kidnappings per state. Data from: *Informe de Víctimas de Homicidio, Secuestro y Extorsión 2017*. (2018). Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP).

Table 3.03 Actual Versus Perception Kidnapping, Unadjusted

	Average: Kidnapping/State	*Range: Kidnapping/State*
Actual, For Sample	64	0 - 199
Perception	990	0 – 100,000
Misperception (Perception minus Reality)	+926 (1447% overestimation)	-199 – 99,985

Note: Of the 4,331 respondents who were asked to estimate violence levels in their state, 3,380 gave their estimation for kidnapping for a response rate of 78%, slightly lower than the 80% response rate for homicide estimation.

These extreme outliers were a very small percentage of overall respondents. As with homicide, I created a new variable of adjusted perceived kidnapping levels using the same method used for measuring and adjusting respondents' homicide estimation. Those whose kidnapping misestimations were within three standard deviations of the mean, or had a z-score of less than three, were unaltered while those whose misestimations were more than three standard deviations from the mean were assigned a response of their state's actual level of kidnapping plus 19,070, as shown in Table 3.04.[76] Respondents with a z-score of three or greater accounted for 0.9% for kidnapping estimation. With these adjustments kidnapping perceptions were still statistically different from official statistics ($p<0.001$). With and without adjustments, perceptions of kidnapping were overall much more exaggerated than perceptions of homicide and underestimation of kidnapping levels was considerably more rare.

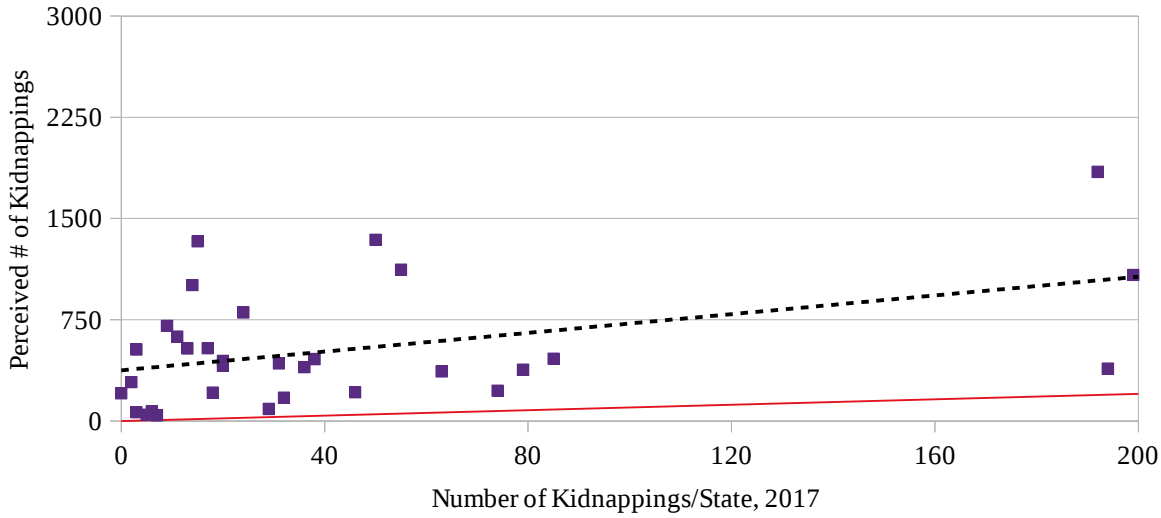
Table 3.04 Actual Versus Perception of Kidnapping, Adjusted

	Average: Kidnapping/State	*Range: Kidnapping/State*
Actual, For Sample	64	0 - 199
Perception, Adjusted	671	0 – 19,269
Misperception (Perception minus Reality), Adjusted	+607 (1048% overestimation)	-199 – 19,070

As with homicide, in areas where kidnapping was more prevalent, perceptions of kidnapping was higher as well. While of kidnapping normally does not carry with it the same overt signals that homicide does of visible police presence, kidnapping does receive extensive news coverage and attention from politicians. Kidnapping is a crime which cuts across social classes, meaning that increases in the prevalence of kidnapping increases the likelihood someone will be affect themselves or someone they know will be affected. Perceptions of kidnapping were positively correlated with official statistics of ($r=3.546$, significant at $p<0.001$): The more violent one's state was, the more violent they thought it was. For every hundred additional kidnappings a state experienced, perception of homicide increased by an average of 355 kidnappings. Unlike with homicide, rises in kidnapping were more than tripled in the minds of the public. This is shown in Figure 3.06, where the black dotted line represents the trend line and the red line represents what accurate perceptions of kidnapping would look like.

[76] An alternative way to calculate this would be to take the z-score for respondents by state versus nationally. This alternate method yields nearly identical results: $r(3,380)= .90$, $p<.001$ for kidnapping.

Figure 3.06 Perception of Kidnapping by Number of Kidnappings per State



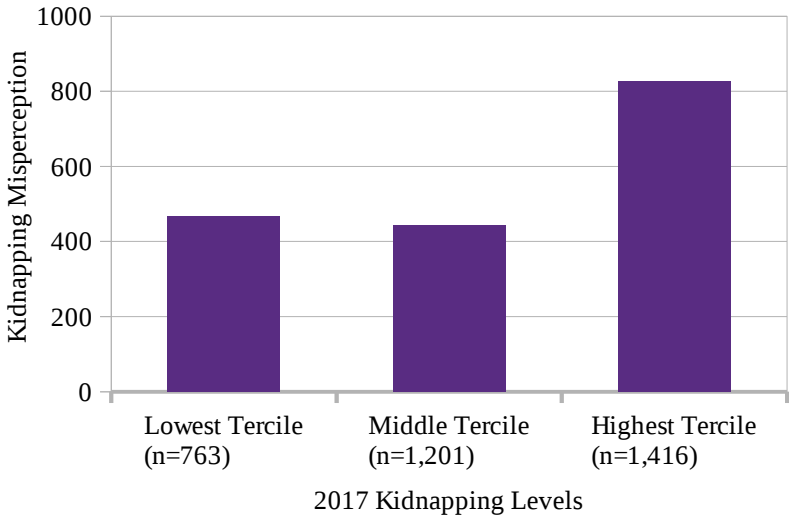
Note: This figure indicates the average misestimation of kidnappings by the number of kidnappings that occured in that state. The black line represents the trend line. The red line represents accurate perception of kidnapping. An F-test of the differences in mispercetion across kidnapping rates was significant (p<0.001). Source: The Executive Secretariate of the National Public Security System (SESNSP).

Unlike with homicide perception, as actual kidnappings increased so did the degree of misperception, or the difference between the actual violence and the perception of the violence. For every additional 100 kidnappings a state experienced, overestimation increased by 264 kidnappings (p<0.001). As seen in Figure 3.06, the lines of perception and actual levels of kidnapping grow further apart as kidnappings increase.

Again I clustered states into terciles based on their 2017 kidnapping levels, shown in Figure 3.07. States in the lowest tercile for had fewer than fourteen kidnappings, states in the middle tercile had between fifteen and thirty-eight, and states in the highest tercile had more than thirty-nine kidnappings. Whereas those in the highest homicide states were the largest underestimators for homicides, those in the highest kidnapping states were the largest overestimators for kidnapping. However, similarly to with homicide, those in the low and moderate kidnapping level states were moderate overestimators and not statistically different from each other (p=0.716). The highest tercile was significantly different from the other two (p<0.001).

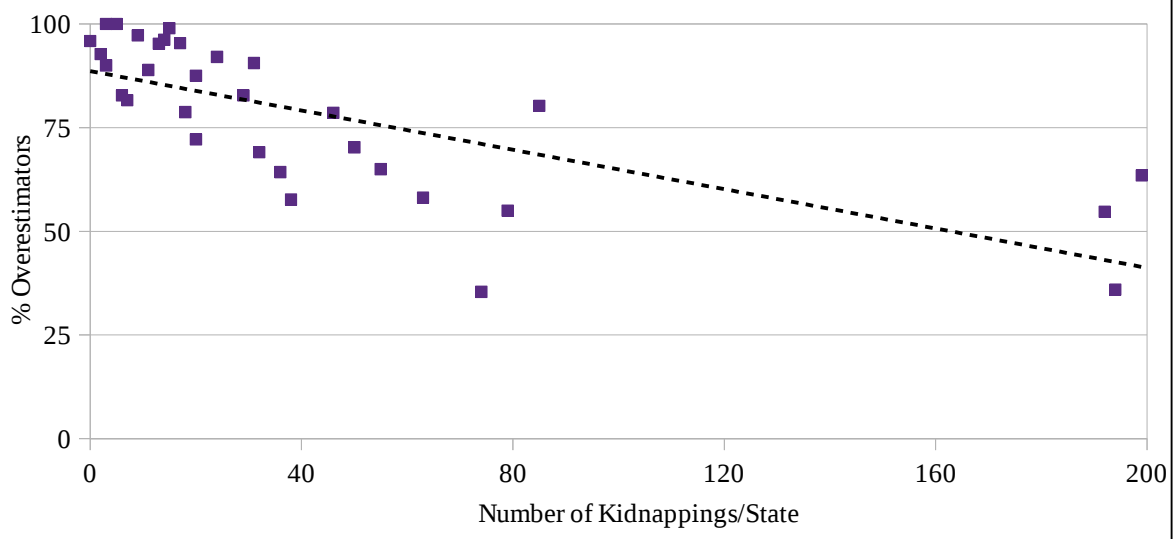
States also varied widely in the overall percentage of respondents who overestimated kidnapping levels, but percentage of overestimators per state and actual levels of violence were inversely correlated for kidnapping as they were for homicide (p<0.001), seen in Figure 3.08. For kidnapping, respondents from Zacatecas, the sixth most dangerous kidnapping state with seventy-four kidnappings, were the least likely to overestimate kidnapping levels, with only 35% of respondents doing so. In both Nayarit and Colima, with three and five kidnappings respectively, 100% of respondents overestimated kidnapping. Nayarit was tied for the second safest state in terms of kidnapping, while Colima was the fifth safest state. On average, 77% of respondents per state overestimated kidnapping. This was similar to homicide perceptions, where the percentage of overestimators declined precipitously in more violent states.

Figure 3.07 Misperceptions of Kidnapping by 2017 Kidnapping Tercile



Note: This figure indicates the average misestimation of kidnappings by the kidnapping level tercile. An F-test of the differences in mispercetion across terciles was statistically significant (p<0.001). Source: The Executive Secretariate of the National Public Security System (SESNSP).

Figure 3.08 Percentage of Respondents in Each State Who Overestimated Kidnapping



Note: This figure indicates the percentage of respondents who overestimated homicide levels by the number of homicides that occured in that state. The black line represents the trend line. An F-test of the differences in overestimation rates across kidnapping levels was significant (p<0.001). Source: The Executive Secretariate of the National Public Security System (SESNSP).

Unlike those of homicide perception, these findings were consistent with the projections from the fear of crime and evolutionary psychology literature which predicted that citizens would dramatically overestimate violence. As theorized earlier in this chapter, information is received and filtered through a variety of overlapping cognitive biases and heuristics which can lead people to inaccurately perceive the world. Among these are Error Management Theory,

which predicts that when one's survival is at stake, humans will systematically overestimate personal threat rather than judging it accurately, as the evolutionary cost of missed detection of threat is much greater than the cost of perceiving a threat that does not exist.

Media coverage is another potential reason why kidnapping is so dramatically overperceived. Despite the same factors affecting media coverage for homicide as kidnapping, including government and organized crime suppression of the free press, these two types of violence are treated somewhat differently in the media. In 2017, there were 29,169 officially recorded homicides and 1,390 officially recorded kidnappings, making homicides twenty-one times more common than kidnappings, according to these statistics. Yet media coverage reflects a different story. In the national newspaper La Prensa in 2017, the word "homicidio" (homicide) appeared in 1,829 articles while "secuestro" (kidnapping) appeared in 579 articles, i.e., approximately three articles mentioning homicide for every one mentioning kidnapping. In the national newspaper Reforma, "homicidio" appeared in 2,450 articles versus 1,278 for "secuestro" in the same year, approximately two articles on homicide for every one that mentions kidnapping. In the national newspaper El Universal in 2017 there were 2,505 articles with the word "homicidio" and 1,416 with the word "secuestro," also approximately two articles on homicide for every one that mentions kidnapping.

Even using the estimates by independent organizations of actual homicide and kidnapping levels, which would indicate 32,000 homicides and 12,510 kidnappings occurred in 2017, discussions of kidnappings were still over-represented proportionally in two out of these three major national newspapers. Newspapers are not the primary source of news for most Mexicans, yet the relationship is clear and likely consistent across types of media: Proportional to incidence, kidnapping receives more news coverage than homicides do. As these indicators of violence increase, including media coverage, the salience of violence increases as does its presence in the minds of those in proximity to it. As discussed previously, Tversky and Kahneman (1974) posit that such increased salience will lead to systematic error when assessing the relative frequency of such events. While there are myriad reasons this over-representation in media coverage might exist, one potential result of this imbalance is that Mexicans receive the message that kidnapping is more prevalent than it is.

Desensitization is likely not at play to the same extent with kidnapping perceptions as with homicide perceptions for two key reasons. First, even though this type of violence is disproportionately covered in national media, kidnappings are by their nature generally less graphically violent than homicides. In extreme, less common circumstances, media coverage of kidnappings may shown cars with bullet holes or remembrance of a violent abduction. Moreover, many of the public displays of violence associated with homicide in the most high violence areas, such as publicly displayed corpses or body parts and threats via hanging banners called *narcomantas* are not commonly associated with kidnapping.

Does kidnapping estimation lag behind changes in actual kidnapping levels in the way that homicide estimation does with homicide levels? Not exactly. There were seven fewer kidnappings nationally in 2016 than 2017, but the distribution of the kidnappings was slightly different. Kidnapping levels for 2016 are positively correlated with estimates of kidnapping for 2017 ($p<0.001$) but the degree of overestimation is higher. Compared to 2016, states ranged from decreasing in the number of kidnapping they experienced by eighty-one kidnappings to increasing by fifty-two. When controlling for 2016 kidnapping levels, respondents living in states with increases in kidnapping rates were closer to accurate in their estimations (significant

at p=0.045) while those whose states had decreases in kidnappings overestimated more (approaching significant at p=0.074). This indicates that there is some lag in updating perceptions of kidnapping, but that that delay is not as pronounced as with homicide estimation. This is likely due to relatively stable kidnapping levels over time.

Across a variety of metrics, kidnapping estimation took on a different form than homicide estimation. Kidnapping overestimation was far more pervasive in frequency and in magnitude, with three-quarters of respondents overestimating kidnapping for an average estimation more than ten times higher than actual levels. Unlike with homicide, this was the hypothesized direction and magnitude of the relationship. As the number of homicides in a state increased, the gap between perception and reality increased on average, yet the overall percentage of respondents overestimating kidnappings decreased.

3.04 Relating The Two Types of Violence

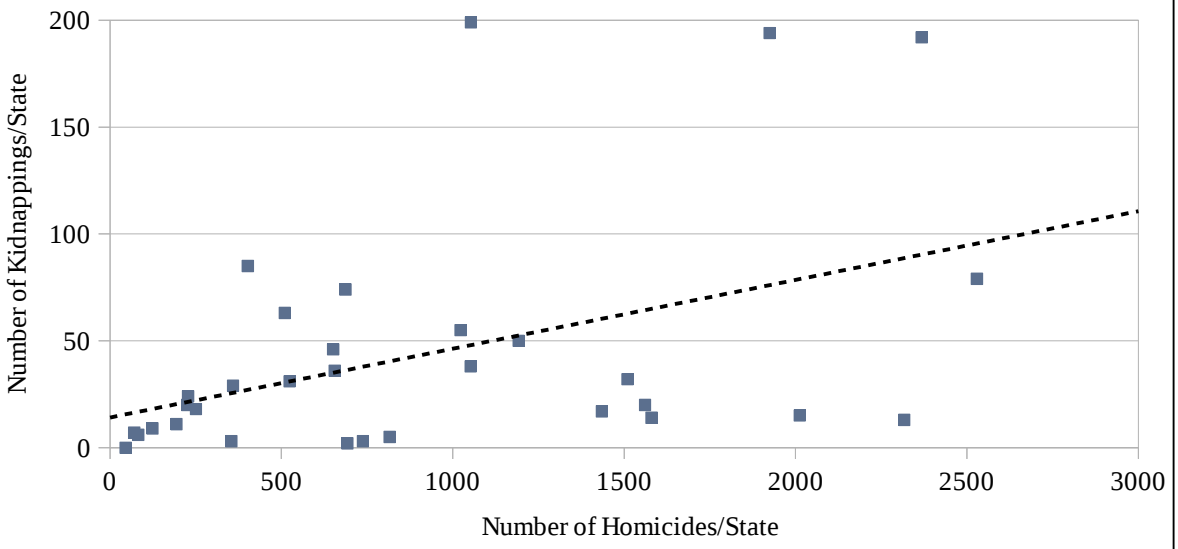
In this chapter I first posited that citizens would systematically misperceive the level of violence in their state. This was substantiated through randomized segment of my survey being assigned to answer questions about how many homicides and kidnappings they believe occurred in their state in 2017. Perceptions of both types of violence were nearly universally wrong, with only 3% of the sample being accurate (+/-5%) in their estimation of each type of violence. The majority of respondents underestimated homicide levels and overestimated kidnapping levels.

A wealth of research on fear of crime and evolved psychological responses to threat predicted that near overperception would be near universal. A wide variety of psychological, social, and individual level factors have been theorized to contribute to that fear. Moreover, in our evolutionary history, there has been systematic and substantial benefit from overestimating our own personal risk of injury. Yet this prediction was not substantiated as a majority of respondents underestimated homicide levels – these intersecting bodies of literature overwhelmingly failed to predict this finding.

Perceptions of homicide was more closely aligned to homicide levels in previous years, with respondents continuing to believe their state had high violence even if the violence rate had decreased. This indicates that for homicide in particular, beliefs about violence levels persist despite changes in actuality. In this sense, we can understand that the pernicious effects of violence, such as withdrawal and retreat from electoral politics as discussed in Chapter Six, will likely continue plague Mexico even after violence abates.

Why are respondents understanding kidnapping so differently from how they understand homicide? It is important to note that while homicide rates and kidnapping rates were positively correlated, as one would expect, the correlation is not perfect (r(30)= .43, p=.014). Different types of violence occur with different propensities given a wide range of factors, many of which also affect one's perceptions of those types of violence. As a state's homicide level increased, so did it's kidnapping level, as shown in Figure 3.09. However, a number of states, including Baja California, Chihuahua, Jalisco, Michoacán, and Sinaloa were among the highest homicide states and lowest kidnapping states; all five of these states had more than 1,500 homicides and fewer than 50 kidnappings in 2017.

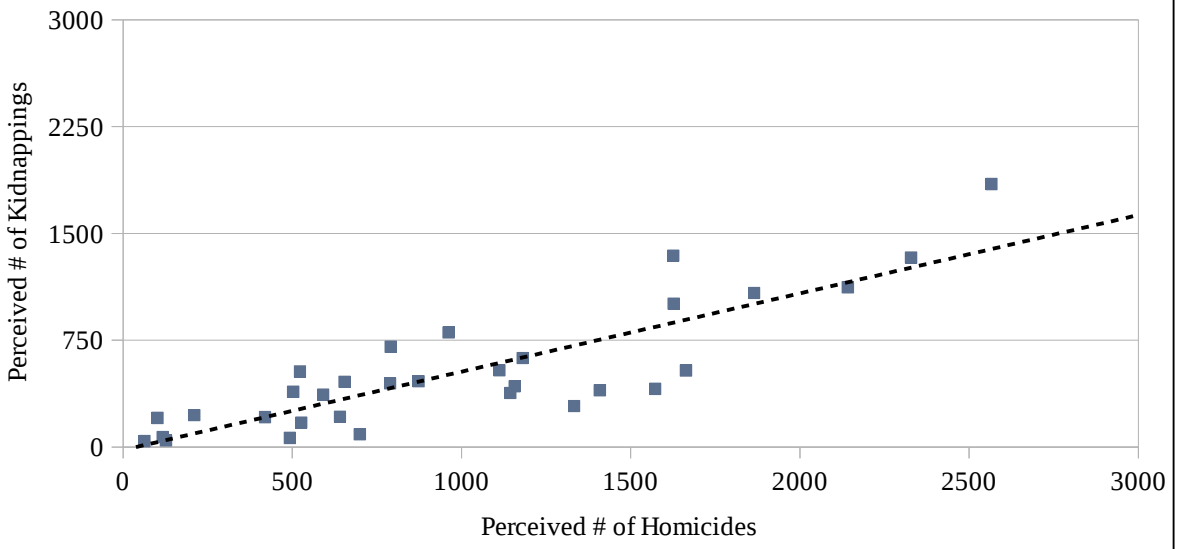
Figure 3.09 State Homicide Levels by State Kidnapping Levels



Note: This figure indicates the number of homicides in a state by the number of kidnapings in a state in 2017. An F-test of the differences in levels of each type of violence was significant (p=0.014). Source: The Executive Secretariate of the National Public Security System (SESNSP).

Perceptions of both types of violence were also highly correlated with each other (r(3,274)= .61, p<.001). As perceptions of homicide increased, so did perceptions of kidnapping, as seen in Figure 3.10, although perceptions of kidnappings were altogether lower than perceptions of homicides.

Figure 3.10 Perceptions of Homicide by Perceptions of Kidnapping



Note: This figure indicates the number of homicides in a state by the number of kidnapings in a state in 2017. An F-test of the differences in levels of each type of violence was significant (p=0.014). Source: The Executive Secretariate of the National Public Security System (SESNSP).

One potential explanation for why we see kidnapping and homicide perceived differently may lie in flaws in the official data used to measure violence. Under-reporting of crime is a pervasive problem in Mexico. Nearly every time of crime is reported at rates far lower than its prevalence. Part of this is due to high levels of impunity and public sentiment that even if a report is filed, no punishment will come to the perpetrator of the crime. Corruption among the police and overt discouraging of reporting of crimes, such as theft, is common. Yet, homicide is largely free from this problem as discovery of a corpse necessarily involves the police. Homicides still can do go undetected, with missing persons reported and later found to have been killed or not found at all; however, this likely represents a small percentage of homicides nationally. Non-governmental estimates of actual homicide rates were about 10% higher than official statistics.[77] Furthermore, in 2018 the official statistics for 2017 had been revised upward from 29,168 (912/state) to reflect a homicide count of 32,079 (1,002/state).[78] The preliminary governmental statistics for homicides in 2017 will be used throughout this project unless otherwise noted as this number was widely publicized by governmental sources and in the media in the months prior to the survey.

Kidnapping, on the other hand, takes on a variety of forms, many of which go unreported. Kidnappings vary in type and length: the term applies to situations in which average citizens are taken hostage in exchange for ransom, members of TCOs or the military who are kidnapped by rivals in order to extract information or send a message, as well as "express" kidnappings, where an individual is abducted for a short period of time and taken to various ATMs, withdrawing money at gun or knife point.[79] It is estimated that one out of every nine kidnappings goes unreported.[80] Low levels of trust in the police and a high impunity rate lead many to believe that reporting, itself a lengthy and burdensome process, will only add to the distress and loss. Police themselves often discourage people from filing *denuncias*, or official police reports, and even when the grievance is filed and the perpetrator is arrested, only 28% of those arrests go to trial.[81] If we take the estimate of kidnapping levels as accurate and assume an average kidnapping rate of nine times official statistics for each state, or an average of 576 kidnappings per state or 555 kidnappings per state for respondents, the gap between perception and that "reality" is still statistically significant (p=0.002).

Moreover, kidnapping might be more consistently and largely overestimated than homicide because it is a crime that cuts across social classes. While official statistics indicate that murder levels are higher across Mexico than kidnapping levels, most of those killed come from

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77 Estimates of 2017 homicides by Mexican NGO Causa en Común put the likely total at 32,000, instead of the officially reported 29,168, meaning that approximately 9.7% of homicides went unreported.
Polo, J. A. (2018, January 25). *Mexico Registers Its Highest Number Of Homicides On Record.* NPR.Org.

78 All other references to homicide levels in 2017 in this project use the number originally published by the government, not this updated number unless otherwise noted specifically.
Datos Priliminares Revelan Que En 2018 Se Registraron 35 Mil 964 Homicidios (347/19; Comunicado de Prensa, pp. 1-2). (2019). Instituto Nacional de Estadística y Geografía (INEGI).

79 If one includes all usage of the term kidnapping, we might consider a third common type includes "virtual" or "false" kidnappings, where victims receive a phone call where the caller pretends to have taken a family member hostage and demands ransom. However, in government data this is considered extortion not kidnapping and despite the use of the word "kidnapping" in the colloquial name, it is highly unlikely that respondents would include this in their mental picture of kidnappings.

80 The National Survey of Victimization and Perceptions of Public Security 2019 (ENVIPE) reports that across all types of crime, 93.2% are either not reported or no investigation was opened (Salomon, 2019).

81 Le Clercq Ortega, J. A., & Rodríguez Sánchez Lara, G. (Eds.). (2017). *Índice Global de Impunidad: Dimensiones de la Impunidad Global*. Fundación Universidad de las Américas Puebla.

poorer socioeconomic backgrounds. Kidnapping cuts across social classes. Traditionally thought of as a crime that mostly affects the wealthy, targeting of middle-class and working-class individuals in addition to the wealthy has become the norm in recent decades.[82] A greater overestimation of kidnappings than homicides lends support to the idea of availability heuristic being a salient cognitive bias. Mental shortcuts often lead to the overestimation of the frequency of events when those events are more cognitively accessible, or available, to the individual doing the estimating. If homicides are largely contained to lower classes, it is likely that a wider swath of the population may know kidnapping victims than know murder victims, and may fear kidnapping more than homicide.[83] This may distort people's perceptions of its prevalence such that they are more accurate in their estimation of homicide, or even underestimate it, as it is not directly a threat to most, versus overestimating kidnapping which may be more likely to be a direct threat.

In all, Mexican citizens are dramatically misperceiving violence in their states. In the following two chapters, I delve into correlates of these misperceptions. First, in Chapter Four, I examine the societal, exogenous factors that shape estimation of both kidnapping and homicide focusing on state-level influences including geographic, economic, and political variables. In Chapter Five, I look at individual-level, endogenous influences including demographic factors, previous political behavior and attitudes, and personal experiences such as living abroad or having been the victim of a crime or solicited for a bribe.

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82 Ochoa, R. (2011). Not just the rich: new tendencies in kidnapping in Mexico City. *Global Crime*, 13(1), 1–21.

83 Again unfortunately there is no concrete data on the social class of homicide victims. Yet many reports suggest that most victims have been TCO members themselves who have fallen in conflict, and reports indicate that the rank and file of TCOs are typically drawn from lower social classes.
Garcia Reyes, K. G. (2020, February 3). *Inside Mexico's War on Drugs: Conversations with "El Narco."* The Conversation.

Chapter 4: Societal Factors in Violence Misperception

At nearly two million square kilometers, Mexico is the 13th largest country in the world by area. Socio-cultural, geographic, economic, and political variation across the large territory help us understand divergent geographical patterns in how Mexicans perceive and misperceive violence. Previous research in relevant fields such as fear of crime have largely ignored contextual factors, focusing largely on individual-level correlates. Reese (2009) warns that a "failure to examine the effects of social, political, or demographic contexts [surrounding fear of crime] could severely limit our understanding of global mechanisms in which individual characteristics operate." This chapter addresses the tremendous subnational diversity in Mexico which may influence perceptions of violence.

While Mexico is more ethnically and religiously homogeneous than many other countries of its population, it still maintains considerable internal diversity. More than half of Mexicans identify as *mestizo*, or of mixed Spanish and indigenous heritage Catholicism is the norm with 83% of the country identifying as such.[84] The government recognizes sixty-eight languages, of which sixty-three are indigenous. Twenty-five million people, a little more than one-tenth of the country, self-identify as indigenous. Immigration has also fueled internal diversity: Waves of Chinese immigrants settled in northern Mexico in the 1800s, Jewish refugees in World War II were granted asylum on Mexico's shores, as were Lebanese and Spanish immigrants fleeing oppressive governments in the middle of the 1900s, and an estimated one and a half million US citizens reside in Mexico, with large concentrations along the border, in coastal beach towns, and retirement communities clustered in central Mexico.

The multitude of indigenous communities date back to pre-colonial Mexico. Prior to Spanish invasion, Mexico had numerous civilizations with different cultural and political legacies. The communities that survived colonization continued to evolve their own unique internal political structures and customs. In some areas indigenous populations with strong histories of social mobilization have been able to effectively resist trans-national criminal organization (TCO) attempts to take over their local governments and gain dominance over their territories (Ley, Mattiace, and Trejo 2019).

Climate and terrain vary widely across the country. There are seven different climate regions from tropical to arid desert, making it one of only seventeen "megadiverse" countries in the world.[85] Among other things, this diversity has led to tremendous variation in industry and natural resources. Areas such as the "Golden Triangle," which crosses the states of Sinaloa, Durango, and Chihuahua is known as a prime opium and cannabis growing area because of it's climate and soil. Western coastal states have served as key ports of entry for the entrance of illicit drugs and drug precursors from South America.

Economic conditions also vary considerably across the large country, with wealthier states enjoying economic conditions similar to Western European countries and poorer states being on par with poorer Central and South American nations. Mexico is home to telecommunications giant Carlos Slim, who held the title of richest person in the world from 2010 to 2013, yet 56% of Mexicans live without a home computer making the country second to last on this statistic among the thirty-seven member nations of the Organization for Cooperation

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84 *Censo de Población y Vivienda 2010.* (2010). Instituto Nacional de Estadística y Geografía (INEGI).

85 Llorente-Bousquets, J., & Ocegueda, S. (2008). Estado del conocimiento de la biota. *Capital Natural de México, Vol. I: Conocimiento Actual de La Biodiversidad*, 1, 283–322.

and Economic Development (OECD).[86]

Politically, Mexico has federalist institutions in which a fair degree of power is vested in state and local governments. As violence itself varies across states, so does the way in which sub-national governments and politicians choose to address violence. A decentralized structure also provides opportunities for local and state level politicians to credibly bargain with TCOs, even entering into covert deals with them often in an attempt to lessen violence or share profit from illicit activity.[87]

Violence itself is unequally distributed across the states and that heterogeneity has become more extreme over time: The gap between the most and least violent states is increasing. According to the Mexico Peace Index, the most peaceful states have become more peaceful over time and the least peaceful states have become less peaceful. The state of Yucatán was ranked as the most peaceful state in Mexico and Baja California Sur the least peaceful.[88]

This chapter proceeds in three parts. First, I examine variation in misperceptions of violence across states and regions within the Mexico. Second, I look at state-level political correlates of violence perception, including the party of the governor at the time of the survey in 2018 and the party that won the state in the 2012 presidential election. Third, I explore the ways in which economic conditions and level of urbanity correlate with misperceptions of violence. Through looking at a multitude of state-level dimensions we can better understand how individual violence misperceptions vary with these exogenous factors.

Across this tremendous diversity, several key findings emerge on how contextual factors interact with how respondents perceived violence. States differ significantly in their average perceptions of violence. Residents of northern Mexico and southern Mexico overperceived homicide at higher rates than those in the central and Bajío regions, while those in central Mexico were dramatically overestimating kidnapping. Living along the northern border specifically was associated with dramatic overestimation of homicides. States in which the PAN (rightist party) were dominant in the 2012 presidential election or in the governorship perceived less violence than those of other parties. Additionally, both high GDP and high inequality were associated with overperception of both type of violence.

4.01 Geography

Within Mexico, states are the primary internal political boundary. The thirty-two federal entities each have their own internal government, similar to other federalist countries. One other political division exists: *circunscripciones electorales* or electoral districts. Mexico has a mixed electoral system in which some federal representatives are elected directly and others are elected through proportional representation from these five electoral districts, each of which encompasses multiple states. However, the districts do not differentiate important geographies. Important regional distinctions constitute non-fixed boundaries within the country; in this section, I look at variation in perceptions of violence by state, socio-cultural region, and by proximity to the borders.

I find tremendous variation in perceptions of violence across states and regions, but the dimensions of this variation are not symmetrical between homicide perception and kidnapping

[86] OECD. (2017). *OECD Digital Economy Outlook* 2017. OECD Publishing.

[87] Broughton, K. (2019, May 17). U.S. Blacklists Mexican Judge, Former Governor Over Alleged Ties to Drug Cartels. *The Wall Street Journal.*

[88] Mexico Peace Index 2018 (No. 56). (2018). Institute for Economics and Peace.

perception. For example, respondents living in northern or southern Mexico were more likely to overestimate homicide, while those living in central Mexico were more likely to overestimate kidnapping. Respondents from the Bajío region were consistent in misestimating both types of violence at low levels, averaging underestimation for homicide and moderate overestimation for kidnapping. Those living along both the northern and southern borders overestimated homicide more dramatically than those living in non-border states, whereas those living along the northern border and in non-border states overestimated kidnapping by the greatest amount.

4.01a States

State of residence was correlated with both homicide and kidnapping misperceptions (both significant at $p<0.001$). States ranged in average misperception from underestimating by an average of 1,421 homicides in 2017 (Veracruz) to overestimating by an average of 1,119 (Oaxaca), as established in Figure 4.01. Interestingly, Veracruz is nearly twice as deadly as Oaxaca (1,924 homicides in 2017 versus 1,023). This reflects the patterns discussed in Chapter Three: As violence increases, overestimation of violence decreases. Nineteen states had an average of overestimation of homicide, three states had an average of accurate estimation of homicide, within +/-5% of actual levels, and ten states had an average of underestimation.

States in which overestimation was prevalent included the following: Aguascalientes, Coahuila, Chiapas, Chihuahua, Ciudad de México, Durango, Hidalgo, Estado de México, Nayarit, Nuevo León, Oaxaca, Querétaro, Quintana Roo, San Luis Potosí, Sonora, Tabasco, Tamaulipas, Tlaxcala, and Yucatán. Of these nineteen states, estimates of homicide were statistically significant from zero in four, approached significance in six, and were not significant in nine.[89] Three states had respondents who were approximately accurate in their average estimation of homicide: Morelos, Sinaloa, and Jalisco. None of the average estimates of homicide in these states were statistically different from zero, as expected.[90] The ten states which averaged underestimation of homicide were: Baja California, Baja California Sur, Campeche, Colima, Guanajuato, Guerrero, Michoacán, Puebla, Veracruz, and Zacatecas. Of these, seven states had average responses significantly different from zero, one approached significance, and two were not significant.[91]

As shown in Figure 4.02, kidnapping misperceptions in each state ranged from an average overestimation of thirty-four (Campeche) to an average overestimation of 1,654 kidnappings (Estado de México) and misperceptions were statistically significant from zero for every state except for Tlaxcala, where it approached significance, and Zacatecas, where it was not significant.[92] Both of those states had low numbers of respondents, thirty-six and forty-eight

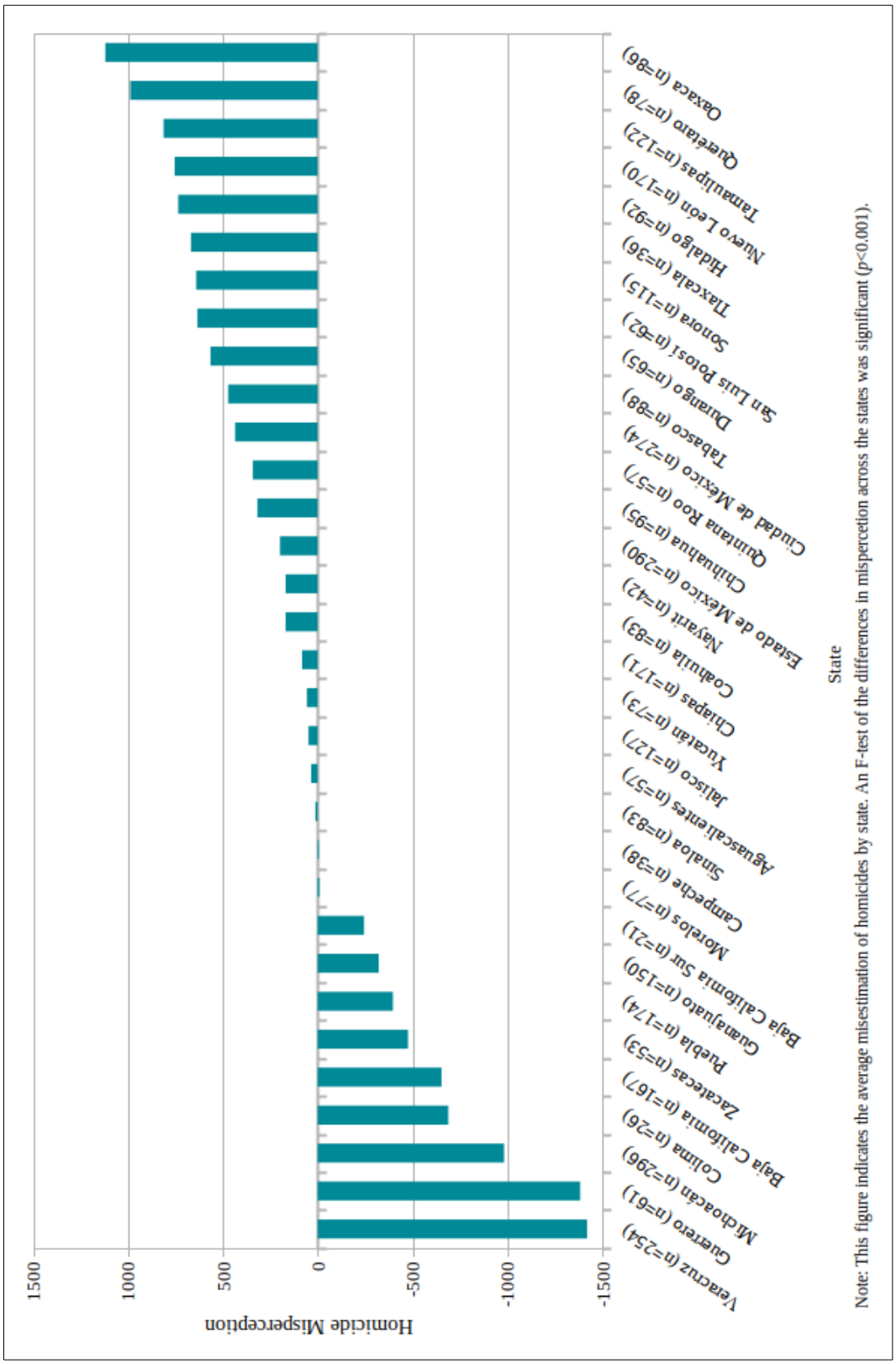
[89] Aguascalientes ($p=0.069$), Coahuila ($p=0.218$), Chiapas ($p=0.636$), Chihuahua ($p=0.576$), Ciudad de México ($p=0.080$), Durango ($p=0.002$), Hidalgo ($p=0.026$), Estado de México ($p=0.585$), Nayarit ($p=0.151$), Nuevo León ($p=0.060$), Oaxaca ($p=0.052$), Querétaro ($p=0.056$), Quintana Roo ($p=0.486$), San Luis Potosí ($p=0.207$), Sonora ($p=0.135$), and Tabasco ($p=0.161$), Tamaulipas ($p=0.030$), Tlaxcala ($p=0.088$), and Yucatán ($p<0.001$).

[90] Morelos ($p=0.978$), Sinaloa ($p=0.979$), and Jalisco ($p=0.901$).

[91] Baja California ($p=0.004$), Baja California Sur ($p=0.068$), Campeche ($p=0.787$), Colima ($p<0.001$), Guanajuato ($p=0.195$), Guerrero ($p=0.007$), Michoacán ($p<0.001$), Puebla ($p=0.001$), Veracruz ($p<0.001$), and Zacatecas ($p<0.001$).

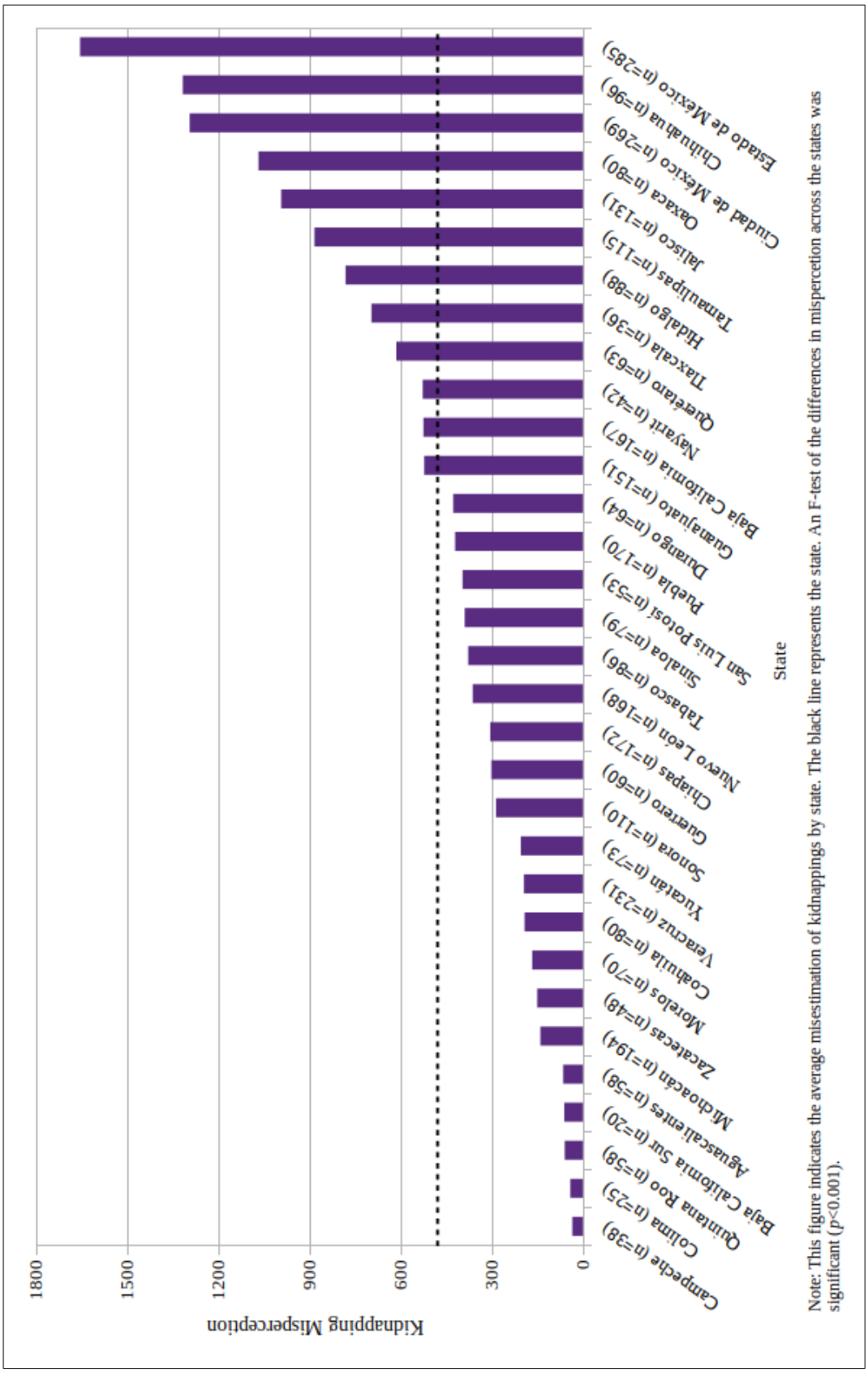
[92] Aguascalientes ($p<0.001$), Baja California ($p<0.001$), Baja California Sur ($p=0.045$), Campeche ($p=0.024$), Chiapas ($p<0.001$), Chihuahua ($p=0.001$), Ciudad de México ($p<0.001$), Coahuila ($p=0.009$), Colima ($p<0.001$), Durango ($p<0.001$), Guanajuato ($p<0.001$), Guerrero ($p=0.002$), Hidalgo ($p<0.001$), Jalisco ($p<0.001$), Estado de México ($p<0.001$), Michoacán ($p<0.001$), Morelos ($p=0.002$), Nayarit ($p<0.001$), Oaxaca ($p=0.005$), Puebla ($p<0.001$), Querétaro ($p=0.049$), Quintana Roo ($p<0.001$), San Luis Potosí ($p=0.005$), Sinaloa ($p<0.001$), Sonora ($p<0.001$), Tabasco ($p=0.002$), Tamaulipas ($p<0.001$), Tlaxcala ($p=0.077$), Veracruz ($p=0.032$), Yucatán

Figure 4.01 Misperception of Homicide by State



(p<0.001), and Zacatecas (p=0.129).

Figure 4.02 Misperception of Kidnapping by State



respondents respectively, and would likely have been significantly different from zero with a higher sample size, since the mean overestimation was sizeable at least in the case of Tlaxcala (overestimation of 696, 150 respectively).

4.01b Region[93]

Broadly speaking, Mexico is understood by some scholars as having four main socio-cultural regions: the North, the Bajío, Central Mexico, and the South. The exact boundaries of these regions are not universally agreed upon and do not perfectly encompass states. However, for simplification, I use the boundaries defined by Lopez-Alonso and Velez Grajales (2015). The North is composed of Baja California, Baja California Sur, Chihuahua, Coahuila, Nuevo León, Sonora, Sinaloa, and Tamaulipas. The Bajío, or lowland, region, includes Aguascalientes, Colima, Durango, Guanajuato, Jalisco, Michoacán, Nayarit, San Luis Potosí, Querétaro, and Zacatecas. Central Mexico is composed of Ciudad de México, Estado de México, Hidalgo, Morelos, Puebla, Tlaxcala, and Veracruz. The states of Campeche, Chiapas, Guerrero, Oaxaca, Tabasco, Quintana Roo, and the Yucatán belong to the South. A map of these boundaries are shown in Figure 4.03.

Figure 4.03 Regions of Mexico

Source: Lopez-Alonso, Moramay, and Roberto Velez Grajales, 2015.

Organized crime related violence remains the largest source of violence in Mexico – an estimated 75% of homicides that occurred in 2017 were tied to organized crime.[94] Each region has been affected differently by variation in federal government responses to drug trafficking and

[93] See Appendix 4.01 for a list of states belonging to each region and each border area.

[94] Polo, J. A. (2018, January 25). *Mexico Registers Its Highest Number Of Homicides On Record.* NPR.Org.

the other illicit activities that trans-national criminal organizations (TCOs) partake in, including targeted use of the Mexican military internally to combat drug-trafficking related violence. This type of violence is largely created by conflict over territory, either between competing TCOs themselves or between one or more TCOs and the military. As an example, five of the seven states in the southern region are among the safest in the country: Campeche, Chiapas, Quintana Roo, Tabasco, and Yucatán. These five states are primarily controlled by one criminal organization with relatively little territorial conflict between competing factions and low military presence[95] Moreover, main drug movement routes leave these states largely untouched (Dell, 2011; Medel et al., 2015). Guerrero and Oaxaca, the other two states of the South, do not enjoy the same conditions nor the same safety and Guerrero specifically is known as being one of the least safe states in the country. The South had an average of 706 homicides per state in 2017, compared to national average of 912 homicides per state. When Guerrero and Oaxaca are removed, the five other states averaged 278 homicides per state. These state differences are shown in Table 4.01. Figure 4.04 shows a map of organized crime activity across Mexico.

Table 4.01 Average Number Homicides and Kidnappings per State by Region in 2017

	North	*Bajío*	*Central*	*South*	*National*
Homicides	1,160	741	1,177	706	912
Kidnappings	38	21	79	45	43

[95] Stewart, S. (2019). *Tracking Mexico's Cartels in 2019.* Stratfor.
Mexican Army C.O. declares that there is no organized crime in Yucatan. (2018, February 26). *The Yucatan Times*.

Figure 4.04 Map of Areas of Trans-National Criminal Organization Influence

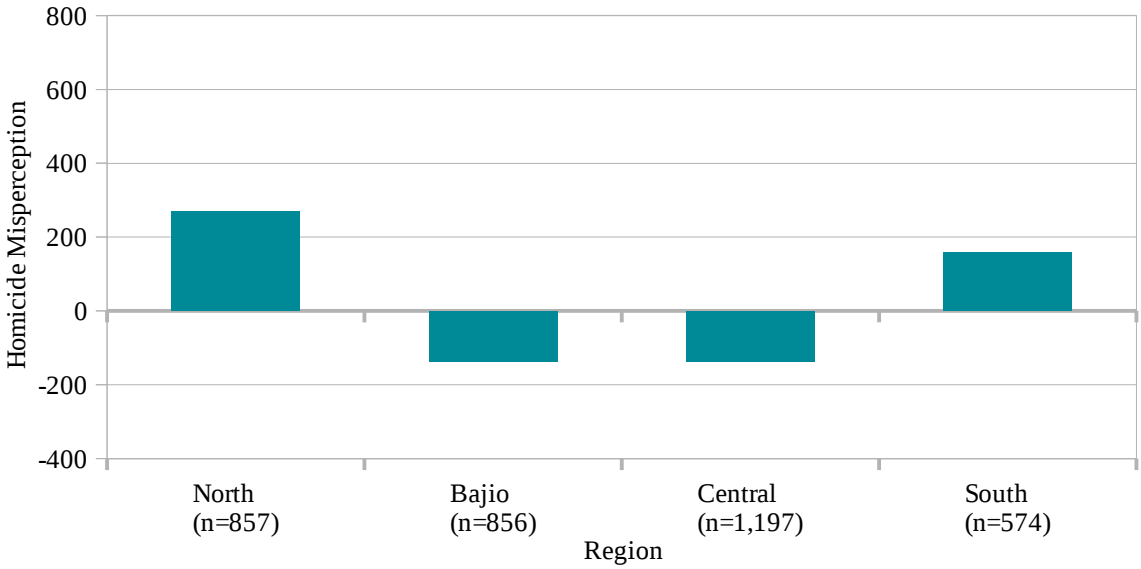
Source: Stewart, S. (2019). *Tracking Mexico's Cartels in 2019.* Stratfor.

These regions also vary in their primary industries, level of urbanization, wealth, and in indigenous, ethnic, and linguistic traditions. For example, the North and Bajío have lower population densities and livestock-based agriculture plays a larger part of the regional economies. Southern Mexico is largely mountainous jungle and holds the country's highest concentration of indigenous people (primarily Maya and Zapotec). Central Mexico, home of the capital district Ciudad de México, is the most densely populated part of the country and the least agricultural.

As evident in Figure 4.05, region was significantly correlated with degree of homicide

misestimation (p=0.038) and kidnapping misestimation (p<0.001). The northern and southern regions averaged an overestimation of homicides while the two regions in the middle of the country, Central and Bajío, underestimated homicide levels on average. When compared to the other regions, only the North was significantly different from the others (p=0.018) while the difference between Central and the other three regions approached significance (p=0.085).

Figure 4.05 Misperception of Homicide by Region



Note: This figure indicates the average misestimation of homicides by region. An F-test of the differences in misperception across the regions was significant (p=0.002).

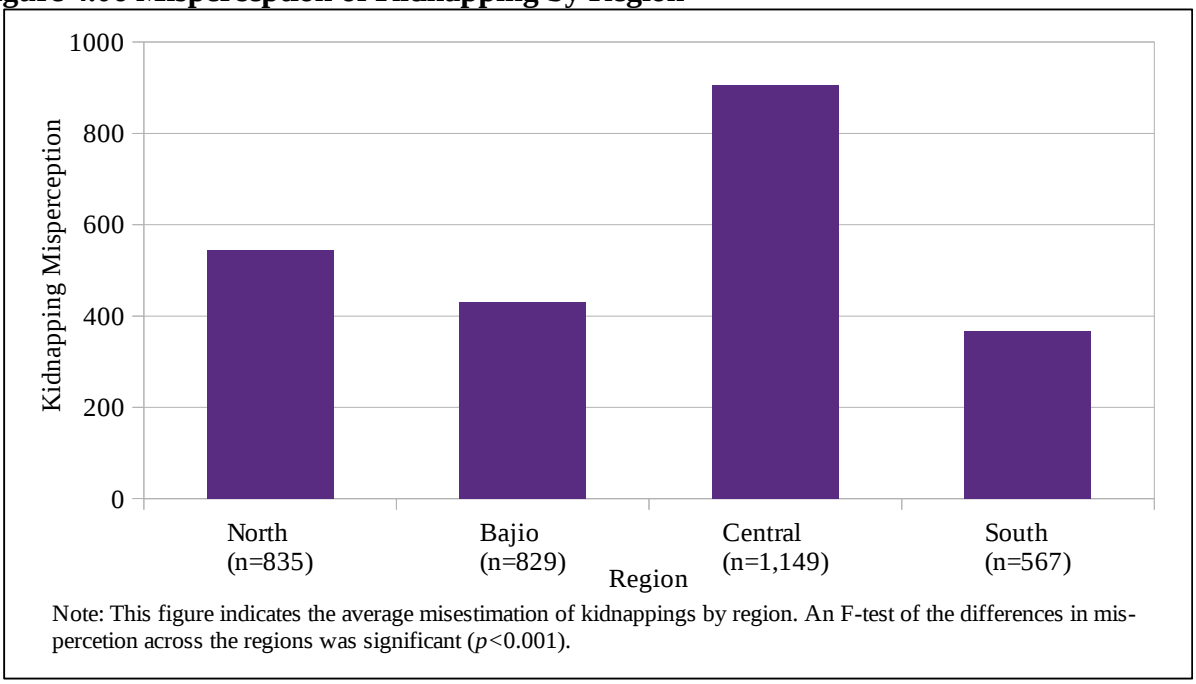
The relationship between kidnapping and region, shown in Figure 4.06, looks substantially different than that of homicide. Whereas respondents from Central Mexico were the largest underestimators of homicide, they were also the largest overestimators of kidnapping, overestimating kidnapping levels by twice that of participants from the other three regions. The difference between Central Mexico and the other three regions was statistically significant (p<0.001). The Central region of Mexico had the highest levels of both types of violence in the country, with an average of 1,177 individuals murdered per state and an average of seventy-nine kidnappings per state in 2017.[96]

These patterns reflect other geographic differences in Mexico. Most of the states in both the Northern and Southern region are border states, which in many parts have a reputation for danger that outpaces actual risk. Central Mexico and the Bajío are similar in their economic features, in the middle of the regions with respect to both average state GDP and poverty rates. Yet central Mexico is home to the nation's capital, Mexico City, which has the highest level of inequality in the country and the rich and poor live in the closest proximity. It is the political and financial center of the country and kidnapping threats against the elites are routine. While kidnapping was previously a problem primarily for the wealthy and has in recent years begun to

[96] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.007 when an original critical value of p=0.050 is used. For homicide, no results remain significant with this new threshold. For kidnapping, all significant results remain significant with this new threshold.

cut across social classes, that concern over kidnapping has not been redistributed. These economic factors will be explored in depth later in this chapter.

Figure 4.06 Misperception of Kidnapping by Region



Note: This figure indicates the average misestimation of kidnappings by region. An F-test of the differences in misperception across the regions was significant ($p<0.001$).

4.01c Border

Mexico borders three countries: the United States to the north and Belize and Guatemala to the south. The northern borderland is known to be one of the most dangerous areas of the country. The cities that dot the border such as Tijuana and Ciudad Juárez have made international news regularly for graphic murders and corpses disfigured and displayed publicly. Ciudad Juárez, the largest city in the state of Chihuahua, sits across the Río Grande from El Paso, Texas. In 2017, El Paso reportedly had nineteen homicide while Ciudad Juárez had an estimated 767 homicides.[97] Tijuana experienced 1,744 homicide in comparison to thirty-four in it's sister city of San Diego, California.[98] This extreme difference highlights how different the experiences are on either side of the border.

The northern border, shown in Figure 4.07, represents one of the most common entry points at which illicit substances are trafficked to the U.S., which is one of the most important and lucrative destinations in the drug trade. Human trafficking, a business in which TCOs have become eager participants as the smuggling of drugs has become more difficult, is also a

[97] Borunda, D. (2018, June 29). Murders in Mexico border city of Juárez continue to rise as deaths top 160 in June alone. *El Paso Times.*
Note that El Paso, with a population of 680,000 people is roughly half the population of Ciudad Juárez, which has 1.3 million residents.

[98] Ong, J. (2018, February 5). SDPD report: Violent crimes down in 2017. *KGTV.*
Dibble, S. (2018, January 14). Control for street drug trade pushes Tijuana to grisly new record: 1,744 homicides. *San Diego Union-Tribune*.
Note that San Diego, with a population of 1.4 million residents is only about 70% as large as Tijuana, with a population close to 2 million.

frequent occurrence along this border. Much of the nearly two thousand mile border comprise dangerous terrain, including mountains and hot, dry dessert, as well as physical barriers, reducing the number of access points to the United States and leading migrants and smugglers alike to attempt risky passages across the international boundary. The difficulty of crossing the border and the lucrative returns for illicit products on the northern side are primary causes of violence in this area; competition over control of this territory is among the most intense conflicts in Mexico.

Mexico's southern border presents a different set of challenges, particularly the border with Guatemala. Close to half a million undocumented immigrants from Central America cross the border in to Mexico each year, with roughly one-third heading north to the United States and the rest attempting to remain in Mexico. This border, however, is not a frequent crossing in the drug trade. Guatemala is often used as a jumping off point for drugs headed through Mexico to the United States, but due to lax flight regulations most of those drugs departing Guatemala arrive in to Mexico via plane, not over the land border.[99] Immigrants crossing at this southern border face robbery, harassment, kidnapping, and rape, but murder is less common and the states that border Guatemala and Belize are among the safest in the country with respect to that type of violence.[100]

Figure 4.07 The US-Mexico Border

Source: Lee, B., Renwick, D., & Cara Labrador, R. (2019). *Mexico's Drug War*. Council on Foreign Relations.

Mexican border regions differ from each other and non-border regions substantially in average homicide levels, but not in average kidnapping levels, as seen in Table 4.02. Unfortunately, it is unclear the extent to which the lack of variation in kidnapping level reflects a

[99] Neves, Y. (2019, July 18). Drug Flights Coming Through Guatemala Continue to Soar. *InSight Crime.*

[100] Gorney, C. (2008, February). Mexico's Other Border. *National Geographic.*

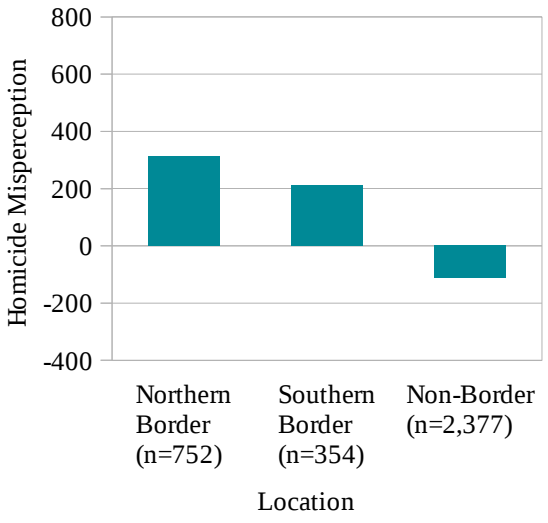
failure of accurate data or true lack of variation. Causa en Común, the NGO that suggested that true kidnapping levels were nine times higher than recorded levels discussed in Chapter Three, has not released their subnational estimates making it hard to know whether there is in fact substantial variation in actual levels of kidnapping along the borders versus non-border areas.

Table 4.02 Average Homicides and Kidnappings per State by Border Region

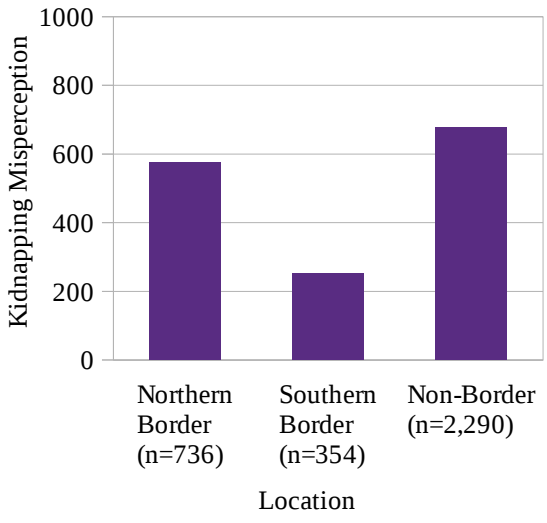
	Northern Border	*Southern Border*	*Non-Border*
Homicides	1,164	336	947
Kidnappings	47	46	42

Figures 4.08 and 4.09 show that where one lived with respect to the borders was a statistically significant correlate of misperception of both homicide (p=0.012) and kidnapping (p=0.002). Misperceptions of homicide for those living along the northern border were significantly higher than those who did not live in a any border state (p=0.007), however misperceptions of kidnapping were not (not significant at p=0.289). When respondents living in southern border states were compared to those not living along any border, misperceptions of homicide were not significantly higher (not significant at p=0.106), but misperceptions of kidnapping were higher (significant at p<0.001).[101]

Figures 4.08 and 4.09 Misperception of Homicide and Kidnapping by Border Area



Note: This figure indicates the average misestimation of homicide by location in a border state. An F-test of the differences in mispercetion between those living in the different regions was significant (p=0.012).



Note: This figure indicates the average misestimation of kidnappings by location in a border state. An F-test of the differences in mispercetion between those living in the different regions was significant (p=0.002).

When holding state homicide rates constant, living along the northern border is correlated with a dramatic increase in misperception compared with those not living in a border area

[101] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 when an original critical value of p=0.050 is used. For both types of violence, all significant results remain significant when this new critical value is used.

(p=0.008). Why might those in northern border states be overestimating homicides more dramatically than those living elsewhere? Violence plays out visually in many ways. A homicide is not a crime that is just between the victim and the perpetrator, but rather many bystanders witness artifacts or 'residue' of that violence: they see police on the street, hear gunshots, and see police tape erected. Along the northern border this process has been amplified by the extreme behaviors of trans-national criminal organizations in publicly displaying bodies or body parts as well as *narcomantas* left on their own or with corpses or dismembered body parts. These cloth banners typically contain threats to journalists, politicians, and the public or descriptions of why the accompanying deceased person was killed. Murders along the northern border have been more consistently public than in other parts of the country, with shootouts occurring on the streets. In 2017, U.S. State Department travel advisories were in effect for all six states along the northern border.[102]

High levels of violence concomitant with the extremely public nature of homicides in this region lead to a situation in which homicide in particular is incredibly salient to the people living there. Journalists are under threat across Mexico, but the border states have been particularly precarious. This has created a vacuum of reliable information about violence in the area, which citizens themselves have tried to fill using Twitter, blogs, and other types of informal media.[103] This lends support to the idea that the availability heuristic is fueling perceptions of violence. In high violence areas where violence is not as public, citizens are either more accurate in their appraisal or even underestimate homicide levels. In contexts in which homicides are extremely gruesome and public, citizens consistently overestimate homicide levels.

For kidnappings, the inverse relationship between borders and perceptions appears to be true. When controlling for kidnapping levels, living along the northern border is not statistically different from living in a non-border state with respect to misperceptions of kidnapping, but those living along the southern border misperceive kidnapping at a lower rate than those living in non-border states (p=0.001). Yet, homicide levels on the southern border are substantially lower than in the rest of the country, while kidnapping levels are not. Likely, as many of those kidnapped are Central American immigrants and not permanent residents of the southern border states, kidnappings are less salient and less likely to have affected the respondent personally.[104]

Homicide and kidnapping misperceptions show tremendous variation between regions and between each other in those regions. Citizens perceive the north and south of the country to be the most dangerous in terms of homicide, but the central region to be the most dangerous int terms of kidnapping. Not all states in the north and south are along the border. Looking specifically at border states, respondents perceive high levels of both types of violence along the northern border but more moderately overestimate homicide and kidnapping along the southern border. For those who do not live in border states, perceptions of kidnapping are dramatic overestimations while perceptions of homicide are moderate underestimations.

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[102] *Situation of Impunity and Violence in Mexico's Northern Border*. (2017). Washington Office on Latin America.

[103] Correa-Cabrera, G., & Nava, J. (2011). *Drug Wars, Social Networks and the Right to Information: The Rise of Informal Media as the Freedom of Press's Lifeline in Northern Mexico.* American Political Science Association Annual Meeting.

[104] *Increase in kidnappings and violence against migrants on the southern border of Mexico.* (2019, October 30). Médecins Sans Frontières (MSF) International.

4.02 Political Factors

States vary in their actual levels of violence due to a variety of factors, with socio-cultural, geographic, and economic variables affecting violence a great deal. Some scholars argue that sub-national variation in crime levels was largely determined by whether or not the president, first Calderón and later Peña Nieto, could effectively coordinate the federal government response with local leaders, with much easier and more frequent coordination attempts occurring with co-partisans (Ríos, 2015b; Urrusti Frenk, 2012). Ley and Trejo (2016) build on this theory by identifying patterns of violence during Calderón's tenure consistent with coordination and cooperation with other PAN (rightist party) leaders, partial cooperation with more centrist opposition from the PRI, and confrontation with leftist PRD governors and local leaders. They posit that violence in certain areas was tolerated as a mechanism to punish political opponents.

That the violence itself is not exogenous to political processes makes it difficult to disentangle whether perceptions of violence are driving political attitudes and preferences or vice versa. One of the main reasons I expect heterogeneity of misperceptions of violence across state boundaries, even between states with similar levels of violence, is variation in party strength across states. In this analysis, a clear pattern emerges: respondents in PAN (rightist party) dominant states are dramatically underestimating homicide and overestimating kidnapping more moderately than states dominated by other parties and respondents in PRD (leftist party) dominant states are doing just the opposite.

4.02a The 2012 Presidential Election[105]

By 2012, the PAN had shifted strategies in their discourse and was trying to draw attention away from the war on drugs, which many viewed as the singular focus of the Calderón administration without substantial wins. This shift was exemplified in the ninety-five pages of their official party platform that year only mentioned violence and organized crime twenty-two times (a rate of .23 references per page).[106] In contrast, mentions of these terms was more than twice as high in the party platforms of the other two main parties. In the 104 page PRI platform, violence and organized crime were mentioned fifty times (.48/page). In the seventy-two pages released by the PRD, violence and organized crime were mentioned forty-nine times (.68/page).[107] Calderón's war on drugs became increasingly unpopular as his *sexeño* wore on and criticism of his focus on militarizing the conflict was an important point of contention in 2012.[108] Many viewed his loss to the PRI's Peña Nieto to be an indictment of the drug war itself.

In the 2012 Presidential election, Enrique Peña Nieto (PRI) won with a plurality of 38% of the vote, Andrés Manuel López Obrador (PRD) came in second with 32% of the vote, Josefina Vázquez Mota (PAN) received 25% of the vote. Four percent of ballots were cast for a fourth party candidate or were left blank as a protest vote. Voter turnout reached 63%. The states won by each party are displayed in Figure 4.10.

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105 See Appendix 4.02 for breakdown of 2012 state winners and parties of the governors.

106 Key search terms were for violence were violence (*violencia*), homicide (*homicidio*), and kidnapping (*secuestro*). Key search terms for organized crime were narcotrafficker or narcotrafficking (*narcotraficante* or *narcotrafico)*, cartel (*cartel)*, criminal organization and organized crime (*crimen organizado, organizaciones criminales*, or *delincuencia organizado)*, and transnational crime (*crimen transnacional)*.

107 *Plataformas Electorales 2012.* (n.d.). Instituto Nacional Electoral (INE).

108 *Calderón llega al último informe con la aprobación más baja de su gobierno.* (2012, September 1). Expansión.

This election signaled the successful transition of the PRI from a hegemonic autocratic party in the 20th century to a party that could compete democratically for the highest offices in the 21st century. In this time frame, the PRI did not shift ideologically per say. It was long seen as a catch-all party whose ideology varied considerably from president to president. In this new era, it remained a pragmatic yet still ideologically flexible party, occupying the center of the political spectrum. Peña Nieto's centrist campaign focused on the promises of economic openness and governmental transparency, in contrast to López Obrador's leftist campaign of progressive social policies, taxation reform to aid the poor, and distance from the United States and incumbent party candidate Vázquez Mota's socially and fiscally conservative campaign which aimed at continuing the drug war in a similar manner to Calderón.

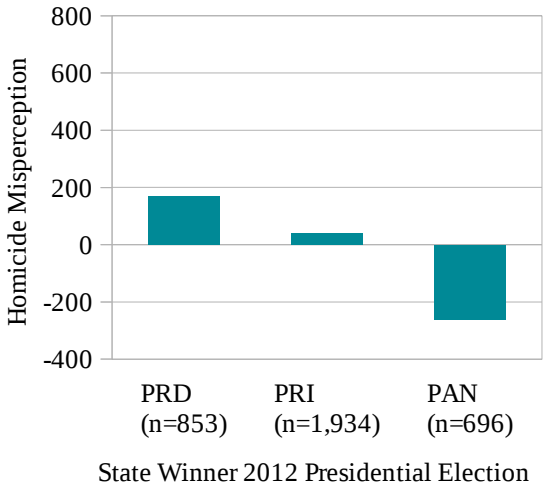
Figure 4.10 Map of State Winners in the 2012 Presidential Election

Source: Ribando Seelke, C. (2012). Mexico's 2012 Elections. *Congressional Research Services, R42548*, 19.

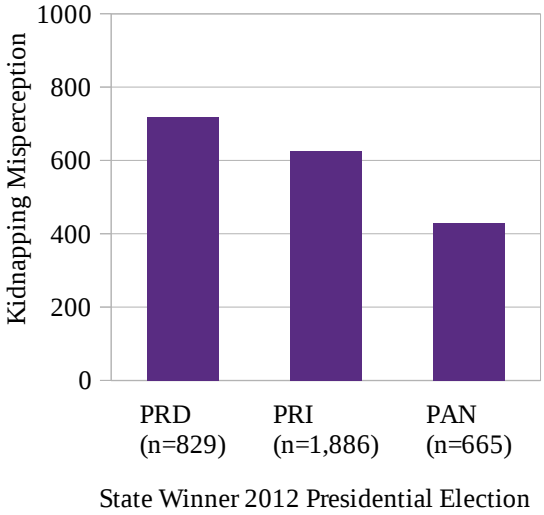
How did partisan voting behavior in the 2012 election correlate with perceptions of violence? Average misperceptions across states supporting each party showed consistent patterns for both types of violence which mirrored the extent to which each party centered violence and criminal organizations in their official campaign platforms. Overperception of violence was most

exaggerated in states that supported the PRD in the 2012 election. Respondents in states where the PRI won a plurality were nearly accurate in their perception of homicide, only overestimating by forty homicides per state on average and while they overestimated kidnappings considerably, they did so less than respondents in PRD dominant states. Respondents in PAN dominant states underestimated homicide levels by an average of 261 homicides per state and had the lowest level of misperception for kidnapping estimation among the three parties. The differences approached significance for homicide misperception (p=0.062) and were significant for kidnapping misperception (p=0.032). These findings are represented in Figures 4.11 and 4.12.

Figures 4.11 and 4.12 Misperception of Homicide and Kidnapping by State Winner in the 2012 Presidential Election



Note: This figure indicates the average misestimation of homicides by the party that won the state in the 2012 presidential election. An F-test of the differences in mis-percetion across the parties approached significance (p=0.062).



Note: This figure indicates the average misestimation of kidnappings by the party that won the state in the 2012 presidential election. An F-test of the differences in mis-percetion across the parties was significant (p=0.032).

Differences in respondents between PRD and PAN winning states were significant for both types of violence (p=0.021 for homicide, p=0.008 for kidnapping). There were no statistical differences between respondents in PRD winning states and PRI winning states (p=0.388 for homicide, p=0.319 for kidnapping). Variation in perceptions of violence between PAN and PRI winning states approached significance for homicide (p=0.064) and were significant for homicide (p=0.038).[109]

López Obrador's campaign put violence front and center, promising to be successful in the war he argued Calderón had started and failed. The PRD official platform mentioned violence and criminal organizations more than any other platform. The PRI sought to highlight the failures of the Calderón administration's domestic security policy while reinventing itself as a moderate party which could return Mexico to the stability of decades prior. The PAN sought to

[109] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 when an original critical value of p=0.050 is used. For homicide, when this new critical value is used, no differences in respondents by the party that won the state in 2012 are significant. For kidnapping, when this new critical value is used, differences across all three party winning states are significant as well as differences between PRD and PAN winning states.

distance themselves from the perception that they were solely focused on security and focused most of the campaign on strategies for economic growth. Moreover, the Calderón administration had worked more closely with PAN dominant states and those states generally saw decreases in violence across his tenure and greater overt successes in the war on drugs (Ríos, 2015b). Given how perceptions of violence lag behind realities of violence, as discussed in Chapter Three, it is likely that these successes affected the perceptions of respondents living in "blue" or PAN dominant states.

4.02b Governorships

Gubernatorial terms are universally six years across Mexico, the same length of time as a the presidential term. However, as demonstrated in Table 4.03, more than half of all governors are elected out of sync from federal elections, which happen every three years. When this survey was conducted, in May of 2018, governors around the country had been in office from between one and five years and nine governors were up for re-election that July.

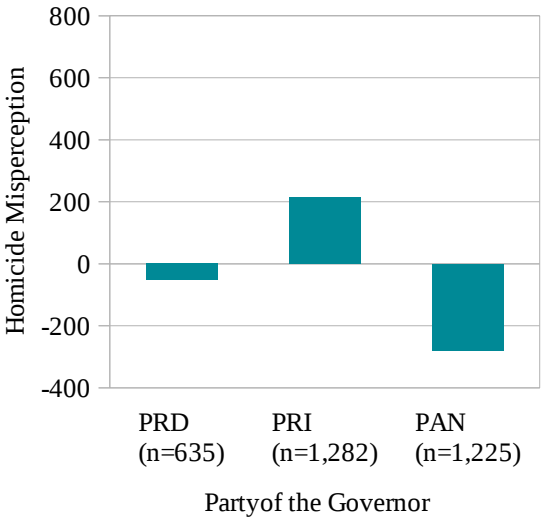
Table 4.03 Elections for Governor by Year

	2013	*2014*	*2015*	*2016*	*2017*	*2018*
# of States	1	0	9	10	3	9

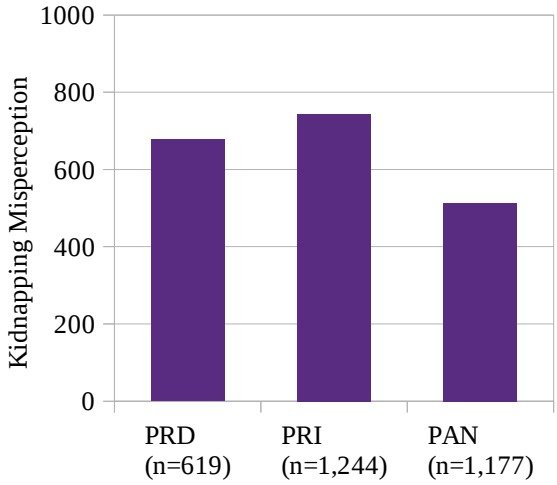
The patterns seen in the 2012 presidential election were largely repeated when looking at the relationship between the party in power at the gubernatorial level and misperception of violence. Overall, misperception of violence varied significantly by party (p=0.003 for homicide, p=0.035 for kidnapping).Respondents who lived in PAN dominant states again were distinctive, dramatically underestimating homicide levels and overestimating kidnapping levels the least of the three groups. Respondents living in states with PAN governors estimated lower levels of violence than those with PRI governors (significant at p<0.001 for homicide, significant at p=0.011 for kidnapping) and PRD governors (not significant at p=0.139 for homicide, approaching significance at p=0.094 for kidnapping). Differences between respondents states with PRI governors and PRD governors were not significant for either type of violence (p=0.166 for homicide, p=0.582 for kidnapping).[110] These findings are displayed in Figures 4.13 and 4.14.

[110] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 when an original critical value of p=0.050 is used. For homicide, when this new critical value is used, differences in respondents across parties in power remain statistically significant as do differences between respondents in PRI and PAN led states. For kidnapping, when this new critical value is used, only differences between respondents in PRI and PAN led states remain significant.

Figures 4.13 and 4.14 Misperception of Homicide and Kidnapping by Party of the Governor[111]



Note: This figure indicates the average misestimation of homicides by the party of the governor at the time of the survey. An F-test of the differences in mispercetion across the parties was significant (p=0.003).



Note: This figure indicates the average misestimation of kidnappings the party of the governor at the time of the survey. An F-test of the differences in mispercetion across the parties was significant (*p*=0.035).

In looking at states through the lens of which parties dominate in each we see a pattern in which respondents in PAN dominant states are downplaying violence, while those in PRI and PRD dominant states are exaggerating it. What is driving these associations? Did variation in perception of violence fuel support for each party or has party dominance in a state affected perceptions of violence? Likely both are simultaneously true. By the time of the 2012 election, sixty thousand Mexicans had died during Calderón's tenure in deaths specifically tied to the war on drugs.[112] The PAN was actively trying to distance themselves from that legacy, while highlighting successes in the drug war and promoting other policies, such as those related to economic development and prosperity. This was reflected in their official party platform by the minimal references to violence and drug trafficking. This signaled clearly to their supporters they were shifting from a focus on violence and insecurity as the most salient problem in the country. Meanwhile the PRI was highlighting the salience of the violence, as demonstrated by their official platform, especially during the 2012 election and the year or two after the election, claiming that they were citizens' best chance at a return to the peace and stability Mexico enjoyed during their continuous seventy-two year rule. In states where support for the PRI was in the majority, the idea that violence was a primary issue facing the nation and of maximal importance was clearly dominant.

[111] Nuevo León, with an independent governor, and Chiapas, with a governor from the Verde party, were excluded from these figures.

[112] Miroff, N., & Booth, W. (2012, November 27). Mexico's drug war is at a stalemate as Calderon's presidency ends. *Washington Post.*

4.03 Economy and Urbanness[113]

Poverty itself has long been posited to be one of the primary drivers of violence in Mexico (Martínez-Cruz & Rodríguez-Castelán, 2016). Lack of formal job opportunities across the country and lucrative illicit opportunities lead many in Mexico to work with TCOs in one way or another, whether it is in the work of growing, manufacturing, or smuggling drugs or many steps removed. Dammert and Malone (2003) suggest that general economic insecurities, specifically around poverty and unemployment, drive fear of crime. I examine how economic conditions correlate with misperceptions of violence using three different metrics: per capita Gross Domestic Product (GDP) by state, state level of inequality, and the degree of urbanness of each respondent's residence. The economic conditions within states vary widely across Mexico. States also vary widely in their levels of inequality: Tlaxcala has the lowest level of inequality, similar to Japan, Ciudad de México has the highest level of inequality, similar to Guatemala[114].

Both of these measures are deeply interrelated but highlight different economic phenomena occurring in each state The tremendous subnational economic variation highlights the incredible diversity in states' natural resources, political strength, human capital, economic opportunities, and geographical constraints across this large country.

4.03a State GDP

The Gross Domestic Product (GDP) of a state essentially measures a state's productivity in a given year, providing an economic snapshot of the area. Mexican states vary tremendously along this metric. Despite the country having the 14th largest economy in the world, the benefits of economic growth and stability are not evenly distributed throughout the country. State per capita GDPs with purchasing power parity ranged from 7,249 USD (Chiapas) to 53,501 USD (Campeche).[115] To put these figures in comparative terms, the output of Chiapas is similar to that of India while the output of Campeche is similar to the Portugal and Slovakia.[116]

Previous research on the link between subnational GDP and violent crime itself is limited and has shown mixed results (see Klaer and Northrup 2014 and Rahim 2016). The logic of a theoretical relationship between subnational GDP and violence is that in areas with greater economic opportunity, with GDP per capita as a proxy of economic opportunity, fewer people will engage in criminal behavior since they have the potential to earn money in the formal economy. Working for trans-national criminal organizations would be less appealing and thus might result in lower levels of violence. On the other hand, the geography of TCO activity in Mexico is historically based on trafficking transit routes and border entry points and labor is sufficiently flexible in the country that those from low wealth states can easily move to, and participate in violent activity in, high wealth states. In Mexico's case, per capita GDP is negatively correlated with both actual levels of both homicide and kidnapping – on average, poorer states have more violence.[117]

For misestimation of violence, as displayed in Figures 4.15 and 4.16, higher levels of overperception of both types of violence is associated with higher GDP (p=0.002 for homicide,

[113] See Appendix 4.03 for GDP per capita and inequality rate (GINI coefficient) for each state.

[114] Central Intelligence Agency World Factbook, accessed 2020.

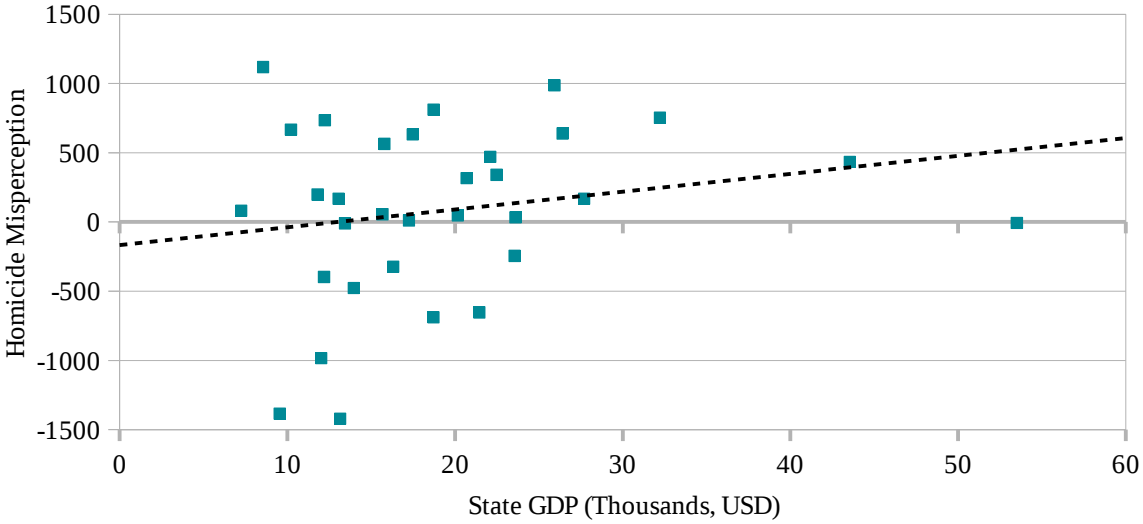
[115] Campeche is a major oil producing state.

[116] World Bank International Comparison Program Database, 2017.

[117] However, these correlations were not statistically significant (p=0.194 for homicide, p=0.176 for kidnapping) likely because of the small n of only thirty-two federal entities.

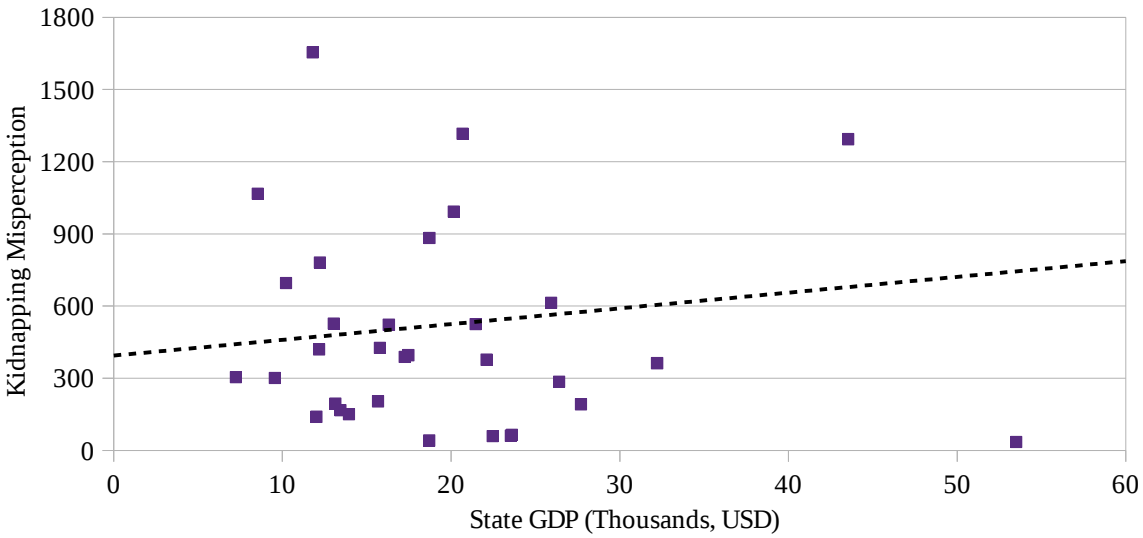
p=0.048 for kidnapping). The greater the wealth of the state, the greater the misperception. This relationship holds true even when controlling for actual violence levels (*p*=0.008 for homicide, *p*=0.001 for kidnapping).

Figure 4.15 Misperception of Homicide by State GDP



Note: This figure indicates the average misestimation of homicides by state GDP. The black line represents the trend line. An F-test of the differences in mispercetion across state GDPs was significant (*p*=0.002). Source: Mexican National Institute for Geography and Statistics (INEGI), 2013.

Figure 4.16 Misperception of Kidnapping by State GDP



Note: This figure indicates the average misestimation of kidnappings by state GDP per capita. The black line represents the trend line. An F-test of the differences in mispercetion across state GDPs was significant (*p*=0.048). Source: Mexican National Institute for Geography and Statistics (INEGI), 2013.

The economic strength of a state is also correlated with lower overall levels of poverty

(p<0.001) and with the strength of different political parties. States which had a PRI governor at the time of the survey had the lowest GDP per capita average, at 16,590 USD/year. PAN controlled states were in the middle, with a mean GDP per capita of 17,161 USD/year and PRD controlled states had a significantly higher GDP at 29,096 USD/year. These differences were statistically significant (p=0.001). When controlling for both of these factors, the relationship between state GDP per capita and misperception of violence disappears indicating that party dominance in a state, which is correlated with economic factors, is a more important explanatory factor in understanding the variation in misperception of these two types of violence. I continue the discussion of which intersecting variables carry the most weight in predicting perceptions of violence at the end of this chapter with a multi-variate regression demonstrating the hierarchy of correlates to misperceptions.

4.03b Inequality

While interrelated, income inequality captures a different phenomenon than either measures of poverty or wealth, highlighting the economic disparities of those living in close proximity. Inequality in Mexico overall is similar in inequality to its regional fellows Guatemala, Costa Rica, and Paraguay, despite being considerably wealthier than these countries in overall GDP and per capita GDP.[118] The top one percent of Mexicans own 43% of the country's wealth.[119]

Income inequality has been directly linked to violent crime, with increases in inequality correlated with dramatic accelerations in crime levels attributable to TCOs (Enamorado et al., 2016). Causation in this case is likely cyclical with high levels of rent extraction by criminal organizations, expansion of illicit market career opportunities and contraction of formal economic opportunities, and endemic, compounded impunity being primary drivers of this relationship. Actual violence levels were positively correlated with state inequality levels – the higher the level of inequality, the more violence in the state.[120]

I expected that an increase in inequality will go hand in hand with an increase in overestimation of violence and that this relationship would persist independently of the relationship between inequality and actual levels of violence. Areas with chronic and substantial inequality have built-in social tension. This is true globally, but is exacerbated in countries of new wealth like Mexico where recent economic advances that have disproportionately affected a select few. Some scholars have called it Mexico's "nouveau riche syndrome."[121] In large cities like Mexico City, Monterrey, and Guadalajara it is common to see flashy cars, expensive watches, and other overt displays of wealth in close proximity to intractable and extreme urban poverty. In the United States and Europe it might only be children of celebrities or the uber rich who have drivers and body guards escort them to school, but in Mexico City the outsides of the many private primary and secondary schools are dotted with waiting hired hands. There exists a paradox of extreme caution – bullet proof cars and jackets, body guards, and barbed wire and electric fences surrounding fortified houses – paired with overt displays of extreme wealth, and

[118] World Bank Development Research Group.

[119] Esquivel Hernandez, G. (2015). *Extreme Inequality in Mexico: Concentration of Economic and Political Power.* OXFAM Mexico.

[120] This correlation was not statistically significant (p=0.754 for homicide, p=0.298 for kidnapping) likely because of the small n of only thirty-two federal entities.

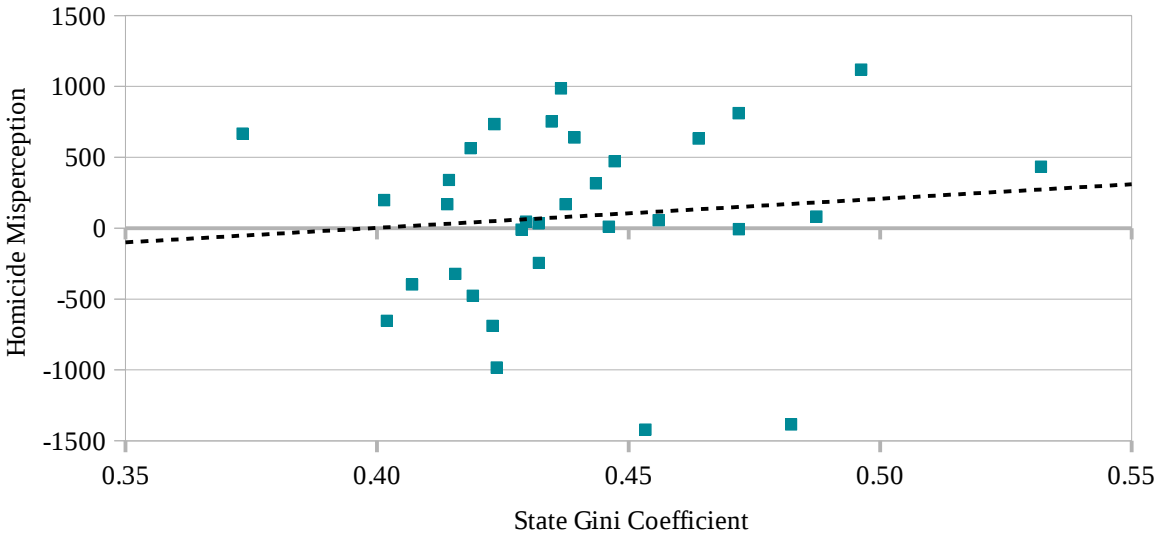
[121] Chabat, J. (1993). Mexico: So Close to the United States, So Far from Latin America. *Current History*, 92(571), 55–58.

in many ways the latter necessitates the former. While not even the most extreme displays of wealth can be seen as inviting violence, devastating poverty in close proximity to such displays of wealth not only drives violence but perceptions of violence.

The Gini coefficient is the most commonly used standard for measuring income dispersion (ie. inequality), with a range of zero, which represents perfect equality to one, where one person holds all the wealth in the country. Higher numbers representing greater levels of inequality. Nationally, in 2018 the Gini coefficient was .47, down from .50 two years prior, representing movement toward greater equality.[122] In 2018, Tlaxcala had the lowest level of inequality with a Gini score of .37 and the capital, Ciudad de México, had the highest with a score of .53.

Consistent with expectations, as inequality increased so did misperception of both homicide and kidnapping (significant at p=0.032 for homicide, approaching significance at p=0.069 for kidnapping), shown in Figures 4.17 and 4.18. The direction of this relationship persisted when controlling for actual violence levels (not significant at p=0.208 for homicide, significant at p=0.004 for kidnapping), indicating that respondents in more unequal states were more likely to overestimate violence regardless of how violent the state actually was.

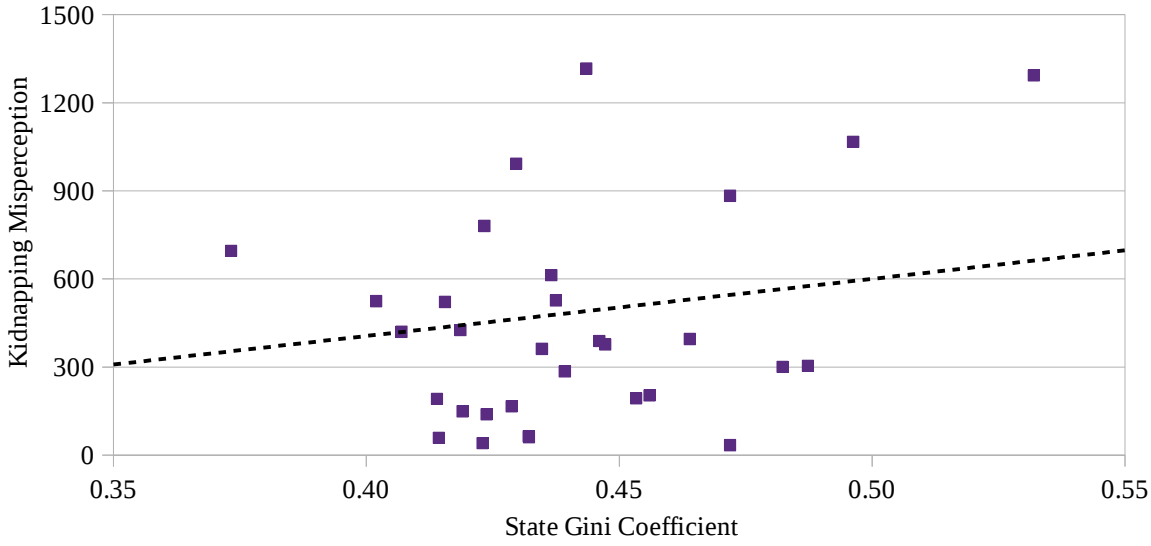
Figure 4.17 Misperception of Homicide by Level of Inequality



Note: This figure indicates the average misestimation of homicides by state Gini coefficient. The black line represents the trend line. An F-test of the differences in mispercetion across level of inequality was significant (p=0.032). Source: Mexican National Council for the Evaluation of Social Development (CONEVAL), 2018.

[122] Mexican National Council for the Evaluation of Social Development (CONEVAL), 2018.

Figure 4.18 Misperception of Kidnapping by Level of Inequality



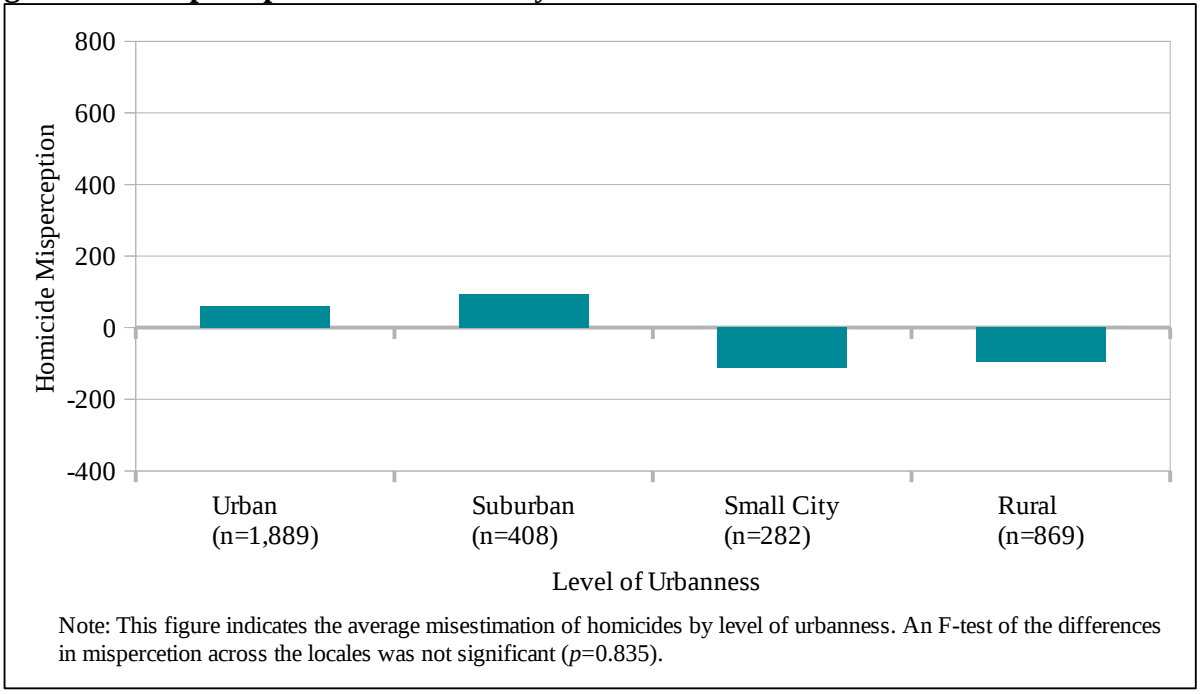
Note: This figure indicates the average misestimation of homicides by state Gini coefficient. The black line represents the trend line. An F-test of the differences in mispercetion across level of inequality approached significance (p=0.069).
Source: Mexican National Council for the Evaluation of Social Development (CONEVAL), 2018.

4.03c Level of Urbanness

Urban settings are consistently more crime dense areas than those with more sparse population. Sheer number of people, heightened inequality in close quarters, competition over resources, the prevalence of gangs, and myriad other reasons facilitate violence in urban areas (see (Balán 2002 and Auyero, Bourgois, and Scheper-Hughes 2015 for further discussion). These same factors also have been found to influence heightened fear of crime in urban environments (Sacco, 1985). Across Mexico, population density of a state was positively correlated with homicide levels but not with kidnapping levels ($p<0.001$ and $p=0.611$, respectively). I expect that this proximity to violence, particularly homicide, will lead those in more urban areas to overestimate violence to a greater degree than those in less population dense areas where the visuals of violence are less endemic.

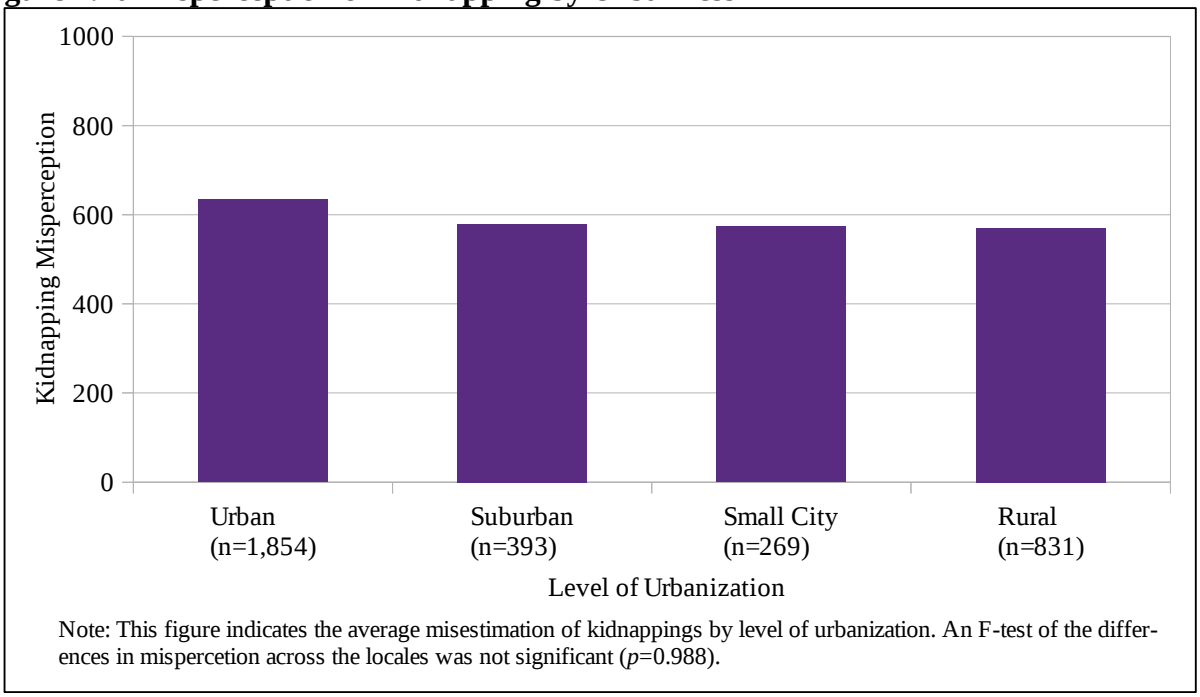
This expectation was not substantiated. Respondents were asked to report whether or not they lived in an environment that could be characterized as urban, suburban, a small city, or rural. One might expect that in areas with greater population density, overestimation of violence would be high as more people are in close proximity to violence and overt reminders of of violence, including police sirens, etc. While respondents from urban and suburban settings overestimated violence by more than those from small cities and rural settings, the differences across these groups were trivial and not statistically significant ($p=0.835$ for homicide, $p=0.988$ for kidnapping), shown in Figure 4.19 and 4.20.

Figure 4.19 Misperception of Homicide by Urbanness



Note: This figure indicates the average misestimation of homicides by level of urbanness. An F-test of the differences in mispercetion across the locales was not significant (p=0.835).

Figure 4.20 Misperception of Kidnapping by Urbanness



Note: This figure indicates the average misestimation of kidnappings by level of urbanization. An F-test of the differences in mispercetion across the locales was not significant (p=0.988).

The finding that urbanness is uncorrelated with perceptions of violence, particularly perceptions of homicide, goes against the hypothesis that proximity fosters overestimation that I discussed in Chapter Three. However, it is unclear whether asking respondents to estimate the violence in the state, rather than their city or directly proximate area, might have diminished the

effects of proximity on perceptions of violence.

Of the economic indicators examined, state GDP, state inequality, and individual level of urbanization, higher levels of state wealth and of state inequality were associated with greater overestimations of both types of violence. Previous research has indicated that high levels of inequality are a key factor in the erosion of social trust and in the generation of violence itself (Halpern, 2001). My findings indicate that high levels of wealth in close proximity to poverty are potentially driving exaggerated perceptions of violence as well.

4.04 Conclusion

The diversity of perceptions of violence across Mexico mirrors the tremendous subnational variation in economic conditions and political party strength across the country. State boundaries, socio-cultural regions, and proximity to the border also play a role in shaping perceptions of violence. These factors, exogenous to an individual's degree and direction of misperception of violence, serve as the background against which many beliefs are formed, constituting the social and political environment in which one lives.

State of residence was correlated with misperceptions of violence and there was considerable heterogeneity in misperception of both types of violence across states. Those in the north and south of the country overestimated homicide, while residents of central Mexico and the Bajío underestimated homicides on average. Central Mexico stood out as being a region which averaged dramatic overestimation of kidnapping. Residents in border states, both north and south, overestimated homicide more than their peers in the interior of the country, while those in southern border states viewed kidnapping to be much less prevalent than in reality.

Variation in party dominance across the states influenced perceptions of violence considerably. When looking at states where the PAN won the majority of votes for president in 2012, overestimation of both homicide and kidnapping was the lowest. This was true also for states in which the PAN held the governorship. For the 2012 presidential election, states that supported the PRD averaged the most dramatic overestimation of violence. Where the PRI held the current governorship, overestimation was the highest.

Mexico's states range in their wealth from being similar to European nations to being comparable to poorer Latin American countries. Across this range, those living in wealthier states were more likely to overestimate homicide. Those in lower wealth states were more likely to overestimate kidnapping, even when controlling for actual levels of violence. Levels of inequality in a state were also predictive of misperception of violence, with higher levels of inequality being associated with more dramatic overestimation of violence. Those who lived in urban or suburban areas were more likely to overestimate homicide than those living in small towns or rural areas and those living in urban areas were slightly more likely to overestimate kidnapping, but neither of these relationships were significant.

In order to understand which of these societal, contextual factors is most important in understanding misperceptions of violence, I ran regression models for homicide and kidnapping separately using the explanatory variables discussed in this chapter which were statistically significant and controlling for actual violence levels. These models are shown in Table 4.04.

Respondents living in PAN (rightist party) dominant states had consistently lower estimates of violence than those living in states dominated by other political parties (p=0.030 for homicide, p<0.001 for kidnapping). This indicates that the official PAN messaging, minimizing

discussion of violence compared to the PRI (centrist party) and the PRD (leftist party), was reflected in the perceptions of states where they were successful. Moreover, PAN efforts to minimize violence in favorable states throughout the Calderón administration, as discussed previously, affected citizen perception of violence even when those states were currently experiencing higher levels of violence, supporting the idea discussed in Chapter Three that perceptions of violence lag behind changes in actual violence levels.

Additionally, living in a border states also was correlated with perceptions of violence, but differently for each of the types of violence. Those along the northern border had exaggerated perceptions of homicide (p=0.007). This is consistent with the realities of the public and bloody nature of homicides along the northern border. Those along the southern border had minimized perceptions of kidnapping (p<0.001), which likely reflects the dominant effects of homicide rates on overall perceptions of violence. Despite the southern border having roughly similar numbers of kidnappings as the northern border and non-border states, respondents perceive there to be substantially fewer. Low homicide levels along the southern border may be driving this perception.

Finally, neither economic indicator was a significant predictor of perceptions of homicide (p=0.427 for GDP, p=0.311 for inequality, but a state's GDP had a moderate positive effect on perceptions of kidnapping (p=0.005). Inequality was not correlated with kidnapping perceptions (not significant at p=0.553).

Table 4.04 Models of Misperceptions of Violence by Societal Factors

Key Independent Variables	*Homicide*	*Kidnapping*
State Violence Level	-0.441 (0.093)***	4.645 (0.648)***
Northern Border	4.851 (1.785)**	0.457 (1.056)
Southern Border	-1.727 (2.285)	-4.998 (1.254)***
PAN State in 2012	-3.667 (1.688)*	-6.077 (1.097)***
PRD State in 2012	0.727 (1.670)	0.160 (1.002)
State GDP	0.063 (0.079)	0.135 (0.048)**
State Inequality	21.607 (21.341)	7.513 (12.671)
	n = 3,483 R^2 = 0.014 cons = -5.825	n = 3,380 R^2 = 0.23 cons = -1.140

Notes: This table consists of regression models of societal correlates of misperceptions of violence, with each violence indicator being hundreds of homicides or kidnappings. The border variable is a categorical variable with non-border states as the control group. Party dominance in the 2012 election is also a categorical variable with the control being PRI states. State violence, state GDP, and state inequality are all continuous variables.
$^{o}p\leq0.100$ $^{*}p\leq0.050$; $^{**}p\leq0.010$, $^{***}p\leq0.001$

In the following chapter, I turn to look at individual level correlates of misperceptions of violence, first looking at demographic factors such as age and education, then political behavior such as participation in the 2012 election and attention to politics, then experiential factors such living abroad or having been the victim of a crime.

Chapter 5: Individual-Level Correlates of Violence Misperception

What individual attributes, behaviors, and experiences correspond with an individuals' misperception of violence? In Chapter Four, I examined the geographic, political, and economic correlates of misperceptions about violence. These factors – the wealth of one's state, what region it falls in, the party in power in that state, etc – are all exogenous to an individual's perception of violence and can be understood as the background against which a person forms their perceptions of violence.[123] In this chapter I continue to explore the responses provided in the Violence Experiment[124] about one's perceptions of levels of violence, now deviling in to individual level correlates of misperceptions of violence. I look at demographic factors, past and anticipated political behavior, candidate and party affinity, and personal experiences. A person's socio-demographic characteristics, individual preferences and behaviors, and experiences shape the way they view the world. It is important to note that these factors are endogenous to perceptions of violence, they both inform how individuals perceive violence and are also influenced by the same factors that affect those perceptions in the first place.

The rest of the chapter proceeds in four parts, all focusing on individual-level characteristics and behaviors and how they corresponded with perceptions of violence. First, I explore the role that demographic factors played in how individuals misperceive violence. Here, I consider the variables of gender, age, and educational background. I find that there are no gender or age differences in misperception, but that those with the highest levels of education are the most inclined to dramatically overestimate violence levels. As will be discussed, this finding is in line with the finding from Chapter Three that media and elite discourse, and an individual's retention and understanding of that received information, explain much of the variance in perceptions of violence.

Second, I discuss past and future (anticipated) political behavior, including whether a respondent voted for in 2012 presidential election, how much attention they were paying to the 2018 election, whether they planned on voting in the 2018 election, and past participation in a multitude of types of political engagement that occur outside of the voting booth, from talking about politics with friends and family to marching in the streets in protest. Past political behavior is largely unconnected to misperceptions of violence, but those who planned on abstaining from the 2018 election were dramatic overestimators of violence, as were those who were paying the most attention to the election. Both attention to the election and education are proxies for attention to and retention of media and elite messaging. These findings are again in line with my hypothesis that the salience of violence, which leads to overperception, is activated by media and elite messaging.

Third, I look at the ways in which candidate and party preferences were associated with different levels of misperception. In both the 2012 and 2018 elections, support for the leftist López Obrador, and his 2018 party Morena,[125] was associated with the highest degree of

[123] For analysis of individual-level characteristics, I used state clustered standard errors to account for the similarities in respondents within a state. As established in Chapter Four, respondents within the same state experience broadly similar violence levels, regional attributes, and macro-economic conditions.

[124] As mentioned previously, only those in the "ask" condition of the Violence Experiment were solicited for their perceptions of violence. The other three-quarters of respondents were either assigned to the "tell" condition, where they were informed about violence levels, or to a pure control condition.

[125] In 2012 he ran with the Democratic Revolutionary Party, the PRD.

overestimation of violence. This reflects the state-level findings from Chapter Four where parties won by López Obrador (under the PRD banner) had the highest overestimators. In 2012, those who supported incumbent candidate Vázquez Mota (PAN) overestimated violence by the least amount, also consistent with state-level averages of states she won in that election. However, in 2018 supporters of the PAN and PRI shared the most limited overestimation of violence, underestimating homicides and most accurately estimating kidnappings.

Fourth, I look at how personal experiences correlate with misperceptions of violence, focusing on whether or not a respondent lived abroad, where and for how long they lived abroad, and how many times they were the victim of a crime or were solicited for a bribe in the last twelve months. Those who lived abroad were no different in their perceptions than those who had not, however this result was likely influenced by small sample size. Contrary to expectations, there were only marginal differences in perceptions of violence between those who had been the victim of a crime or been solicited for a bribe and those who had not. Even more surprisingly, those who had been the victims of crimes or solicited for bribes the greatest number of times actually underestimated homicide dramatically and had substantially lower overestimation of kidnapping (i.e. more accurate estimation of kidnapping) than those who had been victimized or solicited fewer times.

5.01 Demographics

When nineteenth century French sociologist and philosopher Auguste Comte said "demography is destiny," he was implying that by understanding the features of the population of a place we can understand that place. But do those demographic characteristics also shape the way the people themselves perceive that place? Demographic characteristics including gender, age, and education level, can dramatically affect the way citizens see and interact with the world. In this section, I explore how those three factors correlate with perceptions of violence.

5.01a Gender

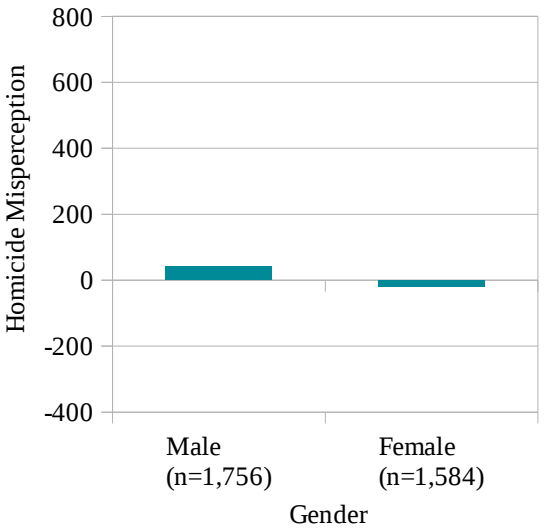
Sex differences in threat perception, assessment of violence, and feelings of risk have been consistent and well documented in a variety of fields (Eckel & Grossman, 2008; May et al., 2010; McClure et al., 2004; Siegrist et al., 2005), with women generally being more likely to perceive higher levels of threat and be more fearful. Women are thought to be more sensitive to risk because of their own physical disadvantages compared to men and also to be rationally perceiving increased threat for certain crimes (Stanko 2016). (Reid and Konrad (2004), however, find that gender differences between perception of risk and fear of crime mirror sex differences in crime threats. Men's fear of crime actually surpasses women's for crimes for which they are more at risk. In this case, men in Mexico are more than eight times more likely to be murdered than women.[126] No clear data exist on gender differences in kidnapping risk in Mexico. I expect that men's overwhelmingly larger likelihood of being the victims of homicide will offset or surpass other psychological factors which make women more likely to overestimate violence than men.

This theorized relationship was somewhat reflected among survey respondents, but the differences between men and women were marginal and not statistically significant for either type of crime (p=0.580 for homicide, p=0.906 for kidnapping). Men overestimated homicides by

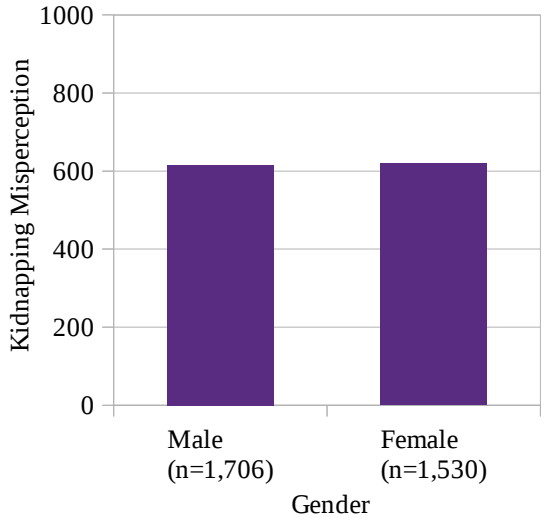
[126] *Mexico Peace Index 2018* (No. 56). (2018). Institute for Economics and Peace.

an average of sixty homicides per state more than women, and women overestimated kidnappings by an average of three per state more than men. Neither gender's homicide overestimation was statistically different from zero (p=0.844 for women, p=0.636 for men), but both were for kidnapping (p<0.001 for both genders). There was also no statistical difference between men and women in perception of either type of violence when controlling for the relevant exogenous factors discussed in Chapter Four, including actual violence level, residence in a border state, the dominant political party of the state, or either economic indicator (p=0.690 for homicide, p=0.939 for kidnapping). These similarities in perceptions are visualized in Figures 5.01 and 5.02.

Figures 5.01 and 5.02 Misperception of Homicide and Kidnapping by Gender[127]



Note: This figure indicates the average misestimation of homicides by gender. An F-test of the differences in mispercetion across genders was not significant (p=0.580).



Note: This figure indicates the average misestimation of kidnappings by gender. An F-test of the differences in mispercetion across genders was not significant (p=0.906).

Women and men are perceiving violence nearly identically. Why? One possible explanation, as mentioned in Chapter Three, is that the nature of this study and the questions about violence allowed respondents to look at violence dispassionately and their sense of fear or threat was not engaged. Another reason might be that the same cognitive biases at play discussed in Chapter Three, such as the availability heuristic, affect individuals equally regardless of gender. Women and men consume much of the same media, receive the same messages from political elites, and both are prone to the same evolved adaptations.

5.01b Age

Numerous studies have investigated the relationship between age and fear of crime. Some have shown that age is positively correlated with fear of crime (Lagrange & Ferraro, 1989; Rader et al., 2012). In these studies, older respondents were found to be more fearful in part because of vulnerabilities due to physical decline with age. Other studies, including by Kappes, Greve, and

[127] Of respondents who listed their gender, 47.4% identified as women and 52.6% identified as men. Of respondents in the "ask" condition, 143 chose not to reveal their gender.

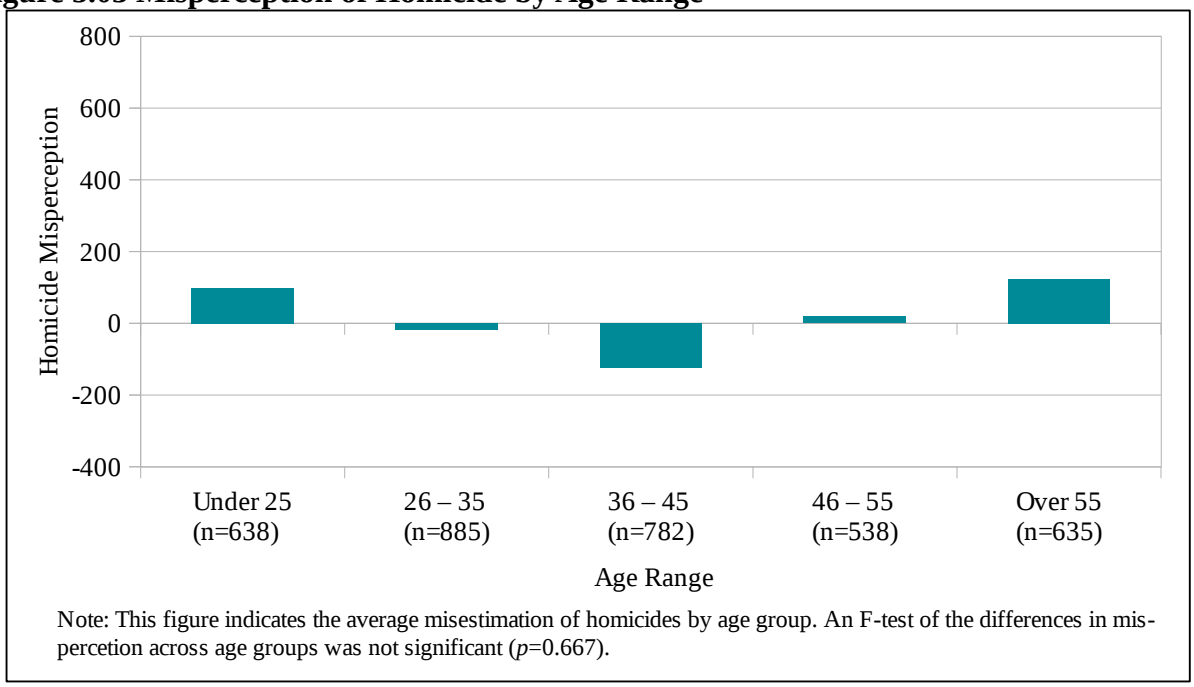
Hellmers (2013) have shown no relationship between age and fear of crime. While fear of violence and misperception of violence are interrelated concepts, age may not play the same role in one as it does the other.

Respondents in the "ask" condition who are being analyzed here ranged from eighteen to ninety-seven years old, with a mean age of forty years old and a median age of thirty-eight years old. Eighteen years old is the threshold for being able to vote in Mexico. The median age of Mexico as a whole is twenty-eight years old and the median age of eligible voters in Mexico is in the late thirties, consistent with this study.[128] Five respondents declined to report their age.

Age was not a statistically significant predictor of misperceptions of homicide (p=0.667), as seen in Figure 5.04 The youngest respondents, those between eighteen and twenty-five, and the oldest respondents, those over the age of fifty-five, were the most likely to overestimate homicide. However neither of these groups were statistically different from those between the ages of twenty-six and fifty-five (p=0.380 for the youngest group, p=0.294 for the oldest group). Age examined as a continuous, instead of categorical, variable was not significantly correlated with homicide misperception (p=0.801) either.

Age was not a statistically significant predictor of kidnapping misperception when looked at either as a categorical variable (p=0.792), as seen in Figure 5.04, or as a continuous variable (p=0.399). Those under twenty-five overestimated kidnappings by the greatest amount, but were not statistically different from those older (p=0.467) nor from those who overestimated by the least amount, those over fifty-five (p=0.359). Those over fifty-five were not statistically different from the other age ranges either (p=0.485). Overall, there was no discernible relationship between age and misestimation of either type of violence.

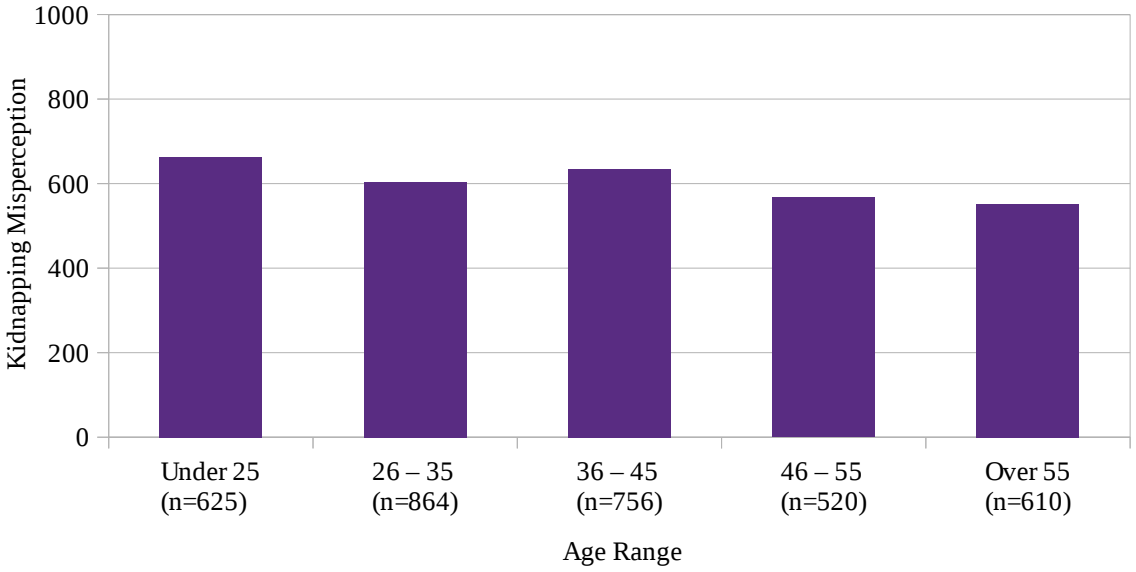
Figure 5.03 Misperception of Homicide by Age Range



Note: This figure indicates the average misestimation of homicides by age group. An F-test of the differences in misperception across age groups was not significant (p=0.667).

[128] Exact data not available. Approximation based off of information available from Payan 2018.

Figure 5.04 Misperception of Kidnapping by Age Range



Note: This figure indicates the average misestimation of kidnappings by age group. An F-test of the differences in mispercetion across age groups was not significant (p=0.792).

5.01c Education Level

Multiple studies suggest that education is negatively correlated with fear of crime, with those the highest levels of education having a greater sense of security (Kruger et al., 2007; Snyder et al., 2011). Those with higher levels of education often have increased social capital, access to information about crime prevention, and wealth, which brings access to security resources and allows for additional safety precautions to be taken, such as the use of a private vehicle instead of public transportation. These factors may contribute to a sense of security. Again, predictions from this literature were not supported.

In Chapter Three, I introduced the idea that proximity to violence and salience of violence would likely lead to overestimation of violence. For example, since homicide, unlike kidnapping, disproportionately affects lower socio-economic populations, those who are in lower classes are more likely to know someone who was murdered and be exposed to the 'residuals' of homicide such as the sounds of bullets or sirens and the visuals of police tape and broken windows. This proximity to violence, I hypothesized, would lead to increases in perceptions of violence. In line with this logic, using education as a proxy for socio-economic status, one might expect that particularly for homicide, those with less education would overestimate violence more than those with more education.

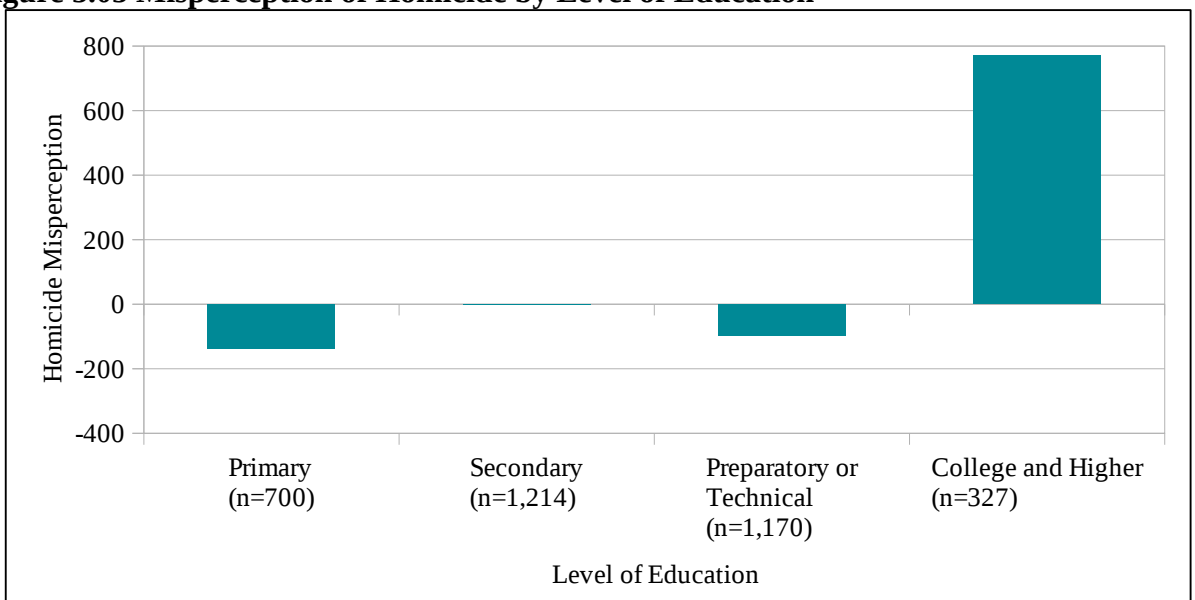
On the other hand, higher levels of education are associated with increased attention to media, which I have posited is a predictor of overestimation of violence. Background political knowledge is the strongest predictor of news reception, and was not measured in this survey, but education also plays a substantial role in media consumption. As Price and Zaller ((1993)) point out:

> Better-educated people are more adept at learning and have been socialized to attend more carefully to political affairs. They are also more likely to be placed in social and occupational settings where an understanding of current events is highly valued. (p. 138)

As such, I expect that as education increases, so will overestimation of violence. In particular, that those with university degrees or higher will be substantial overestimators as the largest variation in social and occupational settings generally occur between those with and without a college degree. Moreover, even when exposure to the media is held constant, those with greater levels of education acquire and retain more information from the news they receive (Yang, 2010). This is to say that those with the highest levels of education are likely receiving more information about violence than those with lower levels of education and retaining that information more successfully.

Overall, level of education attained was significantly positively associated with misperception of homicide (p=0.005). Those who had completed primary school or preparatory/ technical school were the largest underestimators and not statistically different from each other (p=0.728) nor from those who completed secondary school (p=0.420 for primary, p=0.221 for preparatory or technical). However, all three of these rungs of education were different from those who had completed college or higher (p<0.001).[129] This striking difference is clearly seen in Figure 5.05. Those who had completed college or a higher degree overestimated dramatically, overestimating an average of 771 homicides per state in contrast to those who had completed less education who underestimated an average of sixty-eight homicide. Those whose highest level of education was completion of secondary school were on average accurate in their prediction of homicides, overestimating an average of just one homicide per state.

Figure 5.05 Misperception of Homicide by Level of Education



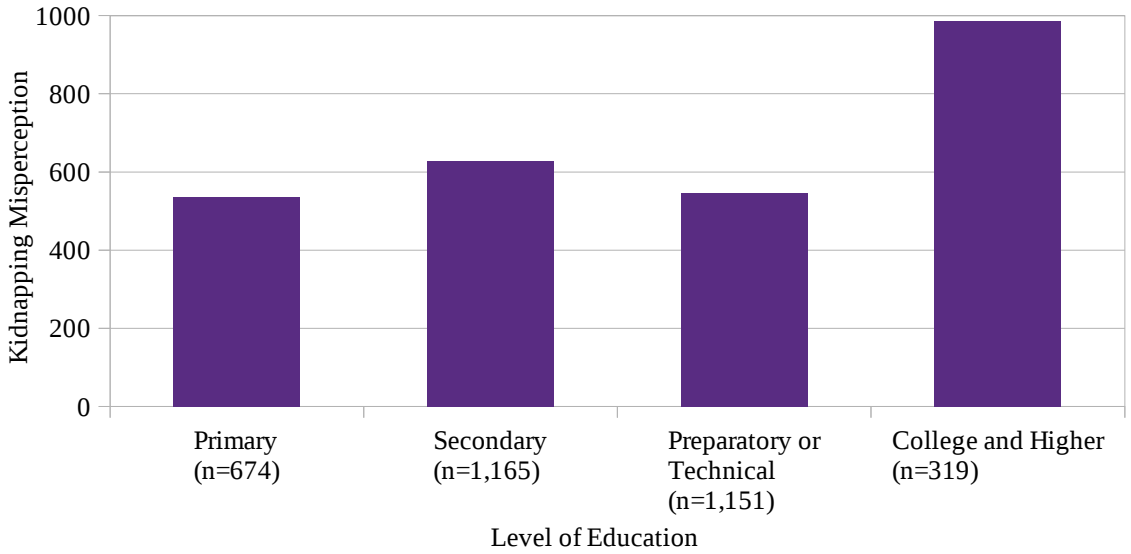
Note: This figure indicates the average misestimation of homicides by highest level of education completed. An F-test of the differences in mispercetion across levels of education was significant (p=0.005).

This pattern with respect to kidnapping is similar. While the relationship between higher educational attainment and increased overperception of kidnapping was not significant

[129] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.007 when an original critical value of p=0.050 is used. All significant results remain significant when this new critical value is used.

(p=0.708), those with a college education or higher were substantially different in their perceptions. As seen in Figure 5.06, respondents who had completed college overestimated an average of 985 more kidnappings than actually occurred while those had not completed college were nearly 40% more accurate, overestimating by an average of 575 kidnappings. This difference was statistically significant (p=0.001).[130]

Figure 5.06 Misperception of Kidnapping by Level of Education



Note: This figure indicates the average misestimation of kidnappings by highest level of education completed. An F-test of the differences in mispercetion across education levels was not significant (p=0.708).

Of the demographic variables examined, age and gender were not significant predictors of perceptions of violence, however, education was. The lack of a relationship between age, gender, and overperception runs contrary to theoretical expectations from evolutionary psychology and the fear of crime literature. On the other hand, those who were highly educated were far more likely to overestimate the levels of violence, consistent with Price and Zaller's discussion of media retention and my hypothesis that media consumption directly reinforces overperception of violence. This finding regarding education is not necessarily inconsistent with the literature on fear of crime, as many of these respondents may believe that violence levels are extremely high yet simultaneously not fear that crime since they have access to protections that others do not. This finding indicates that likely exposure to media and elite messaging about violence levels is a more powerful force in the development of perceptions of violence than proximity to the violence itself. It lends strong support to the findings from Chapter Three that the higher the salience of violence, the greater the overperception.

5.02 Political Participation

Political engagement comes in a wide variety of forms, from speaking to friends and

[130] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.007 when an original critical value of p=0.050 is used. All significant results remain significant when this new critical value is used.

family about current events, to following an election in the media, to taking to the streets in protest. Respondents were asked about a range of past political behaviors, including whether they voted in the 2012 presidential election, whether they intended to vote in the 2018 election, how much attention they were paying the 2018 election, and what political activities they had engaged in outside of the voting booth within the past year.

The frequency and modes of entry into public life are highly individual, with people choosing to engage with the political sphere for a variety of reasons. Some may feel a sense of duty to vote, while others avoid the polling place but protest injustices in the street. Others remain disengaged with the political process, feeling as if they do not have strongly formed preferences or that those preferences will not be effectively heard. Involving oneself in different forms of participation in politics can affect an individual's perception of violence in a variety of ways as well. On one hand, engagement might expose them to more accurate information which would lead to more accurate estimation of violence levels. However, those who participate more may also consume more news (Holt et al., 2013)and thus have stories of violence more readily available in their mind, potentially leading to systematic overestimation. Yet, engaging with one's community to resolve issues like violence can lead to higher levels of political and social efficacy, minimizing one's fear of crime (Smith & Hill, 1991).

I expected that higher levels of engagement with politics would lead to lower levels of overestimation, as citizens would both feel a greater sense of political efficacy and have more immediate access to reliable information. On the other hand, I expected that attention to politics would be associated with greater overestimation of violence. While participation itself might expose people to reliable avenues of information, high levels of attention to a political campaign necessarily involves high levels of exposure to both media and elite messaging, both of which can distort perceptions of violence by way of sensationalizing the phenomenon or excessive focus on it, as discussed in Chapter Three, or through campaigns focus on violence. In this election cycle, for example, all three main parties mentioned terms related to violence more in their official platforms in 2018 than they had in either of the previous election cycles.[131]

These expectations were largely borne out, especially in the electoral realm. While there was no difference in misperception between those who self-reported voting in the 2012 election, those who planned to abstain from the 2018 election were more likely to overperceive violence as were those who paid high levels of attention to the 2018 political campaigns. However, there were no substantive differences between those who participated in non-electoral political activities and those who did not.

5.02a Voting

Voting is one of the most direct methods a citizen has to hold their leaders accountable in any democracy. When looking at whether a respondent voted in the 2012 election, planned on voting in the 2018 election, and their attention to the 2018 election a striking finding emerged: There were no differences in misperception of either type of violence among those who voted or did not vote in 2012, but those who did not plan on voting in 2018 overestimated both types of violence by much greater degrees. Moreover, the more attention one was paying to the then current election cycle, the more they overestimated violence.

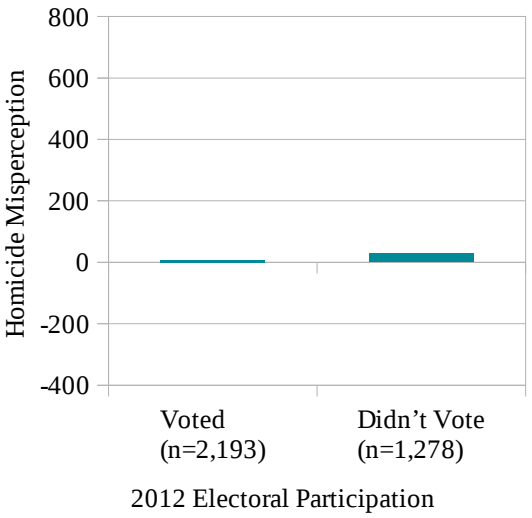
There was no effective difference in misperceptions of violence between those who did

[131] *Plataformas Electorales.* (*2006*). Instituto Nacional Electoral (INE).
Plataformas Electorales. (2012). Instituto Nacional Electoral (INE).
Plataformas Electorales. (2018). Instituto Nacional Electoral (INE).

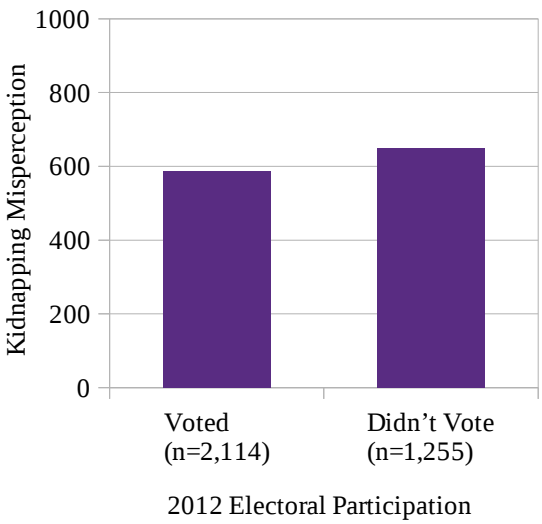
and did not vote in 2012. Those who reported that they did not participate in the 2012 election were slightly more likely to overperceive violence than those who did participate, however, these differences were not statistically significant (p=0.857 for homicide, p=0.185 for kidnapping), as seen in Figures 5.07 and 5.08.

While this runs counter to expectations, it is important to note that self reports of previous voting are notoriously unreliable (Bernstein et al., 2001). Moreover, while perceptions of violence lag behind changes in actual violence levels, as discussed in Chapter Three, likely perceptions had in fact changed since six years prior. Participation in the 2012 election may have been influenced by respondent's perceptions of violence at the time of that election but this study did not measure those past perceptions.

Figures 5.07 and 5.08 Misperception of Homicide and Kidnapping by Participation in the 2012 Election



Note: This figure indicates the average misestimation of homicides by participation in the 2012 election. An F-test of the differences in mispercetion across 2012 voter participation was not significant (p=0.857).



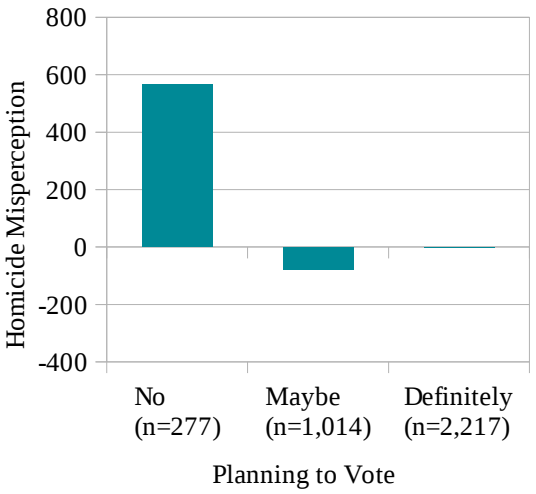
Note: This figure indicates the average misestimation of kidnappings by participation in the 2012 election. An F-test of the differences in mispercetion across 2012 voter participation was not significant (p=0.185).

On the other hand, with respect to the 2018 election, those who did not plan on voting overestimated homicide and kidnapping rates more dramatically than their peers who were considering or definitely planning on voting (Figure 5.09 and 5.10 respectively). But, this relationship was not statistically significant (p=0.277 for homicide, p=0.262 for kidnapping). When using a less conservative model and removing state clustered standard errors, differences in misperception approached significance for homicide (p=0.056) and were significant for kidnapping (p=0.024).

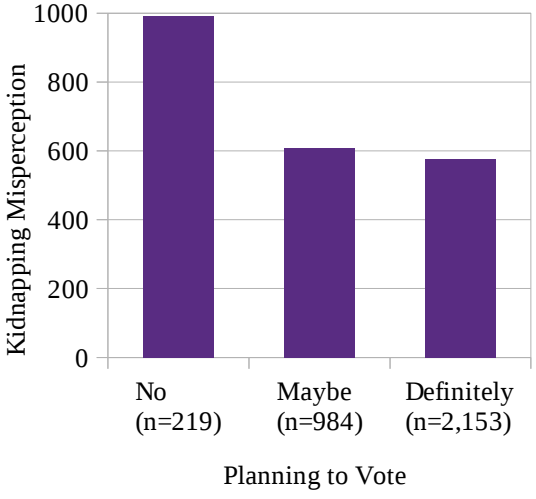
When I analyzed intention to vote as a dichotomous, instead of categorical variable, those who did not plan on voting were again not significantly more likely to overperceive violence than those who were potentially planning on voting (p=0.125 for homicide, p=0.110 for kidnapping) in models using state clustered standard errors, but in less conservative models without those clustered standard errors the difference was significant (p=0.019 for homicide, p=0.007 for kidnapping). Likely the difference in perceptions of violence between those who

planned on voting and those who did not would be significant with a larger sample size, as fewer than three hundred respondents indicated that they were definitely not planning on voting.

Figures 5.09 and 5.10 Misperception of Homicide and Kidnapping by Anticipated Participation in the 2018 Election



Note: This figure indicates the average misestimation of homicides by an individual's intention of voting in the 2018 election. An F-test of the differences in misperception across voting intention was not significant (p=0.277).



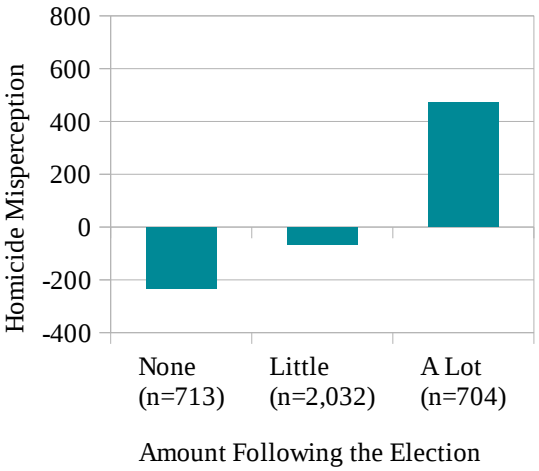
Note: This figure indicates the average misestimation of kidnappings by an individual's intention of voting in the 2018 election. An F-test of the differences in misperception across voting intention was not significant (p=0.262).

5.02b Attention to Politics

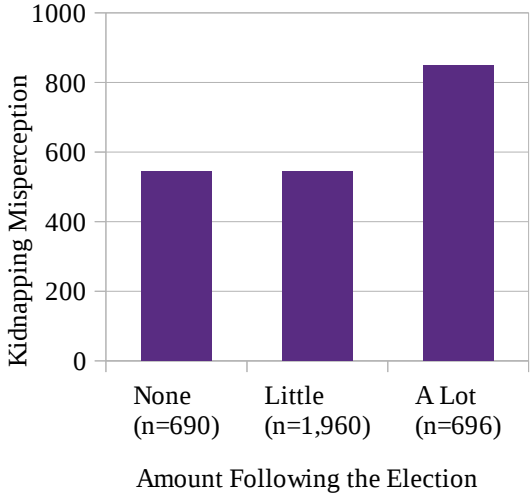
Attention to politics is another important signal of both engagement with and interest in the public sphere. I anticipate that those who pay most attention to politics will also be more likely to overestimate violence. In Chapter Three, I posited that disproportionate focus on kidnapping by the media helped explain the dramatic overestimation of that type of violence. In a similar vein, those who are paying most attention to the election, and thus also the media, should be more likely to overestimate violence as they are more frequently exposed to discussion of violence.

Consistent with expectations, when respondents were asked about the level of attention they were paying to the 2018 election, one's attention to the election was positively correlated with overestimation of both types of violence. Those who self-reported paying the most attention to the electoral process overestimated both types of violence significantly more than their peers who paid less attention (p=0.004 for homicide, p=0.017 for kidnapping), as seen in Figures 5.11 and 5.12. There was no statistical difference between those who were not following the election and those who followed it only a little (p=0.263 for homicide, p=0.980 for kidnapping).

Figures 5.11 and 5.12 Misperception of Homicide and Kidnapping by Amount Following the Election



Note: This figure indicates the average misestimation of homicides by an individual's degree of following the 2018 election. An F-test of the differences in misperception across levels of following the election was significant (p=0.004).



Note: This figure indicates the average misestimation of kidnappings by an individual's degree of following the 2018 election. An F-test of the differences in misperception across levels of following the election was significant (p=0.017).

This finding lends support to the idea that media and elite signaling are important drivers of overperception of violence and helps reinforce the idea presented in Chapter Three that asymmetric media coverage of kidnapping versus homicide partially explains divergence in overestimation between these two types of violence. Following the election involves paying attention to both of these sources of information. As individuals become saturated with messages from political leaders and news outlets, they perceive homicide and kidnapping to be substantially more prevalent than they are. However, that there is no statistical difference between those who are paying no attention to the election and those who are paying little attention indicates that the relationship between exposure and overperception may not be linear.

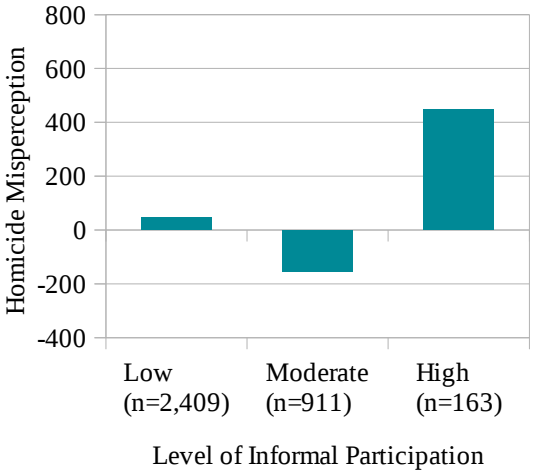
5.02c Non-Electoral Participation

Aside from engagement with elections, either directly by voting or in attention to their process, citizens interact with politics in a variety of other ways. Federal elections occur every three years in Mexico, but opportunities for community involvement toward political ends are nearly constantly available. Those who participate in politics in informal ways are likely paying more attention to the political process, are more engaged with different public policy issue areas, and feel a stronger sense of efficacy around political matters (Ikeda et al., 2008). They may have greater access or exposure to accurate information about violence from their social networks but they may also be working on issues directly related to violence, which may may it more salient in their minds.

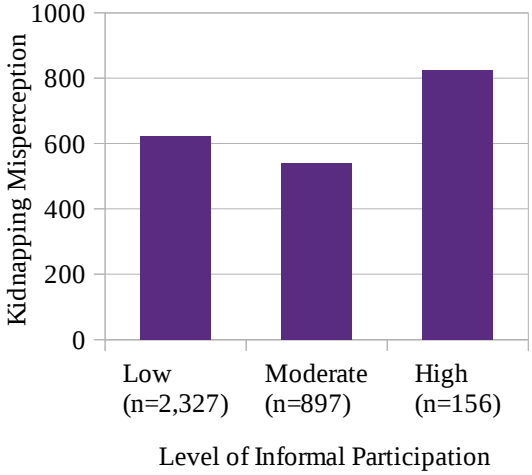
In this survey, those who reported participating in these activities were no more accurate in their perceptions of violence than those who did not. I asked respondents about their engagement in seven different types of political activities which occur outside of the voting booth during the year prior to the survey. These behaviors are examples of informal or non-

electoral participation. These included talking about politics with friends or family, attending a political meeting, attending a protest or strike, contacting an elected official, volunteering for a candidate or party, volunteering for a civic organization, or other informal participation. Respondents were asked if they had engaged in these activities within the last year, with available responses being that they had not, that they did one time, or that they did more than one time. In looking at these types of participation together, I classified respondents into low, medium, and high participators, as detailed in Chapter Two. Shown in Figures 5.13 and 5.14, across these categories of participation those who were the highest participators were also the highest overestimators for both types of violence, but again the relationship was not significant (p=0.134 for homicide, p=0.282 for kidnapping).

Figures 5.13 and 5.14 Misperception of Homicide and Kidnapping by Extent of Informal Participation



Note: This figure indicates the average misestimation of homicides by an individual's amount of non-electoral participaton in the last year. An F-test of the differences in mispercetion across levels of participation was not signficant (p=0.134).



Note: This figure indicates the average misestimation of kidnapping by an individual's amount of non-electoral participaton in the last year. An F-test of the differences in mispercetion across levels of participation was not signficant (p=0.282).

Across this variety of types of political participation and engagement with politics, planned engagement and attention to the 2018 election were significant factors in misperception of both types of violence: Those who did not plan on voting were more likely to overestimate violence, a subject further examined in Chapter Six, and those who were paying the most attention to the election were also the most likely to overestimate violence, in line with expectations. However, contrary to the hypothesized relationship, there were no significant differences in misperceptions of violence between voters and non-voters in 2012 nor between low, medium, and high informal participators.

5.03 Candidate and Party Preferences

Which candidate or party a person chooses to support in an election is also influenced by, and can influence, perceptions of crime and violence. Those who feel that violence is the most

pressing topics facing their country will likely chose to support candidates who they feel can best address insecurity while proposals for other social issues will be of diminished importance. But those with different political and psychological leanings might also be more receptive to elite messages regarding violence levels, adopting the attitudes and learning the information offered by those candidates.

In this section, I examine the relationship between candidate and party preferences and misperceptions of violence. I look at five key variables: candidate choice in the 2012 election, job approval ratings for President Peña Nieto (PRI), candidate choice in the 2018 election, candidate rejection in 2018, and party identification. Mirroring the findings of Chapter Four, I expect that support for the PAN and their candidates will be associated with underestimation, or lower overestimation, of violence and supporters of Morena and López Obrador will be the largest overestimates of violence, in line with the trends seen in the states that supported him in 2012.

Which candidate or party a participant supported was indeed a significant predictor of misestimation of both homicide and kidnapping. I first look at candidate choice in the 2012 election, then job approval ratings for the winner of that election, President Peña Nieto (PRI), and then turn to candidate preference for the 2018 election and party identification. In the 2012 election, consistent with expectations, supporters of PAN candidate Vázquez Mota overestimated violence by the lowest amount and supporters of Morena candidate López Obrador overestimated violence by the highest amount. However, in 2018 that pattern did not hold completely. López Obrador and Morena supporters continued to be the highest overestimators, while supporters of the PRI and PAN were equally low in their estimates of violence, lending only partial support to my initial hypotheses.

It should be noted that unlike the other independent variables looked at in this chapter, candidate preference and rejection in the 2018 election, job approval for then sitting president Enrique Peña Nieto, and party identification were all asked of respondents after the Violence Experiment. Those who offered up their perceptions of violence, i.e. those in the "ask" condition, were also primed to think about violence in this manipulation, which could theoretically have affected their candidate or party preferences. In this case, we see no significant difference between "ask" and control among any of these variables, indicating that being asked about violence did not affect respondent's answers.[132]

5.03a The 2012 Presidential Election

The 2012 presidential election was won decisively by Enrique Peña Nieto receiving over 38% of the vote with a 7% margin of victory. After taking office, his immediate approval rating was over 50%. By the time of this survey, shortly before he left office, that had plummeted to 20%, the lowest during his administration.[133] Respondents in this survey were asked to look back at the 2012 election and report whether or not they voted and who they voted for. They were later asked about the job performance of then president Enrique Peña Nieto.

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[132] For candidate choice, there were no statistical differences between "ask" and control across the options for first choice candidates (p=0.432 for López Obrador, p=0.911 for Meade, and p=0.690 for Anaya, p=0.628 for other candidates, and p=0.251 for undecided voters). Moreover, mean job approval rating was statistically identical in both of these conditions (p=0.246). For party identification, again there were no statistical differences either (p=0.312 for Morena, p=0.730 for PRI, and p=0.367 for PAN).

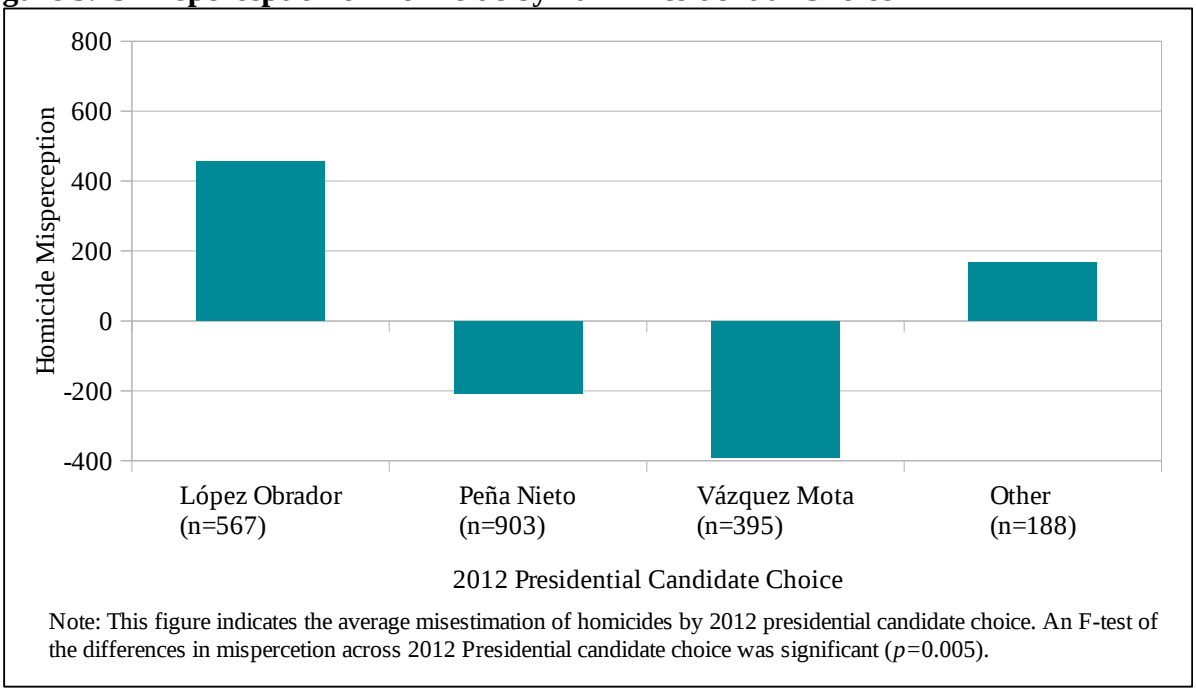
[133] Ortega, A. (2018, November 24). #FinDeSexenio | Peña Nieto termina su gobierno reprobado por la mayoría. *ADNPolítico.*

Among those asked about their perceptions of violence, 44% of respondents indicated that they had voted for Peña Nieto, 28% for López Obrador (PRD), 19% for Vázquez Mota (PAN), and 9% voted for either another candidate or left their ballot blank. Sixty-three percent of the survey sample reported voting that year, a percentage identical to national voter turnout in that election. A greater proportion of respondents reported voting for the winning candidate than the 2012 results, likely reflecting a well documented recall bias in which survey respondents over-report having voted for the winning candidate (Atkeson, 1999; Carsey & Jackson, 2001; Wright, 1993).

With respect to the candidates that respondents chose to support, as expected supporters of Vázquez Mota, the most conservative mainstream candidate, consistently underestimated homicide rates and overestimated kidnapping most minimally compared to supporters of the other two candidates. Those who voted for López Obrador, the most progressive mainstream candidate, in 2012 were considerably more likely to overestimate violence than supporters of other candidates (p=0.005 for homicide and p=0.030 for kidnapping).

As seen in Figure 5.15, López Obrador voters were the only supporters of one of the main three candidates who averaged an overestimation of homicide, with estimates on average exceeding their state's actual murders by 465. Supporters for Vázquez Mota and Peña Nieto both underestimated homicide on average, at an average amount of 390 and 206 murders per state respectively. The differences in misperception between López Obrador voters and supporters of those of Peña Nieto and Vázquez Mota was significant (p<0.001 for each candidate). The difference in homicide misperception between Peña Nieto and Vázquez Mota were not significant (p=0.247).[134]

Figure 5.15 Misperception of Homicide by 2012 Presidential Choice

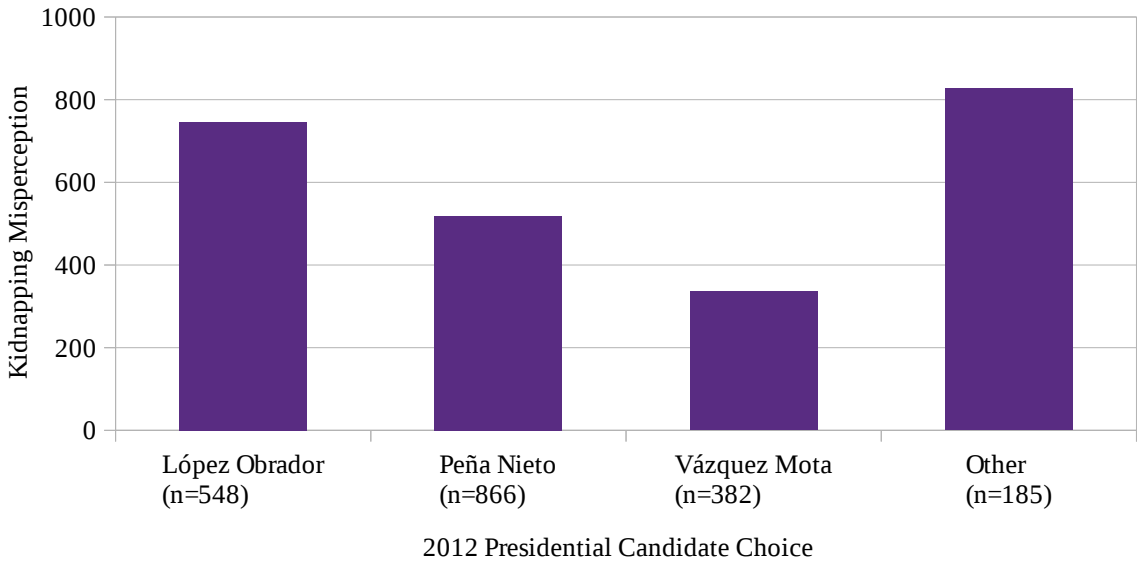


Note: This figure indicates the average misestimation of homicides by 2012 presidential candidate choice. An F-test of the differences in mispercetion across 2012 Presidential candidate choice was significant (p=0.005).

[134] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 when an original critical value of p=0.050 is used. All significant results remain significant when this new critical value is used.

With respect to kidnapping, López Obrador voters stood out again, overestimating kidnapping by a much greater extent than those who supported the other two main candidates. López Obrador supporters overestimated kidnapping by more than twice the amount of Vázquez Mota supporters (745 versus 336, significant at p=0.002) and by half again as much as Peña Nieto supporters (745 versus 518, significant at p=0.043). Differences in overestimation of kidnapping between Peña Nieto and Vázquez Mota supporters approached significance (518 versus 336 p=0.054), as seen in Figure 5.16.[135]

Figure 5.16 Misperception of Kidnapping by 2012 Presidential Choice



Note: This figure indicates the average misestimation of kidnappings by 2012 presidential candidate choice. An F-test of the differences in mispercetion across 2012 Presidential candidate choice was significant (p=0.030).

The three candidates in these figures are arranged on a left-right political scale.[136] It is striking that estimations of violence increase dramatically as one supports candidates further to the left, but it is not a surprise given the role the right played in the exacerbation of violence levels across the country and the extent to which the PRD, López Obrador's party, emphasized violence as the cornerstone of their presidential campaign, as discussed in Chapter Four. The incumbent party PAN, the right most major party, is largely viewed as responsible for increases in violence levels due to the initiation of the war on drugs and sought to downplay violence considerably during this election. When Josefina Vázquez Mota ran for the presidency in 2012 she was running not just from the same party as Calderón but on a platform of continuing his drug war policies, the same policies that were widely viewed as the direct cause of the bloodshed

[135] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 when an original critical value of p=0.050 is used. Only the differences between Vázquez Mota supporters and López Obrador supporters remain significant when this new critical value is used.

[136] Mexican political parties do not align as cleanly on a left-right political scale as in many other democracies, however these three candidates do represent three places along the ideological spectrum more clearly than presidential candidates in other elections: López Obrador ran on many traditional leftist policies, Vázquez Mota proposed many policies common to the right, and Peña Nieto occupied a fairly centrist position. See Chapter 7 for further discussion of the ideological spectrum in Mexico.

nationwide. It stands to reason that her supporters would believe there to be less violence than in actuality, perhaps even believing there had been a downturn in violence due to policy successes, and those supporting the candidate that most strongly repudiated Calderón's policies, López Obrador, would be think about violence in the most exaggerated terms. On the other hand, supporters of Peña Nieto, who denounced some of Calderón's drug war strategies but vowed to continue many of his policies, fell right in the middle in terms of overestimation.

This relationship between candidate preference in 2012 and the magnitude an direction of misperception of violence mirrors that shown in Chapter Four of the relationship between the party which won the state in 2012 and misperception – those supporting the PRD or living in states that the PRD won overestimated violence the most, those supporting the PAN or living in states that the PAN won overestimate violence the least. In the 2012 election, the PAN mentioned violence and other terms associated with criminal organizations fewer times per page than either of the other major parties. In an attempt to distance themselves from the legacy of Calderón they chose to de-emphasize violence and promote plans to grow the Mexican economy. In contrast, the PRD emphasized violence and criminal organizations in their platform more than the other two parties, using this issue as a way in which to distinguish themselves from their competitors. Here we can see that the supporters of the PAN and PRD were effectively receiving those messages.

5.03b President Peña Nieto

The day after taking office, Peña Nieto, known by his initials EPN, and leaders from opposition parties agreed on a suite of policy compromises and reforms that became known as *Pacto por México*, the Pact for Mexico. As described in Chapter One, this agreement included a number of pro-market reforms which he would go on to institute as president. During his first six months in office, Peña Nieto enjoyed his highest approval ratings.[137] That approval began to wane dramatically as scandal after scandal exposed the rampant corruption of the administration and violence continued unabated. The PRI's reinvention of itself as a democratic party was falling short of expectation: Endemic corruption remained unchecked and the peace and economic growth Mexico had enjoyed during the final years of the autocratic PRI hegemony in the 1990s had not returned.

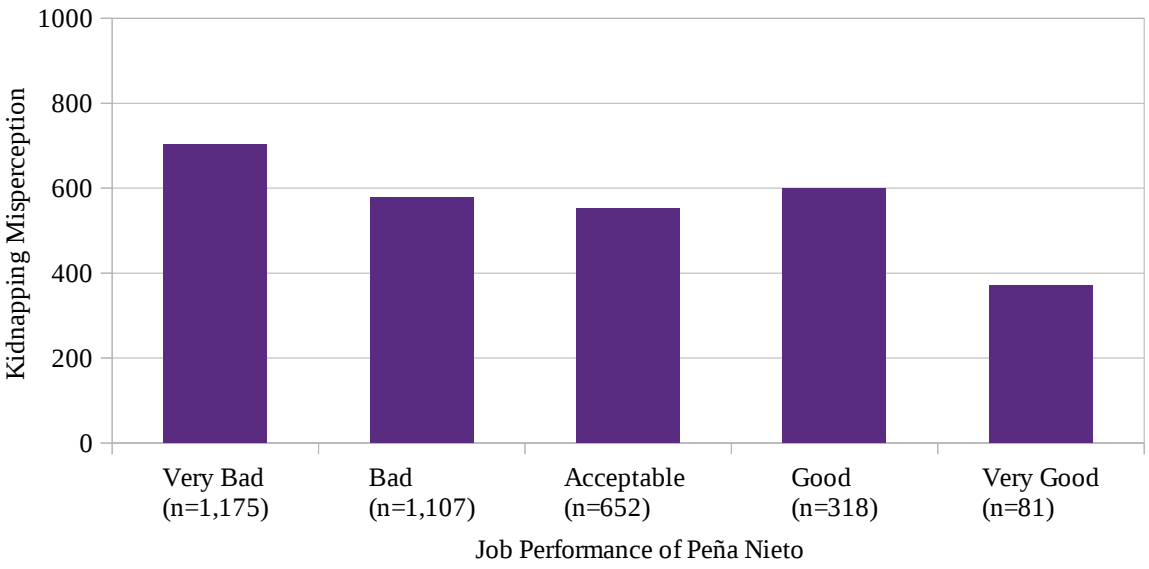
Do those that continued to support Peña Nieto view violence differently than his detractors? Overall, the answer is no, as is demonstrated in Figures 5.17 and 5.18. On average homicide and kidnapping misperceptions decreased as support for Peña Nieto increased, but this relationship was not statistically significant for either homicide (p=0.626) or kidnapping (p=0.104). Those who viewed Peña Nieto favorably were no more likely to be overestimators than those who viewed him unfavorably (p=0.653 for homicide, p=0.243 for kidnapping).

[137] Ortega, A. (2018, November 24). #FinDeSexenio | Peña Nieto termina su gobierno reprobado por la mayoría. *ADNPolítico.*

Figure 5.17 Misperception of Homicide by Support for Peña Nieto

Note: This figure indicates the average misestimation of homicides by assessment of Peña Nieto's job performance. An F-test of the differences in mispercetion across performance ratings was not significant (p=0.653).

Figure 5.18 Misperception of Kidnapping by Support for Peña Nieto



Note: This figure indicates the average misestimation of kidnappings by assessment of Peña Nieto's job performance. An F-test of the differences in mispercetion across performance ratings was not significant (p=0.243).

When comparing those who most approved and least approved of Peña Nieto's job performance the differences are also not statistically significant (p=0.662 for homicide, p=0.193 for kidnapping), likely in part due to the sample size, especially of those who thought he was doing a good or very good job, is low.

5.03c The 2018 Presidential Election

The 2018 election marked an important shift in Mexican politics in several regards. First, a new left party, Morena, had emerged since the last presidential election and was gaining prominence. López Obrador, the runner up in both the 2006 and the 2012 elections, broke from the PRD and created Morena in 2014, taking most of its leftist base with him. His previous party's cooperation with Peña Nieto in creating *Pacto Por México*, described in Chapter One, was one of the main reasons he defected. When he entered the presidential race for the third time, his lead was early and commanding; throughout the entire six months prior to the election no major poll had any other candidate in the lead.[138]

The three main party candidates standing for office were Andrés Manuel López Obrador (leftist Morena), José Antonio Meade (moderate PRI), and Ricardo Anaya Cortes (rightist PAN). Two independent candidates, Margarita Zavala, the wife of former PAN president Calderón (2006 – 2012) who sought the PAN nomination but did not receive it, and Nuevo León governor Jaime "El Bronco" Rodríguez stood as independent candidates. Respondents were asked who, if the election were held today,[139] they would support for president.

Consistent with the previous findings, López Obrador supporters overestimated homicide more than supporters of the other two main candidates. While I expected that Anaya (PAN) supporters would be the lowest estimators, they were in fact tied as lowest with supporters of Meade (PRI). As shown in Figure 5.19, differences in homicide misperception across response choices were statistically significant (p=0.010). Among supporters of the top three candidates, those who endorsed López Obrador had significantly higher estimations of homicide than supporters of Anaya (p=0.033) and than supporters of Meade (p=0.047). There was no difference between supporters of Meade and Anaya (p=0.963), with supporters of both candidates underestimating homicide levels at similar rates.[140] Those who supported independent candidates were the highest overestimators, and those who were undecided in the election also overestimated homicide by considerable amounts.

With kidnapping misperceptions, again supporters of López Obrador were the largest overestimators among supporters of the three candidates. As seen in Figure 5.20, misperceptions across response choices were statistically significant (p=0.020). When looking at paired comparisons of the candidates, supporters of López Obrador overestimated significantly more than supporters of Meade (p=0.019) but there were no differences between supporters of López Obrador and Anaya (p=0.241). Supporters of Meade were the most accurate estimators, followed by supporters of Anaya, but similar to with homicide estimation these were not significant differences (p=0.213).[141]

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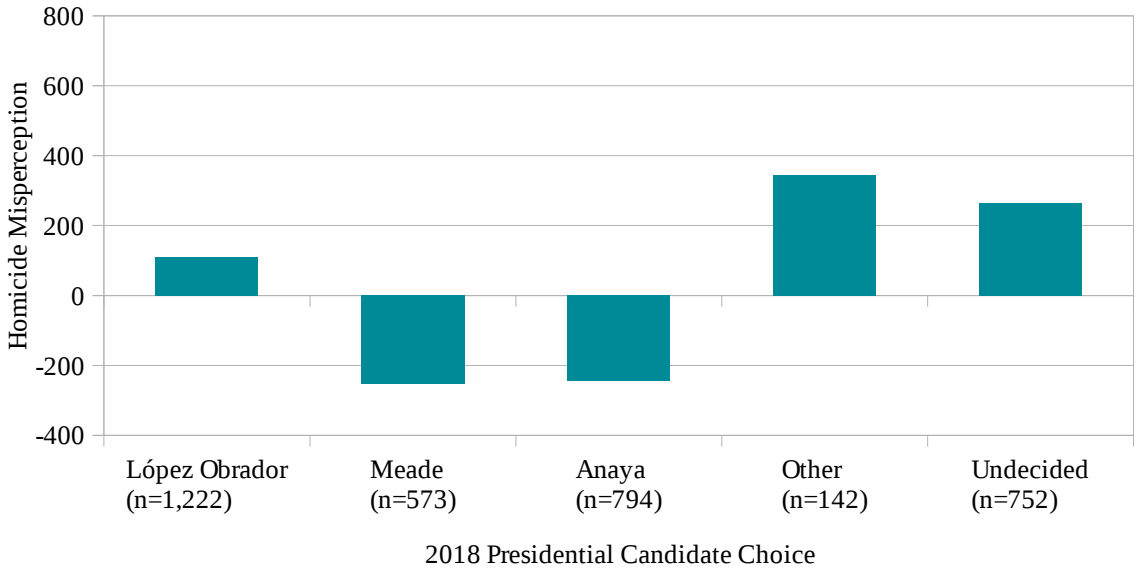
138 Opinion polling for the 2018 Mexican general election. (Accessed May 2020). *Wikipedia*.

139 Six weeks prior to the election.

140 A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 for four tests when an original critical value of p=0.050 is used. None of the differences remain significant when this new critical value is used.

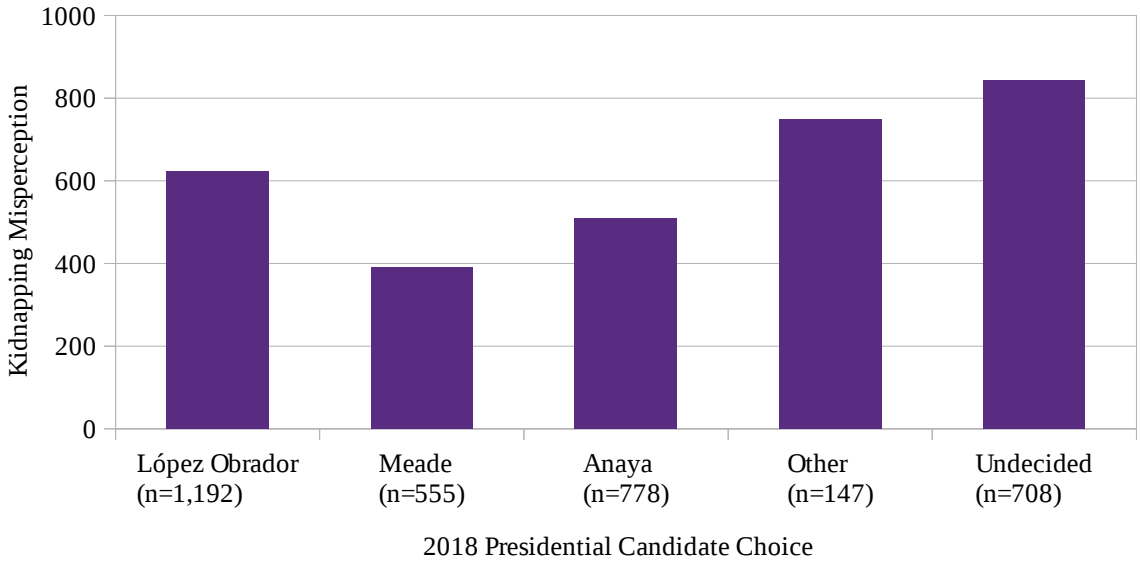
141 A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 for four tests when an original critical value of p=0.050 is used. Only the differences across all groups remain significant when this new critical value is used.

Figure 5.19 Misperception of Homicide by 2018 Presidential Choice



Note: This figure indicates the average misestimation of homicides by 2018 presidential candidate choice. An F-test of the differences in mispercetion across 2018 Presidential candidate choice was significant (p=0.010).

Figure 5.20 Misperception of Kidnapping by 2018 Presidential Choice



Note: This figure indicates the average misestimation of kidnappings by 2018 presidential candidate choice. An F-test of the differences in mispercetion across 20128Presidential candidate choice was significant (p=0.020).

Why are López Obrador supporters consistently overestimating violence at high levels, while Meade and Anaya supporters are overestimating at low levels or even underestimating? Why are PAN supporters in the 2018 race no longer the most consistent underestimators or low overestimators as they were in 2012, as discussed earlier in this chapter and in Chapter Four? Interestingly, in a break from previous patterns, the PAN emphasized violence and criminal more

than any other main party in their official platform, referencing these themes an average of .63 times per page. The PRI were second in this respect, mentioning violence or trans-national criminal organizations .54 times per page of their platform and Morena mentioned these topics only .39 times per page.[142]

Despite the change in order of importance of violence among the parties from previous elections, as evidenced by their official platforms, López Obrador had run for president two times prior and especially in the 2012 election, he made violence and the fight against trans-national criminal organizations the cornerstone of his platform. Where as respondents had more limited time to learn about the policy agenda of Anaya and Meade, they had had over a decade to get to know López Obrador. Likely because of this, respondents were both selecting him as a candidate because of his policy positions around drug violence as well as because of his previous signaling of the primacy of that policy area. Moreover, as the PAN had returned to an emphasis on violence and organized crime in this election, their supporters either grew in their misperception or those with greater misperceptions in the first place became more attracted to the party.

In Chapter Four, I found that respondents in states that the PRI won in 2012 were the most moderate in their misperception of violence. The same was true of respondents who supported PRI candidate Peña Nieto for president in 2012, as demonstrated earlier in this chapter. When looking at states controlled by PRI governors, again in Chapter Four, I found that those states had the highest average overestimation of violence. Yet here supporters of PRI candidate Meade have the lowest perception of violence, underestimating homicides by the largest amount and overestimating kidnapping by the smallest amount.

Especially given the PRI's continued focus on violence in their party platform, why are Meade supporters not overestimating violence at higher rates? One potential explanation is that those who perceive the highest levels of violence are shying away from support for Meade because of the dramatic increases in violence under Peña Nieto's tenure. Looking back at Figure 1.02 one can see that homicide levels decreased in the first few years of Peña Nieto's tenure before growing dramatically again with 2017 as the most violent year in Mexican history. High perceptions of violence may have been driving support for the PRI in the 2012 election, with the hopes that a return to the peace and stability under PRI autocratic rule in the 20th century would be possible. But in 2018, low perceptions of violence were likely driving support for the PRI as those who overperceived violence the most were rejecting the incumbent party for its failures on this front. Further discussion of attitudes toward the incumbent party are developed in Chapter Six, as I show limited evidence for violence driving acceptance of the incumbent party, as one might expect in high violence contexts.

5.03d Partisanship

Mexico has undergone tremendous partisan change over the last two decades since transitioning to a more full democracy in the year 2000, with the first alternation of the party of the president in more than seven decades. One of the parties which fought hard for democratization, the leftist PRD, went from being a major player in partisan politics to being relegated to an afterthought when it's charismatic head López Obrador walked away from the party, forming the new party Morena in 2014. Party switching is not uncommon in Mexico, where politicians switch parties to pursue career advancements not possible within their own

[142] *Plataformas Electorales.* (2018). Instituto Nacional Electoral (INE).

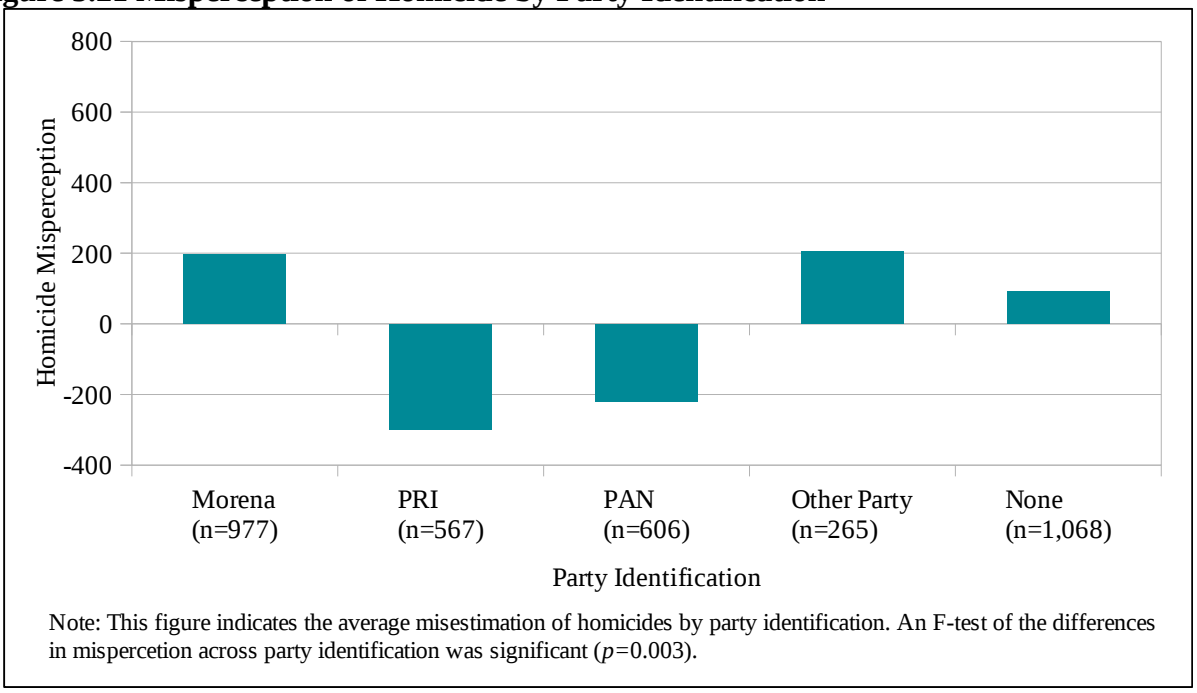
party partly due to total prohibition on reelection that was not changed until 2018 (Kerevel, 2014)

How do adherents of different parties perceive violence? Similar to candidate choices for the 2018 election, respondents who identified with Morena overestimated both types of violence more than respondents supporting the other two main parties. PRI supporters underestimated homicide and overestimated kidnapping by the least amount, as well.

For homicide, Morena supporters overestimated homicide by 198 murders per year, which supporters of the PRI and PAN underestimated homicides by 299 and 220 murders per year, respectively. The differences across party identifications, including 4th party identification and those who did not identify with any party, were significant (p=0.003). The differences between Morena and PRI and Morena and PAN were also significant (p=0.016 and p=0.047 respectively). However, the differences in magnitude of misperception were not significant between PRI and PAN supporters (p=0.647).[143]

Kidnapping misperception across parties followed the same comparative pattern as homicide misperception, and differences across parties were statistically significant (p<0.001) as shown in Figure 5.22. Respondent who identified with Morena, again overestimated violence more than their peers who identified with the other two main parties. These differences were significant (p=0.026 compared to PRI, p=0.028 compared to PAN). However, differences between the PRI and the PAN, who were both most accurate in their estimation, were negligible (p=0.989).[144]

Figure 5.21 Misperception of Homicide by Party Identification

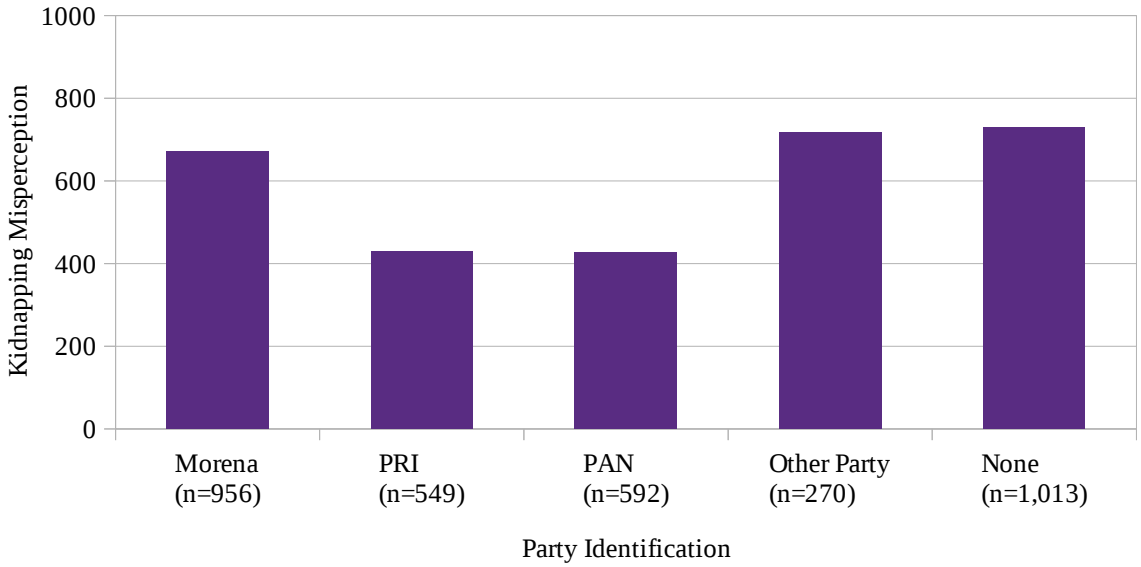


Note: This figure indicates the average misestimation of homicides by party identification. An F-test of the differences in mispercetion across party identification was significant (p=0.003).

[143] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 for four tests when an original critical value of p=0.050 is used. Only the differences across all groups remain significant when this new critical value is used.

[144] A Bonferroni correction for multiple testing gives a new critical value threshold of p=0.013 for four tests when an original critical value of p=0.050 is used. Only the differences across all groups remain significant when this new critical value is used.

Figure 5.22 Misperception of Kidnapping by Party Identification



Note: This figure indicates the average misestimation of kidnappings by party identification. An F-test of the differences in mispercetion across party identification was significant (p<0.001).

In looking at the myriad partisan and candidate variables discussed in this section, both the PAN and the PRI have shared blame by many for high levels of violence across Mexico. Under President Calderón (PAN), the militarization of the drug war began in earnest, with military troops being deployed internally within days of his inauguration and violence skyrocketing throughout his tenure. The 2012 election was considered a clear repudiation of PAN domestic security strategy, with the PRI winning soundly and the PAN candidate, Josefina Vázquez Mota coming in third place, trailing thirteen points behind Peña Nieto. In the 2018 election, the PRI candidate came in third place, trailing winner López Obrador by thirty-seven points. In each of these examples, voters are rejecting the incumbent party overwhelmingly. While an atmosphere of insecurity, be it in real levels of violence, perceptions of violence, or high salience of violence, is leading citizens into withdrawal and uncertainty in the political arena in general, citizens are rejecting the incumbent candidate and party but at more moderate levels than expected, in a clear departure from rejection of the PAN after Calderón, as discussed further in Chapter Six.

5.04 Experiential Factors

An individuals' lived experiences affect how they perceive the world in myriad ways. In this survey, I measured three key experience which could contribute to shaping misperceptions of violence: the experience of living abroad, recent experiences with crime, and recent experiences with corruption. I find that those who have lived abroad are not perceiving violence differently than those who have never lived outside of Mexico. Strikingly, respondents who had been the victim of a crime within the year prior were no more likely than non-victims to overestimate violence. However, those who had been solicited for a bribe within the year prior were more

likely to overestimate homicide, but not kidnapping.

5.04a Living Abroad

A number of Mexicans currently living abroad is just shy of twelve million.[145] Mexico has a high rate and long history of cyclical migration, with many migrants moving abroad (mostly to the United States) for particular seasons or opportunities before returning to Mexico. The Mexican government does not currently estimate the percentage of the population currently living in Mexico who have also lived abroad, but 9% survey respondents reported having lived outside of the country.[146] Of those who had lived abroad from the "ask" condition of the Violence Experiment being analyzed here, 87% had lived in the United States, 6% had lived in Canada, 1% had lived elsewhere in Latin America, 5% had lived in Europe, and the final 1% had lived elsewhere around the globe.[147] No respondents indicated that they had lived in the Middle East nor Africa, and 5% declined to state where they had lived abroad. The average length of time abroad was 4.8 years.

Previous research has indicated that migrants often adopt new political attitudes and behaviors while they are abroad. A wealth of studies from around the globe indicate that migrants, whether or not they return to their home countries, can transmit democratic norms they adopt in the receiving countries back to their country of origin (see Pérez-Armendáriz and Crow 2010; Chauvet and Mercier 2014; Córdova and Hiskey 2015). While research on the perceptions of crime and violence among return migrants is sparse, one might imagine that they bring home not only new political leanings and attitudes but different understandings of violence. For example, living abroad in countries such as the United States where the dominant media coverage of Mexico revolves around violence, insecurity, and drug trafficking could sensitize respondents to the idea of their country as particularly violent and heighten awareness of violence in general. Mexicans are often the recipients of tremendous amounts of discrimination and vitriol in countries like the United States, which may contribute to an overall higher level of fear of violence and sense of insecurity even after returning to Mexico.

Moreover, depending on the way in which the individual migrated, they may have themselves been exposed to violence or victimized in their migration process. Many Mexicans who have moved to the United States have done so without legal documentation. If the individual came into the US as an undocumented immigrant via land crossing, it is likely they interacted directly with criminal organizations, many of which operate *coyote* businesses which smuggle people over the border and often extort money from migrants along their journey, if they do not rob them directly. Approximately 43% of Mexican immigrants living within the US are without legally compliant paperwork, however the percentage of those that crossed via land borders versus overstaying visas or other methods is unknown.[148] Rates of return to Mexico are higher among those who migrated without documentation than those who migrated through legal

[145] Secretary of Exterior Relations. 2020.

[146] In the full sample of 17,451, 9.4% of respondents reported living abroad. Of those in the "ask" condition, who are being discussed in this chapter, 9.1% reported having lived abroad.

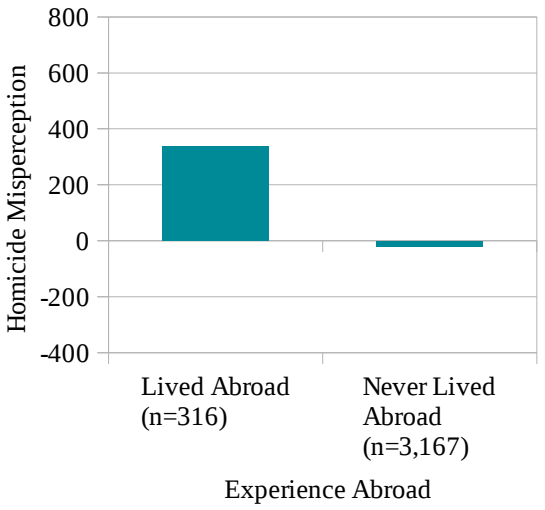
[147] Respondents were asked if they had ever lived outside of Mexico, for how many years, and were given regional options to select from to indicate where they had lived abroad. They were allowed to select multiple regions to indicate all of the places where they had resided outside of Mexico. No minimum time abroad was given for an individual to state they had lived abroad and those who had lived abroad indicated that they had done so from between one and forty-eight years.

[148] Gonzalez-Barrera, A., & Krogstad, J. M. (2019, June 28). *What we know about illegal immigration from Mexico.* Pew Research Center Fact Tank.

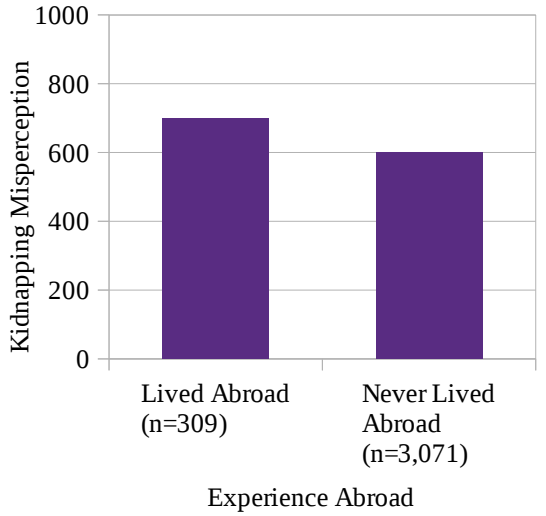
channels, making it likely that more than half of respondents who report living in the US did so without documentation and may have experienced additional violence when leaving their own country and compounded discrimination and marginalization in the United States, all of which could influence their views on violence in Mexico.

Overall, those who lived abroad did perceive higher levels of both types of violence than those who had never lived abroad, but the relationship was weak (approaching significance at p=0.099 for homicide, not significant at p=0.515 for kidnapping). However, the number of respondents who had lived abroad was very small and possibly with a larger sample the relationship would have been statistically significant. Those who had lived in the United States specifically overperceived homicide and kidnapping more than those who had not lived in the U.S (approaching significance at p=0.086 for homicide, not significant at p=0.684 for kidnapping). The sample size of those who had lived abroad in other countries or regions was too small to analyze. The number of years one spent abroad was positively correlated with both types of violence as well. Each additional year abroad was associated with an increase in overestimation by fifty-four homicides and eighteen kidnappings (approaching significance at p=0.064 for homicide, not significant at p=0.321 for kidnapping).

Figures 5.23 and 5.24 Misperceptions of Homicide and Kidnapping by Experience Living Abroad



Note: This figure indicates the average misestimation of homicides by experience living abroad. An F-test of the differences in mispercetion across experiences abroad approached significance (p=0.099).



Note: This figure indicates the average misestimation of kidnappings by experience living abroad. An F-test of the differences in mispercetion across experiences abroad was not significant (p=0.515).

5.04b Victimization

In this survey, respondents were asked if they had been the victim of a crime within the twelve months prior.[149] Twenty-four percent of respondents reported having been victimized.

[149] The question asked "Have you been the victim of a crime within the last twelve months? That is to say, have you been the victim of a robbery, theft, aggression, fraud, blackmail, extortion, threat, or another type of crime in the last twelve months?" As a follow up, respondents who indicated they were the victim of a crime were then asked how many times they were the victim of a crime within that twelve month time frame.

This figure is slightly lower than the estimated 29.7% of Mexicans over the age of eighteen that were estimated to be victims of crimes in 2017.[150]

Direct experiences with crime are affected by other factors explored in this chapter including the demographic characteristics of gender, age, and education. For example, young women are more likely to face street harassment and rape and people over the age of fifty are less likely to be murdered but more likely to be robbed than those of a younger age regardless of gender (Perkins, 1997). In Mexico the average victim of an organized crime-related homicide is a thirty-three year old male (L. Y. Calderón et al., 2019). Males were slightly more likely to be the victims of crime (approaching significance at p=0.096). Those under the age of twenty-five were significantly more likely to have been the victims of crime than older respondents (p=0.002) and those over fifty-five were significantly less likely to be the victims of crime than younger respondents (p<0.001). Age was negatively correlated with victimization overall (p<0.001). Education was positively correlated with victimization: Moving up each rung of the education ladder was associated with an approximate 2% increase in the likelihood of having been a victim (p<0.001).

Table 5.01 Percentage of Respondents Who Were Victims of a Crime by Gender

	Male	*Female*
Victims	24.5%	23.4%

Table 5.02 Percentage of Respondents Who Were Victims of a Crime by Age Range

	18 – 25	*26 – 35*	*36 – 45*	*46 – 55*	*Over 55*
Victims	26.4%	24.9%	24.4%	24.1%	21.0%

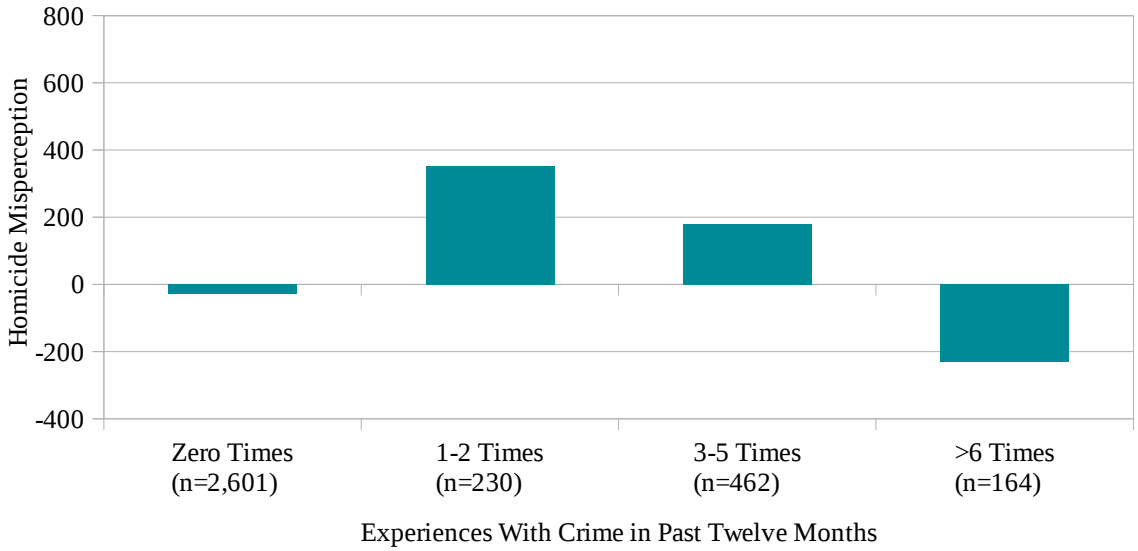
Table 5.03 Percentage of Respondents Who Were Victims of a Crime by Highest Education Level Completed

	Primary	*Secondary*	*Preparatory or Technical*	*College and Higher*
Victims	21.0%	23.6%	26.1%	28.1%

The experience of being the victim of a crime has been theorized to influence a number of political factors. Ceobanu, Wood, and Ribeiro (2011) find that crime victimization decreases an individual's satisfaction with the way democracy works, but does not alter their overall level of support for democracy as a regime type across Latin America. Ugues Jr. and Esparza (2018) find that the experience of being a victim of a crime is correlated with higher levels of trust in the armed forces in Mexico. In this study, I expected that victims of crime would be more likely to have exaggerated overestimations of violence since their own experiences might distort their understanding of the likelihood of these events – a fulfillment of the base rate fallacy – as well as increase the salience of violence in their minds. However, that was not exactly the case.

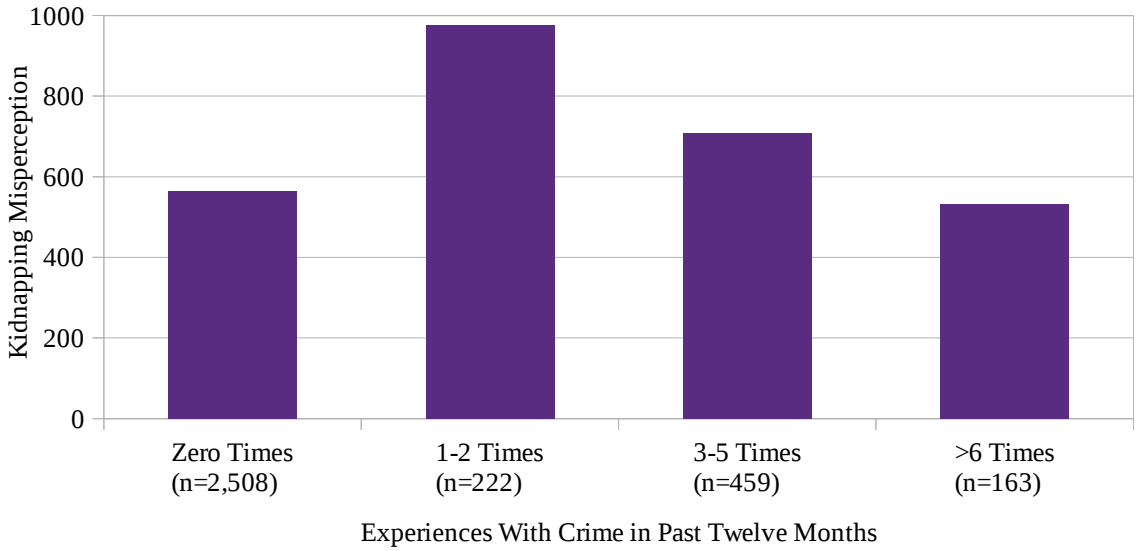
[150] *Encuesta Nacional de Victimización y Percepción sobre Seguridad Pública (ENVIPE) 2019: Principales Resultados.* (2019, September 24). Instituto Nacional de Estadística y Geografía (INEGI).

Figure 5.25 Misperception of Homicide by Experiences Being the Victim of a Crime



Note: This figure indicates the average misestimation of homicides by the number of times the repondent was the victim of a crime within the 12 months prior to the survey. An F-test of the differences in mispercetion across experiences of victimization was not significant (p=0.194).

Figure 5.26 Misperception of Kidnapping by Experiences of Being the Victim of a Crime



Note: This figure indicates the average misestimation of kidnapping by the number of times the repondent was the victim of a crime within the 12 months prior to the survey. An F-test of the differences in mispercetion across experiences of victimization was not significant (p=0.155).

Those who had been the victims of a crime in the past year did overestimate both types of violence at higher rates than those who had not been the victim of a crime at least once in the year prior, but those differences were insignificant for homicide (p=0.276) and approached approached significance for kidnapping (p=0.075).[151] When looking at misperceptions of

[151] When using a less conservative model without state clustered standard errors, differences in perceptions of

violence across the number of times one was victimized, for both homicide and kidnapping there is an inverted- U shaped pattern, as displayed in Figures 5.25 and 5.26. Surprisingly, those who overestimated violence the most had been victims of crimes one or two times in the year prior, while those who either underestimated or overestimated by the least had either not been victimized or had been victimized an astonishing six or more times in the year prior. Those who had not been the victims of crime were overall the most accurate in their estimation of homicide, while they were statistically tied for most accurate for kidnapping. Overall, the number of times one was the victim of a crime within the twelve months prior to the survey was not significantly correlated with either homicide misperception (p=0.194) nor kidnapping misperception (p=0.155).

Consistent with expectation, those who had not been victimized were the most accurate in their perceptions overall. If they have not personally experienced crime, it may be less salient to them or less immediate to them, in line with the availability heuristic and the base rate fallacy. But, why are those who have been victimized the most also the least likely to overestimate violence? One potential explanation might be that those who have been the victims of crime more than six times in the last year lead exceptionally high risk lives. Perhaps they live in high crime neighborhoods, have jobs that require them to be on the street at night, or actively engage in risky behaviors themselves, including illicit activity. If they are engaging in high risk behaviors and experiencing crime, they may not generalize their own experiences to a large swath of society but rather are aware that the crime they face is unique. Moreover, those who were repeatedly victimized may have become desensitized to violence in the way I theorized in Chapter Three that those living in the highest violence areas were becoming desensitized. Shippee (2012) finds that those who have been victimized actually perceive lower risk for themselves than those who have not. He argues that the resilience developed through surviving crime victimization actually increases one's sense of personal control and efficacy and actually lowers fear of crime.

5.04c Corruption

Corruption is one of the most talked about political issues in Mexico. In 2017, the newspaper El Universal mentioned corruption in 5,913 articles – more than twice as many times as mentioned homicide. Reforma, another important national newspaper, mentioned corruption in 7,240 articles, nearly three times as many than mentioned homicide. Mexico's national survey on the Quality and Impact of the Government (known by its Spanish initials ENCIG) showed that an estimated 14% of Mexicans experienced an act of corruption, including being solicited for a bribe, in 2017.[152] Estimates by Transparency International put that figure at 29%.[153]

In this survey, respondents were asked if they had been solicited for a bribe by a government official, police officer, or member of the armed forces within the twelve months prior: 14.6% said yes, they had been.[154] Transparency International estimates are likely closer to

kidnappings are significant (p=0.028), but differences in perceptions of homicides are not (p=0.244).

[152] *Encuesta Nacional de Calidad e Impacto Gubernamental (ENCIG) 2017* (p. 162). (2018). Instituto Nacional de Estadística y Geografía (INEGI).

[153] *Pring, C. (Ed.). (2017). People and Corruption: Latin America and the Caribbean* (No. 9; Global Corruption Barometer). Transparency International.

[154] The question asked "In the last twelve months, has a government official or a member of the armed forces or police solicited a bribe or a "bite" from you? Note: you are not being asked if you paid the bribe or the "bite," only if it was solicited." As a follow up, respondents who indicated they were solicited for a bribe were then asked how many times they solicited within the twelve month time frame. Note that in Mexico *una mordida* or

reality than either this survey or ENCIG, conducted the Mexican government. In this survey, I asked individuals about being solicited for a bribe, not if they gave the bribe. Even though this question wording mitigates some of the social stigma, the reality is that bribes do not happen in a vacuum and typically the "solicitation" is neither overt nor unprompted; bribes are frequently instigated by either party. Bureaucratic hurdles with convoluted and multiple steps are the norm in Mexico, and the verb for engaging with paperwork, *tramitar*, comes up frequently in the complaints of casual conversation. Bribery is considered a reality of many types of official processes between citizens and the government, as well as many interactions with police. Bribe paying is a careful dance done by two interested parties in which both parties are benefiting in the short run, whether to expedite a marriage license or get out of a having your car impounded for a traffic violation, as examples.

On average, 4% more men than women were solicited for bribes (significant at $p<0.001$). The greater education one had, the more likely they were to be solicited for a bribe – those with a college education or higher had a 35% greater chance of being solicited for a bribe than those who had only completed primary school (the difference across education levels was significant at $p<0.001$). This makes sense as education is highly correlated with personal wealth and as wealth increases, so do interactions with government officials: for example, in obtaining a drivers' license or a passport or even for driving violations, as many poorer people rely on public transportation to move around as needed. Greater numbers of interactions with government officials mean more opportunities to be solicited for a bribe and government officials including police officers who observe signs of wealth maybe more likely to ask (or hint, more commonly) for a bribe. The converse is also true: Those with more disposable income may be more inclined to attempt to bribe an official to expedite a process or circumvent a punishment. One might imagine that corruption may go hand in hand with violence, but experiences with bribery were negatively associated with actual levels of both types of violence. This association was only significant for kidnapping, however ($p=0.513$ for homicide, $p<0.001$ for kidnapping).

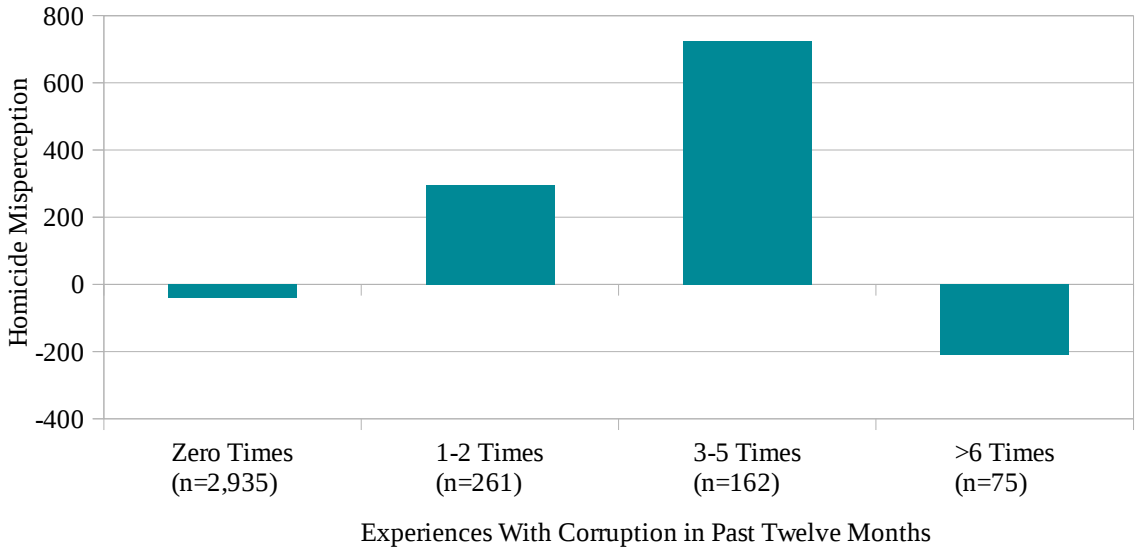
I expected that overperception of both types of violence would be much more exaggerated among those who had been solicited for a bribe, with that overperception increasing the more times a person was solicited. Experiences with corruption have been theorized to erode confidence, trust, and satisfaction with public institutions (Catterberg & Moreno, 2006; Inman & Andrews, 2009; Seligson, 2002). This distrust can bleed over to distrust in government statistics and media reports, as the government is known to have a heavy hand in media in Mexico,[155] as well as distrust in the process of combating crime. This distrust can lead to exaggerated perceptions of how unsafe their state really is.

Overall, those who had been solicited for a bribe were more likely to exaggerate the level of homicides but not the level of kidnappings than those who had not been solicited in the past year ($p=0.028$ and $p=0.872$ respectively). The direction of this relationship was consistent when looking at the number of times one was solicited (approaching significance for homicide at $p=0.068$, not significant for kidnapping at $p=0.985$), shown in Figures 5.27 and 5.28.

"a bite" is a common colloquial way of referring to a bribe.

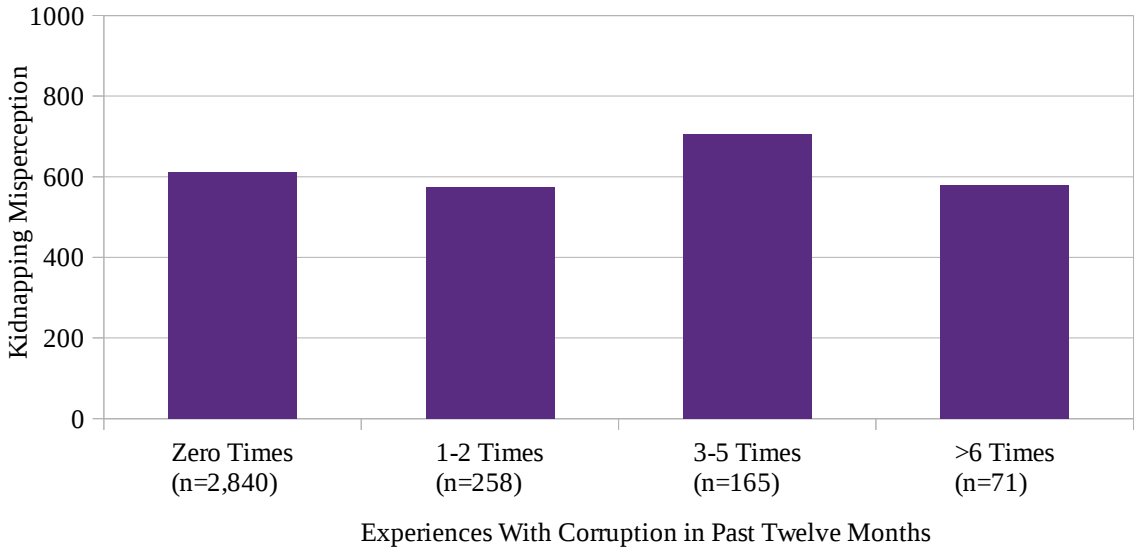
[155] Ahmed, A., & Perlroth, N. (2017, June 19). Using Texts as Lures, Government Spyware Targets Mexican Journalists and Their Families. *The New York Times.*

Figure 5.27 Misperception of Homicide by Experience Being Solicited for a Bribe



Note: This figure indicates the average misestimation of homicides by the number of times the repondent was solicited for a bribe within the 12 months prior to the survey. An F-test of the differences in mispercetion across experiences with corruption approached significance (p=0.068).

Figure 5.28 Misperception of Kidnapping by Experience Being Solicited for a Bribe



Note: This figure indicates the average misestimation of kidnapping by the number of times the repondent was solicited for a bribe within the 12 months prior to the survey. An F-test of the differences in mispercetion across experiences with corruption was not significant (p=0.984).

Moreover, the relationship between misperceptions and the number of times solicited for a bribe show a similar inverted-U pattern to what was seen in experiences with violence, even though on average they increase with greater numbers of bribes. People who had been solicited between three and five times overperceived homicide more than those who had been solicited one to two times, who overperceived more than those who had not been solicited. But the lowest

estimations – underestimation for homicide, most accurate for kidnapping – were among those who had been solicited six or more times in the past year.

With respect to misperceptions, it is unclear the extent to which those who have been solicited for a bribe six or more times are true outliers in their estimation or only in the sample, for which there is a very small sample size of only seventy-five respondents for homicide and seventy-one for kidnapping. As with experience of victimization, this unusual finding may indicate that those who find themselves frequently being solicited for bribes may be fundamentally different themselves than those who are not frequently solicited. They may engage in high bribe-risk behavior, including frequent violation of traffic laws, or have a job that requires wading through considerable red tape, such as the job of a construction contractor, where shortcuts may be offered along the way. It is worthy to note that of those who were victims of a crime six or more times, 7.7% were also solicited for a bribe six or more times, indicating that if these are indeed "high risk" people for either violence or bribe solicitation, there is little overlap in those risk categories.

5.05 Conclusion

How do individual characteristics, political behaviors and preferences, and experiences correspond to misperceptions of violence? In this chapter I found that a variety of individual-level elements correlate with perceptions of violence. These characteristics and behaviors likely both shape and are shaped by these perceptions.

First, I turned to demographic factors, finding that contrary to predictions from the literature on fear of crime, neither age nor gender were related to misperception. This was potentially because fear itself was not being measured, as discussed in Chapter Two, but rather a more sober assessment of violence levels was asked for. However, education, and particularly having a college education or higher, was an important predictor of overestimation of violence. For homicide, those who had less education than a college degree, regardless whether they completed primary school or high school, were effectively accurate in their estimation. Yet, those who had completed a college degree or higher were marked overestimators. Across all education brackets respondents averaged overestimation of kidnapping, but the result was again dramatic for those with a college degree or higher with them overestimating kidnapping levels substantially more than their less educated peers. This finding, consistent with expectations, is in line with Price and Zaller's (1993) findings that highly educated people tend to seek out more news as well as understand the news they receive better. Thus, exposure to news about violence is frequent and well retained, and violence is highly salient to these respondents.

Second, past and anticipated future political participation were not uniform in their relationship to violence misperception. Those who voted in the 2012 election were not statistically different from those that abstained. Nor was there a significant difference between those who had engaged in a number of informal, non-electoral modes of participation. However, in looking forward to the 2018 election, respondents who did not plan on voting overperceived both types of violence more than those who were either maybe or definitely planning on voting. As surety of voting increased, overperception decreased. Respondents who were following the election most closely also overperceived violence considerably, again consistent with the idea presented in Chapter Three that attention to media would be a significant predictor of overestimation.

Third, which candidate or party a respondent supported when they did chose to participate was a crucial factor in understanding violence misperception. In the 2012 election, those who voted for PRD candidate López Obrador averaged the most exaggerated overestimation for both types of violence. Those who voted for PAN candidate Vázquez Mota averaged dramatic underestimation for homicide and the lowest levels of overestimation for kidnapping. Overestimation of violence decreased moving from the most left candidate to the most right for the 2012 election. Those who voted for the more centrist PRI candidate and election winner, Enrique Peña Nieto, underestimated homicides moderately and were the most moderate in their overestimation of kidnapping of supporters of the three candidates. This finding was consistent with results from Chapter Four, with respondents living in states in which the majority had voted for these candidates showing the same dynamic. Assessment of President Peña Nieto's job performance, however, was unrelated to perceptions of violence.

I expected variation in perceptions of violence across candidate and party support in the 2018 election to mirror that of the 2012 election. In one respect, this was true: Supporters of López Obrador and the Morena party averaged the highest overestimation of violence of supporters of the three main candidates. Yet it was not Anaya and PAN supporters, but rather Meade and PRI supporters, who underestimated homicide by the largest amount and overestimated kidnapping by the smallest amount. However, the differences between PAN and PRI supporters were not statistically significant. Rather, the PRI joined the PAN in occupying the position of most underestimation for homicide and most accurate, i.e. lowest estimators, for kidnapping.

While in the official party platform Morena mentioned violence substantially fewer times than the other two parties, their standard-bearer and presidential candidate López Obrador had run for president several times previously and had been a vocal public figure, with violence amelioration as a focal point of his previous campaigns. Likely, his previous attention to violence counteracted any minimization of violence in the official party platform. On the other hand, both the PRI and PAN are seen by many as the two parties that have stoked the flames of violence in Mexico. To continue to support them despite this might also mean that one underestimates or more moderately overestimates violence compared to supporters of other candidates, and that that perception is what, in a sense, allows that support.

Fourth, I examined three key experiential factors as well: having lived abroad, having been the victim of a crime recently, and having been solicited for a bribe recently. Living abroad was not a significant predictor of perceptions of violence, but both having been the victim of a crime or solicited for a bribe were related to violence perception. Victims of crime were more likely to overestimate both types of violence, but surprisingly this relationship was not significant. Sharp differences in homicide estimation existed between those who had not been the victim of a crime within the last twelve months and those who had been a victim once or twice. Those who had been a victim once or twice were substantially more likely to overestimate violence, but that overestimation decreased as the number of times the person was victimized increased, with those who had been the victims of crime six or more times underestimation homicide dramatically and being the lowest overestimators of kidnapping. These findings indicate that those who have been repeatedly come face to face with criminal activity are likely both systematically different from those who have not in the type of life they lead and are also desensitized to crime.

One-sixth of respondents reported being solicited for a bribe at least once within the

twelve months prior to the survey. Being solicited for a bribe was positively correlated with homicide overestimation, but was not significantly correlated with kidnapping overestimation. The relationship between experiences with corruption and violence overestimation mirrored the inverted-U shaped relationship between victimization and violence estimation. Those who had been solicited for a bribe six or more times within the last year underestimated homicide more than any other group and were the second lowest in overestimation of kidnapping. Similar to the findings with experiences of victimization, likely these respondents are leading high risk lives that are fundamentally different from other respondents in key, unidentified ways.

In order to understand the ways in which these covariates of misperception interact with each other, similarly to in Chapter Four, I ran ordinary least squares (OLS) regression models of perceptions of both homicide and kidnapping that included the significant factors uncovered in this chapter. Controlling for state level of homicide or kidnapping, I examined the effects of having completed college or higher, not planning on voting, and paying significant attention to politics. I also looked at the effects of candidate support in the 2018 election, compared to undecided voters, and the experiences of having been the victim of a crime or solicited for a bribe.

Having a college education or higher and paying significant attention to the political process, both proxies for media attention and retention, were again positively correlated with perceptions of homicide and attention to politics was as well for kidnapping.[156] When controlling for these other factors, not planning on voting was not a significant predictor of perceptions of violence (p=0.203 for homicide, p=0.133 for kidnapping).[157]

With respect to candidate choice, only supporters of Meade were systematically different than undecided voters. Planning on supporting Meade was negatively correlated with violence overperception (approaching significance for homicide at p=0.063, significant for kidnapping at p=0.015).[158] Neither crime victimization nor experience being solicited for a bribe were significant predictors of perceptions of violence, although the positive relationship between being a victim of a crime and kidnapping misperception approached significance (p=0.066).[159]

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156 For college education, p=0.010 for homicide, p=0.204 for kidnapping. For high attention to the election, p=0.014 for homicide, p=0.010 for kidnapping.

157 When using a less conservative model without state clustered standard errors, not planning on voting approached significance for perceptions of homicide (p=0.056) and was significant for perceptions of kidnapping (p=0.024).

158 In a model without state clustered standard errors, support for Anaya was also negatively correlated with violence misperception (p=0.034 for homicide, p=0.018 for kidnapping). The negative relationship between support for López Obrador and violence misperception was not significant for homicide (p=0.564) and approached significance for kidnapping misperception (p=0.069).

159 In a model without state clustered standard errors, it was significant at p=0.038.

Table 5.04 Models of Misperceptions of Violence by Individual Factors

Key Independent Variables	*Homicide*	*Kidnapping*
State Violence Level	-0.493 (0.087)*	2.777 (0.574)
College or Higher Education	7.462 (2.198)**	3.455 (1.315)
Not Planning on Voting 2018	5.146 (2.692)	3.650 (1.620)
Significant Attention to Politics	5.733 (1.602)*	3.213 (0.954)**
Meade 2018	-4.576 (2.173)^{o}	-3.846 (1.310)*
Anaya 2018	-4.203 (1.981)*	-2.833 (1.195)
López Obrador 2018	-1.046 (1.816)	-1.995 (1.096)
Other 2018	0.703 (3.520)	-0.325 (2.064)
Victim of a Crime	0.632 (1.498)	1.855 (0.894)^{o}
Solicited for a bribe	2.130 (1.832)	-0.674 (1.091)
	n = 3,310	n = 3,211
	R^2 = 0.023	R^2 = 0.021
	cons = 5.309	cons = 4.902

Notes: This table consists of regression models of societal correlates of misperceptions of violence, with each violence indicator being hundreds of homicides or kidnappings. The 2018 election control variable is is undecided voters. This model used state clustered standard errors.
$^{o}p \leq 0.100$ *$p \leq 0.050$; **$p \leq 0.010$, ***$p \leq 0.001$

Both a college education and attention to politics remained consistent drivers of overperception of both homicide and kidnapping, even when controlling for the other variables considered in this chapter. This supports the idea that media influence and attention to elites drive the salience of violence in the minds of individuals, leading to overperception perceptions of violence. Moreover, these perceptions may be influencing political preferences. In the following chapter, I continue explore this possibility, moving beyond the correlates of misperception and turning to the consequences of these misperceptions on political behavior and attitudes, including to citizens' support and opposition to candidates in the 2018 presidential election and to partisan identification and policy preferences.

Chapter 6: Uncertainty and Withdrawal

Violence is a pestilence. It invades and saturates everyday life in communities afflicted by it. The atmosphere of insecurity it creates is oppressive. I argue that living amidst perpetual violence leads citizens to retreat into themselves, fleeing from public and political life and effectively hiding in fear. This retreat is not necessarily a direct or linear response to violence itself, but rather a cloud that hangs over communities and individuals across the country, mediated by their own perceptions of violence and how salient it is to them in their decision making.

The previous three chapters focused on the correlates of perceptions of violence, delving into the ways in which Mexicans are filtering and understanding the violent world around them. This chapter turns to understand some of the consequences of perceptions of violence, examining whether and how violence is leading citizens to retreat from electoral politics. As established in Chapter Three, violence is filtered through the lens of one's own cognitive biases. Actual, objective levels of violence are interpreted by individuals based on the salience of violence to the person, which is heavily influenced by personal risk, media coverage, and elite discourse. These influences in the salience of violence are, in essence, multi-level distortions that lay between actualities and perceptions of violence. In this chapter, I look at the effects of perceptions of violence as well as the effects of those two key building blocks of those perceptions: objective levels of violence and the salience of violence. I find that these perceptions of violence and the two cornerstones of those perceptions, actual violence and the salience of violence, affect a number of important ways in which citizens interact with their government including their sense of security, if they vote, who they vote for, how they relate to political parties, and their views on political reforms and policies. All of these effects lead in the same direction, toward a public that, when fearful of violence, tend to show uncertainty and retreat from the political sphere.

Previous research on the consequences of violence on political engagement range from more direct effects, such as voter suppression via explicit threats from criminal organizations[160] to more subtle, indirect ramifications including changes in attitudes toward the government or even the regime type itself (Blanco and Ruiz 2013; Corbacho, Philipp, and Ruiz-Vega 2015). The literature on the effects of violence on willingness to participate in the political sphere show mixed results.

Some find that both direct and indirect experiences with violence can actually activate citizens to participate. Robbins, Hunter, and Murray (2013) find that terrorism in particular can increase voter turnout, as the violence can enhance the importance of elections in the minds of citizens. Smulovitz (2003) finds that in Argentina high levels of insecurity lead citizens to take measures to protect themselves, including forming and participating in civic associations aimed at crime reduction. Bateson (2012) finds that around the world, direct victimization increases the likelihood of political participation. Evidence from Uganda indicates that exposure to traumatic events can lead to personal growth which mobilizes voters (Blattman, 2009). These findings have been echoed in Mexico as well (Dorff 2017).

On the other hand, a growing body of literature counters these findings, arguing that violence and insecurity are demobilizing. Miethe (1995) finds that crime in the United States leads to retreat from urban life, with Americans changing their daily routines to avoid public activities and distrusting strangers. Poverty and endemic crime have been shown to diminish

[160] Miroff, N., & Booth, W. (2012, January 15). Mexico 2012 vote vulnerable to narco threat. *Washington Post.*

feelings of efficacy, driving minorities in urban America away from engagement (Cohen & Dawson, 1993). Alacevich and Zejcirovic (2020) find in Bosnia and Herzegovina that pervasive violence against civilians can lower voter turnout for decades after the violence has ended. In Colombia, regions actively contested between the military and organized crime or insurgent groups show depressed voter turnout as well (García-Sánchez, 2010). Evidence from Brazil indicates that both physical and economic insecurity erode active citizenship and inhibit non-electoral forms of participation (Brooks, 2014). In Mexico specifically, higher violence regions have been shown to have the lowest electoral participation rates(Bravo & Maldonado, 2012; Trelles & Carreras, 2012). Ley (2014) argues that violence has pushed Mexican citizens away from electoral politics, specifically suppressing turnout, but can drive citizens toward informal political participation, depending on their social networks.

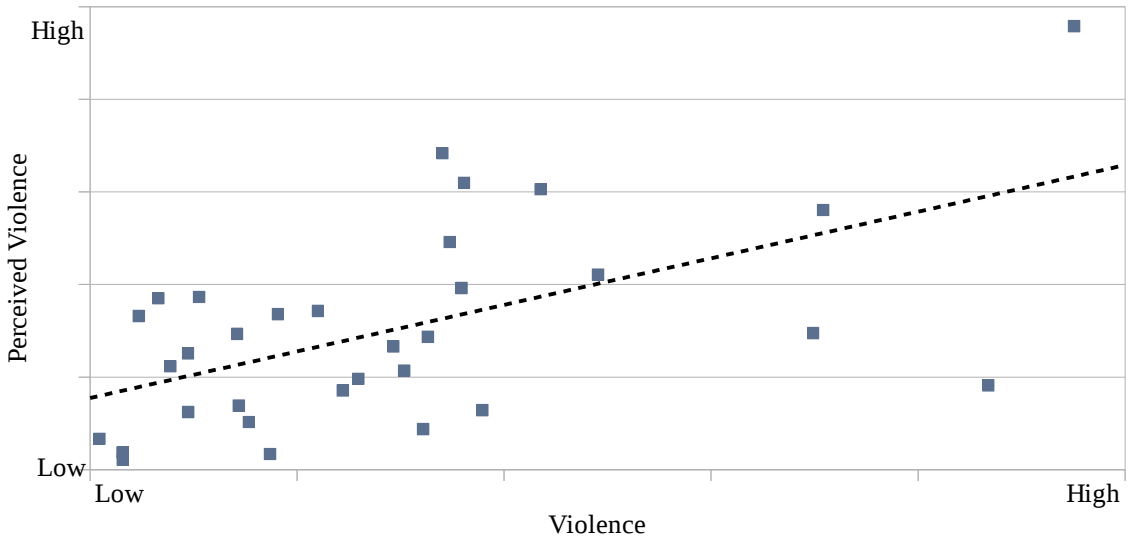
This chapter contributes to this domain of research and reinforces the finding that violence leads to fear and withdrawal from public engagement. This withdrawal occurs via multiple pathways. People are afraid for their safety when engaging in public activities and may stay home from voting to prevent exposure to potentially violent scenarios, whether or not they would be likely victims in the first place. As insecurity increases, the self-protection strategies of those without the resources to cope with that risk are at odds with political engagement (Brooks, 2014). Moreover, living amidst high levels of violence can diminish one's sense of political efficacy as well as one's belief in democracy as the best form of government, leading them to retreat from engagement believing their participation may make no difference (Blanco 2013). Violence breaks down the social contract between neighbors leading them to be fearful of one another (Ishiyama et al., 2018). It can also leave people desensitized to violence and even indifferent to victims (Schedler, 2016).

For the subsequent analysis, I created a violence index that combines information about homicide and kidnapping. For both objective (actual) and subjective (perception) measures, I first transformed the original homicide and kidnapping measures to range from zero to one, with zero representing the minimum number of homicides or kidnappings found in the data for 2017 and one representing the maximum. Then I averaged those two variables to maintain the zero to one scale. When looking at the effects of actual violence levels, I am able to use the entire survey sample of 17,451 respondents. On this composite measure, Yucatán was the least violent state with a score of 0.01 and Estado de México was the most violent state with a score of 0.95.

For perceptions of violence, I use the "ask" sub-sample from the Violence Experiment, from whom these data were obtained (n=3,276). Looking at state means of perceived violence levels in this newly created index, individuals ranged in perceptions of violence from a score of 0.0 to 0.997. Campeche (the third least violent state in actuality) had the lowest average perceived violence level with a score of 0.002 and Estado de México had the highest average perceived violence level with a score of 0.096.[161] As seen in Figure 6.01, subjective perceptions of violence are positively correlated with objective levels of violence, as they were for each specific type of violence discussed in Chapter Three.

[161] Charts of state means which include both violence and perceptions of violence along the x-axis have violence on a scale of 0 to 1 and perceptions of violence on a scale of 0 to 0.10, effectively showing the full range of state averages for each variable.

Figure 6.01 The Relationship Between Perceptions of Violence and Violence



Note: This figure indicates the average sense of security by state violence level and by perceived violence level. An F-test of the differences in perceptions of violence across violence was significant ($p<0.001$).

In addition to analyzing how each outcome relates to violence and perceptions of violence, I examine the effects of salience of violence. To understand the role of salience, I look at the effects of being assigned to the "tell" category versus the control in the Violence Experiment. As discussed in Chapter Two, this assignment corrects misperceptions about actual levels of violence *and* forces respondents to think concretely about how violent their state is in terms of homicide and kidnapping. These dual effects of strong priming and correction effectively increase the salience of violence to the respondent as they continue throughout the survey. It brings their perceptions of violence to the forefront of their mind, reinforces their awareness of violence, and also provides them with accurate information about violence levels. In this survey, 4,393 respondents were assigned to the "tell" condition and 8,727 to the control.

Triangulating between these three variables of perceptions of violence and its two primary motivators, actual violence and the salience of violence, I proceed here in three sections that are organized around key outcomes associated with the idea of retreat and withdrawal. First, I look at how violence is affecting feelings of fear and sense of safety. Second, I examine the ways in which it drives citizens to disconnect from electoral politics, focusing on planned abstention, indecision in the presidential race, and retreat from party affiliation. Third, I look how violence affects tolerance for reform measures as well as things otherwise seen as societal ills: corruption and trans-national criminal organizations (TCOs).

By analyzing key dependent variables related to fear and insecurity, disconnection from electoral politics, and tolerance of reforms and societal ills as they relate to violence, perceptions of violence, and the salience of violence, I am able to look at the myriad ways in which violence is vexing the Mexican populous. Across all of these outcomes, I find that perceptions of violence and salience of violence are the most important drivers of respondents' withdrawal from politics. This is consistent with my findings, illustrated previous chapters, which demonstrated that actual levels of violence only partly predict perceptions of violence, with individual variation in

salience of violence being a key intermediary. While the objective levels of violence affect how individuals behave in a number of ways, this will be less immediately important than an individual's beliefs about their state's level of violence and than having their attention drawn to violence.

As the analysis to come will show, the primary effect of this living in a context of high violence is clear: Mexican citizens are in retreat. While the various outcomes are affected in slightly different ways, an atmosphere of insecurity is leading citizens to be fearful, withdraw from electoral politics both inside and outside of the voting booth, shy away from reform measures, and acquiesce to societal ills such as corruption and the operations of TCOs.

6.01 Increased Fear and Insecurity

One of the clearest ways in which violence is affecting Mexican citizens is by making them fearful. This fear crosses all locations: Mexicans are afraid in their homes, their streets, their neighborhoods, their workplaces and schools, their cities, and in their states. They are also less likely to respond at all to questions that directly inquire about violence, such as being asked to estimate violence in their state. Fear is one of the key pathways through which an atmosphere of violence can affect one's engagement in politics.

6.01a Sense of Safety

While one might naturally assume that violence leads to fear, it is important to test the hypothesis and disaggregate the influences of actual violence, perceived violence, and the salience of violence in driving fear and feelings of insecurity. Respondents were asked how secure they felt in a number of places – their homes, streets, work or school, neighborhood, city, and state. I looked at each of these measures individually as well as an index of overall sense of security, created by averaging responses to feelings of insecurity across the six places and scaling the variable from zero to one (see Chapter Two for more details).

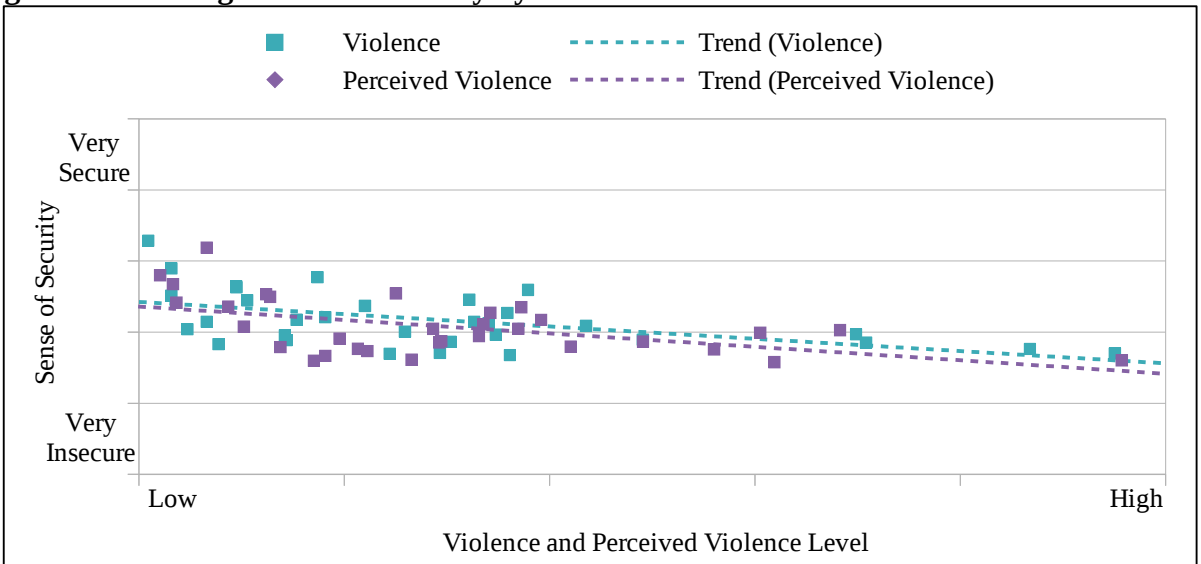
As expected, actual violence was negatively correlated with a sense of safety overall ($p<0.001$) and across all six locations, with respondents living in more violent states feeling less secure in their home ($p<0.001$), street ($p=0.001$), school or work place ($p<0.001$), neighborhood ($p<0.001$), cities ($p<0.001$), and state ($p<0.001$). When looking at overall safety on a zero to one scale, those who lived in the most violent states differed from those who lived in the least violent states by about 15% of the scale's full range, representing three-quarters of a standard deviation.

As shown in Figure 6.02, perceptions of state-level violence were also negatively correlated with overall security (significant at $p=0.037$). This was true in five of the six locations respondents were asked about, including one's home (approaching significance at $p=0.055$), one's street (significant at $p=0.040$), one's work or school (approaching significance at $p=0.092$), one's neighborhood (approaching significance at $p=0.062$), and one's state (significant at $p=0.006$). Perceptions of state-level violence were not correlated with sense of security in one's city ($p=0.208$).[162] When looking at overall safety on a zero to one scale, those who perceived the

[162] Surprisingly, the level of violence in a state was not correlated with whether or not one had been the victim of a crime (p=0.109), and was negatively correlated with the number of times one had been the victim of a crime (p=0.028). Homicide and kidnapping represent a small portion of overall crime. In 2017, a total of 1,835,762 crimes were reported, with kidnapping and homicide representing only 1.7% of that total. Given the pervasiveness of under-reporting of all crimes, it's likely that homicide and kidnapping actually represent an even smaller proportion.

highest levels of violence differed from those who lived in the least violent states by about 12% of the scale's full range, representing three-fifths of a standard deviation. These regression results are shown in Table 6.01.

Figure 6.02 Average Sense of Security by Violence and Perceived Violence



Note: This figure indicates the average sense of security by state violence level and by perceived violence level. An F-test of the differences in feelings of security across violence levels was significant ($p<0.001$) and of differences of feelings of security across perceived violence levels was significant ($p=0.037$).

When violence was made highly salient to respondents and they were informed about true levels of violence, as in the "tell" condition, their average sense of security was not different from those in the control group (not significant at $p=0.507$). This was true even when controlling for violence levels overall (not significant at $p=0.770$) and was true across all six locations. This indicates that one's sense of security may be relatively stable across time, slow to change, and that changing the salience of violence does not not change one's feelings of safety. This mirrors the findings from Chapter Three that perceptions themselves are slow to update, lagging behind real world changes in violence levels. Controlling for demographic factors, including age, gender, and education level does not substantially alter these results.

The loss of a sense of security in high violence contexts, or in perceived high violence contexts, informs a wide range of public and private behaviors. Previous research has shown that fear has become endemic across the country. Even those in less dangerous areas are changing their behaviors, including going out at night less frequently and avoiding areas like shopping malls and bars (Díaz-Cayeros et al., 2011). One's sense of security in their own home, street, workplace, etc. can lead to a variety of changes in their behavior in the public domain as well. In this way, fear or sense of security are one of the pathways through which perceptions of violence are affecting key political outcomes. Throughout the rest of the chapter, I will analyze this intervening variable alongside the three other measures of insecurity (violence, perceptions of violence, and salience of violence) to see if and when fear is mediating the relationship between insecurity and participation.

Table 6.01 Models of Citizens' Sense of Security

	Actual Violence	*Perceptions of Violence*	*"Tell" versus Control*
Overall	-0.150 (0.027)*** R^2 = 0.042 n = 17,246 cons = 0.472	-0.120 (0.055)* R^2 = 0.004 n = 3,249 cons = 0.414	0.002 (0.004) R^2 = 0.000 n = 17,246 cons = 0.410
Home	-0.126 (0.028)*** R^2 = 0.016 n = 17,325 cons = 0.598	-0.144 (0.072)º R^2 = 0.003 n = 3,263 cons = 0.558	0.001 (0.005) R^2 = 0.000 n = 17,325 cons = 0.547
Street	-0.134 (0.035)*** R^2 = 0.019 n = 17,329 cons = 0.475	-0.137 (0.064)* R^2 = 0.003 n = 3,264 cons = 0.423	-0.001 (0.005) R^2 = 0.000 n = 17,329 cons = 0.423
Work/School	-0.136 (0.027)*** R^2 = 0.021 n = 17,268 cons = 0.504	-0.117 (0.067)º R^2 = 0.002 n = 3,255 cons = 0.453	0.004 (0.005) R^2 = 0.000 n = 17,268 cons = 0.447
Neighborhood	-0.159 (0.027)*** R^2 = 0.029 n = 17,327 cons = 0.451	-0.116 (0.060)º R^2 = 0.002 n = 3,263 cons = 0.389	-0.001 (0.005) R^2 = 0.000 n = 17,327 cons = 0.387
City	-0.170 (0.032)*** R^2 = 0.034 n = 17,326 cons = 0.425	-0.071 (0.056) R^2 = 0.001 n = 3,265 cons = 0.351	0.003 (0.005) R^2 = 0.000 n = 17,326 cons = 0.355
State	-0.177 (0.034)*** R^2 = 0.037 n = 17,326 cons = 0.379	-0.150 (0.050)** R^2 = 0.004 n = 3,263 cons = 0.308	0.005 (0.005) R^2 = 0.000 n = 17,326 cons = 0.305

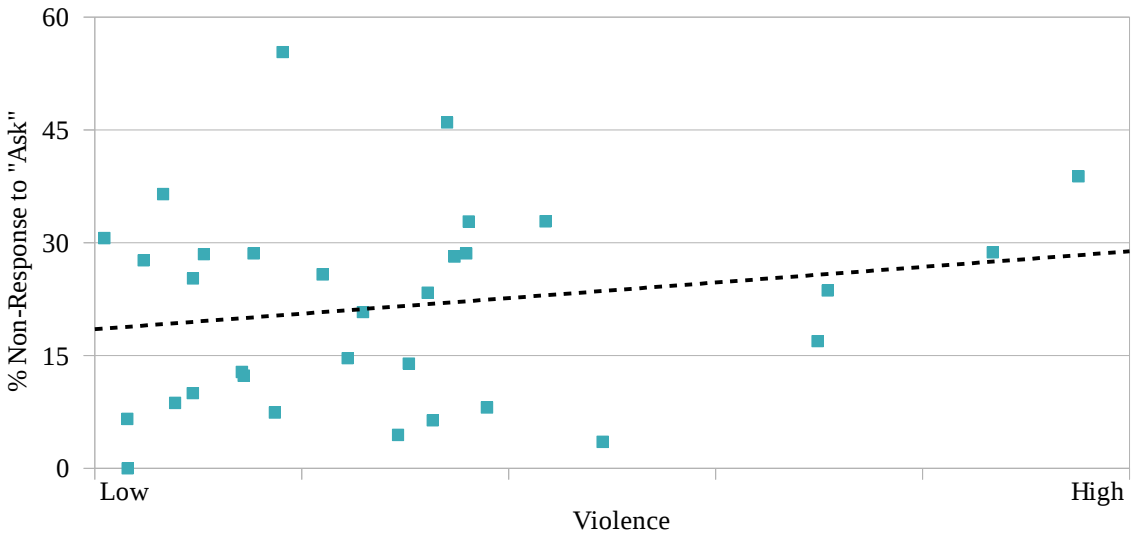
Notes: This table details regression results examining citizens' sense of security across multiple locations, analyzed by overall levels of violence, perceptions of violence, and assignment to the "tell" condition versus control. Coefficients are shown, with the standard error in parentheses. The violence and perceptions of violence models use state clustered standard errors.
ºp≤0.100 *p≤0.050; **p≤0.010, ***p≤0.001

6.01b Non-Response to Crime and Insecurity Questions

In order to understand whether respondents feelings of insecurity and fear were leading respondents to shy away from answering questions about crime and violence, I analyzed non-responses to six questions about crime and violence that appeared in the survey: perceptions of homicide and kidnapping ("ask" only), if they experienced being the victim of a crime, who they blamed for crime, evaluation of current levels of crime and insecurity compared to twelve months prior, outlook on future levels of crime and insecurity twelve months in the future, and overall sense of security.

One-quarter of respondents assigned to the “ask” condition chose not to estimate either homicide or kidnapping levels in their state. Non-response to this question was higher than any other question in the survey. As another mode of retreat, respondents in high violence areas were less likely to offer an estimate of homicide and kidnapping levels than those in lower violence areas (p=0.039), as shown in Figure 6.03. Those in the most violent areas were twice as likely to abstain from answering this question as those in the least violent areas. This finding persists when using basic socio-demographic controls as well (p=0.030). Overall sense of security was unrelated to non-response to this question (p=0.461). Unfortunately, since this was the question that ascertained perceptions of violence, it is not possible to examine the ways in which non-response to this question correlated with these perceptions. Also it is not possible to assess the effects of increasing the salience of violence on non-response to this question, i.e. by comparing “tell” versus control, as perceptions of violence were only solicited from respondents in the “ask” condition of the Violence Experiment.

Figure 6.03 Non-Response to “Ask” by Violence



Note: This figure indicates the average rate of non-response to being asked about one's perception of violence by state violence level. The black line represents the trend line. An F-test of the differences in non-response rates across violence levels was significant (p=0.039).

The relationship between violence and non-response was not shown when looking at non-response to other questions around crime in the survey. The remaining five questions about crime were analyzed together as each one had an extremely low non-response rate. These five questions asked whether the respondent had been the victim of a crime, who the respondent blamed for crime, an evaluation of current levels of crime and insecurity compared to twelve months prior, outlook on future levels of crime and insecurity twelve months in the future, and an assessment of one’s overall sense of security. Six percent of respondents chose not to answer one or more of these questions, with non-response on individual questions ranging from zero to three percent. Unlike with non-response to perceptions of violence, non-response to these five questions were uncorrelated to violence (p=0.993), perceptions of violence (p=0.354), and manipulated increased salience of violence (p=0.812).

To sum, Mexican citizens' sense of security across a range of locations (their home, street, work or school, etc) decreases as the actual and perceived violence in their state increases. This sense of fear, as demonstrated in the subsequent sections of this chapter, is a key pathway by which violence and perceptions of violence are affecting how Mexican citizens approach or avoid politics. Those for whom violence was manipulated to be most salient reported no greater feeling of insecurity than others, indicating that one's sense of safety, like perceptions of violence themselves, are relatively stable across time and slow to change. We also saw the first of many ways in which insecurity has led to withdrawal and uncertainty: Those living in high violence states—and/or perceived that they did so—were much less willing to answer questions about the level of violence where they live, with non-response rates doubled in the highest violence areas compared to the lowest.

6.02 Disconnection from Electoral Politics

An individual's support for a particular candidate or party is driven by myriad social, institutional, environmental, and psychological factors. Beliefs about violence and criminal activity may well be among these factors. I hypothesize that a context of insecurity and fear is driving Mexican citizens into retreat. They are disconnecting from electoral politics in a variety of ways, including higher rates of abstention from voting, increased indecision on who to support in the 2018 presidential race, reduced tendencies toward retrospective voting around violence, and lower levels of affiliation with political parties.

6.02a Abstention from Voting

The act of voting is one of the most common ways that citizens of democracies around the world interact with their government to effect change. How have violence and perceptions of violence affected how Mexicans participate in their democracy? The dominant finding of my analysis is that those who perceive high levels of violence in their state are dramatically less likely to say they will vote in the next election. Furthermore, those in high violence areas who do not plan on voting report overwhelmingly that the reason they do not plan on voting is because they feel their vote will make no difference.[163]

As noted earlier, previous research has shown that increases in violence during election campaigns in Mexico suppress electoral participation (Ley, 2018). In this survey, neither actual state-level violence in 2016 nor violence in 2017 were correlated with planned abstention (p=0.835 for 2016, p=0.974 for 2017). Similarly, there was no relationship between either 2016 or 2017 violence levels and a state's final turnout rate (p=0.516 for 2016 and p=0.967 for 2017).[164] If current levels of violence are, themselves, suppressing turnout, perhaps what matters is violence at a local, community or city level, not at the level of the state.

However, perceptions of state-level violence were very strongly related to (non-)voting intentions. Specifically, those who perceived the most violence in their states were three times more likely than those who perceived the least violence in their state to say they would not vote in the upcoming presidential election (OR=3.048; 95% CI: 1.19 – 7.79; p=0.020). This

[163] Analysis of differences between "tell" and control were excluded from this section, as questions about intended participation were asked prior to the Violence Experiment. However, I do examine the relationship between perceptions of violence (which are only available from respondents in the "ask" condition) and abstention from voting as respondents' beliefs about how violent their state existed prior to being asked about them.

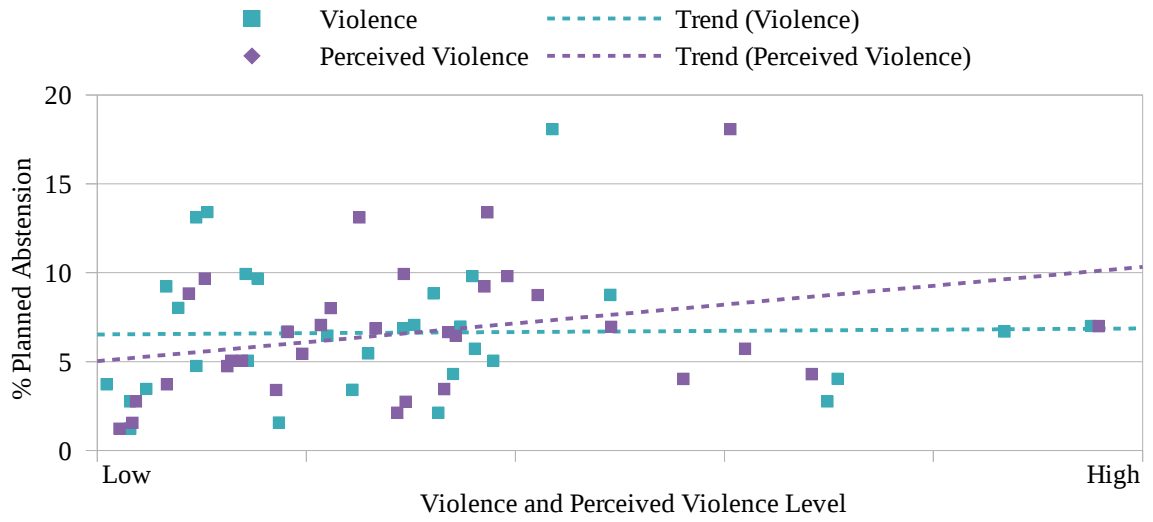
[164] As measured by the National Electoral Institute (INE), available at https:/computos2018.ine.mx/.

relationship holds when controlling for demographic factors (p=0.003).

Perceptions of violence are influenced by a range of variables discussed in earlier chapters, but are also presumably based on local levels of violence. People who live in a violent state and also live on dangerous street or in a dangerous city likely hold different political attitudes and exhibit different behaviors than those who live in a violent state but in a safe local area. Examining how local violence levels influence political behavior is outside the scope of this project, but I would expect that the more proximate the violence is to the respondent, the more likely they would be to withdraw from electoral politics by staying out of the voting booth.

Actual of violence levels were correlated with respondents' explanations of why they were planning to abstain in the election. This speaks to citizens' conscious reasoning about their own withdrawal. Among those who did not plan on voting, respondents who lived in the highest violence states were more than twice as likely to say that their reason for abstention was that they believed their vote did not make a difference (OR=2.201; 95% CI: 1.18 – 4.09; p=0.013). However, this correlation disappears when controlling for demographic factors. Respondents who felt the lowest overall sense of safety were less likely to plan on voting, but not significantly (p=0.249), and were more likely to endorse the statement that their vote did not make a difference (approaching significance at p=0.080). Those with higher perceptions of violence were more likely to say they felt their vote did not matter, as well, but this difference was not statistically significant (p=0.195). These findings mirror previous studies about diminished efficacy among those in high violence contexts and further supports the idea that an atmosphere of violence, be it created by real violence or one's own perceptions, is causing people to retreat from electoral politics in defeat and fear.

Figure 6.04 Planned Abstention from the 2018 Election by Violence and Perceived Violence



Note: This figure indicates the average percentage of respondents who do not plan on voting in the 2018 presidential election by state violence and perceptions of state violence level. An F-test of the differences in planned abstention across violence levels was not significant (p=0.974) and of differences across perceived violence levels was significant (p=0.020).

Overall, a clear pattern emerges: Citizens' willingness to participate in the electoral process is buffered by how much violence they perceive to be in their state and how their state's

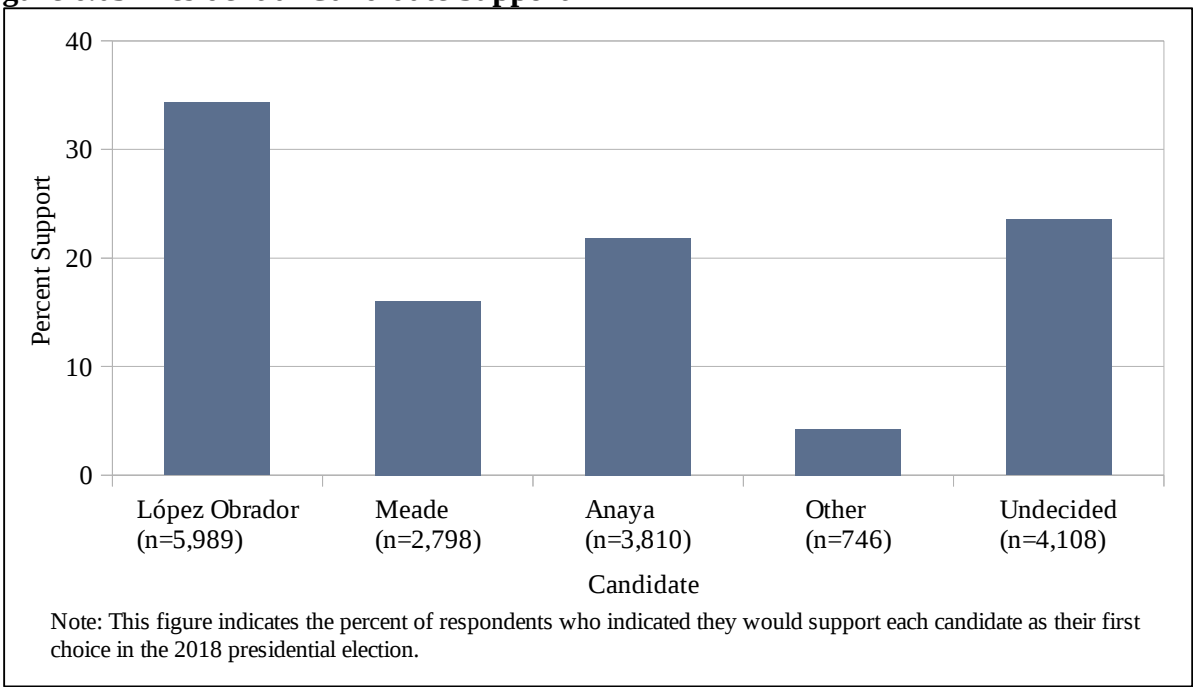
violence has changed over time. The latter relationship is reflected both in this survey and in voter turnout numbers from the election which occurred six weeks after the survey. Independent of the objective levels of violence a state is experiencing, citizens are responding in fear with with resignation and disengagement. Those living in this context of high violence are more likely to view their vote as irrelevant and are sidestepping participation in the electoral process entirely.

6.02b Indecision in the Presidential Race

In the months leading up to the 2018 presidential election, the country was abuzz with discussion of politics. Would López Obrador (Morena) finally be successful in his third attempt at the presidency? Would the reigning Institutional Revolutionary Party (PRI) manage to effectively run away from their image as a corrupt, opaque party with the help of their technocratic nominee, Meade? Would Ricardo Anaya overcome his likability issue and return the presidency to the National Action Party (PAN), who had held it for the first twelve years of the century?

National polls in the lead up to the election were consistent to a fault: they all showed that López Obrador had a commanding lead, with many polls putting him 20% or more ahead of his nearest competitor.[165] As shown in Figure 6.05, results on candidate preferences from my survey mirrored others from that time period and reflected the results that would be borne out six weeks later on the night of the presidential election. López Obrador (leftist) led the pack by a substantial margin, trailed by Anaya (rightist), with Meade (centrist) in third place.

Figure 6.05 Presidential Candidate Support



Note: This figure indicates the percent of respondents who indicated they would support each candidate as their first choice in the 2018 presidential election.

While nearly a quarter of the country reported being undecided, in the weeks just before the election the questions changed from if López Obrador would win to "by how much?" The

[165] Richards, T. AMLO Leads in Latest Poll with 52%, Twice that of Nearest Rival Anaya. (2018, May 30). *Mexico News Daily.*

election culminated in a clear and overwhelming win by López Obrador with a landslide victory garnering 53.19% of the vote, besting the second highest vote-getter, Ricardo Anaya (PAN), by over 30%.

Behind this decisive win, another story went untold: In the weeks leading up to the election a large percentage of Mexican citizens remained undecided, including nearly a quarter of respondents in this survey. It is difficult to gauge exactly if this percentage was larger than in previous elections, as many polling firms changed their methodology and reporting format in the six years between presidential elections, but the polling results of several large firms indicate that indecision in this election may have been higher than in the past: Consulta Mitofsky reported 21% of the electorate as being undecided in early May of 2012 and 26% as being undecided at the same time in 2018, Buendia y Laredo reported 16% being undecided in May of 2012 and 18% as undecided in May of 2018, and Parametría reported findings that 16% of voters were undecided in early May of 2012 versus 20% six years later.[166]

While violence itself was not correlated with indecision (p=0.828), perceptions of violence were and exacerbated this uncertainty. Those who perceived the highest levels of violence in their state were nearly three times as likely to be undecided as to who to support for president only a month and a half before election night (OR 2.883; 95% CI: 1.18 – 7.05; p=0.020). Moreover, those assigned to the "tell" condition of the Violence Experiment, for whom accurate information and reinforcement of the prevalence of violence in their state were provided, were more likely than those in the control condition to be undecided, with 2.5% more respondents undecided in "tell" than in control (significant at p=0.002). Those who felt the least safe across a variety of settings were also more likely to be undecided (approaching significance at p=0.067), indicating that fear was likely one of the pathways through which perceptions and salience of violence were moving. The results for violence and perceptions of violence are shown in Figure 6.06 and all results were consistent with and without demographic controls.

By inference, the context of high violence in which many Mexicans are living is causing them to be indecisive about the direction they want their country to move in, withdrawing from the difficult choice they were faced with over the three very different visions for Mexico. Both believing one lived in a violent state and having the violence of that state made salient led to increased indecision. While "tell" is an artificial construct in which respondents were informed about violence and forced to think about it, organic situations emerge which could force the same fear and flight response, including reading newspaper reports about violence, having a friend or loved one be the victim of a violent crime, or seeing the public residue of violence: police tape, broken windows, or sirens. In highly violent areas, these are daily occurrences. These findings reinforce the ideas that perceptions, not actualities of violence are driving behavioral changes and that the salience of violence is a key dimension of understanding insecurity as salience of violence changes perceptions.

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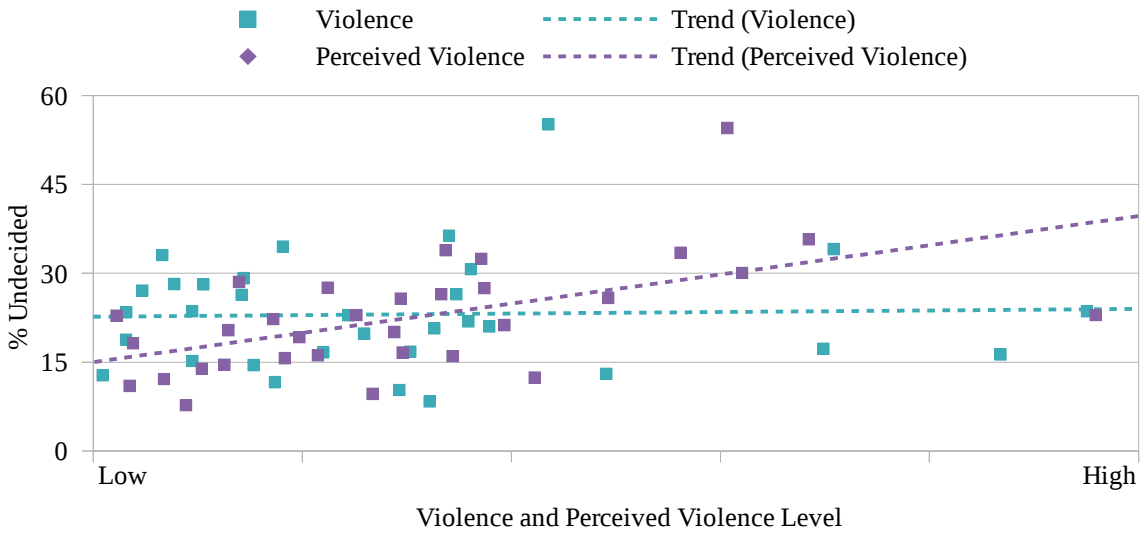
[166] *Elección 2012 en México: Preferencias Ciudadanas.* (2012, May 1). Consulta Mitofsky.
Previo al segundo debate, encuesta de Mitofsky da a AMLO 12 puntos sobre Anaya. (2018, May 16). ADNPolítico.
Panorama Electoral, Encuesta Nacional 7 -10 Mayo 2012. (2012). Buendía y Laredo.
Encuesta Nacional Reporte Descriptivo, Mayo 2018. (2018). Buendía y Laredo
Encuesta Parametría-El Sol de México. (2012). Parametría.
Los independientes como una variable importante en la elección del 2018. (2018, May). Parametróa.

Figure 6.06 Undecided Voters in the 2018 Election by Violence and Perceived Violence



Note: This figure indicates the average percentage of respondents who were undecided in the 2018 presidential election by state violence and perceptions of state violence level. An F-test of the differences in indecision across violence levels was not significant (p=0.828) and of differences across perceived violence levels was significant (p=0.020).

In addition to being asked who their first choice candidate was, respondents were asked which of the three main candidates they thought was best suited to deal with eight different of policy arenas: insecurity, corruption, the economy, the environment, healthcare, education, poverty alleviation, and institutional reforms. I look at these issue areas jointly – combining all eight issue areas into an index of the number of policy arenas in which respondents said they did not know which candidate was best – as well as individually, by policy.

Objective levels of violence were not correlated with indecision about which candidate was best to deal with these policy areas to a statistically significant extent, either jointly or individually.[167] However, when a less conservative analysis was used, removing state clusters, increases in violence in a state were associated with increased indecision across the index of policy arenas (approaching significance at p=0.056) and across seven of the eight individual policy arenas, insecurity (p=0.035), corruption (p=0.044), the economy (p=0.020), healthcare (p=0.037), education (p=0.014), poverty alleviation (p=0.024), and institutional reforms (p=0.030).[168]

Perceptions of violence were also correlated with indexed indecision (approaching significance at p=0.080). Those with higher perceptions of violence were more likely to report being unsure of who was the best candidate to deal with insecurity (approaching significance at p=0.098), the economy (approaching significance at p=0.081), the environment (approaching significance at p=0.074), healthcare (approaching significance at p=0.059), and poverty (approaching significance at p=0.060).[169]

[167] p=0.584 for all eight areas together, p=0.586 for insecurity, p=0.612 for corruption, p=0.539 for the economy, p=0.719 for the environment, p=0.580 for healthcare, p=0.518 for education, p=0.554 for poverty alleviation, and p=0.577 for institutional reforms.

[168] Not significant for the environment (p=0.171).

[169] Perceptions of violence were not correlated to assessment of who would be the best candidate to confront corruption (p=0.208), education (p=0.108), and institutional reforms (p=0.128) .

Those who had violence made salient to them (and who simultaneously were informed about violence) were also more likely to be undecided in this realm. This relationship was reflected in the indexed analysis (approaching significance at p=0.067) and in six of the eight policy areas. Those areas included insecurity (significant at p=0.041), corruption (significant at p=0.038), the economy (approaching significance at p=0.058), the environment (approaching significance at p=0.064), healthcare (approaching significance at p=0.055), and poverty (approaching significance at p=0.069).[170] Table 6.02 demonstrates results from all three sets of analyses.

Table 6.02 Modeling Indecision About Best Candidate Across Policy Areas[171]

	Actual Violence	*Perceptions of Violence*	*"Tell" versus Control*
Overall Number of "Don't Know" Responses (0 - 8)	1.132 (0.73 – 1.76) n = 17,442 cons = 0.179	1.729º (0.94 – 3.19) n = 3,270 cons = 0.131	1.085º (0.99 – 1.18) n = 17,442 cons = 0.163
Insecurity	1.162 (0.68 – 1.99) Pseudo-R^2 = 0.000 n = 17,451 cons = 0.189	1.876º (0.89 – 3.95) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.153	1.106* (1.00 – 1.22) Pseudo-R^2 = 0.000 n = 17,451 cons = 0.195
Corruption	1.153 (0.67 – 1200) Pseudo-R^2 = 0.000 n = 17,451 cons = 0.193	1.625 (0.76 – 3.46) Pseudo-R^2 = 0.000 n = 3,270 cons = 0.155	1.107* (1.02 – 1.22) Pseudo-R^2 = 0.000 n = 17,451 cons = 0.199
The Economy	1.181 (0.69 – 2.01) Pseudo-R^2 = 0.000 n = 17,451 cons = 0.184	2.006º (0.92 – 4.39) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.147	1.098º (0.92 – 1.12) Pseudo-R^2 = 0.000 n = 17,451 cons = 0.191
The Environment	1.102 (0.65 – 1.87) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.198	1.990º (0.94 – 4.23) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.158	1.094º (0.99 – 1.20) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.200
Healthcare	1.160 (0.68 – 1.97) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.188	2.117º (0.97 – 4.61) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.148	1.099º (1.00– 1.21) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.194

[170] Assignment to "tell" versus control was not associated with differences in indecision around education (p=0.111) nor institutional reform (p=.122).

[171] These findings are consistent with and without demographic controls.

Education	1.193 (0.70 – 2.04) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.183	1.924 (0.87 – 4.27) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.147	1.105 (0.98 – 1.25) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.191
Poverty	1.175 (0.69 – 2.01) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.185	2.045º (0.97 – 4.31) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.149	1.119º (0.99 – 1.26) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.191
Institutional Reforms	1.167 (0.68 – 2.01) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.188	1.877 (0.83 – 4.22) Pseudo-R^2 = 0.001 n = 3,270 cons = 0.150	1.107 (0.97 – 1.26) Pseudo-R^2 = 0.000 n = 17,442 cons = 0.195

Notes: This table details Poisson and logistic regression results examining indecision among respondents in who the best candidate for a given policy area was analyzed by overall levels of violence, perceptions of violence, and assignment to the "tell" condition versus control. For the Poisson regression of "Overall", incidence-rate ratios are shown, with the 95% confidence interval in parentheses. For the logistic regressions of each policy area, the odds ratio is sown with the 95% confidence interval in parentheses. The violence and perceptions of violence models use state clustered standard errors.
ºp≤0.100 *p≤0.050; **p≤0.010, ***p≤0.001

These results further reinforce the idea that perceptions of violence are leading to indecision among Mexican voters. Violence itself had little effect on whether or not respondents were undecided as to who was the best candidate across these issue areas, but when violence was made salient, a key factor in the formation of perceptions of violence, and independently when perceptions of violence were high, indecision reigned. It also appears that fear for one's safety was not the mechanism through which this indecision was occurring. Those who felt the most overall safety were less likely to be undecided on the best candidate to deal with these issue areas, but that relationship was not statistically significant (p=0.475). That the relationship between the atmosphere of violence and uncertainty over who the best candidate is on policy areas is not stronger indicates that respondents are not suffering from uncertainty over who may be best in various policy arenas, but are either confused about which policy arena to prioritize or are withdrawn from applying those ideas to a candidate preference. Respondents may know who they feel is best for a number of policies, but still be unsure if the person they think is best can reduce violence.

6.02c Retrospective Voting, Tamed

For those respondents who indeed had decided who they wanted support, one might imagine that the logic of retrospective voting would lead people away from the incumbent party, the PRI, and toward the challengers. Yet this is not the case; violence was not leading Mexicans away from the incumbent party in 2018.

The logic of retrospective voting indicates that Mexican citizens would be relying information about past performance, particularly the recent past performance, of their elected officials to make forward-looking decisions about who to support (Fearon, 1999; Ferejohn, 1986; Kramer, 1971). Following this rationale, voters would be more likely to seek electoral change as

violence increases. Punishing or rewarding incumbents based on performance does not require citizens to have complete or deep political knowledge (Fiorina, 1981). Rather, retrospective voting goes hand in hand with the prevalence of information shortfalls and cognitive heuristics, as voters may be relying on these positive or negative retrospective evaluations as shortcuts instead of evaluating candidates more comprehensively (Healy and Malhotra 2013; Healy and Lenz 2014).

Much of the scholarship around retrospective voting has focused on an electorate punishing or rewarding incumbents for economic performance (see Kramer 1971; Fair 1978; Achen and Bartels 2004). More recent applications have focused on how politicians are evaluated on natural disasters (Bechtel & Hainmueller, 2011; Gasper & Reeves, 2011) and on the handling of wars and foreign policy (Gaines et al., 2007; Karol & Miguel, 2007). Only recently has this lens been turned toward social unrest and violence. Arce (2003) finds that in Peru left leaning politicians are punished more than right leaning ones for violence and insecurity. Ley (2017) finds evidence of retrospective voting around violence in the 2012 Mexican election, conditional on voters knowing who to accurately blame for the violence. Yet, accuracy of blame attribution has been widely deemed irrelevant in many other contexts of retrospective voting and incumbents are often punished for events well outside of their control, including lottery wins (Huber, Hill, and Lenz 2012) and the performances of professional sports teams (Healy, Malhotra, and Mo 2009; Miller 2013).

In this survey, as shown below, I find mixed evidence for respondents punishing incumbents for bad states of affairs. Where Mexicans freely punish politicians for failures in the economy and good governance, they hesitate to do so with failures in regard to violence and public security. Why are citizens not clearly and decisively punishing politicians for societal violence? I posit that hesitance, uncertainty, and withdrawal from political decisions largely erase this particular type of retrospective voting in Mexico. Violence levels rose dramatically across Peña Nieto's tenure, as discussed in Chapter There. Yet, as I will demonstrate, there exists little evidence that the PRI were indeed punished because of the growth in violence and crime during these six years.

The logic of retrospective voting in 2018 was fully evident with respect to the economy, corruption, and crime. Respondents were asked how the situation a year prior compared to the present day with respect the economy, corruption, and crime. Those who believed the economy was worse than the year prior, corruption was worse than the year prior, and crime was worse than the year prior were all much more likely to vote against the incumbent party.[172] Moreover, those who felt the lowest sense of safety were four times less likely to vote for the incumbent party than those with the greatest sense of safety ($p<0.001$).

When it came to violence specifically, though, there was no relationship between violence and rejection of the incumbent – those in high violence states supported PRI candidate Meade at the same rate as those who lived in low violence states (no significant difference at $p=0.437$). Respondents with higher perceptions of violence also supported Meade at similar rates to those with low perceptions of violence ($p=0.225$). Respondent assigned to the "tell" condition of the Violence Experiment, and thus were given accurate information about violence and prompted to think about violence, were also no different in their support for the PRI than those who were not ($p=0.215$). All three of these findings are consistent when demographic controls

[172] For the economy: OR 1.153; 95% CI: 1.08 – 1.24; $p<0.001$
For corruption: OR 1.128; 95% CI: 1.05 – 1.22; $p=0.002$
For crime: OR 1.126; 95% CI: 1.04 – 1.22; $p=0.002$

are used as well and indicate that Mexicans are not consistently punishing politicians for insecurity, as the logic of retrospective voting might lead us to expect.

To further assess support for the incumbent party, I turn to two list experiments. The first list experiment is aimed at revealing whether or not respondents believed that the PRI should remain in power. The second list experiment revealed the extent to which respondents believed that support for the PRI should not be as heavily criticized as it often was.[173]

Across all respondents, there was almost no support for the proposition that the PRI remain in power, with an average of 0% endorsing this list item. However, as shown in Table 6.03, those living in high violence states, however, did endorse the PRI remaining in power more than those living in low violence states (p=0.032). This is shown by the significant interaction between violence and "treatment" in the table.[174] Furthermore, those who were assigned to the "tell" condition were also more likely to support the PRI remaining in power than those who were in the control (p=0.003). These findings indicate that rather than rejecting the incumbent party due to heightened insecurity, those in the highest violence states and for whom violence was most salient were actually embracing the incumbent party more. In this experiment, it is violence itself and the salience of violence, not perceptions of violence, that are correlated with this support.

[173] Criticism and widespread social shaming for support of the PRI is not focused around violence in the country but rather the authoritarian past of the party. Especially among the educated class, it is not uncommon to hear support for the PRI reviled and wrongfully dismissed as being only among people whose votes have been purchased. Because of this, support for the PRI as a party can be seen as sensitive.

[174] With a list experiment, the effect of "treatment" shows the percentage of people endorsing the statement in question, which here concern affirmations of the incumbent party, PRI. In the Table 6.03 specification, the coefficient on "PRI Remain (Treatment)" indicates the support for the PRI among those scoring low on actual violence (top panel), perceived violence (middle panel) and not primed to think about violence (bottom panel). The coefficients on the violence measures show the extent to which violence predicts endorsement of baseline statements, not of interest here. The interaction coefficient is the key coefficient of interest. This shows whether violence (actual, perceived, salience) affects the likelihood of endorsing the statement. In Table 6.03, both actual violence (top panel) and the manipulation making violence salient ("Tell", bottom panel), show a significant interaction, suggesting that more support for the incumbent party, PRI.

Table 6.03 Models of Support for PRI Remaining in Office[175]

Key Independent Variables	*Results*
Violence	
PRI Remain (Treatment)	-0.078 (0.052)
2017 Violence	-0.260 (0.310)
Treatment*Violence	0.192 (0.085)*
	n = 4,693
	R^2 = 0.002
	cons = 1.760
Perception of Violence	
PRI Remain (Treatment)	-0.359 (0.099)***
Perceived 2017 Violence	0.347 (0.481)
Treatment*Perceived Violence	-0.225 (0.605)
	n = 863
	R^2 = 0.019
	cons = 1.730
Overall, by Tell vs. Control	
PRI Remain (Treatment)	0.019 (0.055)
Tell	-0.321 (0.069)***
Treatment*Tell	0.286 (0.097)**
	n = 3,534
	R^2 = 0.008
	cons = 1.725

Notes: This table consists of five regression models based on a list experiment in which support for the PRI remaining in power is measured. The violence and perceptions of violence models use state clustered standard errors.
$^{o}p \leq 0.100$ $^{*}p \leq 0.050$; $^{**}p \leq 0.010$, $^{***}p \leq 0.001$

Approval of the idea that support for the PRI should not be so heavily criticized was more widespread in the sample than affirmation of the idea of the PRI remaining in power, with 11.4% of respondents endorsing this list item (significant at p=0.004). Violence and perceptions of violence are uncorrelated with endorsement of PRI support not being so heavily criticized (p=0.409 and p=0.477, respectively). However, as violence was made salient and accurate information provided about violence levels, support for this list item did increase significantly (p=0.002).[176] Again, this is shown in the interaction term between the "treatment" and violence, as seen in Table 6.04.[177]

The patterns seen in both of these list experiments are consistent: Despite retrospective voting logic indicating that violence should be a deterrent to support for the incumbent party, it was not. Rather, violence was positively associated with support for the PRI in the first experiment and increased salience of violence was positively associated with support for the PRI in both list experiments. These findings indicate that voters likely view insecurity as fundamentally different than other policy issue domains when they are deciding who to support and are hesitant to punish politicians for failures with respect to violence.

[175] When controlling for demographic factors the findings remain nearly identical. For violence, the interaction of the treatment and violence is significant at p=0.032 and with demographic controls approaches significance at p=0.083. P-values for perceptions of violence and "tell" vs. control are in the same ranges as indicated in the chart.

[176] These findings remain with and without demographic controls.

[177] See Footnote 169 for further explanation of interaction terms in these presentations of findings.

Table 6.04 Models of Social Support for the PRI

Key Independent Variables	*Results*
Violence	
PRI Support (Treatment)	0.102 (0.064)
2017 Violence	-0.260 (0.310)
Treatment*Violence	0.033 (0.113)
	n = 4,646
	R^2 = 0.004
	cons = 1.760
Perception of Violence	
PRI Support (Treatment)	0.179 (0.115)
Perceived 2017 Violence	0.347 (0.481)
Treatment*Perceived Violence	-0.387 (0.715)
	n = 845
	R^2 = 0.004
	cons = 1.730
Overall, by Tell vs. Control	
PRI Support (Treatment)	0.038 (0.056)
Tell	-0.321 (0.069)***
Treatment*Tell	0.299 (0.097)**
	n = 3,531
	R^2 = 0.009
	cons = 1.725

Notes: This table consists of regression models of a list experiment in which the idea that support for the PRI should not be so heavily criticized is measured. The violence and perceptions of violence models use state clustered standard errors.
$^{o}p \leq 0.100$ $^{*}p \leq 0.050$; $^{**}p \leq 0.010$, $^{***}p \leq 0.001$

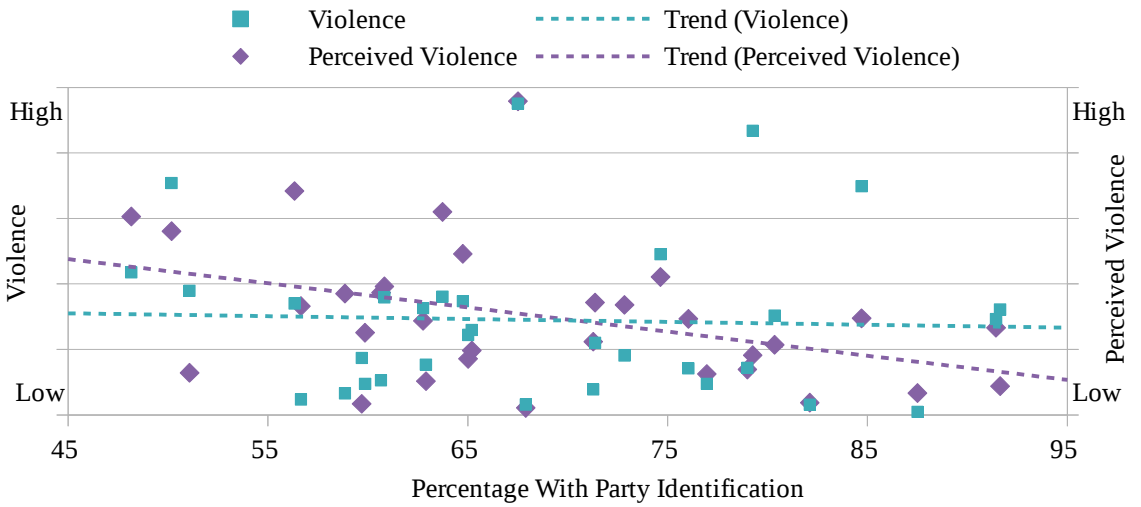
This hesitance is consistent with other key changes in participatory behavior noted in this chapter. Respondents are openly punishing incumbents for failures in other arenas, such as the economy, but showing reluctance to punish them for failures around security. This could indicate that even though violence has increased dramatically, respondents are afraid of changing paths for fear that security could degrade even further. This reluctance parallels respondents indecision about who to vote for for president and, as illustrated later in this chapter, their disengagement from other aspects in the public sphere, such as party affiliation.

6.02d Non-Affiliation with Political Parties

Another way in which citizens are disengaging from electoral politics is through withdrawal from identifying with political parties. I measure affiliation with parties in three main ways. First, I looked at which political parties respondents claimed most affinity with. Second, for those who did identify with a political party, examined how strongly they identified with that party. And third, I explored whether or not respondents indicated they were planning to vote a straight ticket for any party. I counted a voter as intending to vote straight ticket for a party if they indicated that they planned on voting for that party's candidate for the presidency, the governorship if their state was holding a gubernatorial race, for the senate, and for the lower chamber of the legislature. Neither their stated party affiliation nor their candidate preferences in previous elections were factored in to whether or not they were counted as a straight ticket voter.

Those living in high violence states were slightly less likely to identify with a political party than those living in low violence states, but this relationship was not statistically significant (p=0.980). However, as perceptions of violence increased, so did respondents reluctance to identify with political parties at all (approaching significance at p=0.058). These relationships are shown in Figure 6.07. This dynamic was mirrored by those in the "tell" condition, who were less likely than those in the control to identify with a political party (significant at p=0.001). Those who had been informed about their state's level of violence and had violence brought to the top of mind were 3% less likely to identify with a political party than those who had not. These findings are persistent with and without the demographic controls of age, gender, and education level. Sense of safety was uncorrelated with the extent of party identification (p=0.603), again indicating that fear is only one of the pathways through which high perceptions of violence are leading to withdrawal and uncertainty, but not the only pathway.

Figure 6.07 Identification with a Political Party by Violence and Perceptions of Violence



Note: This figure indicates the average percentage of respondents who do identified with any political party by state violence and perceptions of state violence level. An F-test of the differences in party identification across violence levels was not significant (p=0.980) and one of differences across perceived violence levels approached significance (p=0.058).

Again, these findings are consistent with the idea that perceptions of violence, not violence itself, are driving changes in behavior. Actual levels of violence are understood through different cognitive biases and shortcuts and the salience of violence appears to drive perceptions more than actual violence does. In looking at party identification, perceptions of violence and the salience of violence both affect levels of party identification, but violence itself is not statistically relevant. Fear for one's safety does not appear to be a driver of this relationship either. Rather it is likely that high perceptions of violence lead to dissatisfaction with the government, institutions including political parties, and potentially with the system of democracy itself.

Despite the ways in which perceptions of violence diminish party identification, those that did indicate affiliation with a political party were more loyal to that party if experiencing more violence. Those who lived in more violent states identified more strongly with their chosen party (significant at p=0.021) and expressed a greater inclination for straight ticket voting

(significant at $p<0.001$). However, neither perceptions of violence nor assignment to the "tell" condition of the Violence Experiment, manipulating salience, affected either measure of party loyalty. The findings about violence and the salience of violence are persistent with demographic controls.

Insecurity is leading Mexicans to back away from feeling affinity with any political party. This is another example of withdrawal from public political life and an increase in doubt and indecision. Across the board, citizens are disengaging from electoral politics, the primary source of government accountability. Insecurity has led Mexican voters to retreat from making crucial decisions about their own democracy and thus their own lives: A context of insecurity is leading them to be unsure of who they want to support, if they plan on entering the voting booth at all.

6.03 Rejecting Reforms and Tolerating Societal Ills

In addition to heightening fear and insecurity and retreating from electoral politics, an atmosphere of violence and insecurity is driving Mexican citizens to reject reforms and tolerate societal blights, including corrupt politicians and the main driver of violence, trans-national criminal organizations themselves. This further shows the ways in which Mexicans are engaged in political flight and withdrawal.

6.03a Rejecting Reforms

An interesting pattern emerges among those who are assigned to be in the control for the list experiment: The salience of violence is leading people to be less supportive of reforms generally. In the list experiments, all four of the control items used were pro-reform items and crossed political lines. The four items were:

1. The minimum wage should be increased across the country.
2. Foreign oil companies should be allowed to operate in Mexico.
3. Corrupt politicians should be severely punished.
4. The voting age should be lowered to sixteen.

The first item is a policy which was supported by all three main parties, but was more prominent and with a bigger proposed increase in minimum wage and more frequent discourse from the leftist Morena. The second item was a reform implemented under then president Enrique Peña Nieto of the centrist PRI, and was supported by the rightist PAN but rejected, with plans to repeal the change, by Morena. The third item was discussed to varying degrees by all three parties and the forth item, also a pro-reform item, was not discussed by any party.

Respondents from higher violence areas rejected more of these items than those from lower violence areas, with those in the highest violence areas endorsing an average of .3 fewer reform items than those in the lowest violence areas (a mean of 1.8 reformist items endorsed in low violence areas and 1.5 in high violence areas). As shown in Table 6.06, this relationship was not statistically significant ($p=0.409$), but when a less conservative model was used without state clustered standard errors, this relationship was significant ($p=0.007$). Differences in perceptions of violence were not associated with variation in endorsement of these reformist items ($p=0.477$).

Consistent with the results concerning actual violence, support for reform was also significantly lower among those assigned to "tell," with a mean of 1.4 reformist items endorsed by those in "tell" and 1.7 items endorsed by those in control ($p<0.001$). This indicates that among those for whom violence was the most salient at the time of the survey and who had been

accurately informed about violence in their state, there was a higher level of rejection of all reforms. These findings persist when using demographic controls as well.

Table 6.05 Models of Support for List Control Items

Key Independent Variables	*Results*
Violence 2017 Violence	-0.260 (0.310) n = 2,314 R^2 = 0.003 cons = 1.760
Perceptions of Violence Perceived 2017 Violence	0.347 (0.481) n = 414 R^2 = 0.000 cons = 0.000
Overall, by Tell vs. Control Tell	-0.321 (0.067)*** n = 1,765 R^2 = 0.000 cons = 1.725
Notes: This table consists of regression models for those in the list-control group by "tell-ask" assignment, violence, and perceptions of violence. The violence and perceptions of violence models use state clustered standard errors. $^{o}p \leq 0.100$ *$p \leq 0.050$; **$p \leq 0.010$, ***$p \leq 0.001$	

These results indicate that another way in which citizens are withdrawing from the political sphere is through rejecting change, regardless of the type of change. Respondents who live in especially violent states or for whom violence was manipulated to be highly salient are less willing to endorse reforms generally. Fear again is not in the driver seat as overall sense of safety was uncorrelated with support for these control items (p=0.279). Yet, a context of insecurity has frozen the Mexican population, incapacitating them, and leading them to retreat inward. This withdrawal is also seen in increased tolerance for corruption as well as resignation to TCOs.

6.03b Assent to Corruption

Beyond an overall lack of support for reforms generally, I measured support via list experiment for acceptance of corrupt politicians through endorsement of the statement "Moderately corrupt politicians should be tolerated if the demonstrate good results." Overall, there was modest support for this statement with 11.7% of respondents endorsing this item (significant at p=0.002).

Those living in the highest violence areas were less likely to endorse this tolerance of corrupt politicians than those living in the lowest violence areas (p=0.004) and higher perceptions of violence were negatively correlated with support for this statement (significant at p=0.040) as well. However, the Violence Experiment substantially altered support for this item. In fact, the support that did exist was concentrated only within the "tell" condition (significant at p=0.005). Those living in more violent states were less likely to endorse this item overall, but not

within the "tell" condition.[178] Only 1.4% of respondents in the control condition of the Violence Experiment endorsed this item, while 38.2% of respondents in the "tell" condition endorsed this item.[179] These findings persist with demographic controls used as well.

Table 6.06 Models of Support for Moderately Corrupt Politicians

Key Independent Variables	*Results*
Violence	
Corruption (Treatment)	0.206 (0.069)***
2017 Violence	-0.260 (0.101)
Treatment*Violence	-0.210 (0.138)**
	n = 4,882
	R^2 = 0.008
	cons = 1.760
Perception of Violence	
Corruption (Treatment)	0.147 (0.097)
Perceived 2017 Violence	0.347 (0.563)
Treatment*Perceived Violence	-1.702 (0.086)*
	n = 858
	R^2 = 0.007
	cons = 1.730
Overall, by Tell vs. Control	
Corruption (Treatment)	0.014 (0.055)
Tell	-0.321 (0.070)***
Treatment*Tell	0.368 (0.096)***
	n = 3,743
	R^2 = 0.008
	cons = 1.725

Notes: This table consists of regression models based on a list experiment in which support for the idea that moderately corrupt politicians who show good results should be tolerated is measured. The violence and perceptions of violence models use state clustered standard errors.
$^{o}p \leq 0.100$ $^{*}p \leq 0.050$; $^{**}p \leq 0.010$, $^{***}p \leq 0.001$

In this case, it is not violence and perceptions of violence driving support for corrupt politicians, but rather the immediacy of violence. This result is both surprising and stark. The background conditions of violence or even people's baseline understanding of that violence are leading people to reject corrupt politicians. Both actual, objective levels of violence and perceived, subjective levels of violence are a part of respondents' every day realities. They maybe believe that corruption has even fostered insecurity in Mexico. But, when they are forced to confront those daily realities through the Violence Experiment, i.e. violence is induced to be highly salient to respondents, the direction of this relationship flips: Respondents who have had violence made immediately salient to them are considerably more accepting of corrupt politicians than those who have not.

6.03c Surrender to Trans-National Criminal Organizations

In December of 2017, seven months before the election, front runner López Obrador mentioned during a campaign speech that his campaign was considering the possibility of

[178] 6% of those in the "ask" condition endorsed this item as well. Not statistically different from zero at p=0.407.
[179] See Footnote 169 for further explanation of interaction terms in these presentations of findings.

granting amnesty to the leaders of trans-national criminal organizations as a proposal to end the violence which had ravaged the country for more than a decade.[180] Public push-back was immediate and near universal among media, public intellectuals, and political elites. Only one other polling firm during this time measured support for this policy proposal, finding 19% of respondents supported amnesty.[181] In this series of list experiments, I measured support for the idea that "Cartels should be granted amnesty" and found that 22% of respondents endorsed this sentiment (statistically different from zero at $p<0.001$).

For this list experiment, those in high violence areas were no different in support for this measure than those in low violence areas ($p=0.914$). Increases in perceptions of violence led to decreases in support for granting amnesty to TCOs ($p=0.037$). However, a similar pattern emerged as with that of corruption: When the whole sample was taken together, support for this list item was substantial but that support was exaggerated among those within the "tell" condition of the Violence Experiment. For those in the control condition, 17.4% endorsed the idea that TCOs members should be granted amnesty (significant at $p=0.001$) but 47.7% of those in the "tell condition" endorsed this statement (significant at $p<0.001$).[182] These results are shown in Table 6.08 and are consistent with results when demographic controls are used.

Table 6.07 Models of Support for Amnesty for Trans-National Criminal Organizations

Key Independent Variables	*Results*
Violence	
Amnesty (Treatment)	0.227 (0.068)***
2017 Violence	-0.260 (0.098)
Treatment*Violence	-0.015 (0.138)
	n = 4,670
	R^2 = 0.020
	cons = 1.760
Perception of Violence	
Amnesty (Treatment)	0.104 (0.095)
Perceived 2017 Violence	0.347 (0.553)
Treatment*Perceived Violence	-1.183 (0.839)*
	n = 867
	R^2 = 0.003
	cons = 1.730
Overall, by Tell vs. Control	0.174 (0.055)**
Amnesty (Treatment)	-0.321 (0.068)***
Tell	0.303 (0.097)**
Treatment*Tell	
	n = 3,522
	R^2 = 0.016
	cons = 1.725

Notes: This table consists of five regression models based on a list experiment in which support for granting amnesty to TCOs is measured. The violence and perceptions of violence models use state clustered standard errors.
$^{o}p\leq0.100$ *$p\leq0.050$; **$p\leq0.010$, ***$p\leq0.001$

Having violence made highly salient and brought to the top of one's mind was an

[180] de Dios Palmas, A. (2017, December 2). AMLO analiza amnistía a líderes del narco para garantizar la paz. *El Universal.*

[181] Moreno, A. (2018, June 27). 7 de cada 10, en desacuerdo con amnistía de AMLO. *El Financiero.*

[182] See Footnote 169 for further explanation of interaction terms in these presentations of findings.

important predictor of support for granting amnesty to TCOs. While violence was negatively correlated with support overall, this was not true for those who were manipulated to have violence at the forefront of their mind. This illustrates the multi-dimensionality of the effects of insecurity. If citizens respond differently when violence is brought to the front of their mind than they do when living in highly violent contexts, it shows the extent to which in some areas citizens are able to put aside the violence they live amidst and continue with their lives. But when they are forced to face that violence by being given accurate information and prompted to think about that information, they change their mind and are, in effect, waving a white flag of surrender to trans-national criminal organizations, offering reprieve from prosecution for the devastation wrought on their country in exchange for peace.

6.04 Conclusion

Violence is not uni-dimensional. It is not only sum of acts of violence, but also the physical, psychological, and social devastation it leaves in its wake. Insecurity is leading to citizens withdrawing from political life. This cloud of insecurity leads people to reject a variety of reforms, across the political spectrum, and acquiesce to the societal ills that they would normally eschew, those same ills which led to the vast insecurity in the first place. The sense of insecurity and fear it causes is pervasive but not the only mechanism by which citizens are withdrawing from political life. Previous research has identified the clear ways in which living amidst violence can weaken the social contract between neighbors, erode trust in institutions, destroy faith in democracy, and bring about economic devastation. In the case of Mexico's pernicious violence, citizens are asked to make important political decisions about their future under a cloud of insecurity. Under this cloud, Mexicans are in retreat. Those most affected by violence are those most withdrawn from the political process and most likely to respond with uncertainty and fear.

In this chapter I have looked at the effects of violence through three lenses: The direct effects of living in a violent state, the effects of believing you live in a violent state, and the simultaneous effects of being informed about violence and having it be highly salient to you. Perceptions of violence were the primary independent variable of interest, with actual levels of violence and the salience of violence being primary determinants of one's perceptions. Using these lenses, I analyzed a wide range of key outcomes to understand how a context of insecurity is shaping political choices and ideas.

First, I looked at the ways in which this context of insecurity affected citizens' levels of fear and sense of safety in their environment. As violence increases, so do feelings of insecurity. The relationship is the same with perceived violence – the more violent you think your state is, the less secure you feel across a variety of locations, from your home or street to your state. However this sense of insecurity was unaffected by having been informed about violence and having had it brought to the front of your mind, indicating that one's sense of security is relatively stable across time and is affected by underlying conditions more than moments of salience. This finding is consistent with the findings in Chapter Three that indicate that perceptions of violence are relatively stable across time, slow to update with changes to the actualities of violence.

Interestingly, the insecurity that respondents in high violence contexts felt influenced their response rate to sensitive questions, with respondents from higher violence states declining

to answer questions about the amount of violence in their state at substantially higher rates than those living in safer states.

Second, I examined a number of ways in which Mexican citizens are retreating from electoral politics, both walking away from engaging at all and expressing uncertainty when they do chose to engage. Those who perceived the highest levels of violence were less likely to say they planned on voting in the 2018 presidential election. The actual level of violence in 2017 was not a factor in whether or not one planned on voting, but for those in states that experienced increases in violence from the year prior, the greater increase in violence the state had the less likely the state's residents were to plan on voting. Fear was one of the driving mechanisms here, as those with the lowest sense of safety being more likely to indicate a lack of political efficacy and say they felt their vote did not matter.

In addition to withdrawing from participation, respondents indicated an overall higher degree of uncertainty in who to vote for if they perceived higher levels of violence or if violence had been made salient to them. This was true when respondents were asked who they planned on voting for and which candidate they felt was the best across a number of policy arenas. This uncertainty was driven again by perceptions of violence and the salience of violence rather than objective levels of violence.

One might have expected in the context of high levels of insecurity that support for the incumbent PRI would be inversely related to violence. The logic of retrospective voting asserts that voters punish incumbents for negative outcomes related to public safety. Yet support for incumbent party candidate Meade (PRI) was consistent across levels of objective violence, perceived violence, and regardless of the salience of violence. Moreover, support for the incumbent party as measured indirectly through two list experiments actually increased among those for whom violence was made salient (respondents in the "tell" condition of the Violence Experiment) and in one experiment increased as violence increased as well. While Mexican voters are freely punishing politicians for failures in other policy domains, such as the economy, this punishment is attenuated around issues of violence and insecurity.

In addition to greater uncertainty over which candidate to support, respondents who perceived higher levels of violence or who for whom violence was made immediately salient were also less likely to identify with any political party. This indicates another channel of retreat from electoral politics. In the face of a number of distinct party platforms and presidential candidates, Mexican citizens in the context of insecurity are shutting down.

Finally, this context of insecurity is leading Mexican citizens to reject reform measures, across the political spectrum, tolerate corruption, and acquiesce to trans-national criminal organizations. This speaks to a population who are in effect surrendering to the violence, responding in fear and uncertainty, and withdrawing from public politics.

There is a duality of the effects of violence: Across multiple outcomes, the experience of living in a violent state was different from perceiving you lived in a violent state or having that violence made highly salient. Consistent with findings about the development of perceptions of violence, discussed in Chapter Three, violence itself was uncorrelated with many elements of withdrawal from the electoral arena, while perceptions of violence and the salience of violence had strong effects. However, in contrast, when looking at support for the incumbent party or support for societal ills such as corruption and trans-national criminal organizations, violence was operating in on in one direction while the experience of having that violence brought to one's attention was operating in another. At the time of this survey, the militarized war on drugs

was in its twelfth year. The homicide rate had ebbed and flowed during Calderón's tenure from 2006 to 2012, but under Enrique Peña Nieto it only flowed. Mexicans across the country had spent more than a decade simmering in violence. Fear and insecurity are the background against which Mexicans exist and in many places, that violence has has a desensitizing effect. People are accustomed to violence. Yet, as in the case of support for the incumbent party PRI, tolerance for corruption, and interest in granting amnesty to TCOs, those opinions were only activated in the context of being forced to think about the realities of violence in one's state.

The "tell" condition of the Violence Experiment, in which violence is both made highly salient and accurate information about violence is provided, is an artificial construction. Yet there are a multitude of organic situations which might have a similar effect. These include seeing news coverage of violent crime, driving past a *narcomanta* or banner displaying messages from organized crime, hearing police sirens, having a friend or family member victimized, or listening to a politicians' campaign speech about violence. In all of these scenarios, experimentally manipulated or naturally arising, violence becomes highly salient. That salience is not necessarily long lived, but for many, those moments are frequent if not daily. The experience of violence as highly salient is driving behavioral changes around how one engages with their democracy with pernicious consequences.

Across this wide range of outcomes, a clear picture emerges: The citizens of Mexico are in retreat. The persistent toxicity of living in a country with skyrocketing violence has taken its toll on the populous, and the consequences are indecision and withdrawal. What are the prospects for positive change in Mexico if those for whom violence is most immediate and perceive the highest levels of it are withdrawing from public life, choosing to forgo engagement in political processes, reject reforms, and tolerate social ills? If those most affected by violence are retreating from the public sphere, they are also not holding politicians accountable for their failures. Violence in Mexico is, in effect, handicapping democracy this fundamental way.

Chapter 7: Conclusion

In this project I have looked at two key driving questions: How do Mexicans perceive violence and how do those perceptions affect political behavior? In the years following this survey, violence has not decreased. The year 2019 was the most violent in Mexico's history and 2020 is expected to surpass that record.[183] As insecurity continues to plague Mexico and other parts of the world, the answers to these questions become increasingly crucial. In this concluding chapter, I discuss important takeaways on how Mexicans perceive violence and how those perceptions affect political behavior. I then explore future avenues of research connected to these findings.

Perceptions of violence among respondents were nearly universally inaccurate. As discussed in Chapter Three, only 6% of survey takers were accurate within +/-5% of government recorded violence levels for at least one of the two types of violence asked about, homicide and kidnapping. Additionally, contrary to predictions from scholarship concerning fear of crime and evolved threat perception, those inaccuracies were *not* consistently biased toward overestimation. Most Mexicans underestimated homicide levels and overestimated kidnapping levels. However, a sizeable minority did the opposite: one-fifth overestimated homicide and one-quarter underestimated kidnapping. The mean perception of homicide was not statistically different from actual, objective homicide levels, despite most people underestimating violence, as those who overestimated did so by significant amounts. However, the mean perception of kidnapping was more than ten times actual levels of kidnapping.

These perceptions, particularly for homicide, lagged behind actual levels of violence. As explained in Chapter Three, homicide estimations were more closely in line with levels of years prior than they were with 2017, the year respondents were asked about. Those in the lowest homicide states averaged overestimation while those in the highest homicide states averaged underestimation. Many of the states with the highest homicide levels in 2017 showed the greatest increases from the year prior. Likewise many of the states with the lowest homicide levels in 2017 showed the greatest decreases from the year before. Respondents perceptions did not reflect these changes, as they were neither adjusting upward or downward sufficiently to match current homicide levels. This underestimation in the highest homicide states also likely reflects desensitization to violence. Additionally, Mexicans' sense of security, as discussed in Chapter Six, was also relatively inflexible, immune to manipulations in the salience of violence. These findings indicate that some key elements of how violence affects Mexican citizens are temporally stable and likely endure even after violence itself diminishes.

Unlike homicide, which showed significant year to year variation, kidnapping varied minimally in the several years prior to the survey. Thus, it may be that kidnapping perceptions are lagging as well, but the evidence is less clear given the lack of substantial variation in actual kidnappings. Both those in the highest and lowest kidnapping levels states dramatically overestimated kidnapping. This divergent finding highlights the ways in which these two types of violence were understood differently in the minds of respondents. This difference is likely due to several factors including pervasive under-reporting of kidnapping to government officials and consistent over-reporting, proportional to homicides, of kidnappings in the media.

Although perceptions of violence track realities of violence to some extent, variation in the salience of violence appeared to be a more significant driver of perceptions. Regional

[183] Grant, W. (2020, July 12). Could this become Mexico's bloodiest year on record? *BBC News.*

variation in media and elite discourse, as discussed in Chapter Three, and individual variation in reception and retention of those messages, as discussed in Chapter Five, explained much of the variation in perceptions across violence levels and differences between the two types of violence. Actual, objective violence levels are mediated through a number of different overlapping cognitive biases and heuristics. The availability heuristic is of key importance: Those for whom violence was the most salient were most likely to perceive high levels of violence, even if they lived in low violence areas.

Internal geographic boundaries help explain variation in perceptions of violence. As discussed in Chapter Four, those who live along the northern and southern border systematically differed from each other in their violence perceptions and from those who live in interior states. Residents along the US-Mexico border, the northern border, overestimated homicides to a greater extent than did those who live along the southern border, while those in the interior region actually tended to underestimate homicides. In contrast, kidnapping was most overestimated by those along the northern border and those not living in a border state, while those along the southern border were the closest to accurate in their kidnapping estimations.

Aside from geographic variation, state variation in economic conditions were associated with variation in perceptions of violence as well. Those in wealthier states, i.e. those with a higher GDP, were more likely to overestimate both types of violence than those in poorer states, as shown in Chapter Four. Some scholars view a state's wealth as a proxy for economic opportunity and argue that lower engagement in criminal behavior will occur in states with greater wealth and thus greater economic freedom. Trafficking routes are a fundamental source of income for trans-national criminal organizations and also of violence itself, stemming from competition between TCOs themselves and the government. These routes do not only pass through poorer states but rather begin at key ports of entry into Mexico or areas of drug production and lead directly to the US border. Consistent with these trade routes being more important than the economic conditions of any particular state, actual violence was uncorrelated with state GDP. However, those in wealthier states overestimated violence more than those in less wealthy states. Additionally, higher levels of inequality were also associated with higher overestimation for both homicide and kidnapping, likely due to built-in social tension in areas with considerable economic disparities.

One's political party and candidate preferences were associated with certain types of systematic misperceptions as well. In particular, supporters past and present of current president Andrés Manuel López Obrador and his party Morena overestimated violence considerably more than their peers supporting other candidates. As discussed in Chapter Four, residents in states that were won by López Obrador in 2012 were more likely to overestimate both types of violence, as were supporters of López Obrador in his 2012 and 2018 runs and those who identified with Morena, discussed in Chapter Five. Residents of PAN dominant states and PAN supporters in 2012 were the least likely to overestimate violence, underestimating homicides and only slightly overestimating kidnappings, estimating kidnappings more accurately than supporters of other parties. This changed in the 2018 election with both PAN and PRI supporters averaging similar levels of underestimation of homicide and low levels of overperception of kidnapping.

There were no significant differences in perceptions of violence between those who had recently been the victims of crime and those who had not. When I looked at the number of times one was victimized, rather than just if they had been victimized, those who had been victimized the most, more than six times in the twelve months prior, perceived the lowest levels of violence,

underestimating homicide and only slightly overestimating kidnapping. This finding lends credence the idea that desensitization to high levels of violence are occurring due to one's own experiences with criminality, as found in Chapter Five, and more broadly with high levels of exposure to violence from media and political discourse, as considered in Chapter Three.

In Chapter Six, I explored the idea that perceptions of violence, and two of the key factors feeding those perceptions, actual violence levels and the salience of violence, were affecting Mexicans' political behavior. I found that high perceptions of violence were inducing Mexicans to retreat from political life in clear ways: By refraining from voting, expressing indecision about the presidential race, tempering their reprobation of governmental failures, rejecting reforms, and tolerating societal ills. Those who perceive the most violence are also exhibiting the most fear, one of the key drivers of this broad political withdrawal.

Those who perceived the most violence and to whom violence was most salient, as manipulated by the Violence Experiment, indicated that they were planning on abstaining from participation in the 2018 election in significantly higher numbers than those with low perceptions of violence or those for whom violence was not as immediately salient. In these conditions, respondents expressed a lack of political efficacy indicating that they believed their vote did not matter. Even among those who did plan to participate in the election, uncertainty was endemic for those who perceived the highest amounts of violence. This uncertainty manifested itself both in determining which candidate they planned on voting for and in which candidate they believed was best suited to address a wide range of policy domains. Contrary to the well established logic of retrospective voting, voters were not systematically punishing the incumbent party for failures in public security, although they were punishing them for poor performance in other domains, including the economy and corruption. Partisanship among those who perceived the most violence and those for whom violence was the most salient was dramatically lower as well, as Mexicans who experienced the most violence, regardless of objective levels, withdrew from party affiliation. This array of findings indicates that fear, uncertainty, and indifference are pervading Mexicans' engagement, or lack there of, in politics.

Evidence from list experiments, also discussed in Chapter Six, further supported the idea that Mexicans were showing withdrawal and uncertainty in the face of perceived violence. Those for whom violence was the most salient rejected a number of reform measures across the ideological spectrum at higher rates than those for whom violence was not made salient. Those living in high violence states and who perceived the most violence were less likely to tolerate corrupt politicians while those for whom violence was most salient were more likely to tolerate them. The proposal of granting amnesty to members of criminal organizations also declined as perceptions of violence increased but increased among those for whom violence was most salient. These results evince the complex nature of the consequences of violence.

Across these findings, there was a clear duality to the effects of violence: Objective levels of violence influenced behavior less than perceptions of violence or the salience of violence. Consistent with the findings discussed in Chapter Three about the origins of perceptions of violence, violence itself was uncorrelated with many elements of withdrawal from the electoral arena, while perceptions of violence and the salience of violence had strong effects. Respondents were least willing to reject the incumbent party despite failings in public security when violence was manipulated to be at the top of mind. Similarly, in the case of tolerance of corruption and support for amnesty for members of organized crime, violence and the salience of violence were actually working in opposite directions. While the majority of scholarly research on the effects of

violence on political behavior has focused on the relationship between actual violence levels and participation and vote choice, researchers have missed that perceptions of violence, not violence itself, are the key driver of these processes.

This study contributes to understanding across several different scholarly fields. Contrary to the predictions of evolutionary psychology and the fear of crime literature in sociology and criminology, overestimation of violence was far from universal: Four-fifths of respondents underestimated at least one of the two types of violence. Yet underestimation was the norm for homicide perceptions and a substantial number of respondents underestimated kidnapping as well. Part of this inaccuracy, as discussed above, is tied to slow updating on the part of Mexican citizens, with their beliefs about violence reflecting actual violence levels of years prior. The variation in the salience of violence, in line with the availability heuristic, more than actual violence, appears to drive the extent and direction of these inaccuracies.

The field of political behavior research is long standing and varied in its findings. Previous domains of investigation have focused largely on socio-demographic correlates and individual psychological traits. Only recently have the roles of living amidst violence and direct experiences of victimization begun to be explored as they relate to civic life and political engagement. This dissertation adds an important new dimension to this emerging domain and opens the door to a new way of understanding the consequences of violence with a focus on perceptions of violence, or how violence is understood and assimilated through divergent cognitive processes, rather than objective measures of violence. This research also serves as an important first step in quantifying perceptions of violence as distinct from fear of crime or risk assessment.

In adding to these bodies of knowledge, the need for future research in a number of areas becomes clear. This was the first large scale attempt to understand how Mexicans are perceiving violence. In doing so, a substantial portion of this project was descriptive in nature and sought to understand the 'what' as a prelude to the 'why.' I have proposed several hypotheses to explain the patterns of perceptions shown by the citizens of Mexico, but additional studies are needed to test those causal pathways.

Subsequent studies could push further in the examination of the effects of high perceptions of violence versus the salience of violence. This could be done in a variety of manners, including with a variation on the Violence Experiment where, instead of "ask" and "tell," respondents would be assigned to "ask" or "ask then tell, where respondents in both groups would be asked about their perceptions of violence and those in the "ask then tell" treatment group would be corrected with accurate information. This would allow a comparison between overestimators who had violence made salient to them versus overestimators who did not and likewise for underestimators in both groups. Using a wider range of questions on media consumption and attention would also contribute substantively to this purpose. Moreover, future surveys and research in this domain should include a wider range of measures on the theme of retreat. These include questions on political efficacy, attitudes toward democracy, and on other forms of anticipated, not just retrospective, political behavior outside of the voting booth. They could also incorporate questions about the perceived probability of victimization of violent crimes.

Additionally, while my decision to focus on state-level violence instead of community-level violence was driven by the availability of reliable data across the whole country, one area of important future research is to look at perceptions of violence at the local level. This would

likely necessitate, at least in the Mexican case, not using a national sample but rather statistical case studies of particular areas in which neighborhood or city-level violence data is available and reliable. In examining perceptions of local-level violence, one may see more evidence to support predictions from evolutionary psychology, including Error Management Theory, as well as the fear of crime literature.

Other scholarship has begun to look at the long term effects of violence on political behavior – Balcells (2012) concludes that violence can lead to long term changes in political behavior related to inter-generational trauma and Alacevich and Zejcirovic (2020) find that voter turnout is depressed two decades after violence has ended. Longitudinal studies of how perceptions change over time, especially given my finding that they lag behind changes in violence levels, as well as what the lasting consequences of violence are will provide further insights into how this particular social blight is affecting the people living in its midst.

Another important domain for future research is in extending the argument beyond Mexico. Mexico is sadly not alone in facing an extended public security crisis. The near decade long civil war in Syria has claimed the lives of half a million people, including tens of thousands of children.[184] Violence and fear have become a way of life and millions have abandoned their homes and are internal refugees fleeing from terror. In Somalia, kidnapping is tragically frequent, with government officials and international aid workers as common targets. Gang violence in El Salvador has plagued the country at an increasing rate since the end of the civil war three decades ago. Even amidst the coronavirus pandemic murders have not abated. Do the citizens of these countries understand violence in their own countries in the same ways as Mexicans do?

The effects of insecurity in Mexico have been catastrophic. The drug war, started at the beginning of the Calderón administration in 2006, has led to nearly 300,000 deaths directly, billions of dollars in economic losses, and endemic fear among the citizenry. Existing research has only scratched the surface of the depths of these influences on the psyche of Mexicans. The lasting ramifications of violence in Mexico on the political sphere remain to be seen.

[184] *Global Peace Index 2020.* (2020). Institute for Economics and Peace.

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Appendix

A2.01 Number of Respondents, Population, and Violence Levels per State

Table A2.01 Number of Respondents per State, Population, and Violence Levels[185]

State	# of Respondents per State	Population	2017 Homicides	2017 Kidnappings
Aguascalientes	218	1,312,544	83	6
Baja California	706	3,315,766	2,317	13
Baja California Sur	124	712,029	738	3
Campeche	162	899,931	71	7
Coahuila	421	2,954,915	251	18
Colima	129	711,235	816	5
Chiapas	842	5,217,908	510	63
Chihuahua	544	3,556,574	2,012	15
Ciudad de México	1,456	8,918,653	1,192	50
Durango	284	1,754,754	225	20
Guanajuato	666	5,853,677	1,435	17
Guerrero	255	3,533,251	2,529	79
Hidalgo	455	2,858,359	228	24
Jalisco	661	7,844,830	1,580	14
Estado de México	1,865	16,187,608	2,368	192
Michoacán	789	4,484,471	1,510	32
Morelos	323	1,903,811	651	46
Nayarit	188	1,181,050	354	3
Nuevo León	901	5,119,504	656	36
Oaxaca	616	3,967,889	1,023	55
Puebla	906	6,168,883	1,052	38
Querétaro	384	2,038,372	194	11
Quintana Roo	257	1,501,562	359	29
San Luis Potosí	394	2,717,820	524	31
Sinaloa	434	2,966,321	1,561	20
Sonora	459	2,850,330	693	2
Tabasco	350	2,395,272	402	85
Tamaulipas	572	3,441,698	1,053	199
Tlaxcala	203	1,272,847	124	9
Veracruz	1,287	8,112,505	1,924	194

[185] 2015 Mexican Census; *Informe de Víctimas de Homicidio, Secuestro y Extorsión 2017.* (2018) Secretariado Ejecutivo del Sistema Nacional de Seguridad Pública (SESNSP).

Yucatán	352	2,097,175	46	0
Zacatecas	251	1,579,209	687	74
Overall	17,451	119,430,753	29,168	1,309

A2.02 Variables and Scoring

Table A2.02 Variables and Scoring

Variable	*Scoring*
Demographic Variables	
Age	Continuous, range 18 - 98
Age Range	0 18 – 25 years old 1 26 – 35 years old 2 36 – 45 years old 3 46 – 55 years old 4 Over 55 years old
Gender	0 Female 1 Male
Education Level	0 Primary school 1 Secondary school 2 Preparatory or technical school 3 College or higher
Personal Experiences	
Lived Abroad	0 No 1 Yes
Location Lived Abroad	0 United States 1 Canada 2 Europe 3 Asia 4 Australia or Oceania 5 Latin America
Years Abroad	Continuous, range 0 - 60
Victim of a Crime	0 No 1 Yes
# of Times Victimized	0 None 1 1-2 times 2 3-5 times 3 6+ times
Solicited for a Bribe	0 No 1 Yes
# of Times Solicited for a Bribe	0 None 1 1-2 times 2 3-5 times

	3	6+ times
Political Behavior		
Voted in 2012	0 1	No Yes
Who Voted for in 2012	1 2 3 4 98 99	Josefina Vázquez Mota (PAN) Andrés Manuel López Obrador (PRD) Enrique Peña Nieto (PRI) Other None I don’t know
Plan on Voting in 2018	0 1 2	I will definitely not vote I’ll probably vote I will definitely vote
Why Not Planning on Voting	1 2 3 4 5 6 7 99	I am not eligible or do not have a voting credential I feel that my vote will make no difference My work hours do not allow me to or I have a conflict with work I feel that I do not know enough about the candidates to vote It’s complicated to get to my polling station I do not like any of the candidates Other reason I don’t know
Following the Election	0 1 2	None A little A lot
Talked About Politics in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once
Attend a Party or Candidate Meeting in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once
Attended a protest or strike in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once
Contacted an Elected or Bureaucratic Official in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once
Volunteered for a Political Party or Candidate in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once
Volunteered or Worked for a Civic Organization in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once
Worked on a Community Problem Informally in the 12 Months Prior	0 1 2	No Yes, one time Yes, more than once

Informal Participation Overall	0 Low participation 1 Moderate participation 2 High participation
2018 Election, 1st Choice Presidential Candidate	1 José Antonio Meade (PRI, PANAL, Partido Verde) 2 Ricardo Anaya Cortés (PAN, PRD, MC) 3 Andrés Manuel López Obrador (Morena, PT, PES) 4 Margarita Zavala (Independent) 5 Jaime "El Bronco" Rodríguez Calderón (Independent) 6 Other candidates 98 None 99 I don't know
2018 Election, 2nd Choice Presidential Candidate	1 José Antonio Meade (PRI, PANAL, Partido Verde) 2 Ricardo Anaya Cortés (PAN, PRD, MC) 3 Andrés Manuel López Obrador (Morena, PT, PES) 4 Margarita Zavala (Independent) 5 Jaime "El Bronco" Rodríguez Calderón (Independent) 6 Other candidates 98 None 99 I don't know
2018 Election, Candidate Would Never Support	1 José Antonio Meade (PRI, PANAL, Partido Verde) 2 Ricardo Anaya Cortés (PAN, PRD, MC) 3 Andrés Manuel López Obrador (Morena, PT, PES) 4 Margarita Zavala (Independent) 5 Jaime "El Bronco" Rodríguez Calderón (Independent) 6 Other candidates 7 There is no candidate I would never vote for 99 I don't know
Candidate Support	0 I still have not decided who I will vote for in the election. 1 I am not sure how much I support this candidate, but I could vote for him/her in the July 1st election. 2 For the most part I support this candidate and it's likely I will vote for him/her in the July 1st election. 3 I support this candidate fully and I will vote for him/her in the July 1st election.
Peña Nieto Job Approval	0 Very bad 1 Bad 2 Acceptable 3 Good 4 Very good 99 I don't know
Party Identification	1 Institutional Revolutionary Party (PRI) 2 National Action Party (PAN) 3 Movement for National Regeneration (Morena) 4 Democratic Revolutionary Party (PRD) 5 Green Ecologist Party of Mexico (Verde) 6 Labor Party (PT) 7 New Alliance (PANAL) 8 Citizens' Movement (MC) 9 Social Encounter Party (PES)

	10	Other party
	98	None
	99	I don’t know
Strength of Party Identification	0	Not identified
	1	Not very identified
	2	Moderately identified
	3	Somewhat identified
	4	Strongly identified
	99	I don’t know
Best Candidate for Employment and the Economy	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for Insecurity and Violence	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for Corruption and Impunity	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for the Environment and Climate Change	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for Healthcare	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for Education	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for Social Programs and Poverty Alleviation	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador
	98	None
	99	I don’t know
Best Candidate for Governmental and Institutional Reforms	1	José Antonio Meade Kuribreña
	2	Ricardo Anaya Cortés
	3	Andrés Manuel López Obrador

	98	None
	99	I don’t know
Blame Attribution for the Economy (Multi-code)	1	President
	2	Legislature
	3	Judiciary
	4	Federal government
	5	State government
	6	Municipal government
	7	USA, other countries, or foreign organizations
	8	Mexican citizens
	9	Media
	10	Political Parties
	11	Armed forces and the police
	12	Corporations and businesses
	13	Unions and other interest groups
	14	Others
	98	None
	99	Nothing
Blame Attribution for the Corruption (Multi-code)	1	President
	2	Legislature
	3	Judiciary
	4	Federal government
	5	State government
	6	Municipal government
	7	USA, other countries, or foreign organizations
	8	Mexican citizens
	9	Media
	10	Political Parties
	11	Armed forces and the police
	12	Corporations and businesses
	13	Unions and other interest groups
	14	Others
	98	None
	99	Nothing
Blame Attribution for Environmental Problems (Multi-code)	1	President
	2	Legislature
	3	Judiciary
	4	Federal government
	5	State government
	6	Municipal government
	7	USA, other countries, or foreign organizations
	8	Mexican citizens
	9	Media
	10	Political Parties
	11	Armed forces and the police
	12	Corporations and businesses
	13	Unions and other interest groups
	14	Others
	98	None
	99	Nothing

Blame Attribution for Problems with Healthcare (Multi-code)	1	President
	2	Legislature
	3	Judiciary
	4	Federal government
	5	State government
	6	Municipal government
	7	USA, other countries, or foreign organizations
	8	Mexican citizens
	9	Media
	10	Political Parties
	11	Armed forces and the police
	12	Corporations and businesses
	13	Unions and other interest groups
	14	Others
	98	None
	99	Nothing
Blame Attribution for Education (Multi-code)	1	President
	2	Legislature
	3	Judiciary
	4	Federal government
	5	State government
	6	Municipal government
	7	USA, other countries, or foreign organizations
	8	Mexican citizens
	9	Media
	10	Political Parties
	11	Armed forces and the police
	12	Corporations and businesses
	13	Unions and other interest groups
	14	Others
	98	None
	99	Nothing
Blame Attribution for Poverty (Multi-code)	1	President
	2	Legislature
	3	Judiciary
	4	Federal government
	5	State government
	6	Municipal government
	7	USA, other countries, or foreign organizations
	8	Mexican citizens
	9	Media
	10	Political Parties
	11	Armed forces and the police
	12	Corporations and businesses
	13	Unions and other interest groups
	14	Others
	98	None
	99	Nothing
Attitudes and Experiences		
Satisfaction with One's	0	Very unsatisfied

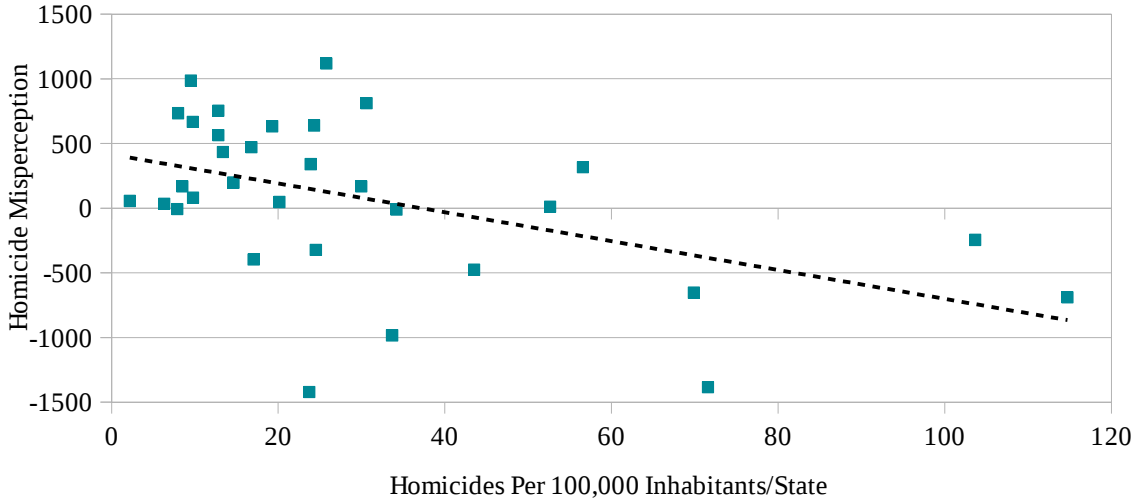
Economic Situation	1	Somewhat unsatisfied
	2	Neither satisfied nor unsatisfied
	3	Somewhat satisfied
	4	Very satisfied
	98	None
	99	I don’t know
Economy Retrospective (Versus a Year Ago)	0	Much worse
	1	A little worse
	2	The same
	3	A little better
	4	Much better
	98	None
	99	I don’t know
Economy Prospective (Versus a Year From Now)	0	Much worse
	1	A little worse
	2	The same
	3	A little better
	4	Much better
	98	None
	99	I don’t know
Crime Retrospective (Versus a Year Ago)	0	Much worse
	1	A little worse
	2	The same
	3	A little better
	4	Much better
	98	None
	99	I don’t know
Crime Prospective (Versus a Year From Now)	0	Much worse
	1	A little worse
	2	The same
	3	A little better
	4	Much better
	98	None
	99	I don’t know
Corruption Retrospective (Versus a Year Ago)	0	Much worse
	1	A little worse
	2	The same
	3	A little better
	4	Much better
	98	None
	99	I don’t know
Corruption Prospective (Versus a Year From Now)	0	Much worse
	1	A little worse
	2	The same
	3	A little better
	4	Much better
	98	None
	99	I don’t know

Overall Sense of Security	0 – 1, average of six security questions
Sense of Security: Home	0 Very insecure 1 Insecure 2 Neither secure nor insecure 3 Secure 4 Very secure 99 I don't know
Sense of Security: Street	0 Very insecure 1 Insecure 2 Neither secure nor insecure 3 Secure 4 Very secure 99 I don't know
Sense of Security: Work or School	0 Very insecure 1 Insecure 2 Neither secure nor insecure 3 Secure 4 Very secure 99 I don't know
Sense of Security: Neighborhood	0 Very insecure 1 Insecure 2 Neither secure nor insecure 3 Secure 4 Very secure 99 I don't know
Sense of Security: City	0 Very insecure 1 Insecure 2 Neither secure nor insecure 3 Secure 4 Very secure 99 I don't know
Sense of Security: State	0 Very insecure 1 Insecure 2 Neither secure nor insecure 3 Secure 4 Very secure 99 I don't know
Victimization in Last 12 Months	0 No 1 Yes
Number of Time Victimized in Last 12 Months	0 None 1 1 -2 times 2 Between 3 – 5 times 3 More than six times
Solicited for a Bribe in Last 12 Months	0 No 1 Yes
Number of Time Solicited for a Bribe in Last 12 Months	0 None 1 1 -2 times

	2 Between 3 – 5 times 3 More than six times
Violence Experiment	
"Tell-Ask"	0 Control 1 Tell 2 Ask
Perception of Homicide ("Ask" Only), Unadjusted	Continuous, range 0 – 100,000
Perception of Homicide ("Ask" Only), Adjusted	Continuous, range 0 – 29,959
Magnitude of Misperception of Homicide ("Ask Only")	Continuous, range -2,529 – 27,430
Perception of Kidnapping ("Ask" Only), Unadjusted	Continuous, range 0 – 100,000
Perception of Kidnapping ("Ask" Only), Adjusted	Continuous, range 0 – 19,269
Magnitude of Misperception of Kidnappings ("Ask Only")	Continuous, range -199 – 19,070
Violence Compared to Last Year ("Tell" and "Ask"	0 Less violent 1 Equally violent 2 More violent 99 Don't know
List Experiments	
List Assignment	0 Control 1 PRI remain in office 2 PRI social support 3 Morena social support 4 PRI candidate 5 Amnesty 6 Corruption
List Count, Control	Continuous, range 0 - 4
List Count, Any Treatment	Continuous, range 0 - 5

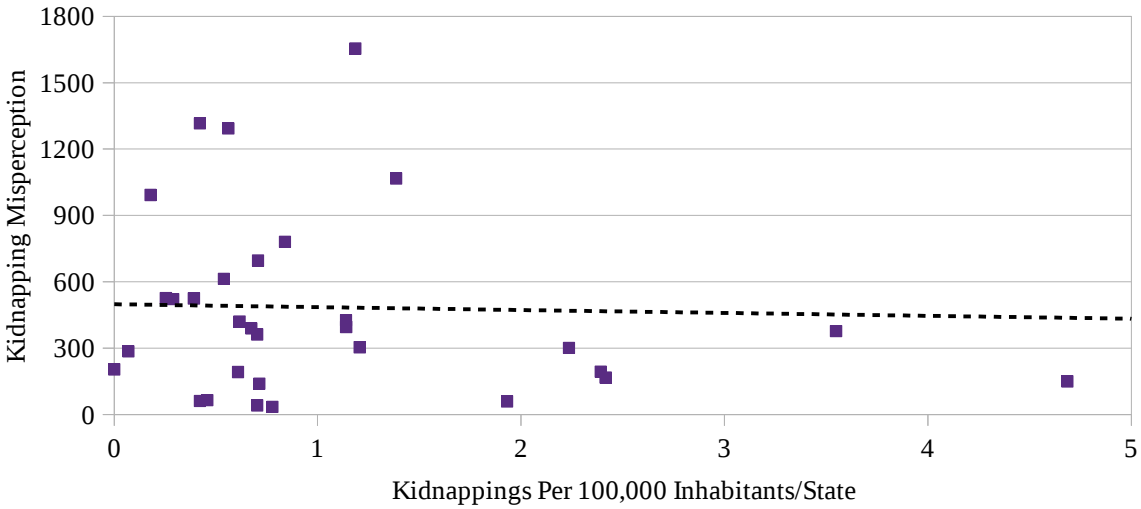
A3.01 Misperception of Violence by Violence Rate

Figure A3.01 Misperception of Homicide by Homicide Rate



Note: This figure indicates the average misestimation of homicides by the rate of homicides that occured in that state (homicides per 100,00 inhabitants). The black line represents the trend line. An F-test of the differences in mispercetion across homicide rates was significant (p<0.001). Source: Mexican National Institute for Geography and Statistics (INEGI), 2015.

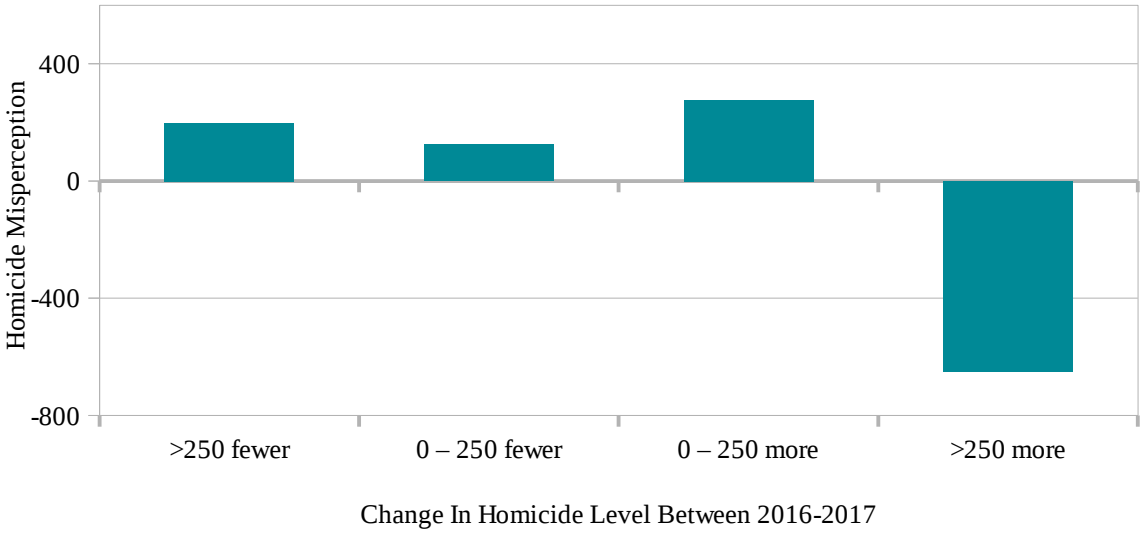
Figure A3.02 Misperception of Kidnapping by Kidnapping Rate



Note: This figure indicates the average misestimation of kidnappings by the rate of kidnappings that occured in that state (kidnappings per 100,00 inhabitants). The black line represents the trend line. An F-test of the differences in mis-percetion across kidnapping rates approached (p=0.070). Source: Mexican National Institute for Geography and Statis-tics (INEGI), 2015.

A3.02 Misperception of Homicide by Change in Homicide Level, 2016 – 2017

Figure A3.03 Homicide Misperception by Changes in Homicide Level, 2016 – 2017



Note: This figure indicates the average misestimation of homicides by the amount homicides had changed in the state from the year prior. An F-test of the differences in mispercetion across changes in homicide levels was statistically significant (p=0.036). Source: The Executive Secretariate of the National Public Security System (SESNSP).

A4.01 States in Each Region and Border Area

Table A4.01 States in Each Region of Mexico

	North	*Central*	*Bajío*	*South*
States	Baja California Baja California Sur Coahuila Chihuahua Nuevo Léon Sinaloa Sonora Tamaulipas	Ciudad de México Hidalgo Estado de México Morelos Puebla Tlaxcala Veracruz	Aguascalientes Colima Durango Guanajuato Jalisco Michoacán Nayarit Querétaro San Luis Potosí Zacatecas	Campeche Chiapas Guerrero Oaxaca Quintana Roo Tabasco Yucatán

Table A4.02 States in Each Border Area of Mexico

	Northern Border	*Southern Border*	*Non-Border*
States	Baja California Coahuila Chihuahua Nuevo Léon Sonora Tamaulipas	Campeche Chiapas Quintana Roo Tabasco	Aguascalientes Baja California Sur Colima Ciudad de México Durango Guanajuato Guerrero Hidalgo Jalisco Estado de México Michoacán Morelos Nayarit Oaxaca Puebla Querétaro San Luis Potosí Sinaloa Tlaxcala Veracruz Yucatán Zacatecas

A4.02 2012 Presidential Election Winner and Governor by State

Table A4.03 Party of the State Presidential Winner 2012 and Party of The Governor at the Time of the Survey

State	**2012 Presidential Party Winner**	**Party of Governor in May 2018**
Aguascalientes	PRI	PAN
Baja California	PRI	PAN
Baja California Sur	PRI	PAN
Campeche	PRI	PRI
Coahuila	PRI	PRI
Colima	PRI	PRI
Chiapas	PRI	Verde
Chihuahua	PRI	PAN
Ciudad de México	PRD	PRD
Durango	PRI	PAN

Guanajuato	PAN	PAN
Guerrero	PRD	PRI
Hidalgo	PRI	PRI
Jalisco	PRI	PRI
Estado de México	PRI	PRI
Michoacán	PRI	PRD
Morelos	PRD	PRD
Nayarit	PRI	PRD
Nuevo León	PAN	Independent
Oaxaca	PRD	PRI
Puebla	PRD	PRD
Querétaro	PRI	PAN
Quintana Roo	PRD	PRI
San Luis Potosí	PRI	PRI
Sinaloa	PRI	PRI
Sonora	PRI	PRI
Tabasco	PRD	PRD
Tamaulipas	PAN	PAN
Tlaxcala	PRD	PRI
Veracruz	PAN	PAN
Yucatán	PRI	PRI
Zacatecas	PRI	PRI

A4.03 Economic Indicators by State

Table A4.04 Economic Indicators by State[186]

State	GDP per Capita	Gini
Aguascalientes	23.604	0.432
Baja California	21.454	0.402
Baja California Sur	23.547	0.432
Campeche	53.501	0.472
Coahuila	27.702	0.414
Colima	18.711	0.423
Chiapas	7.249	0.487

[186] Mexican National Institute for Geography and Statistics (INEGI), 2013; Mexican National Institute for Geography and Statistics (INEGI), Anexo Estadístico de Pobreza en México 2018.

Chihuahua	20.685	0.443
Ciudad de México	43.539	0.532
Durango	15.789	0.419
Guanajuato	16.314	0.416
Guerrero	9.550	0.482
Hidalgo	12.229	0.423
Jalisco	20.161	0.430
Estado de México	11.802	0.401
Michoacán	12.013	0.424
Morelos	13.436	0.429
Nayarit	13.049	0.437
Nuevo León	32.205	0.435
Oaxaca	8.547	0.496
Puebla	12.184	0.407
Querétaro	25.925	0.437
Quintana Roo	22.473	0.414
San Luis Potosí	17.469	0.464
Sinaloa	17.249	0.446
Sonora	26.407	0.439
Tabasco	22.101	0.447
Tamaulipas	18.723	0.472
Tlaxcala	10.215	0.373
Veracruz	13.146	0.453
Yucatán	15.668	0.456
Zacatecas	13.953	0.419