Are Voters too Afraid to Tackle Corruption? Survey and Experimental Evidence from Mexico*

Omar García-Ponce
New York University
garcia.ponce@nyu.edu

Leonard Wantchekon
Princeton University
lwantche@princeton.edu

Thomas Zeitzoff
American University
zeitzoff@gmail.com

December 2014

Abstract

Are individuals that live in violent contexts too scared to reform corrupt institutions for fear of future violence? Or does violence and insecurity mobilize them to fight corruption, even with the risk of more violence? We investigate these questions by looking at the effect that fear and exposure to Drug War violence have on Mexican citizens' willingness to make trade-offs between corruption and violence ahead of the 2012 Mexican general election. We conducted two surveys a week apart before the election. First, as part of a nationally representative survey of Mexicans fielded two weeks before the election, we find that fear over violence from the Drug War was positively correlated with greater willingness to accept corruption in exchange for lower levels of violence. To disentangle the causal effects, we conducted a follow-up survey experiment on representative population in Greater Mexico City one week later. We randomly manipulated levels of fear over the Drug War and find conditional effects. Individuals who have been victims of crimes and received the fear manipulation, are *more* in favor of reducing corruption, even in the face of increased violence. Our results support a growing body of evidence that suggests that exposure to violence can activate civic engagement and reduce tolerance for poor governance —even in the presence of insecurity.

*We are grateful to Alberto Díaz-Cayeros, Oeindrila Dube, Beatriz Magaloni, and participants at the 2013 USMEX Associates Conference, and the LACEA 2013 Annual Meeting, for valuable comments and suggestions. We would also like to thank the survey enumeration team from Buendía & Laredo, and funding support from the Bobst Center for Peace and Justice at Princeton University.

1 Motivation

A central tenet of democracy is the ability of the citizens to hold politicians accountable (Fearon, 1999). Three distinct, but related phenomena can pervert this process. (1) Political corruption and clientelism[1] can dissuade voters and elites from removing bad types (incumbents) from office, as they (voters) will no longer enjoy the favors and goods from the incumbent (Wantchekon, 2003). (2) Violence may also influence voters decisions. In situations of insecurity, citizens may prefer to support politicians with criminal or (para)military connections,[2] as they may feel they are better able to keep the peace (Wantchekon, 2004), and perhaps more importantly to avoid retribution if they were not to support a candidate with a reputation for violence (Bratton, 2008). (3) Citizens may also see corrupt politicians as a Faustian bargain they must endure in order to establish order —especially where justice is weak (North, Wallis, Webb and Weingast, 2012). Thus corruption is the price that must be paid to keep various elites and armed groups in society at a relatively peaceful equilibrium, and avoid future conflict.

Previous research has consistently found that voters are averse to supporting corrupt candidates (Banerjee, Green, McManus and Pande, 2012), even if it is ex post efficient —i.e. even if politicians otherwise perform well in office (Winters and Weitz-Shapiro, 2013). Yet, corruption does not exist in a vacuum, but rather reflects inefficiency costs of doing business given the current arrangement (Shleifer and Vishny, 1993). Any attempt to understand voter attitudes towards corruption must also present the counterfactual —what is likely to happen in the absence of corruption?

We address this gap in the extant literature by investigating the trade-offs voters make between improving security versus reducing corruption in a corrupt, and violent context. We examine a particular mechanism —fear generated by insecurity— to explore this research question. Using a survey experiment, we test whether threats to security lead citizens to be more willing to make trade-offs for corrupt candidates in exchange for lower levels of violence, or whether citizens mobilize in the face of these threats and demand politicians fight corruption —even if this means higher levels of violence.

[1] Politicians trading favors in exchange for votes and political support.
[2] Such as a warlord or local crime boss.

These questions are fundamental to understanding governance and development. Many states face challenges to their capacity from organized crime.[3] Crime syndicates use violence, intimidation, and corruption to strike fear into citizenry to maintain their power. The rise of organized crime has resulted in criminal-run enclaves with little state presence in various countries within Latin America and the Caribbean region. In many parts of Latin America, there is a common phrase used to describe the trade-off faced by individuals when confronted with organized criminal elements: *plata o plomo* (literally, "silver or lead"), accept the bribe, or face the threat of bodily harm (the bullet) (Dal Bó, Dal Bó and Di Tella, 2006). Understanding how past violence, and the threat of future violence influence attitudes towards corruptions is an important step towards rectifying the cycle of violence, corruption, and fear that are thought to corrode state capacity and negatively influence democracies (Leonardi, Nanetti and Putnam, 2001).

In this paper, we present survey and experimental evidence of the effect that fear and exposure to drug-related violence has on Mexican citizens' willingness to make trade-offs between corruption and violence ahead of the 2012 general election (also a presidential election). The 2012 Mexican general election serves as an ideal case to study the relationship between fear stemming from violence and attitudes towards corruption for two reasons. (1) A number of polls and journalistic accounts suggest that the continued violence surrounding the Mexican Drug War[4] was one of the principal concerns of Mexican voters as they cast their ballots to replace the outgoing President Felipe Calderón.[5] (2) Furthermore, many have argued that an implicit appeal of Enrique Peña Nieto, the key challenger and eventual winner of the election, was that he and his party —the Partido Revolucionario Institucional (PRI)— were offering voters lower levels of violence in exchange for increasing corruption via an unofficial policy of accepting bribes. This was widely viewed as taking a more "hands-off" approach to the Mexican Drug Trafficking Organizations (DTOs)[6], and allowing them to operate with greater impunity.[7]

We conducted two surveys a week apart before the election. First, as part of a nationally

[3]See the United Nations Office on Drugs and Crime (UNODC) "Transnational organized crime threat assessments" for an overview of criminal markets around the globe.

[4]There are many alternative names for the high levels of violence associated with the fight between various DTOs and the Mexican Government. To avoid confusion we refer to the "Drug War" as the violence occurring principally in Mexico, and not part of the broader "War on Drugs."

[5]See *The Washington Times*, February 3, 2012 and *The New York Times*, January 7, 2012.

[6]We refer interchangeably to drug "cartels" and DTOs.

[7]See *The Huffington Post*, September 2, 2011.

represented survey of Mexicans we find that fear over violence from the Drug War was positively correlated with greater willingness to accept corruption in exchange for lower levels of violence. To tease apart how violence and fear influence these attitudes, we conducted a survey experiment on a representative population in Greater Mexico City. We randomly assigned subjects to one of two manipulations: one which primed subjects for fear over the Mexican Drug War ("Drug War Fear Treatment"), or a neutral manipulation. We find that subjects primed for fear over the Drug War and who had been the victim of violent crimes favor lower levels of corruption, even if it means higher levels of violence. The findings demonstrate that relationship between fear, exposure to violence, and political behavior is not straightforward. Taken together, our findings suggest that past victimization and fear —rather than leading individuals to be more willing to tolerant of bad policies— actually empowers them to fight corruption. From a normative perspective, we feel these results are encouraging. They show that violent externalities do not deter citizens from demanding good governance.

The remaining of the paper is organized as follows. We start by discussing the extant literature on violence, emotions, and corruption. Next, we describe violence surrounding Mexico's Drug War and the context under which the 2012 presidential election took place. Then we discuss the methodology and main findings from the national survey. We then describe our experimental design and report the results from the survey experiment in Greater Mexico City. The last section puts our results into a broader context on electoral politics, violence, and corruption.

2 Violence, Emotions, and Corruption

2.1 Previous Literature

A fundamental function of the state is the ability to monopolize violence within its borders (Tilly, Evans, Rueschemeyer and Skocpol, 1985; Weber, 1919). Yet violence from non-state groups, such as DTOs, challenges this monopoly. How do citizens react when reducing corruption and increasing the capacity of the state leads to higher levels of violence?[8] Three different literatures

[8]Implicit in this argument is that reducing corruption will lead to higher levels of DTO-violence. While it is difficult to forecast, recent empirical research suggests that this is so (Dell, 2011; Osorio, 2012). Yet for the present study, all that is needed is the perception that tackling corruption will result in an increase in violence, a story already widely-circulated (Bonner, 2012).

—the effect of violence on political mobilization, voters evaluations of corrupt candidates, and the effects of emotions on decision-making and political behavior— suggest two very different possibilities.

Previous research in political science has found a connection between exposure to violence and political and social empowerment. Studies have shown that exposure to violence increases voter participation (Blattman, 2009), and leads higher levels of ingroup cohesion (Gilligan, Pasquale and Samii, 2014; Zeitzoff, 2013) among affected individuals. Voors, Nillesen, Verwimp, Bulte, Lensink and Van Soest (2012) show that exposure to violence affects risk-taking behavior, leading those exposed to be more risk-taking. Particularly relevant to the current study, Bateson (2012) shows that being a victim of a crime leads to large increases in political participation, but also greater support for vigilantism and harsh policing tactics. The literature on violence would suggest that exposure to violence leads to increased political empowerment, but is unclear whether this extends to fights against corruption —especially in the face of higher levels of violence.

Research in the political economy of development consistently finds that voters are averse to supporting corrupt politicians (Banerjee, Green, McManus and Pande, 2012). Winters and Weitz-Shapiro (2013) use a survey experiment in Brazil to show that voters oppose corruption even if it is ex post efficient for delivering public goods. However, others have found that voters are remarkably tolerant of corruption (Golden, 2006). Anduiza, Gallego and Muñoz (2013) suggest that this may be due to partisan bias —co-partisans are more willing to tolerate corruption. Chong, De La, Ana, Karlan and Wantchekon (2011) use a field experiment in Mexico and show that informing voters of corrupt incumbents reduces support for incumbents, but also reduces voter turnout. They suggest that paradoxically informing voters of corruption may actually erode political control, by reducing confidence in the electoral process and reducing overall turnout, thereby blunting any negative effect on the corrupt incumbent.

A separate literature in psychology and decision-making explores the role that fear and negative emotions play in influencing political behavior (Hatemi and McDermott, 2011). Emotions are thought to be adapted mechanisms that provide individuals the ability to respond to situational stimuli (Frijda, 1986). Different negative emotions stemming from the same violent event —such as anger and fear— can have vastly different effects on perceptions of risk and behavioral

tendencies. Anger is generally thought to increase risk-taking, action-oriented emotion. Conversely, fear is thought to lead to risk-averse behavior and inhibit action (Frijda, 1986; Lerner, Gonzalez, Small and Fischhoff, 2003; Lerner, Small and Loewenstein, 2004). Further research in political psychology finds that fear leads to increased conservatism (Jost et al., 2007) and vigilance (Brader, 2005). Jackson and Gray (2010) show in a survey in London that fear of crime increases levels of vigilance, and that this vigilance can quickly turn "dysfunctional," eroding the quality of life.

Yet most of the extant studies have focused on the role of emotions in the context of U.S. voting behavior (Marcus, Neuman and MacKuen, 2000). Comparatively, there have been few studies that have looked at the effect of emotions on political behavior in developing countries and/or violent contexts. This is a large gap in the literature, given that the stakes (and risks) involved with voting are much higher in the developing contexts,[9] and hence emotions are likened to be heightened.[10]

2.2 Competing Hypotheses

These three literatures provide competing hypotheses for the effects of priming fear over the Mexican Drug War. The literatures on exposure to violence and corruption have consistently found that violence motivates political action, and that voters are averse to corrupt politicians. Individuals primed for fear over the Drug War in Mexico will want to take action, and engage in risky behavior to rectify the situation. This means tackling corruption, even if it leads to higher levels of violence. The desire to fight corruption in the face of continued political violence, will be especially true for those that have personally experienced violence. We call this desire to trade off increased levels of violence for lower levels of corruption the *Empowerment Hypothesis*.

The political psychology literature on emotions predicts the opposite. Fear is considered an inhibitory emotion —leading people to be less willing to take risks. Priming fear over the Drug War will lead individuals to be more risk-averse, and less willing to reduce corruption if it means increasing violence. Fear will thus cause individuals to be more tolerant of corruption, if it lowers

[9] See Sambanis (2004) for an overview on the connection between poverty and political violence.

[10] For instance, (Haushofer, de Laat, Chemin and Archambault, 2013) find that negative income shocks increase levels of cortisol among farmers in Kenya —a hormone associated with stress.

violence. We call this acceptance of higher levels of corruption in exchange for lower levels of violence *Too Fearful to Reform Hypothesis*.

Our study is in a unique position to adjudicate between the *Empowerment* and *Too Fearful to Reform* hypotheses for three reasons. (1) We explicitly frame the survey question as voters making trade-offs between corruption and violence. Conversely, most previous research only examines whether voters are willing to accept corruption if they received personal benefits (i.e. clientelism), and not the broader effect of corruption on levels of violence. (2) We measure and manipulate levels of fear over the Drug War to to test extant psychological theories that heightened fear reduces support for tough political choices. (3) Finally, we first utilize a national survey to examine the relationship between fear and support for trading-off corruption for violence. Then, we explicitly test its causal effect using a survey experiment.

3 Mexico's Drug War and the 2012 Presidential Election

On July 1, 2012, Mexico held a general election to replace the outgoing President Felipe Calderón. Given electoral rules in Mexico, Calderón of the Partido Acción Nacional (PAN) could not seek a second term. His successor at the PAN, Josefina Vázquez Mota, ran against Enrique Peña Nieto of the PRI, Andrés Manuel López Obrador of the Partido de la Revolución Democrática (PRD), and Gabriel Quadri of the Partido Nueva Alianza (PANAL). Peña Nieto of the PRI led for much of the campaign, and eventually was declared the winner with 38.2% of the vote, followed by Andrés Manuel López Obrador (31.6%), Josefina Vázquez Mota (25.4%), and Gabriel Quadri (2.3%).[11]

One of the principal anxieties of Mexican voters faced as they cast their ballots in 2012 was the continued violence surrounding the Drug War initiated by President Felipe Calderón.[12] From 2006-2012, Calderón's administration implemented an aggressive policy to combat drug trafficking in Mexico, which included the use of the Mexican military in major operations against drug syndicates and policing high violence areas such as Ciudad Juárez. The military campaign started in the states of Michoacán and Baja California in December 2006, but as time progressed,

[11] Official results from the Federal Electoral Institute (IFE, by its Spanish acronym).
[12] See, e.g., *The Washington Times*, February 3, 2012 and *The New York Times*, January 7, 2012.

President Calderón escalated the campaign by increasing the number of military troops deployed in various localities affected by organized crime.

Violence and crime levels increased dramatically during Calderón's administration. As shown in Figure 1, official data from Mexico's Instituto Nacional de Estadística y Geografía (INEGI) indicates that in 2011 Mexico reached its highest homicide rate in recent history: 24 deaths per 100,000 people. Over 95,000 people were killed in the five-year period from December 2006 to December 2011. Arguably, 60,000 of those homicides were specifically tied to the Drug War.[13] Figure 2 shows the geographic distribution of drug-related killings between 2007 and 2010, based on data from the Mexican National Security Council.[14] There are two things worth noting here. First, while this type of violence is certainly concentrated in the northern part of the country, i.e. along the drug-trafficking routes into the U.S., there is substantial spatial variation across the Mexican territory. The map clearly shows that drug-related violence in Mexico is not a border-specific phenomenon. Second, even within states, we observe interesting variation in violence levels. Peaceful localities coexist with violence hotspots in some states.

Calderón continuously justified, and asked Mexicans to back, his aggressive anti-drug campaign by stating that the wave of violence in the country was a necessary stage to terminate drug trafficking in Mexico.[15] Nonetheless, the sharp increase in violence levels —and specifically drug-related murders— was a central concern among voters as they approached the election day. According to polls conducted during the course of the campaign, public security and drug-related violence were the top issues for voters, neck and neck with unemployment and the economy (Olson, 2012).

Signaling a shift from Calderón, Peña Nieto campaigned on reducing kidnappings and day-to-day crime, rather than going after DTO leaders.[16] A concern voiced by opposition politicians, and international leaders, was that Peña Nieto would curtail the fight against the DTOs in

[13] This figure is based on the estimates reported by *Zeta* magazine in December 2011, which were computed using official statistics from local- and national-level authorities. See *Proceso*, December 10, 2011. More conservative estimates suggest that there were 47,515 organized crime murders over the same time period (Ríos and Shirk, 2012).

[14] Unfortunately, estimates of drug-related killings are not available for other time periods.

[15] See, e.g., *The Washington Post*, June 16, 2010.

[16] In his first news conference after the election, Peña Nieto said: "I will adjust the strategy so that Mexicans really feel an improvement in security and a reduction in crimes rates, especially homicide, kidnapping and extortion" (see *Reuters*, July 5, 2012).

order to reduce violence and gain public support, at the expense of increased corruption. Critics viewed a PRI administration as returning Mexico to an unofficial policy of accepting bribes, and allowing the DTOs to operate with a greater level of impunity in exchange for lower violence. This trade-off between high corruption and comparatively lower violence characterized the PRI's 70-year dominance of Mexican politics before the PAN wrested control of the presidency from them in 2000 (Dell, 2011; Osorio, 2012).

4 National Survey

Two weeks before the presidential election, as part of the nationally representative survey conducted by Buendía & Laredo,[17] we were able to first measure the relationship between self-reported levels of fear over the Drug War and citizens' willingness to accept higher levels of corruption in exchange for lower levels of violence. The survey followed a random selection of citizens based on a stratified multistage cluster sampling design, using Mexico's electoral precincts as the Primary Sampling Units (PSUs).[18] In total, 800 face-to-face interviews with Mexicans 18 years old or older were conducted.[19]

Two key questions were included aiming at measuring the extent to which fear over the Drug War correlates with willingness to trade-off corruption for violence.[20] First, we included a 7-point item that asked respondents if they would prefer lots of violence and little corruption (1) to little violence and lots of corruption (7). The exact wording was as follows: *If you had to choose between corruption and violence, on a scale from 1 to 7, where 1 represents lots of violence and little corruption, and 7 represents little violence and lots of corruption, which would you choose?* Second, to measure fear, we asked subjects to report their level of fear over the Drug War on a 7-point scale: *On a scale from 1 to 7, where 1 means "Not at all" and 7 means "A lot", how scared are you about the violence from the Drug War?*

The data from the national survey —which did not involve any experimental manipulation— indicate that a majority of the respondents tend to report relatively high levels of both fear over

[17] A well-respect Mexican polling and survey firm.
[18] See the Online Appendix for a detailed explanation of the sampling design.
[19] The response rate was 63%, based on AAPOR's *Standard Definitions*.
[20] Additionally, a series of basic demographic questions were included in the survey.

the Drug War and willingness to exchange corruption for lower levels of violence.[21] As shown in Figure 3, the distributions of both variables are slightly skewed to the left. The average level of self-reported fear was 5.04 (standard deviation = 1.83), and the median respondent reported a score equal to 5. As for the corruption trade-off question, the mean was 4.65 (standard deviation = 1.82), and the median 5. The scatter plot and fitted line shown in Figure 4 suggests that fear over violence from the Drug War is positively correlated with greater willingness to tolerate higher levels of corruption in exchange for lower levels of violence.

Table 1 shows, in regression form, that an individual's self-reported level of fear over the Drug War is positively and significantly correlated with her willingness to trade-off corruption for violence. This statistical association holds across estimation methods (either OLS, ordered logit, or Tobit regressions) and is robust to the inclusion of individual characteristics (such as gender, age, and education) as explanatory variables. The baseline estimate reported in Model 1 suggests that a one-point increase in fear over the Drug War is associated with a 0.31 increase in preferring little violence and lots of corruption to lots of violence and little corruption on a 7-point scale.

However, we should take these results with caution and only as a point of departure in our analysis. Since emotions over the Drug War are not randomly assigned or induced among individuals, based on these results we cannot rule out the possibility that the association between fear over the Drug War and willingness to tolerate corruption in exchange for lower levels of violence is caused by a third factor linked to both variables. For instance, it may well be the case that individual exposure to violence (or crime victimization) is positively correlated with fear over the Drug War but influences the willingness to trade-off corruption for violence through a different channel (or a different emotion).

[21] We choose to measure the corruption trade-off, rather than vote choice for a particular candidate for two reasons. (1) Vote choice and party ID in Mexico is multi-dimensional, and the candidates stated vague positions on both corruption and the Drug War. Related to the previous point, (2) we were fundamentally interested in voter reaction to the negative externalities associated with fighting corruption and the Drug War. Preference for candidates would only be weakly related to this, +thus reducing experimental control and efficiency.

5 Survey Experiment in Greater Mexico City

In order to disentangle the causal effect of fear on citizens' willingness to tolerate corruption in exchange for lower levels of violence from the nationally representative survey, we conducted a survey experiment on a representative population in Greater Mexico City. We conducted the survey one week before the presidential election (i.e. one week after the national survey). We chose Greater Mexico City to conduct our survey experiment for three reasons. (1) Greater Mexico City contains around 20 million people, approximately one-sixth of the population of Mexico, and is diverse politically and socio-economically.[22] (2) As discussed in the next subsection, Greater Mexico City has experienced varying levels of violence with respect to the Drug War, allowing us to compare how high- and low-exposure (to violence) citizens are influenced by fear. (3) Finally, as shown in Figure 2, many of the extremely high levels of violence associated with the Drug War are geographically concentrated in the western region of the country and along the US-Mexico border.[23] Therefore, by concentrating our sample on Greater Mexico City we are better able to isolate the effect of fear on attitudes about corruption (and avoid having treatment effects completely swamped by the location of the respondent).[24]

In the remainder of this section, we describe the sampling method, as well as the experimental design, and present our main findings.

5.1 Sampling

Greater Mexico City refers to the conurbation around Mexico City, officially called Mexico City Metropolitan Area, constituted by Distrito Federal (the Federal District, which is composed of 16 municipalities) and 41 adjacent municipalities of the states of Mexico and Hidalgo (see Figure 5). The methodology employed to achieve a representative sample of Greater Mexico City is

[22] During the previous presidential election, in 2006, the PAN won in 22.8% of the electoral precincts, the PRD in 38%, and the PRI in 38.7%. Furthermore, according to the 2010 Census, 48% of the people 18 years old or older who live in Greater Mexico City has a High School degree or higher. This percentage is below 30% in 10% of the electoral precincts, and above 80% in precincts located at the 90th percentile of the education distribution.

[23] This is mostly due to the in-fighting and territorial contestation that takes place along the drug-trafficking routes into the U.S. (Dell, 2011), and in the drug-production areas which are heavily concentrated in western Mexico (Dube, García-Ponce and Thom, 2014).

[24] Also, we felt it would be unethical to ask a large number of questions about Drug War violence in extremely high violence areas, such as Ciudad Juárez or Nuevo Laredo, and put both the enumerators and respondents at risk. Therefore we limited our survey experiment to Greater Mexico City.

similar to that used in the national survey. We used electoral precincts as our primary sampling units, and employed a stratified multistage cluster sampling design to randomly select blocks, households, and citizens. In terms of design, the most important difference with respect to the national survey is that we stratify Greater Mexico City's electoral precincts by their level of Drug War violence and their political preferences.[25]

In order to reach people exposed to different levels of Drug War violence, and to achieve a representative sample of political preferences throughout Greater Mexico City, the sampling design involved two main steps:

1. ***Stratification by Drug War Intensity***. We used official data from the Mexican National Security Council on the number of drug-related homicides that took place between 2007 and 2010[26] to construct an ordinal measure of Drug War intensity (low, medium, and high). Specifically, we used the rate of drug-related homicides per 100,000 people —which ranges from 0 to 33.5— to divide the full set of electoral precincts of Greater Mexico City into terciles. On average, the rate of drug-related homicides experienced over 2007-2010 is 5.9 in *low* intensity precincts, 8.9 in *medium* intensity precincts, and 13.7 in *high* intensity ones. It is important to mention that these violence data are disaggregated at the municipal level, and thus we treated all electoral precincts within a given municipality as having the same level of Drug War violence. To maximize the likelihood of reaching households exposed to high levels of drug-related violence, we oversampled high intensity electoral precincts (and then adjusted applying post-stratification weighting).[27]

2. ***Stratification by Political Preferences***. Since fear over the Drug War may be correlated with both attitudes towards corruption and political preferences, we also defined strata according to the winner party of the 2006 presidential election. The possible categories

[25] In the national survey, the strata are based on the geographical region, the political preferences, and the degree of urbanization of the electoral precincts. Since the experiment is restricted to Greater Mexico City, we do not need to stratify by geographical region and degree of urbanization. Virtually all electoral precincts within this region of the country are considered as urban by the Federal Electoral Institute.

[26] These data were disclosed by the Mexican Presidency. Unfortunately, estimates of homicides specifically tied to the Drug War are not available for other time periods.

[27] Because of sample size limitations, we do not stratify on income or poverty measures. It is nonetheless worth mentioning that the rate of drug-related homicides is positively correlated with the 2010 Index of Marginalization reported by INEGI ($r = 0.26$).

for winner party are PAN, PRI, PRD, and other (minor parties). According to the 2006 presidential election, the PAN won in 22.8% of the electoral precincts of Greater Mexico City, the PRD won in 38%, and the PRI won in 38.7%. Other parties won in less than 1 percent of the electoral precincts.

This sample design generated 12 strata in total. Within each stratum, electoral precincts were selected according to a probability proportional to its size (number of registered voters). The number of precincts drawn was 100, and we interviewed 8 citizens per electoral precinct, totaling 800 face-to-face interviews.[28] The total number of precincts in the sample was proportionally distributed in each stratum. The block selection within electoral precincts, the household selection within blocks, and the respondent selection within households are all described in the Online Appendix for the national survey.

5.2 Experimental Design

Once an eligible respondent assented, they were then interviewed by the enumerators. Respondents first answered orally a brief series of demographic questions including their age, household size, education level, and whether they have children or not. They were then randomly assigned to one of four experimental treatments that varied with respect to their emphasis on the upcoming elections and emotions. These manipulations were read to the subjects and also given to them. The electoral manipulation randomly assigned subjects to a treatment that primed the importance of the upcoming presidential election or one that did not.[29] We found no difference in respondents' attitudes towards corruption and violence between the two election statements, so we omit them from the rest of the analysis.

The second manipulation respondents received was either an emotional manipulation that manipulated fear over the Drug War ("Drug War Fear Treatment"), or a more neutral manipulation ("Neutral Emotion"). In the "Neutral Emotion" they were shown pictures of Mexico's

[28]The response rate was 57%, based on AAPOR's *Standard Definitions*.

[29]A copy of the full text of the electoral manipulation statements can be found in the Online Appendix. Respondents were randomly assigned to one of two statements about the forthcoming election: "Neutral Election" or "Salience Election." The "Neutral Election" simply stated that there was a presidential election and gave the names of the presidential candidates and their parties. The "Salience Election" contained the same information as the "Neutral Election", but also emphasized the importance of the election in determining Mexico's future with respect to fighting corruption and the Drug War.

various natural wonders (see Figure 6) and asked to write about what they think Mexico could do to better preserve them for citizens and tourists. The exact wording of the text accompanying the picture was as follows:

> *Mexico is a country that contains much natural and ancient beauty. From ancient ruins, canyons in the north, jungles in the south, and beaches on both the Gulf and Pacific, citizens and tourists enjoy their beauty. We are particularly interested what you think Mexico could do to further improve and maintain its natural beauty. More places reserved for national parks? Better education about the environment and Mexico's history? Please write below.*

For the the "Drug War Fear Treatment," respondents were shown pictures of a truck on fire used as a narco-blockade and schoolchildren fleeing from a shoot out between police and DTOs (see Figure 7). They were then asked to write about what scared them the most about the narco-related violence.[30] The exact wording was as follows:

> *The Mexican Drug War has caused people to feel a lot of emotions. We are interested in what makes you most AFRAID about drug-related violence. Please describe in detail the one thing that makes you most AFRAID about these riots. Write as detailed a description of that one thing (that makes you most afraid) as possible. If you can, write your description so that someone reading it might become AFRAID from learning about the situation.*

This emotional manipulation closely mimics those used by Ekman (1992); Lerner, Gonzalez, Small and Fischhoff (2003); Zeitzoff (2013) to manipulate targeted emotions. After the emotional manipulations, respondents were then given the key questions of interest to answer. These questions are the exact same two items that were included in the national survey: the corruption violence trade-off, and the self-reported level of fear over the Drug War (which served as a manipulation check for the emotional manipulation). Given the levels of violence in Mexico and to ensure accuracy in response, enumerators read the questions orally to respondents and

[30] Respondents received the picture with the accompanying text located directly below it. A half-page space was provided for respondents to write down their thoughts.

subjects filled out their own answer sheet privately on a clipboard. After the questionnaire, these response sheets were folded by respondents and placed in a sealed envelope to further protect the anonymity of the respondents.[31]

Additional questions measuring respondents' exposure to criminal victimization, psychological stress (Cohen, Kamarck and Mermelstein, 1983), and perceptions of violence and corruption in their neighborhood were included. These survey items were used to calculate indices of crime victimization, psychological stress, perceived neighborhood violence, and perceived neighborhood corruption, using principal component analysis.[32]

Table 2 reports covariate balance statistics comparing treated and control units. The data shows that the randomization was successful in producing treatment and control units with similar pre-treatment attributes. The full set of covariates is described in the tables and in the Online Appendix.

5.3 Findings

In this section we test whether our experimental manipulation of fear from Drug War violence affected responses to the two key survey items: self-reported levels of fear over the Drug War, and expressed willingness to tolerate higher levels of corruption in exchange for lower levels of violence. In order to account for the fact that an individual's response to the "Drug War Fear Treatment" can be moderated by her personal experience of criminal violence, we use the following specification:

$$y_i = \beta_0 + \beta_1 Treatment_i + \beta_2 Crime_i + (Treatment_i \times Crime_i)\beta_3 + \mathbf{X}_i'\beta_4 + \varepsilon_i \qquad (1)$$

where y_i is the outcome of interest —either the self-reported level of fear over the Drug War, or the willingness to exchange corruption for violence— for individual i; β_0 is a constant to be estimated; $Treatment_i$ is an indicator for whether the individual was exposed to the "Drug War Fear Treatment"; $Crime_i$ represents the crime victimization index, which ranges from 0 (low

[31] At the start of the sensitive questions portion of the survey respondents were aware of these procedures to insure protection of their responses.

[32] The first component was retained to describe each index as a continuous variable. See the Online Appendix for additional details.

victimization) to 10 (high victimization), and $\mathbf{X}_i'$ is a vector of control variables that varies across models. ε_i is the usual error term. Note that in this interaction model the marginal effect of the treatment is conditional on the levels of crime victimization, and will therefore be defined as $\hat{\beta}_1 + \hat{\beta}_3$. Since our response variables are censored by design,[33] we fit the model using weighted Tobit regressions (applying the survey weights) with both left- and right-censoring (Cameron and Trivedi, 2005).[34]

We start by reporting the results on self-reported levels of fear over the Drug War. This test serves as a manipulation check. The underlying assumption is that crime victims are more likely to be responsive to treatment, and hence to report higher levels of fear. The results in Table 3 confirm our expectations. The partial relationship between the fear emotion treatment and the self-reported level of fear of Drug War becomes positive and stronger as the respondent's level of crime victimization increases. In Figure 8, we plot the marginal effect for different levels of crime victimization. The substantive interpretation is that respondents who have been personally exposed to higher levels of crime and received the fear emotion treatment tend to report higher levels of fear over the Drug War. Interestingly, for people with lower levels of exposure to crime, acknowledging their fear over the Drug War violence actually reduced their levels of fear. This catharsis effect for the "Drug War Fear Treatment" aligns with recent studies in psychology that suggest that acknowledging and describing a fear may actual lessen it (Watkins, 2008), in this case for those not exposed to high levels of crime.[35]

Our main results on the effect of fear of violence on attitudes toward corruption are reported in Table 4. We find that individuals who have been victims of crimes and received the "Drug War Fear Treatment", are *more* in favor of reducing corruption (even if it means more violence). As shown across Models 1–5, the results are robust to controlling for demographic characteristics, political preferences, psychological stress, and perceptions of violence and corruption in the neighborhood. The marginal effect of the "Drug War Fear Treatment" conditional on the level of crime victimization is plotted in Figure 9. The plot shows that increasing level of victimiza-

[33] Respondents could cluster their answers at the upper and lower extremes for each question.

[34] In the Online Appendix we show that our results are robust to weighted least squares regression.

[35] It is worth emphasizing that, as previously mentioned, the "Salience Election" manipulation was not effective, which rules out the possibility that the estimated treatment effect is due to one respondent being asked to think about the Drug War versus another not.

tion decreases tolerance for corruption, and increases their willingness to accept higher levels of violence to do so. The partial relationship between the fear treatment and the willingness to tolerate corruption is in fact negative, and becomes statistically significant at the 95% level for respondents who score above 1.2 in the crime victimization index, which includes almost 60% of our sample.

Our results strongly support the *Empowerment Hypothesis*. While the nationally representative experiment shows a positive a correlation between fear over the Drug War, the experimental results suggest a more nuanced explanation. Rather than being too afraid to fight corruption (*Too Scared to Reform Hypothesis*), and accepting corrupt candidates, the results suggest that fear can in fact mobilize voters to seek out good policies even in the face of violence. They further support a growing body of evidence that exposure to violence can activate civic engagement and reduce tolerance for poor governance (Bateson, 2012).

Why would voters living under the threat of violence be mobilized to fight corruption, even if it increases violence? Subjects' answers to the "Drug War Fear Treatment" provide some clues. As one respondent wrote, "it is sad to see that in our country corruption is so huge that it goes hand-in-hand with drug trafficking violence." This sentiment —that corruption was just as much as a problem as violence— was a common theme in the responses to the treatment. Another respondent was even more blunt: "we must fight corruption as much as drug trafficking." Respondents did not see a separation between the drug-related violence and corruption, rather they saw the former as a symptom of the latter. Several respondents also suggested that they were just as scared by the ineffective and capricious nature of law enforcement: "what scares me the most is the uncertainty caused by the narco-police and the government. They do not do anything (to fight the traffickers)." Thus voters primed for fear over the Drug War do not see increasing corruption as a short-term solution to violence. Rather they see corruption and ineffectual law enforcement as the root cause of the violence —and both corruption and drug-related violence have to be addressed and fixed.

6 Discussion

A fundamental aspect of democracy is the ability of citizens to freely choose good candidates and sanction bad candidates. High levels of insecurity and violence, like those experienced by Mexicans during the Drug War, have the potential to warp the electoral relationship, leading voters to keep bad candidates in office out of fear, rather than the candidate's good policy choices. We first showed in a nationally representative sample of Mexicans that fear over the Drug War is positively correlated with a willingness to tolerate corruption. However, using a survey experiment in Greater Mexico City we show that the relationship between fear and tolerance for corruption (if it lowers violence), is more complex. Individuals who have been victims of crime are more fearful when primed for fear over the Drug War, but also less willing to tolerate corruption even if it means higher levels of violence. The results suggest fear does not lead citizens to support higher levels of corruption.

Our findings also point to a more nuanced portrait of how emotions influence political participation —fear does not inhibit politically risky decisions, but in fact can galvanize them (among those who have been victims of violence). They also provide a new direction for the growing literature on fear and threat on political behavior (Thórisdóttir and Jost, 2011). Much of the previous literature suggests that fear of future threats will lead people to demand forceful government responses to protect them —e.g. post 9/11 counter-terror measures (Huddy and Feldman, 2011). Yet, we show that priming fear does not lead people to demand actions that may make them safer in the short-term (accepting corruption), but rather that they may, in the short-term, be willing to accept less safety to try to rectify the violence (as is the case of fighting corruption in Mexico).

The results also provide a more sanguine portrait of democracy in the face of insecurity. Individuals who have been victims of crime are more emboldened to tackle poor institutions and corruption than those that are not. This echoes other research that finds that violence is related to higher levels of civic engagement (Blattman, 2009; Gilligan, Pasquale and Samii, 2014). In this regard, we urge scholars of political violence and political development to better incorporate and measure emotions and psycholgocial factors in their studies. Until now, they have been an

important, but understudied mechanism of political development.

We conclude on a note of cautious optimism. Much of the work in political science has suggested that elites —particularly in developing countries— can manipulate and scare voters into bad policies (Horowitz, 2001; Lupia and Menning, 2009). Or that voters are myopic in evaluating candidates (Healy and Malhotra, 2009), letting extraneous factors unrelated to the politicians influence their choices. Given the fact that many developing countries face threats from non-state actors (organized crime and rebel groups), our finding that fear can have an empowering effect on citizens' willingness to fight corruption in the face of significant negative externalities (i.e. narco violence in Mexico) is heartening.[36] The fact that voters (in our opinion) rightly recognize the intertwined nature of corruption in violence further suggests that voters are more strategic, and more resilient in the face of violence than many extant theories of political behavior suggest. Finally, future research that looks at ways to harness emotions to enact positive political change and institutional strength may prove fruitful from both an academic and policy perspective.

[36]The growth of vigilante groups, or "autodefensas" represents the more extreme example of our findings *Foreign Affairs*, July/August 2013.

References

Anduiza, Eva, Aina Gallego and Jordi Muñoz. 2013. "Turning a Blind Eye Experimental Evidence of Partisan Bias in Attitudes Toward Corruption." *Comparative Political Studies* 46(12):1664–1692.

Banerjee, Abhijit, Donald P Green, Jeffery McManus and Rohini Pande. 2012. "Are Poor Voters Indifferent to Whether Elected Leaders are Criminal or Corrupt? A Vignette Experiment in Rural India.".

Bateson, Regina. 2012. "Crime Victimization and Political Participation." *American Political Science Review* 1-6(3):570–587.

Blattman, Christopher. 2009. "From Violence to Voting: War and Political Participation in Uganda." *American Political Science Review* 103(02):231–247.

Bonner, Robert C. 2012. "The Cartel Crackdown: Winning the Drug War and Rebuilding Mexico in the Process." *Foreign Affairs* 91:12.

Brader, Ted. 2005. "Striking a responsive chord: How political ads motivate and persuade voters by appealing to emotions." *American Journal of Political Science* 49(2):388–405.

Bratton, Michael. 2008. "Vote buying and violence in Nigerian election campaigns." *Electoral Studies* 27(4):621–632.

Cameron, A.C. and P.K. Trivedi. 2005. *Microeconometrics: Methods and Applications*. Cambridge University Press.

Chong, Alberto, O De La, L Ana, Dean Karlan and Leonard Wantchekon. 2011. "Looking beyond the incumbent: The effects of exposing corruption on electoral outcomes." *National Bureau of Economic Research* .

Cohen, Sheldon, Tom Kamarck and Robin Mermelstein. 1983. "A global measure of perceived stress." *Journal of Health and Social Behavior* 24(4):385–396.

Dal Bó, Ernesto, Pedro Dal Bó and Rafael Di Tella. 2006. "âPlata o Plomo?â: Bribe and Punishment in a Theory of Political Influence." *American Political Science Review* 100(01):41–53.

Dell, Melissa. 2011. "Trafficking Networks and the Mexican Drug War." *Working Paper* .

Dube, Oeindrila, Omar García-Ponce and Kevin Thom. 2014. "From Maize to Haze: Agricultural Shocks and the Growth of the Mexican Drug Sector." *CGD Working Paper 355* .

Ekman, Paul. 1992. "An Argument for Basic Emotions." *Cognition and EMotion* 6(3/4):169–200.

Fearon, James D. 1999. "Electoral accountability and the control of politicians: selecting good types versus sanctioning poor performance." *Democracy, accountability, and representation* 55:61.

Frijda, Nico H. 1986. *The Emotions*. Cambridge University Press.

Gilligan, Michael J., Benjamin J. Pasquale and Cyrus D. Samii. 2014. "Civil War and Social Capital: Behavioral-Game Evidence from Nepal." *American Journal of Political Science* forthcoming.

Golden, Miriam. 2006. Some Puzzles of Political Corruption in Modern Advanced Democracies. In *Unpublished manuscript. Annual Meetings of the Japan Political Science Association, Tokyo*.

Hatemi, Peter K and Rose McDermott. 2011. *Man is by nature a political animal: Evolution, biology, and politics*. University of Chicago Press.

Haushofer, Johannes, Joost de Laat, Matthieu Chemin and C Archambault. 2013. "Negative Rainfall Shocks Increase Levels of the Stress Hormone Cortisol Among Poor Farmers in Kenya.".

Healy, Andrew and Neil Malhotra. 2009. "Myopic voters and natural disaster policy." *American Political Science Review* 103(03):387–406.

Horowitz, Donald L. 2001. *The Deadly Ethnic Riot*. University of California Press.

Huddy, Leonie and Stanley Feldman. 2011. "Americans respond politically to 9/11: understanding the impact of the terrorist attacks and their aftermath." *American Psychologist* 66(6):455.

Jackson, Jonathan and Emily Gray. 2010. "Functional fear and public insecurities about crime." *British journal of criminology* 50(1):1–22.

Jost, John T, Jaime L Napier, Hulda Thorisdottir, Samuel D Gosling, Tibor P Palfai and Brian Ostafin. 2007. "Are needs to manage uncertainty and threat associated with political conservatism or ideological extremity?" *Personality and Social Psychology Bulletin* 33(7):989–1007.

Leonardi, Robert, Raffaella Y. Nanetti and Robert D. Putnam. 2001. *Making Democracy Work: Civic Traditions in Modern Italy.* Princeton University Press.

Lerner, Jennifer S., Deborah A. Small and George Loewenstein. 2004. "Heart Strings and Purse Strings: Carryover Effects of Emotions on Economic Decisions." *Psychological Science* 15(5):pp. 337–341.

Lerner, Jennifer S., Roxana M. Gonzalez, Deborah A. Small and Baruch Fischhoff. 2003. "Effects of Fear and Anger on Perceived Risks of Terrorism: A National Field Experiment." *Psychological Science* 14(2):144–150.

Lupia, Arthur and Jesse O Menning. 2009. "When can politicians scare citizens into supporting bad policies?" *American Journal of Political Science* 53(1):90–106.

Marcus, George, W. Russell Neuman and Michael MacKuen. 2000. *Affective Intelligence and Political Judgement.* University of Chicago Press.

North, Douglass C, John Joseph Wallis, Steven B Webb and Barry R Weingast. 2012. *In the Shadow of Violence: Politics, Economics, and the Problems of Development.* Cambridge University Press.

Olson, Eric L. 2012. "Mexico's 2012 Elections: Key Issues and Critical Questions Now and Beyond." Woodrow Wilson Center for International Scholars. Mexico Institute.

Osorio, Javier. 2012. "Democratization and Drug Violence in Mexico." *Working Paper* .

Ríos, Viridiana and David A. Shirk. 2012. "Drug Violence in Mexico: Data and Analysis Through 2011." Trans-Border Institute, University of San Diego.

Rosenbaum, Paul R. and Donald B. Rubin. 1985. "The Bias Due to Incomplete Matching." *Biometrics* 41(1):103–116.

Sambanis, Nicholas. 2004. Poverty and the organization of political violence. In *Brookings Trade Forum*. Vol. 2004 Brookings Institution Press pp. 165–211.

Shleifer, Andrei and Robert W Vishny. 1993. "Corruption." *The Quarterly Journal of Economics* 108(3):599–617.

Thórisdóttir, Hulda and John T Jost. 2011. "Motivated Closed-Mindedness Mediates the Effect of Threat on Political Conservatism." *Political Psychology* 32(5):785–811.

Tilly, Charles, Peter B Evans, Dietrich Rueschemeyer and Theda Skocpol. 1985. *War making and state making as organized crime*. Cambridge University Press.

Voors, Maarten J, Eleonora EM Nillesen, Philip Verwimp, Erwin H Bulte, Robert Lensink and Daan P Van Soest. 2012. "Violent conflict and behavior: a field experiment in Burundi." *The American Economic Review* 102(2):941–964.

Wantchekon, Leonard. 2003. "Clientelism and voting behavior: Evidence from a field experiment in Benin." *World Politics* 55(3):399–422.

Wantchekon, Leonard. 2004. "The Paradox of "Warlord" Democracy: A Theoretical Investigation." *American Political Science Review* 98(01):17–33.

Watkins, Edward R. 2008. "Constructive and unconstructive repetitive thought." *Psychological bulletin* 134(2):163.

Weber, Max. 1919. *Politics as a Vocation*.

Winters, Matthew S. and Rebecca Weitz-Shapiro. 2013. "Lacking Information or Condoning Corruption: When Do Voters Support Corrupt Politicians?" *Comparative Politics* 45(4).

Zeitzoff, Thomas. 2013. "Anger, Exposure to Violence and Intragroup Conflict: A 'Lab in the Field' Experiment in Southern Israel." *Political Psychology* forthcoming.

Table 1: Fear over the Drug War and Corruption Trade-off

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Fear of Drug War	0.31***	0.31***	0.40***	0.41***	0.44***	0.45***
	(0.04)	(0.04)	(0.06)	(0.06)	(0.06)	(0.06)
Male		0.14		0.12		0.24
		(0.13)		(0.13)		(0.18)
Age		-0.00		-0.00		-0.00
		(0.01)		(0.01)		(0.01)
Education		-0.01		-0.04		-0.04
		(0.04)		(0.04)		(0.05)
Estimation	OLS	OLS	Ord. Logit	Ord. Logit	Tobit	Tobit
Observations	729	728	729	728	729	728

All estimates are from unweighted regressions.

Robust standard errors are shown in parentheses.

*** Significant at the 1% level; ** significant at the 5% level; * significant at the 10% level.

Table 2: Randomization Check: Covariate Balance Statistics

Variable	Mean if Treated	Mean if Control	Diff.	% bias	p-value
Crime victimization index	1.85	1.77	0.07	4.70	0.51
Age	38.09	38.70	-0.61	-4.10	0.56
Male	0.45	0.47	-0.02	-3.50	0.62
Education	5.62	5.54	0.08	4.50	0.52
Children (dummy variable)	0.37	0.35	0.02	4.20	0.56
Household size	4.03	3.89	0.14	9.10	0.20
Psychological stress index	5.63	5.49	0.14	8.80	0.22
AMLO vote	0.36	0.36	0.00	0.6	0.94
EPN vote	0.30	0.31	-0.02	-3.90	0.58
Perceived neighborhood violence	4.60	4.55	0.05	1.90	0.79
Perceived neighborhood corruption	4.19	4.19	0.00	0.00	1.00

Notes: This table reports two-tailed t-tests for equality of means of the treated and untreated groups based on unweighted regressions. The standardized bias (% bias) measures the difference of the sample means as a percentage of the square root of the average of the sample variances in the two groups (Rosenbaum and Rubin, 1985). The respondent's *Age* is measured in years; *Male* is equal to one if the respondent is male, and 0 otherwise; *Education* measures the respondent's schooling attainment on a eight-point scale; *Children* is a dummy variable equal to one if the respondent has at least one child 17 years old or younger, and 0 otherwise; *Household size* measures the number of people living in the respondent's house; *AMLO vote* is equal to one if the respondent's preferred candidate is Andrés Manuel López Obrador of the PRD, and 0 otherwise; *EPN vote* is equal to one if the respondent's preferred candidate is Enrique Peña Nieto of the PRI, and 0 otherwise. The indices of *crime victimization*, *psychological stress*, *perceived neighborhood violence*, and *perceived neighborhood corruption* range from 0 to 10.

Table 3: Effect of Fear Treatment on Fear over the Drug War

	Model 1	Model 2	Model 3	Model 4	Model 5
Fear treatment	-0.70**	-0.77**	-0.87**	-0.89**	-0.86**
	(0.35)	(0.37)	(0.36)	(0.36)	(0.37)
Crime victimization index	0.27**	0.25*	0.19	0.19	0.14
	(0.13)	(0.14)	(0.13)	(0.13)	(0.12)
Fear treatment × Crime victim. index	0.23*	0.27*	0.30**	0.31**	0.30**
	(0.14)	(0.15)	(0.14)	(0.14)	(0.14)
Age		0.01	0.01	0.01	0.01
		(0.01)	(0.01)	(0.01)	(0.01)
Male		-0.69***	-0.69***	-0.68***	-0.65***
		(0.21)	(0.21)	(0.21)	(0.20)
Education		-0.14*	-0.14*	-0.16**	-0.14*
		(0.08)	(0.08)	(0.08)	(0.08)
Children (dummy variable)		0.80***	0.81***	0.84***	0.93***
		(0.26)	(0.26)	(0.26)	(0.25)
Household size		-0.12	-0.15*	-0.15*	-0.18**
		(0.09)	(0.09)	(0.09)	(0.09)
Psychological stress index			0.25**	0.27***	0.24**
			(0.10)	(0.10)	(0.10)
AMLO vote				-0.11	-0.05
				(0.28)	(0.27)
EPN vote				0.24	0.17
				(0.27)	(0.28)
Perceived neighborhood violence					0.14
					(0.09)
Perceived neighborhood corruption					0.01
					(0.06)
Constant	7.54***	8.54***	7.43***	7.48***	6.89***
	(0.38)	(0.83)	(0.95)	(0.94)	(0.94)
σ	2.88***	2.81***	2.79***	2.78***	2.71***
	(0.18)	(0.18)	(0.17)	(0.17)	(0.16)
Observations	783	764	756	746	738

All estimates are based on weighted Tobit regressions with both left- and right-censoring.

Linearized standard errors in parentheses account for clustering at the electoral precinct level.

*** Significant at the 1% level; ** significant at the 5% level; and * significant at the 10% level.

Table 4: Effect of Fear Treatment on Corruption Trade-off

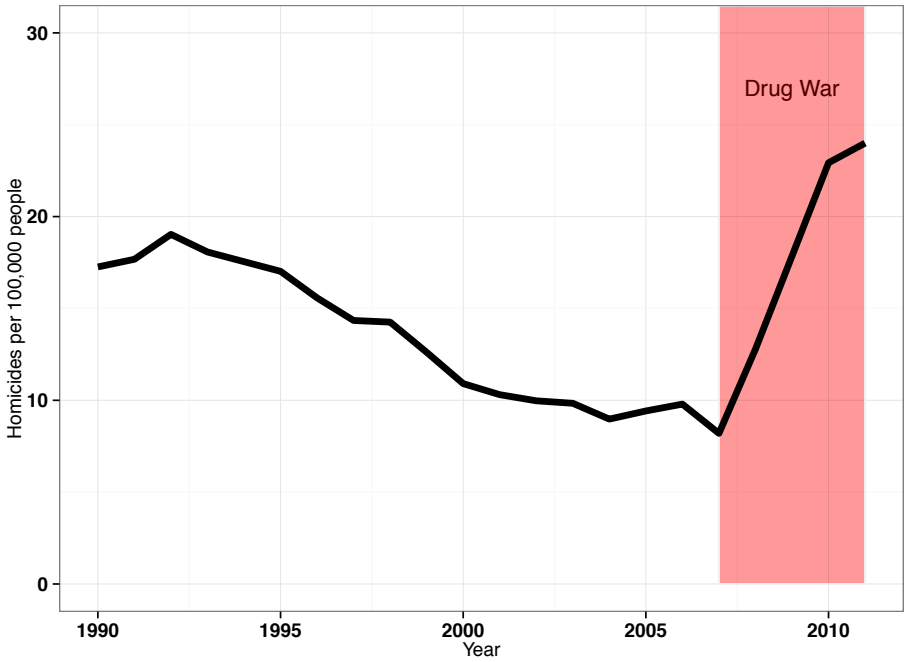
	Model 1	Model 2	Model 3	Model 4	Model 5
Fear treatment	-0.01	-0.04	-0.08	-0.08	-0.06
	(0.24)	(0.24)	(0.25)	(0.25)	(0.25)
Crime victimization index	0.46***	0.48***	0.48***	0.49***	0.42***
	(0.09)	(0.10)	(0.09)	(0.09)	(0.08)
Fear treatment × Crime victim. index	-0.20*	-0.21*	-0.21*	-0.21*	-0.22*
	(0.11)	(0.11)	(0.12)	(0.12)	(0.12)
Age		-0.01*	-0.01	-0.01	-0.01
		(0.01)	(0.01)	(0.01)	(0.01)
Male		-0.19	-0.17	-0.20	-0.27
		(0.19)	(0.20)	(0.20)	(0.19)
Education		-0.12	-0.11	-0.13	-0.12*
		(0.08)	(0.08)	(0.08)	(0.07)
Children (dummy variable)		-0.17	-0.18	-0.17	-0.06
		(0.23)	(0.22)	(0.23)	(0.22)
Household size		0.09	0.07	0.08	0.05
		(0.07)	(0.07)	(0.07)	(0.07)
Psychological stress index			0.02	0.03	-0.01
			(0.09)	(0.09)	(0.08)
AMLO vote				0.20	0.21
				(0.28)	(0.27)
EPN vote				0.29	0.16
				(0.27)	(0.27)
Perceived neighborhood violence					0.07
					(0.08)
Perceived neighborhood corruption					0.11
					(0.07)
Constant	5.77***	6.68***	6.59***	6.47***	6.01***
	(0.24)	(0.69)	(0.79)	(0.82)	(0.77)
σ	2.71***	2.66***	2.66***	2.65***	2.59***
	(0.15)	(0.13)	(0.14)	(0.13)	(0.13)
Observations	771	753	746	736	729

All estimates are based on weighted Tobit regressions with both left- and right-censoring.

Linearized standard errors in parentheses account for clustering at the electoral precinct level.

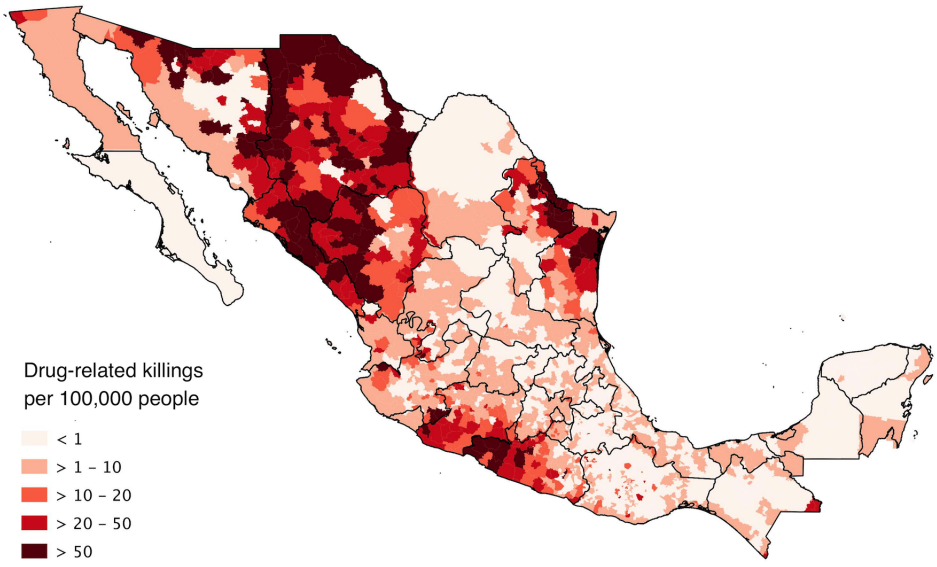
*** Significant at the 1% level; ** significant at the 5% level; and * significant at the 10% level.

Figure 1: Homicide Rate in Mexico (1990-2011)



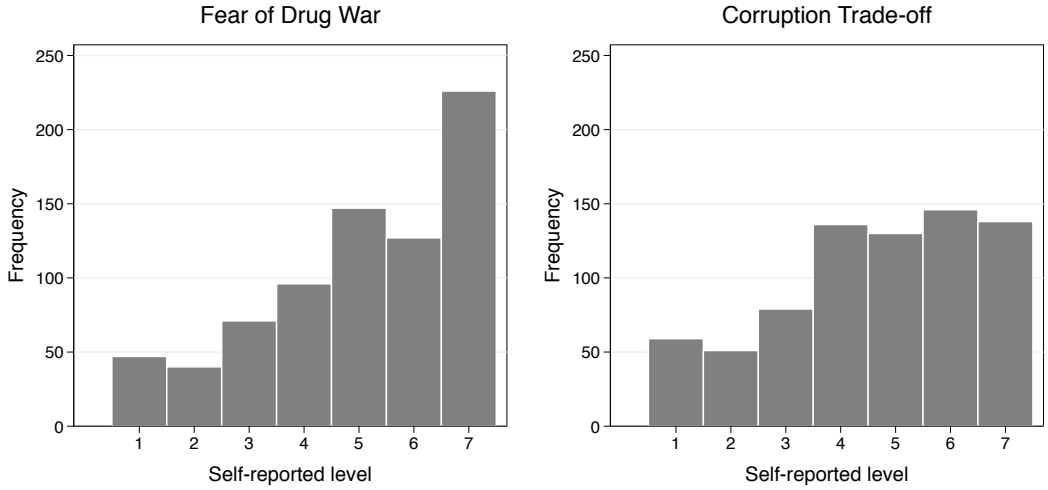
Notes: This figure shows the number of homicides per 100,000 people in Mexico between 1990 and 2011, based on data from INEGI.

Figure 2: Drug-related Killings by Municipality (2007-2010)



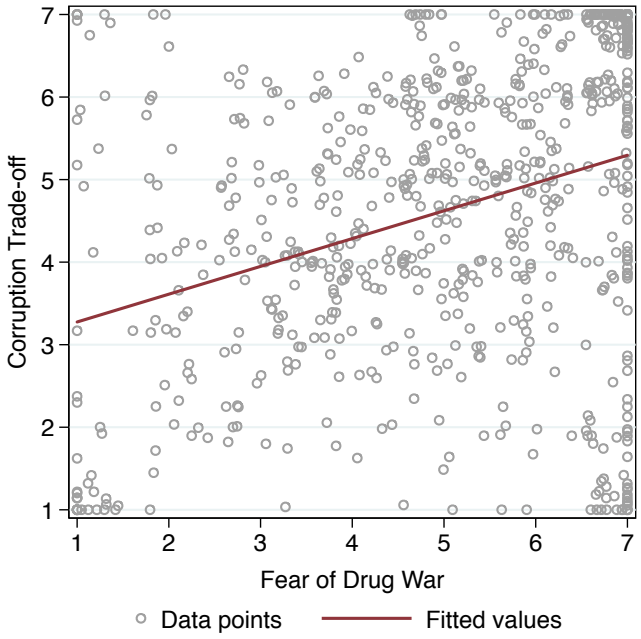
Notes: This map shows the annual average of drug-related killings per 100,000 people in each Mexican municipality between 2007 and 2010. State boundaries are shown in black. The data come from the Mexican National Security Council.

Figure 3: Histograms of Key Questions in the National Survey



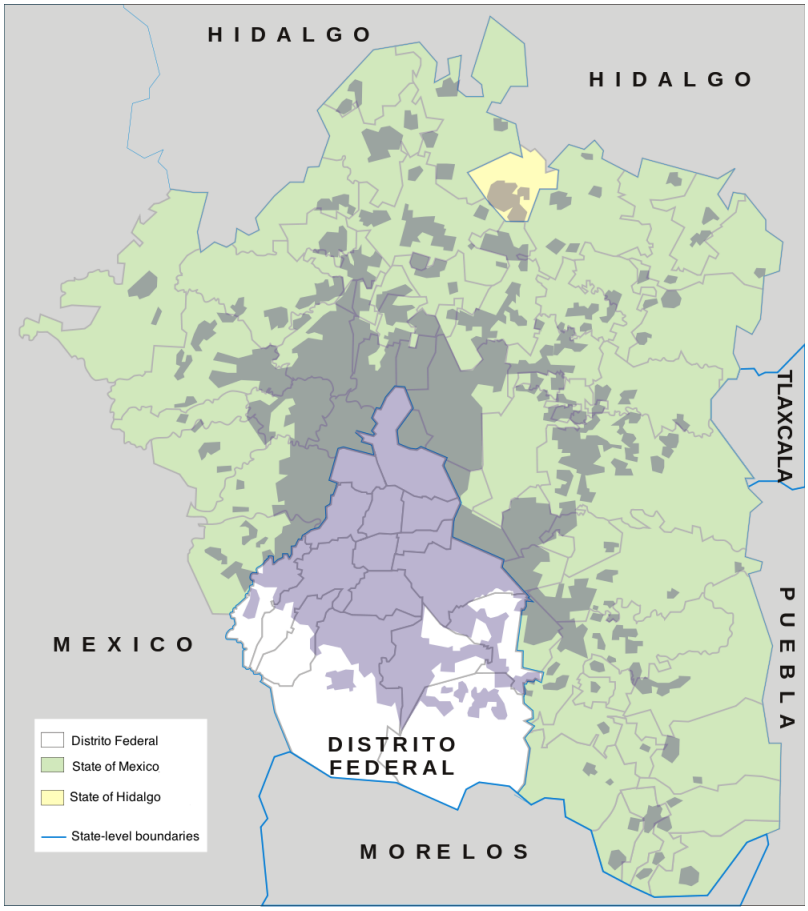
Notes: Distributions of answers to key questions included in the national survey. **Left:** *On a scale from 1 to 7, where 1 means "not at all" and 7 means "A lot", how scared are you about the violence from the Drug War?* **Right:** *If you had to choose between corruption and violence, on a scale from 1 to 7, where 1 represents lots of violence and little corruption, and 7 represents little violence and lots of corruption, which would you choose?*

Figure 4: Fear over the Drug War and Corruption Trade-off



Notes: Fitted values are based on a linear regression of Corruption Trade-off against Fear over the Drug War using data from the national survey.

Figure 5: Greater Mexico City



Notes: This map shows the area comprising Greater Mexico City. Municipalities that belong to the Federal District are shown in white. Those that belong to the states of Mexico and Hidalgo are shown in green and yellow, respectively. Densely populated areas are shaded in gray (*Wikicommons, Public Domain*).

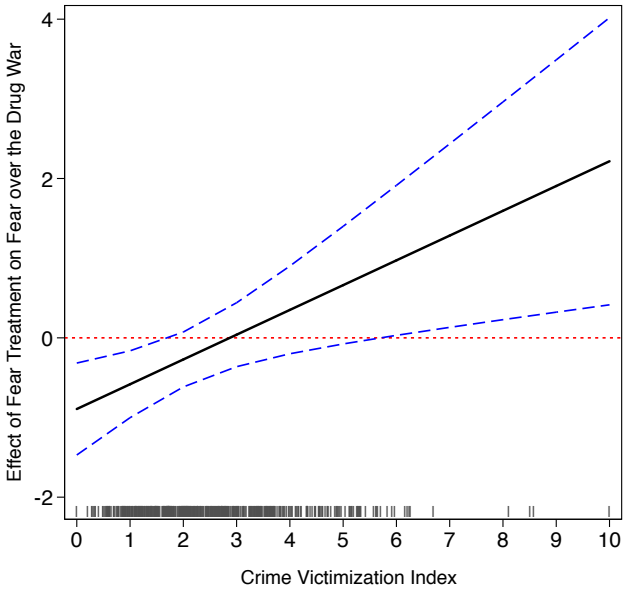
Figure 6: Neutral Emotion (Control)

Notes: This picture was accompanied by the following caption: **Top:** Chichen Itza in Yucatan (left) and Sumidero Canyon in Chiapas (right). **Bottom:** Barranca del Cobre in Chihuahua (left) and Cabo San Lucas in Baja California Sur (right).

Figure 7: Fear Emotion (Treatment)

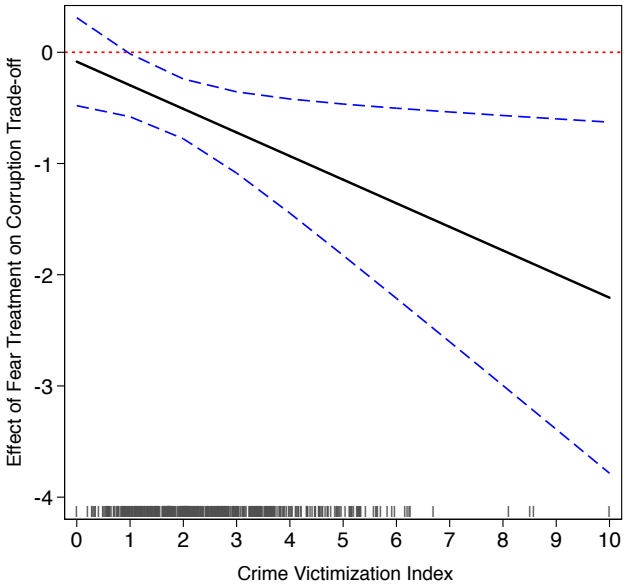
Notes: This picture was accompanied by the following caption: **Left:** A truck is lit on fire by narco-gangs to blockade a road in Mexico. **Right:** Schoolchildren flee as government forces confront narco-gangs.

Figure 8: Marginal Effect of Fear Treatment on Fear over the Drug War



Notes: This plot shows the marginal effect of the Fear Treatment on Fear over the Drug War for different levels of the Crime Victimization Index, based on the estimates reported in Model 4 of Table 3. The solid black line depicts the point estimate, and the blue dashed lines indicate 90% confidence intervals. The rug plot underneath shows the distribution of the Crime Victimization Index.

Figure 9: Marginal Effect of Fear Treatment on Corruption Trade-off



Notes: This plot shows the marginal effect of the Fear Treatment on Corruption Trade-off for different levels of the Crime Victimization Index, based on the estimates reported in Model 4 of Table 4. The solid black line depicts the point estimate, and the blue dashed lines indicate 90% confidence intervals. The rug plot underneath shows the distribution of the Crime Victimization Index.

A Online Appendix

This Online Appendix contains four sections. Section A.1 provides additional details of the sampling design used in the national survey. Section A.2 presents the electoral treatments used in the survey experiment. Section A.3 describes additional questions included in the survey experiment and that are used to construct indices of crime victimization, psychological stress, perceived neighborhood violence, and perceived neighborhood corruption. Section A.4 shows that our main results are robust to weighted least squares regression.

A.1 Sampling Design of National Survey

We used Mexico's electoral precincts as the Primary Sampling Units (PSUs). Electoral precincts constitute the most updated and complete sampling frame available in the country. Geospatial data from the Federal Electoral Institute (IFE, by its Spanish acronym) are continuously updated and provide an excellent assessment of the Mexican electorate (approximately 95 percent of Mexicans 18 years old or older are registered at the IFE). The most recent information from the IFE sets the total number of registered citizens at about 77.4 million people. These citizens are dispersed across 64,934 electoral precincts.

Our sampling method followed a random selection of citizens using a stratified multistage cluster sampling design. In order to achieve a truly representative national sample, the design included the following steps:

1. ***Stratification by Geographical Region and Type of Electoral Precinct***. In order to achieve territorial coverage, the sample was allocated to five geographical regions (electoral circumscriptions) as defined by the IFE. These regions have a very similar number of registered voters. Strata were defined according to the winning party of the 2006 presidential election and the current degree of urbanity in the section. The IFE classifies electoral precincts (our PSUs) as urban, rural or mixed (urban-rural). We used this classification to define each stratum. The possible categories for party support among the precincts are PAN, PRI-PVEM and PRD, where PRI-PVEM represents the PRI or the PRI-PVEM alliance. As of today, 69% of registered citizens live in urban precincts, 20% in rural

precincts, and 11% in mixed precincts. According to the 2006 election results, 43% of registered citizens live in electoral precincts where the PAN won, 23% live in PRI-PVEM precincts, and 34% live in electoral precincts won by the PRD. The idea behind this is to increase the accuracy of the estimators since political preferences vary from one stratum to another.

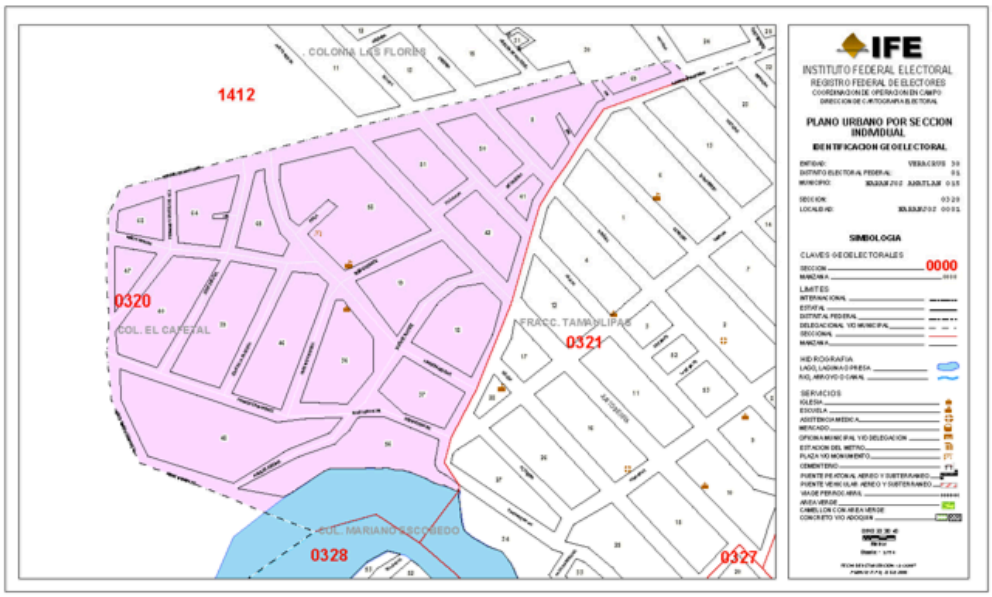
2. ***Electoral Precinct Selection***. Within each stratum, electoral precincts were selected according to a probability proportional to its size, in the same way a cluster sampling design is carried out. The number of precincts drawn was 100. The size of a electoral precinct is measured as the number of registered voters. We interviewed 8 citizens per electoral precinct, totaling 800 face-to-face interviews. The total number of precincts in the sample was proportionally distributed in each stratum.

3. ***Block Selection within Electoral Precincts***. Once electoral precincts in the sample were drawn, the next step was to select two blocks from the precinct using a table with random numbers. For instance, the PSU map shown below has 20 blocks, and the PSU number is 0320. A combination of the number of blocks and the last digit of the PSU number determines which blocks are to be selected.

4. ***Household Selection within Blocks***. Once blocks in the sample were identified, households per block were selected using a systematic random sampling method. Blocks were covered starting by the northeast corner using a systematic random start of 3 households. Blocks were walked clockwise. Once a questionnaire was completed, the interviewer had to move to the next side of the block.

5. ***Respondent Selection within Households***. One person per household was selected using a random method. If the selected respondent was not available at first visit, the interviewer returned upon three more visits. If the respondent refused the interview, the interviewer moved using a systematic random start of 10 households in order to obtain the interview.

Figure 10: Example of a PSU Map



A.2 Electoral Manipulation in Survey Experiment

The electoral manipulation was aimed at priming the importance of the presidential election with respect to fighting corruption and the Drug War. Respondents were randomly assigned to one of two statements:

Neutral Election

In the 2012 Mexican General Election, voters will seek to replace current President Felipe Calderón (PAN). Andrés Manuel López Obrador (PRD), Enrique Peña Nieto (PRI), and Josefina Vázquez Mota (PAN) all are vying for the presidency.

Salience Election

In the 2012 Mexican General Election, voters will seek to replace current President Felipe Calderón (PAN). Andrés Manuel López Obrador (PRD), Enrique Peña Nieto (PRI), and Josefina Vázquez Mota (PAN) all are vying for the presidency. ***Many observers argue that Mexicans face important choices ahead. The two key issues remain corruption and narco-violence. The next president must confront the high levels of corruption that plague institutions at a local and***

national level. Additionally, widespread narco-violence remains a large obstacle to a peaceful, prosperous Mexico.

A.3 Additional Questions in Survey Experiment

- ***Crime victimization index.*** Respondents were asked the following question: *Please mark for each of the following crimes whether you (with the exception of murder), your immediate family, your friends, or your extended family have been the victim of the following: a) house robbed, b) business robbed, c) car-jacked, d) assaulted on public transportation, e) wounded from a firearm, f) murder, g) extortion, h) fraud, i) kidnapping, and j) sexual abuse.* Each response was assigned a number based on how close they were to a victim of given crime: personally (4), immediate family (3), friends (2), or extended family (1) or 0 no one. A crime victimization index was then constructed using principal components analysis on the assigned values for each of the 10 crimes. The resulting index was normalized rescaling by the minimum to make all the elements lie between 0 (lowest level of victimization) and 10 (highest level of victimization).

- ***Psychological stress index.*** This metric was constructed using a 10-item Perceived Stress Scale (PSS) asking how stressed subjects felt in the last month, derived from (Cohen, Kamarck and Mermelstein, 1983).

- ***Perceived neighborhood violence.*** Respondents were asked the following question: *On a scale from 0 to 10, where 0 is not that likely and 10 is very likely, how likely is it that someone like you who lives in your neighborhood has felt the following in the past month: a) has felt fear to go out in the street because of fears of personal safety, b) has paid for personal protection, c) has been the victim of physical aggression, d) has seen drugs sold in public, e) has seen people carry guns who are not police or military.* An index of perceived neighborhood violence was constructed via principal components analysis using the ranked answers to the five items. The resulting index was normalized rescaling by the minimum to make all the elements lie between 0 (lowest level of perceived violence) and 10 (highest level of perceived violence).

- ***Perceived neighborhood corruption.*** Respondents were asked the following question: *On a scale from 0 to 10, where 0 is not that likely and 10 is very likely, how likely is it that someone like you who lives in your neighborhood has experienced the following in the past month: a) has had to pay under the table to any government employee to have access to electricity, water, or some other service; b) has paid under the table to avoid a parking violation; c) has had to pay under the table to any government employee to obtain a construction or business license; d) has received gifts, job offer, or any other type of personal benefits in exchange for supporting a candidate or political party.* Based on the ranked answers to these items, an index of perceived neighborhood corruption was constructed using principal components analysis. The resulting index was normalized rescaling by the minimum to make all the elements lie between 0 (lowest level of perceived corruption) and 10 (highest level of perceived corruption).

A.4 Robustness to Weighted Least Squares Regression

Table 5: Effect of Fear Treatment on Fear over the Drug War and Corruption Trade-off

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Fear of Drug War				*Corruption Trade-off*			
Fear treatment	-0.56**	-0.63**	-0.65**	-0.64**	-0.03	-0.06	-0.07	-0.05
	(0.27)	(0.26)	(0.26)	(0.26)	(0.22)	(0.23)	(0.23)	(0.23)
Crime victimization index	0.21**	0.16*	0.15*	0.11	0.41***	0.41***	0.41***	0.35***
	(0.10)	(0.09)	(0.09)	(0.09)	(0.08)	(0.08)	(0.08)	(0.07)
Fear treat. × Crime victim. idx	0.19*	0.21**	0.22**	0.22**	-0.17*	-0.16*	-0.17*	-0.17*
	(0.10)	(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Demographic controls?	✓	✓	✓	✓	✓	✓	✓	✓
Psychological stress index?		✓	✓	✓		✓	✓	✓
Political preferences?			✓	✓			✓	✓
Nbrhd. violence & corruption?				✓				✓
N	764	756	746	738	753	746	736	729
R^2	0.08	0.09	0.10	0.12	0.06	0.06	0.06	0.10

All estimates are based on weighted least squares regressions.
Linearized standard errors in parentheses account for clustering at the electoral precinct level.
*** Significant at the 1% level; ** significant at the 5% level; and * significant at the 10% level.