

Anger and Support for Punitive Justice in Mexico's Drug War

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Abstract

Why do civilians affected by violence support vigilante groups? We argue that outrage after violence increases the demand for punitiveness, even at the expense of the rule of law. We test our theory using three observational and experimental studies using data from an original survey of 1,200 individuals in Western Mexico, a region affected by narcotrafficking and vigilante violence. We find first that individuals exposed to more violence are angrier and more supportive of punitive criminal justice, including policies that enable vigilantes. Second, both experiments show that citizens are more supportive of harsh punishments, and place less value on their legality, for morally outrageous crimes. Third, the innocence of a crime's victim has a stronger effect on anger and punitiveness than the severity of its violence. The findings suggest that emotional reactions to violence can lead to cycles of retribution that undermine the rule of law.

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1 Introduction

“They kidnapped my sisters. They tried to kill my wife and my children. And when they started going into the schools and taking the baby girls, 11-year-olds, 12-year-olds, that was my breaking point... We have a lot of anger.”

–Autodefensa leader quoted in *The Washington Post*¹

In 2013, Luis Antonio Torres, known by “Simon el Americano,” organized a group of residents to eject the police from the Mexican municipality of Buenavista Tomatlán, and to fight against *Los Templarios*, the dominant cartel. Vigilante groups like those formed by Torres became known as *autodefensas* (literally self-defenders). In the period before the autodefensas’ uprising, Los Templarios were demanding 20% of local farmers’ revenues in Buenavista Tomatlán, and kidnapping or killing those who refused to pay. In Buenavista and similar municipalities, many civilians gave money and other forms of support to the autodefensas in order to take action against the police and cartels.²

For a short period in 2013, security in areas under the autodefensas’ control seemingly improved. The autodefensas had the tacit support of the army and the interior ministry.³ Yet by early 2014, Torres and other autodefensas were accused of being allied with Los Templarios, and engaging in deadly clashes with neighboring autodefensas over control of lucrative lime orchards.⁴ Torres was identified as a regional leader in a new Michoacán cartel known as “H3,” or “The Third Brotherhood,” that represented an alliance between several autodefensas groups and cells of Los Templarios and a second prominent cartel, *Jalisco Cartel Nueva Generación*.⁵ In 2018, five years

¹McCrummen, Stephanie, “In the hills of Michoacan, self-defense groups battle a Mexican drug cartel,” *The Washington Post*, 9 Sep 2013, https://www.washingtonpost.com/world/the_americas/in-the-hills-of-michoacan-self-defense-groups-battle-a-mexican-drug-cartel/2013/09/09/6947e47a-119f-11e3-a2b3-5e107edf9897_story.html?noredirect=on&utm_term=.a8465e5752d9.

²See <https://www.newyorker.com/magazine/2017/11/27/a-mexican-town-wages-its-own-war-on-drugs> and a 2014 poll that shows that close to 60% of the residents of Michoacán supported the autodefensas. See <https://www.quadratin.com.mx/justicia/El-58-de-michoacanos-avala-autodefensas-revela-encuesta/>.

³Nacar, Jonathan, “Michoacan, a cinco años de las autodefensas,” *Eje Central*, 25 Feb 2018, <http://www.ejecentral.com.mx/michoacan-cinco-anos-de-las-autodefensas/>.

⁴Macias, Veronica, “Edil de Buenavista defiende a El Americano,” *El Economista*, 11 Mar 2014, <https://www.eleconomista.com.mx/politica/Edil-de-Buenavista-defiende-a-El-Americano-20140311-0129.html>.

⁵Parkinson, Charles, “Michoacan’s ‘New Cartel’ Bolsters Vigilante Criminalization Fears”, *InSight Crime*, 6 May 2014, <https://www.insightcrime.org/news/brief/michoacans-new-cartel-bolsters-mexico-vigilante-criminalization-fears/>. Becerril, Andres, “Autodefensas dan origen a otro cartel; nace en Michoacán La Tercera Hermandad o H3,” *Excelsior*, 5 Jun 2014, <https://www.excelsior.com.mx/nacional/2014/05/06/957619>.

after the emergence of the autodefensas, official statistics show that violence in the region around Buenavista has increased.⁶ Cases like Buenavista Tomatlán raise a puzzling question: why do citizens support vigilante groups that seem to make violence even worse?

The sequence of events in Buenavista is an example of a pattern in communities affected by violence: outrageous crimes lead to a demand for harsh punishment, even at the cost of the rule of law. In the Philippines, Rodrigo Duterte, known for organizing death squads as the mayor of Davao, won election on a platform of ending crime by killing criminals without due process. As of 2018, he is accused of killing as many as 12,000 drug suspects, but according to official statistics, the homicide rate rose 15% in his first year in office.⁷ In the U.S. stand your ground laws providing legal immunity for the use of lethal force in self-defense situations (without a “duty to retreat”) are supported by a majority or large plurality of Americans.⁸ despite research suggesting that these laws may actually cause increases in homicides (Cheng and Hoekstra, 2013; Humphreys, Gasparrini and Wiebe, 2017). On the other hand, public opinion has stymied efforts to scale up evidence-based programs to reduce violence, such as financial incentives for high-risk youth to abstain from crime,⁹ although evaluations suggest that these programs can be effective. In all of these cases, citizens support harsh or violent criminal justice policy even if these policies lead to increased violence, and oppose less punitive policies that have a track record of reducing violence. What explains this taste for harsh punishment?

We argue that when thinking about criminal justice policies citizens do care about effectiveness. Yet they also have a preference for punitiveness, or for punishing criminals in a way that corresponds to the crimes they have committed. We argue that exposure to some types of violence increases the demand for punitive punishments. Specifically, violence that causes people to feel outrage

⁶Nacar, *Eje Central*, 25 Feb 2018.

⁷Talabong, Rambo, “Crimes, except homicide, in the Philippines down by 21.8% in 2017,” *Rappler*, 20 Dec 2017, <https://www.rappler.com/nation/191747-philippines-crime-statistics-2017-all-crimes-drop-except-homicide-ppp-year-end-2017>

⁸DeLuca, Matthew, “Majority of Americans support ‘Stand Your Ground’ laws: poll,” *NBC News*, 3 Nov 2015, <https://www.nbcnews.com/news/us-news/majority-americans-support-stand-your-ground-laws-poll-flna6C10825023>. Rasmussen Reports, “41% Think ‘Stand Your Ground’ Laws Improve Public Safety,” 20 Feb 2014, http://www.rasmussenreports.com/public_content/politics/general_politics/february_2014/41_think_stand_your_ground_laws_improve_public_safety.

⁹Davis, Aaron, *The Washington Post*, “D.C. abandons plan to pay criminals to stay out of trouble,” 5 May 2016, https://www.washingtonpost.com/local/dc-politics/dc-abandons-plan-to-pay-criminals-to-stay-out-of-trouble/2016/05/05/6e4ad018-12af-11e6-8967-7ac733c56f12_story.html. Cowan, Claudia, “One California city is paying people not to commit crimes,” *Fox News*, 24 Aug 2016, <https://goo.gl/7wWny3>.

in turn increases perceptions of blame and preferences for punitiveness. We use three separate observational and experimental tests to elicit these preferences, and to test whether anger plays an important role in the process. We implemented these tests during a survey of 1,200 residents in Western Mexico, where vigilante groups sprang up in 2013 in a number of municipalities like Buenavista Tomatlán.

First, we examine whether those exposed to higher levels of violence prefer more punitive policies and perceive perpetrators as more worthy of blame and punishment than those who are not (Study 1). Second, we use a survey experiment designed to generate moral outrage to test whether scenarios that induce higher levels of anger cause people to prefer harsh, illegal punishments (Study 2). Finally, we use a set of 125 randomly generated scenarios to test whether across a broad spectrum of violent crimes, more severe violence against more innocent victims induces higher levels of anger, and causes people to prefer extrajudicial and harsh punishments (Study 3).

The combination of these three research designs enables us to draw conclusions that are based on highly realistic variation, generalizable to a large population of interest, and causal. The first study's observational design looks at real variation in exposure to violence and policy preferences in a representative sample of Western Mexicans. This research design enables us to examine whether there is a substantively meaningful relationship between policy preferences and exposure to violence. The second study, a survey experiment, enables us to test for specific causal mechanisms and to estimate the effects of anger resulting from hypothetical exposure to outrageous violence. Finally, in the third study, we use a factorial experimental design that provides causal estimates of the effects of a wide range of crime scenarios. All of our hypotheses, and the research designs of the two experiments, were pre-registered in advance of analysis with the EGAP experimental design registry.¹⁰

These three analyses yield three key findings. First, we find that exposure to violence is correlated with increased levels of anger and support for harsh punishment, including those carried out by vigilantes. Second, across our two experiments we find that morally outrageous crimes increase support for harsh punishments, and cause citizens to care less about the legality

¹⁰See EGAP ID #20170504AB for more information.

of punishments. Importantly, we find no evidence that exposure to violence causes citizens to develop a specific preference for vigilante justice: instead, our evidence suggests that citizens turn to vigilantes because they promise harsher punishments than the state rather than because people like extrajudicial violence. Finally, we find that the innocence of the victims of crimes rather than the severity of the crime has the largest effect on outrage and subsequent preferences for harsh punishments.

Our findings extend a growing literature on how exposure to violence, including violent crime, affects political beliefs and behavior. Much of this research has focused on the longer-term effects of direct exposure to violence during civil war (see [Bauer et al., 2016](#), for a recent review). Several recent studies have examined the effects of crime exposure in Latin America ([Malone, 2010](#); [Bateson, 2012](#); [Ley, 2017](#); [Romero, Magaloni and Díaz-Cayeros, 2016](#); [Berens and von Schiller, 2017](#)). One question of particular importance in this literature is whether exposure to violence is associated with political attitudes that exacerbate or defuse violence, with mixed empirical results. [Canetti-Nisim et al. \(2009\)](#) and [Getmansky and Zeitzoff \(2014\)](#) find that violence exposure increases public support for escalatory policies, while others find that it leads to more conciliatory, pro-compromise positions ([Lyall, 2009](#); [Hazlett, 2013](#); [Beber, Roessler and Scacco, 2014](#); [Zeitzoff, 2014](#)). We expand this literature by disaggregating the type of violence that might lead to conciliatory or aggressive preferences, and by proposing emotions as a specific mechanism.

2 Anger, Exposure to Violence, and Attitudes Towards Justice

Early political theorists suggested two rationales for determining punishment: retribution and prevention ([Vidmar and Miller, 1980](#); [Darley, Carlsmith and Robinson, 2000](#)). Retribution is retrospective, focusing on the perpetrator's "just deserts" to argue that the punishment should be proportional to the severity of the crime or how morally outrageous it is ([Kant, 1952](#)). If punishments are determined according to this principle, the severity of the harm and the existence of extenuating circumstances that mitigate or exacerbate the moral outrage should be strongly related to the severity of the punishment ([Darley, Carlsmith and Robinson, 2000](#)). In contrast, utilitarian

legal scholars argue that “general prevention ought to be the chief end of punishment” (Bentham 1962, qtd. in Carlsmith, Darley and Robinson 2002). While in theory policies could be both punitive and effective in preventing crime, in practice there is considerable evidence that in many cases harsh punishments are not effective in preventing future crime either through deterrence or rehabilitation, particularly if there is uncertainty in whether they will be meted out (Farrington, MacKenzie, Sherman and Welsh, 2003; Chen and Shapiro, 2007; Andrews and Bonta, 2010). Later research argues that citizens also care about equitable treatment, otherwise known as “procedural justice” (Lind and Tyler, 1988). Procedural justice advocates argue that while individuals care about punishing wrongs, what they really care about is fairness and transparency in the judicial process because punishments derive their legitimacy from fair processes (Tyler, 2006).

Research in the U.S. has attempted to identify whether aggregate attitudes towards criminal justice policy are driven by a logic of retribution, prevention, or procedural justice. Public opinion researchers have suggested that the popularity of the death penalty and three strikes laws is primarily motivated by a logic of retribution (Roberts et al., 2002; Enns, 2014). Political psychologists have also used vignette experiments to show that participants prefer harsher punishments for crimes that are morally outrageous, but not necessarily for those in which the punishment is more likely to deter or incapacitate a future crime (Darley, Carlsmith and Robinson, 2000; Carlsmith, Darley and Robinson, 2002). Research from behavioral economics suggests that this preference for harsh punishments may be part of a more general willingness to punish, even when it is personally costly (Camerer and Thaler, 1995; Carpenter, 2007).

What cognitive processes make someone willing to sacrifice their personal welfare (in terms of security or monetary payoffs), in order to exact a severe punishment? Existing research suggests that anger may play a key role in pushing individuals to prioritize costly punishment over personal interests. Theory on emotions and cognition from psychology provides a foundation for the view that anger could increase the taste for punishment. Anger is an approach-oriented emotion that prepares individuals to take action in order to rectify perceived wrongs or slights (Frijda, 1986; Carver and Harmon-Jones, 2009). Appraisal tendency theory distinguishes anger from other negative emotions by its association with appraisals of certainty, control, and responsibility (Lerner

and Keltner, 2000). Anger induced in experiments has been shown to affect a host of appraisals and behaviors that are thought to help the individual arrive at his desired state, including punitiveness (Lerner and Keltner, 2001; Bastian, Denson and Haslam, 2013).

Several studies in behavioral economics support the idea that anger undergirds harsh punishment (Pillutla and Murnighan, 1996; Srivastava, Espinoza and Fedorikhin, 2009). There is some evidence that anger and moral outrage are correlated with a preference for harsh criminal justice policy (Johnson, 2009) and can even cause increases in punitiveness in hypothetical crime scenarios in an experimental setting (Lerner, Goldberg and Tetlock, 1998). Similarly, social psychologists have argued that anger plays an integral role in explaining preferences for punishment because crime violates sacred values and produces moral outrage. Garland (2012) builds on Durkheim and Swain (2008) to argue that: “(t)he criminal act violates sentiments and emotions which are deeply ingrained in most members of society – it shocks their healthy consciences – and this violation calls forth strong psychological reactions, even among those not directly involved. It provokes a sense of outrage, anger, indignation, and a passionate desire for vengeance” (30).

We argue that exposure to certain types of violence leads to anger, and in turn, increase support for punitiveness and retribution. While violence certainly can lead to fear, anger is also a common reaction, particularly from people who appraise that they have the resources to fight back. In particular, we predict that violent acts that are severe and target innocent victims are more likely to induce anger. Acts of violence that violate core values such as harming children can induce a sense of moral outrage (Atran, Axelrod and Davis, 2007).

Finally, what kind of punishments or policies will those exposed to violence turn to in order to implement harsh punishments? As discussed above, most of the public opinion research on criminal justice policy has been conducted in high-capacity states like the U.S. However, exposure to violence is generally higher in poorer states where the public is less confident that the government can effectively implement harsh punishments.¹¹ In such a setting, the taste for punishment that is induced by outrageous violence may lead affected individuals to turn to extrajudicial options such as vigilante groups, and prioritize retribution over legality as well as prevention of future harm.

¹¹See “2018 Gallup 2018 Global Law and Order Report” <https://news.gallup.com/reports/235310/gallup-global-law-order-report-2018.aspx>.

To summarize, the existing literature leads us to make three main predictions. First, we expect that exposure to violence will be associated with the emotion of anger, especially if the violence is severe or targets victims who are perceived as innocent (*Prediction 1*). Second, we expect that exposure to violence, again particularly violence that is severe or targets innocent victims, will increase support for harsh punishments (*Prediction 2*). This increase in support for harsh punishments can also be expressed as an increase in support for punitiveness as a general principle of criminal justice policy, at the expense of the competing principles of legality or procedural justice, and effectiveness in preventing future crime. Finally, we predict that exposure to violence, particularly violence that is severe or targets innocent victims, will be associated with an increase in support for extrajudicial punishments (*Prediction 3*). While anger could lead citizens to support vigilantes because they are an ends to the means of harsh punishments, this final hypothesis predicts that conditional on the harshness of the punishment, anger may cause citizens to develop a separate preference for punishments that are meted out by vigilantes.

As discussed in depth in Section 4, we test these hypotheses using both variation in past exposure to real violence that respondents report, and by asking respondents to evaluate randomly assigned hypothetical scenarios that describe violent crimes. These predictions as well as the research design were preregistered with EGAP before any analysis was conducted.¹²

3 Violence and Vigilantism in Mexico

3.1 Mexico's Drug War

Drug-related violence is the largest threat to security in Mexico, affecting various regions in the country for more than 10 years. Based on official data from the National Institute of Statistics and Geography (INEGI), over 200,000 Mexicans have been killed since December 2006, when former Mexican president Felipe Calderón unleashed a war against organized crime by sending

¹²We also preregistered two hypotheses about individual characteristics that would moderate participants' reactions to the crime scenarios. **Prediction 4:** *People with more positive attitudes towards vengeance will be even more supportive of harsh and extrajudicial punishments for crimes with innocent victims or more severe violence.* **Prediction 5:** *People with more exposure to violence will be even more supportive of harsh and extrajudicial punishments for crimes with innocent victims or more severe violence.* In the interest of brevity, we do not present these results in this paper, but rather write them up in a separate analysis of individual differences and reactions to violent crime.

the army into the state of Michoacán. Mexico's president at the time of this study, Enrique Peña Nieto, adopted a similar strategy towards combatting drug trafficking organizations. The army and the federal police were deployed throughout the Mexican territory aiming at capturing or killing criminal bosses.

Figure 1 shows the geographic distribution of homicide rates at the municipality level for 2017, the most violent year in Mexico in at least 20 years, based on data from INEGI.¹³ While much of the violence is concentrated in the northern part of the country, along the drug-trafficking routes into the U.S., there is substantial spatial variation across the country, particularly in the western spine of the country, where drug production is concentrated (Dube, García-Ponce and Thom, 2016). The state-level borders in red demarcate Western Mexico, which includes (from left to right in the map) the states of Nayarit, Jalisco, Colima, and Michoacán. These states exhibit varying levels of violence, but all of them have experienced significant increases in their murder rates over the past decade. For instance, between 2008 and 2017, the homicide rate in Michoacán more than doubled, escalating from 15 to 36 homicides per 100,000 people.

Scholars and policymakers have pointed to institutionalized corruption and an ineffective judicial system as key drivers of the violence.¹⁴ Other factors that have led to heightened violence over the past decade include the fragmentation of the cartels,¹⁵ the diversification of the cartels from drug trafficking into other criminal activities like extortion, human trafficking, and fuel theft,¹⁶ and a fierce battle for controlling lucrative coast ports such as Manzanillo in Colima and Lázaro Cárdenas in Michoacán.¹⁷

3.2 Vigilantism and Support for Extrajudicial Violence

In early 2013, groups of civilians in the state of Michoacán formed self-defense militias or vigilante groups called *autodefensas* to fight organized crime, with the initial goal of kicking out an exceptionally violent drug cartel known as *Los Templarios*. Violence and extortion are longstanding problems

¹³see <http://time.com/5111972/mexico-murder-rate-record-2017/>

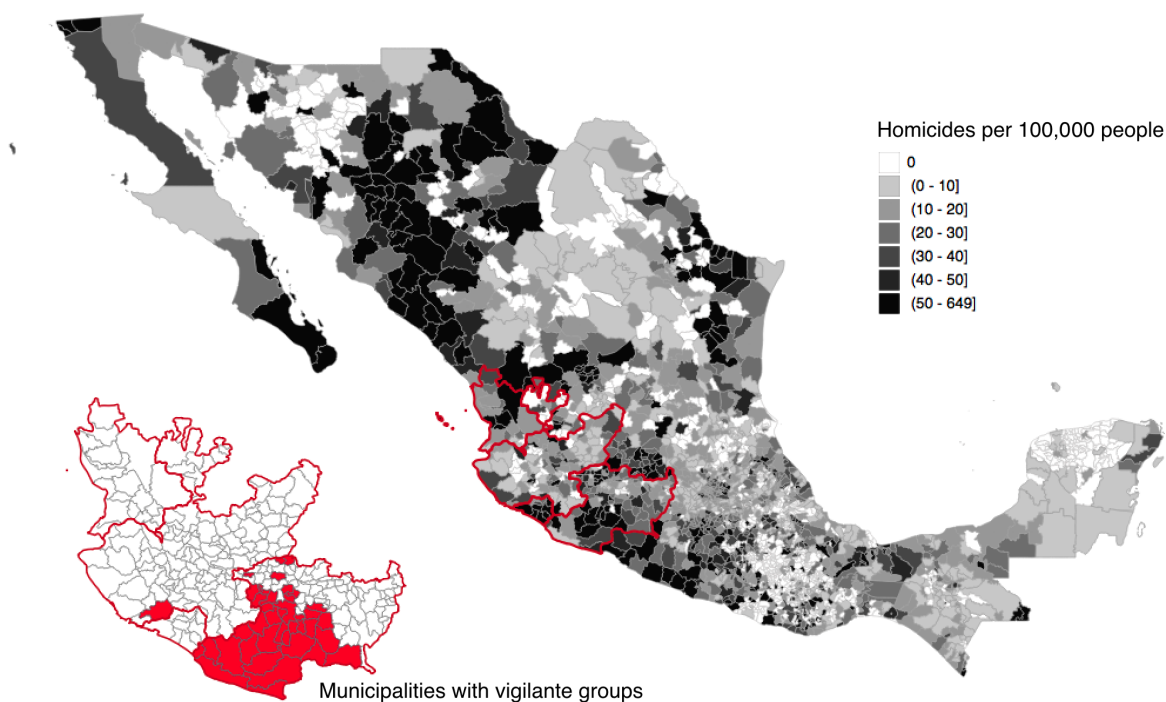
¹⁴See <http://harvardkennedyschoolreview.com/justice-in-mexico-the-mexican-drug-wars-most-important-change-that-not/>

¹⁵See <https://www.businessinsider.com/mexico-fighting-between-sinaloa-cartel-jalisco-cartel-getting-worse-2016-10>

¹⁶See <https://www.nytimes.com/2017/04/26/world/americas/mexico-fuel-theft-crisis.html>

¹⁷See <https://www.wilsoncenter.org/article/whats-behind-rising-violence-colima-brief-look-2016s-most-violent-mexico>

Figure 1: Homicide rates at the municipality Level, 2017



in Michoacán, particularly in the region known as the “Hot Land” (*Tierra caliente*). One leader of the *autodefensas* explained that *Los Templarios* had crossed a line when they started to kidnap women and children in groups in order to rape them. Others have argued that they formed the militias when *Los Templarios* started exerting direct control over agricultural production, taking over farms illegally, displacing owners and exploiting workers.¹⁸

The emergence of self-defense militias is not a new phenomenon in Mexico, but the *autodefensas* represent a new generation. Many of these vigilante groups clashed with both drug cartels and state security forces in their attempt to maintain territorial control, and were accused of carrying out lynchings and human rights abuses.¹⁹ As shown in the smaller map in Figure 1, vigilante groups have operated in recent years in more than than one-third of all municipalities in Michoacán. Based on public opinion polls conducted shortly after the creation of the *autodefensas*, a majority of Mexican citizens supported the creation of such groups and perceived them as more effective than

¹⁸See https://www.washingtonpost.com/news/monkey-cage/wp/2014/05/20/how-does-a-drug-cartel-become-a-lime-cartel/?utm_term=.049f2190dc34

¹⁹See <https://news.vice.com/article/mexican-authorities-say-they-dont-exist-vigilantes-standing-up-to-the-zetas>

the state security forces.²⁰

Although the *autodefensas* were mostly filled with farmers and local business owners, it has been suspected that their ranks were infiltrated by drug cartels members.²¹ On May 2014, after federal authorities arrested one of the *autodefensas* leaders, the government offered to incorporate the *autodefensas* into official public security forces, which resulted in the newly formed rural police forces.

Michoacán's violence levels did not decrease as a result of the emergence of vigilante groups. In fact, the murder rate has increased sharply over the past two years.²² More recently, the western state of Colima has experienced a large uptick of violence based on jockeying of rival cartels, with a homicide rate of 113 per 100,000, a four-fold increase from 2015.²³

4 Sampling Strategy

Our target population for this study was adult residents of the four states that make up Western Mexico: Colima, Jalisco, Michoacán, and Nayarit. Respondents were randomly selected using a stratified multistage cluster sampling design. Our sampling strategy takes into account variation in the presence of *autodefensas*, violence severity, and urbanization. Half of our sample is from Michoacán because of its high exposure to vigilantes, with the rest selected proportional to population from Colima, Jalisco, and Nayarit.²⁴ After stratifying based on these characteristics, we sampled PSUs proportional to the size of their populations.

We generated five random samples so that surveyors could replace PSUs if necessary. Six out of 120 (5%) PSUs from the first sample had to be replaced.²⁵ They were replaced with five PSUs from the second sample.²⁶ Within each PSU, surveyors used maps and a random number generator

²⁰See <http://www.animalpolitico.com/2014/07/7-de-cada-10-mexicanos-apoyan-a-los-grupos-de-autodefensas/>

²¹See <https://www.businessinsider.com/autodefensas-causing-violence-in-guerrero-and-michoacan-in-mexico-2016-12>

²²See <http://www.businessinsider.com/mexico-sinaloa-jalisco-cartel-fighting-violence-in-colima-2017-1>

²³See <http://www.businessinsider.com/mexico-sinaloa-jalisco-cartel-fighting-violence-in-colima-2017-1>

²⁴Because the vast majority of localities outside of Michoacán do not have known vigilante group presence, we only stratified on vigilante group presence in Michoacán.

²⁵All were in high violence areas: three in the city of Zapopan, one in Zacoalco de Torres, and two in the rural areas of Tomatlan and Coalcoman de Vasquez Pallares.

²⁶36 respondents were also surveyed in PSUs that were not in any of the samples, mostly in two Guadalajara PSUs. These respondents have been dropped for all the analyses in this article, but interpretation of the results does not change if they are included.

to select blocks or clusters of households proportional to their size. Within each block or cluster, they sampled households by starting at the northeast corner, walking clockwise, and skipping households in regular intervals of three. Once a household was selected, the surveyors selected a respondent from eligible adult household members by creating a household roster of a randomly selected gender²⁷ and then using a random number generator programmed into their questionnaire. If the respondent was not available or declined, we made one replacement within the household and then replaced the household with its nearest neighbor. The interview was administered using tablets with a questionnaire programmed in Open Data Kit.

This strategy produced a sample with considerable variation in terms of exposure to violence and criminal justice preferences. Half of the respondents in our sample are in Michoacán, 40% are in Jalisco (due to its large population), 6% are in Nayarit, and 4% in Colima. Full demographic summary statistics are presented in Table A.1 on page 3 of the Supplemental Information.

5 Study 1: Is Violence Correlated with Support for Harsh, Pro-vigilante Policies?

In the first study we test whether exposure to violence is correlated with anger, attributions of blame, and punitiveness. This provides an observational test of whether exposure to violence is related to stronger preferences for harsh and vigilante punishment including more punitiveness, stronger attributions of blame, and more anger. If we find the expected relationships—exposure to violence increases punitiveness and anger—then this would suggest a mechanism for how violence corrodes support for the rule of law.

Our main measure of exposure to violence, the key independent variable in Study 1, is a standardized additive index of five different types of violence (abduction, extortion, paying for protection, being threatened with a weapon, and assault) measured indirectly as discussed in the previous section.

There is considerable variation in exposure to violence in our sample, both within and across

²⁷We sampled men with a 60% probability in order to produce a sample with better gender balance because men were more likely to be unavailable to participate in the survey.

states. Because we assessed that it was unethical to ask respondents to directly report on personal experiences with severe violence, we proxy for personal exposure with an indirect measure. Specifically, we asked respondents to estimate how likely it is that someone in their community has experienced different types of violence in the past 30 days. We selected five contextually relevant forms of violence based on past applications of the Harvard Trauma Questionnaire with Mexican respondents and crime statistics for the four states included in our study (O'Connor, Vizcaino and Benavides, 2015). To validate these measures as proxies for personal exposure, we also measure a subset of less sensitive types of violence directly by asking people if they have experienced them in the past year. As Appendix C (page 6) shows, the direct questions are strongly predictive of responses to the indirect questions, even after including fixed effects for the 119 PSUs. This validation suggests that respondents are drawing on their personal experiences to answer the indirect questions about violence, and that these measures can indeed be used as proxies for personal exposure. In Figure 2 we plot the distribution of the estimated likelihood that someone in the respondent's community has experienced each type of violence in the past thirty days.

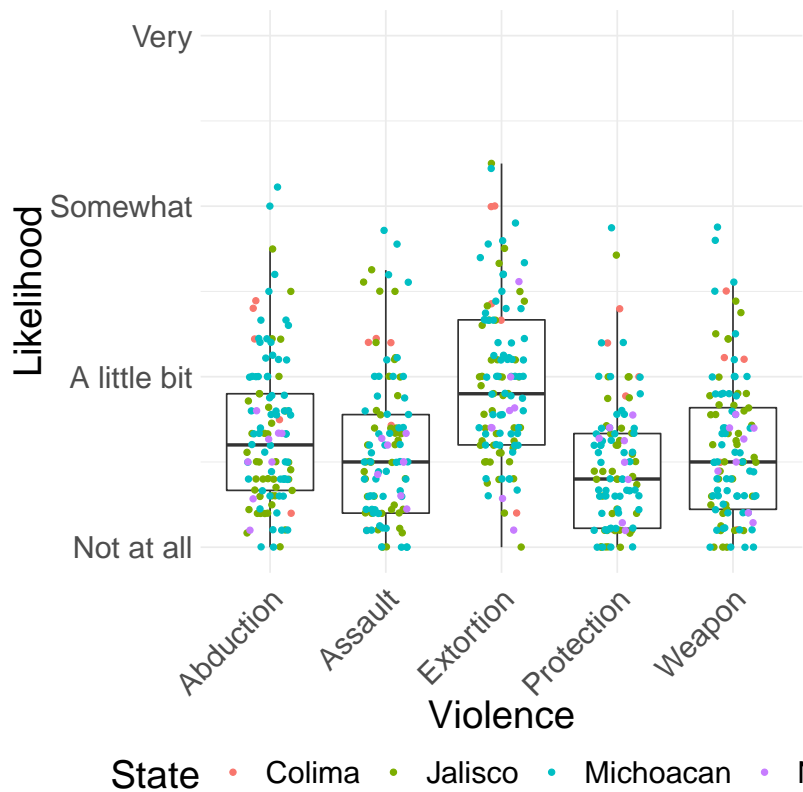
Our data suggests that extortion is the most common type of violence that people experience. The extremely high incidence of extortion is also supported by our direct measure of exposure to this type of violence: 14% of our respondents say that they have personally experienced extortion in the context of the drug war or drug trafficking. The high prevalence of extortion is also in line with other data sources, including the 2016 National Crime Victimization Survey (ENVIPE) and other recent academic surveys (Magaloni et al., 2017).²⁸

We examine the correlation between an index of exposure to violence based on these five measures and respondents' preferences on five different policy questions. The five policy questions measure the extent of support or opposition to non-governmental armed groups, the *autodefensas*, lynching a criminal rather than releasing him on a technicality, reinstating the death penalty, and opposing a proposal to pay narcotraffickers to stop participating in violence.²⁹ Figure 3 presents the

²⁸See http://www.inegi.org.mx/saladeprensa/boletines/2016/especiales/especiales2016_09_04.pdf.

²⁹We also asked respondents whether they thought the *autodefensas* should be legalized and whether they thought El Chapo (a notorious drug trafficker extradited to the US shortly before our survey) should be tried in the U.S. We do not analyze these questions here because they are not unambiguously related to the underlying attitudes we are measuring. Preferences for legalizing the *autodefensas*, for example, could be driven by a desire for all criminal justice to be carried out under the auspices of the legal system or by strong support for the *autodefensas*. Opposition to El Chapo's extradition

Figure 2: Estimated incidence of severe violence by state



distribution of responses to each of these five policy proposals.

We find fairly strong support for punitive, state-implemented criminal justice policies. 36% of respondents support bringing back the death penalty. A large majority (86%) of respondents are opposed to a policy that would financially reward narcotraffickers for abstaining from violence. We find somewhat similar levels of support for vigilante solutions to drug violence. Across the two questions that ask directly about support for non-governmental armed groups or *autodefensas*, a sizable minority of respondents say that they support or strongly support these groups ($\approx 34\text{-}37\%$). 28% would prefer that a criminal be lynched than released legally on a technicality.

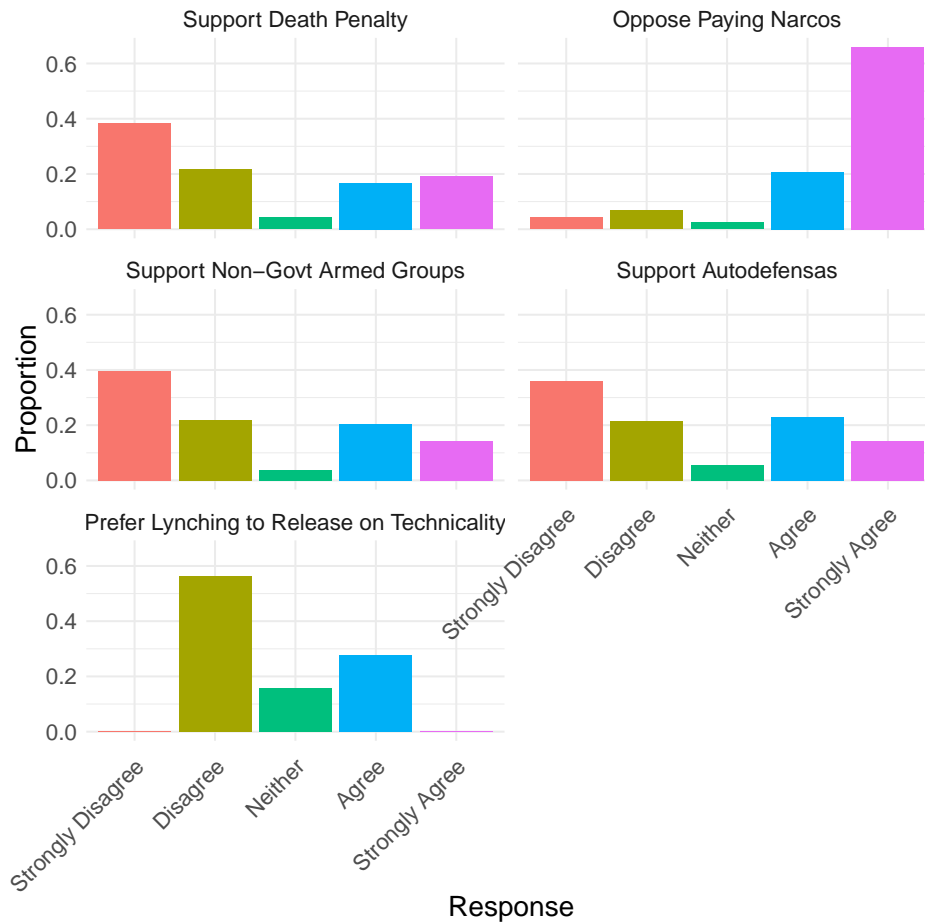
We now test whether people who are exposed to more narcotrafficking violence are more likely to prefer criminal justice policies that support vigilante groups and involve harsher punishments.³⁰

This analysis is based on a mean effects index built from the five distinct survey questions presented

could be because they think he's less likely to be harshly punished in the U.S. or because they think he should be tried by the citizens whom he most harmed, among other reasons.

³⁰These specifications were not preregistered, although the hypotheses tested here were.

Figure 3: Support for pro-vigilante and harsh criminal justice policy



above. The full text of all the measures used to construct this index is included in Appendix B.1 (page 4).

We estimate the relationship with exposure to violence using OLS. We estimate a specification without any control variables, with individual-level controls, and with PSU fixed effects. The individual controls include gender, education, an assets index, age, marital status, and employment of the household head. We selected these demographic characteristics because they are both likely to explain variation in exposure to violence, and because they are the kind of slow-changing demographic characteristics that are unlikely to introduce post-treatment bias (Montgomery, Nyhan and Torres, 2016). We cluster standard errors by locality because violence exposure is likely

correlated across residents at the local level.³¹

Table 1: Exposure to violence is associated with higher support for punitive and pro-vigilante criminal justice policy preferences

	<i>Dependent variable:</i>		
	Policy Attitudes Index		
	(1)	(2)	(3)
Violence Index	0.07*** (0.02)	0.06*** (0.02)	0.05** (0.02)
Female		-0.03 (0.03)	-0.03 (0.03)
Education		0.01 (0.01)	0.003 (0.01)
Assets Index		0.03 (0.02)	0.02 (0.02)
Age		-0.003*** (0.001)	-0.01*** (0.001)
Married		0.01 (0.03)	0.03 (0.04)
Employed		-0.01 (0.04)	-0.03 (0.04)
Constant	0.03 (0.02)	0.14* (0.08)	0.07 (0.09)
PSU FEs			✓
Number of PSUs			119
Observations	1,149	1,117	1,117
R ²	0.02	0.04	0.20

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

Standard errors clustered by PSU in parentheses.

Coefficients are estimated using OLS. Observations are weighted by the inverse propensity that a respondent is selected for the sample and the proportion of the PSU population that her age and gender cohort makes up.

Table 1 shows that past exposure to narco-trafficking violence is strongly and robustly correlated with preferences for harsh and vigilante criminal justice policy. A one standard deviation increase in the Violence Index is associated with a 0.06 to 0.07 standard deviation increase in the index of preferences for harsh and pro-vigilante criminal justice policy. These effects are robust to the inclusion of a battery of individual-level controls and PSU fixed effects and are larger in magnitude than any of the standard demographic controls. Disaggregated results presented in Appendix D.1 (page 6) show that these results are driven primarily by two sub-indicators in the dependent variable: support for the death penalty, and support for lynching as opposed to releasing criminals

³¹PSU fixed effects explain 18-22% of the variation in exposure to the five types of severe violence that we measured indirectly.

on technicalities.

Substantively, the magnitudes of these coefficients on policy preferences are important. People who are exposed to above-average levels of narcotrafficking violence, for example, are 10 percentage points more likely to support bringing back the death penalty, an increase of 30% over the low-violence group. High-violence respondents are also ten percentage points more likely to prefer that criminals are lynched in the town square rather than released from jail on a technicality, a 37% increase over the low-violence group.

Our explanation for the link between exposure to violence and policy preferences is that violence leads to changes in the psychological states of those affected, which in turn leads to changes in their policy preferences. We next test whether past exposure to narcotrafficking violence is associated with psychological factors that should increase support for punitive, pro-vigilante justice policies: higher levels of anger, stronger attributions of blame, and a stronger general desire to punish. Following the appraisal tendency framework, we view blame attributions as a potential mechanism linking anger to punitiveness (Lerner, Goldberg and Tetlock, 1998).

To measure attributions of blame, we asked people for their opinions about how responsible different actors are for the drug-related violence in Mexico, including the narcotraffickers, local and federal police, army, *autodefensas*, and politicians. We use a similar strategy to measure general punitiveness by asking respondents how much they would like to see the same six actors be punished on a four-point scale. To measure general levels of anger, we ask them to report how often they felt angry in the last 30 days on a four-point frequency scale.

Table 2 shows that past exposure to violence is strongly and positively associated with the propensity to feel anger, attributions of blame, and general punitiveness. Based on the most conservative specifications, a one standard deviation increase in exposure to violence is associated with a 0.16 standard deviation increase in trait anger, a 0.1 standard deviation increase in blame attributions, and a 0.09 standard deviation increase in general punitiveness. Appendix D on page 6 of the Supplemental Appendix show that the increases in blame and punitiveness are consistent across all six of the sub-indicators that make up the indices. In addition, we test for associations between violence exposure and three alternative emotions: fear, sadness, and happiness. Although

Table 2: Exposure to violence and psychological outcomes: Emotions and attributions

	<i>Dependent variable:</i>								
	Anger			Blame Index			Punitiveness Index		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Violence Index	0.14*** (0.03)	0.14*** (0.03)	0.17*** (0.03)	0.10*** (0.02)	0.09*** (0.02)	0.10*** (0.02)	0.10*** (0.02)	0.09*** (0.02)	0.09*** (0.02)
Female		0.05 (0.05)	0.07 (0.06)		-0.04 (0.04)	-0.02 (0.05)		0.01 (0.04)	0.02 (0.04)
Education		-0.01 (0.02)	-0.01 (0.02)		-0.005 (0.01)	-0.02 (0.01)		0.02 (0.01)	0.01 (0.01)
Assets Index		-0.02 (0.03)	-0.01 (0.03)		0.05* (0.03)	0.05** (0.03)		0.07** (0.03)	0.05* (0.03)
Age		-0.003** (0.002)	-0.003 (0.002)		-0.005*** (0.002)	-0.004** (0.002)		-0.01*** (0.001)	-0.01*** (0.002)
Married		-0.03 (0.06)	-0.04 (0.07)		0.05 (0.04)	0.07 (0.05)		0.03 (0.04)	0.06 (0.05)
Employed		0.02 (0.06)	0.04 (0.07)		0.05 (0.04)	0.06 (0.04)		0.03 (0.04)	0.02 (0.04)
Constant	0.01 (0.03)	0.16 (0.12)	0.32** (0.14)	0.02 (0.02)	0.19* (0.10)	0.26** (0.11)	0.03 (0.03)	0.15* (0.08)	0.47*** (0.11)
PSU FEs			✓			✓			✓
Number of PSUs			119			119			119
Observations	1,147	1,115	1,115	1,141	1,112	1,112	1,140	1,110	1,110
R ²	0.03	0.04	0.14	0.02	0.05	0.21	0.02	0.07	0.22

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

Standard errors clustered by PSU in parentheses.

Coefficients are estimated using OLS. Observations are weighted by the inverse propensity that a respondent is selected for the sample and the proportion of the PSU population that her age and gender cohort makes up.

we find some evidence that violence exposure is associated with higher levels of other emotions, particularly fear, the association between violence and anger is larger in magnitude than that with violence and any other emotion. This suggests that while violence is understandably associated with a complicated mix of emotions, anger seems to be the most potent component.

Overall, Study 1 shows that past exposure to violence is positively and consistently correlated with anger, appraisals of blame and punitiveness, and policy preferences that facilitate harsh and extrajudicial punishments for the perpetrators of violence. However, this observational research design does not allow us to rule out the possibility that these correlations could be driven by an omitted variable that jointly explains exposure to violence and psychological variables and justice attitudes, or reverse causation. In the next sections, we turn to experimental research designs that use randomly-assigned variation in exposure to hypothetical forms of violence to address some of the endogeneity concerns and identify the type of violent events that are most likely to set off a

cycle of anger and retributiveness.

6 Study 2: Do Crimes that Inspire Outrage Increase Support for Harsh, Vigilante Policies?

In Study 2 we use an experiment to test whether outrage is driving the relationship between exposure to violence and preferences for harsh, vigilante criminal justice policy. This eliminates the possibility that a confounding factor or reverse causation might bias our estimate of the relationship between anger, violence, and political preferences. We directly test how individuals respond to morally outrageous violence, compared to similar scenarios that do not trigger outrage. While the experimental design comes at the cost of less external validity because we rely on hypothetical scenarios and respondents' self-assessments of what they would do and feel in such situations, the gains in terms of causal identification make Study 2 a strong complement to the observational methods in Study 1.

We manipulate the level of moral outrage that respondents feel in response to a crime by violating moral tenets in three different scenarios described during the course of a survey. We then ask respondents to report how they would react if such a crime occurred, including what emotions they would feel and how they would evaluate two different potential punishments: one that is clearly very harsh and extra-judicial (Outcome B), and another that is legal and less severe (Outcome A). The full text of the crime scenarios and two potential punishments are presented in Table 3. The sections of the scenarios that are randomized are italicized, and the "moral outrage" version of the scenario is also bolded.

The three scenarios violate various moral tenets, and in two of the three scenarios the crime is violent. In all of the scenarios, the victims are presented as innocents, but this is particularly strong in Scenarios 1 and 2 where the victims in the outrageous version are children. In Scenario 3, the crime evokes the idea of "extra-lethal" violence (Fuji, 2013) that is particularly performative and brutal. On the other hand, a number of factors are held constant between the moral outrage and control versions of the scenarios that might influence the perceived effectiveness and justice of

Table 3: Crime scenarios and punishment options in Study 2

	Scenario 1	Scenario 2	Scenario 3
Scenario	Imagine a situation in which a narco gang controls the town. They control the drug trade, and they also are notorious for abusing and exploiting <i>the local population / children under the age of 10</i> .	Imagine a situation in which a corrupt politician is in charge of a large city. He does political favors for his friends and powerful people, and steals money from <i>government contracts / a hospital for disabled children</i> .	Imagine that a narco abducts a small business owner because he won't pay them part of his profits. A week later, the business owner's body is found outside town, and he has been <i>shot to death / beheaded and his body shows signs of torture</i> .
Outcomes	<p>A: The narco gang members are arrested and put on trial for their crimes.</p> <p>B: The narco gang members are killed by locals in the town square.</p>	<p>A: The politician is arrested and put on trial for corruption.</p> <p>B: Local citizens attack the mayor and burn his house down.</p>	<p>A: The narco is arrested and put on trial.</p> <p>B: The narco is killed by autodefensas.</p>

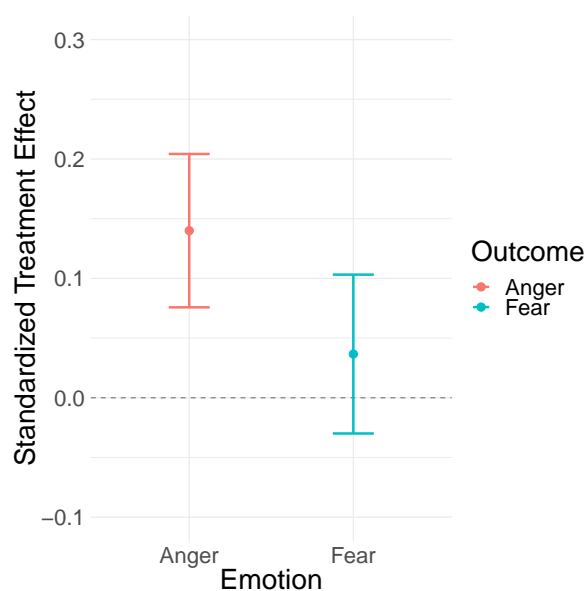
punishment, including the perpetrator's identity, the likely motivation, and the amount of harm.

All respondents were asked to evaluate all three scenarios in a random order, and we present our main analysis based on a stacked dataset of all responses to all three scenarios to avoid making multiple comparisons. We cluster standard errors at the individual level to take this stacked structure into account.

In this experiment we have four main outcomes of interest. First, we test whether respondents say that the scenarios would make them angry. Because the experiment is designed to induce anger, we consider this a manipulation check. We also measure another emotion that could be plausibly induced by the moral outrage versions of the scenarios, namely fear. We consider the experiment to have passed the manipulation check if participants report that the outrage scenario would make them feel significant levels of anger and have little effect on fear. Figure 4 plots the coefficients from an analysis of the effects of the three pooled treatments on how angry and afraid respondents say they would feel if the hypothetical crime scenario occurred in their community.

The treatments overall had a large, statistically significant positive effect on how angry respondents thought they would be if the crime occurred in their community. They had no detectable effect on how afraid respondents would be. Appendix Figure E.1 (page 11) shows that this effect

Figure 4: Effect of outrage scenarios on hypothetical anger and fear



is driven by Scenarios 1 and 2, with a much larger effect in Scenario 1, while the outrage version of Scenario 3 had no effect on either anger or fear. We'll come back to this heterogeneity in the effectiveness of the scenarios in manipulating outrage when discussing the interpretation of the substantive results, and in Study 3, where we use an experimental design to test more systematically for the types of violence that makes people most outraged.

Next, we turn to the substantive outcomes of interest, which measure the respondents' preferences over two punishments for the crime. First, we test whether respondents are more likely to prefer the vigilante outcome if they are presented with the outrageous crime. Second, we examine two perceptions that might underlie such a preference shift: the perception that the vigilante outcome is more effective in preventing future violence, and the perception that it is more just.

Our primary analysis of the effect of the outrage scenarios is based on a linear probability model, but in Appendix E (page 8) we show robustness to a logit model that takes into account the binary nature of the three dependent variables of interest.

Table 4 shows that the outrageous scenarios had mixed effects on the three outcomes of interest. First, while the effects of the outrage scenarios on whether the respondents preferred the harsh, vigilante solution and perceived it as more just are both positive, neither is statistically significant. On the other hand, the outrage scenarios significantly increased the proportion of respondents who

Table 4: The outrage scenarios increase the perception that the vigilante solution is more effective

	<i>Dependent variable:</i>					
	Vigilante Preferred		Vigilante More Just		Vigilante More Effective	
	(1)	(2)	(3)	(4)	(5)	(6)
Outrage Treatment	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.02 (0.01)	0.03** (0.02)	0.04*** (0.02)
Individual Controls		✓		✓		✓
PSU FEs		✓		✓		✓
Observations	3,507	3,351	3,507	3,351	3,507	3,351
R ²	0.0002	0.08	0.0004	0.08	0.002	0.09

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

Standard errors clustered by respondent in parentheses.

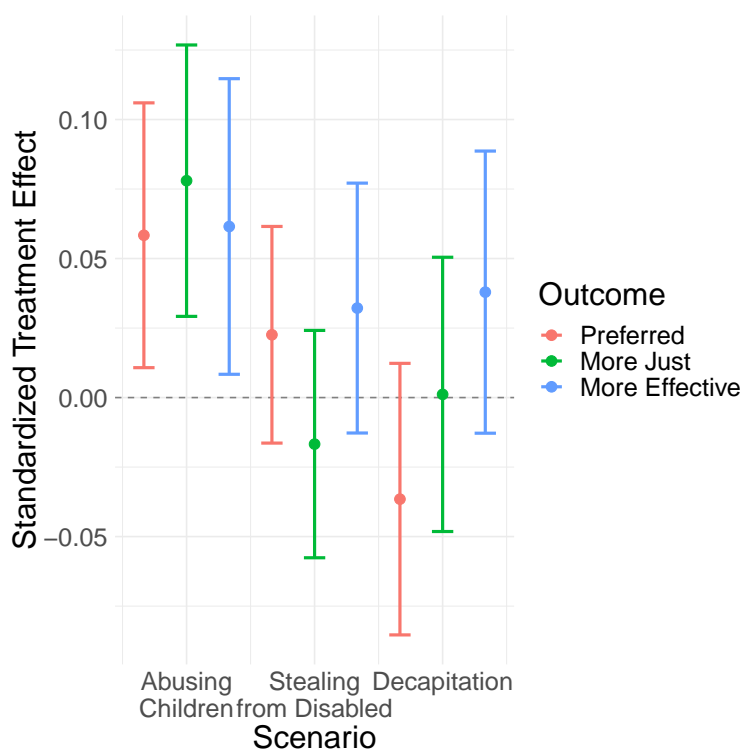
Coefficients are estimated using OLS. Individual Controls include gender, education, age, an assets index, marital status, and employment status of the household head.

perceived that the harsh, vigilante solution would be more effective in preventing future crimes of this nature. This result is particularly interesting because there is little reason to expect that the kind of criminals who violate moral tenets would be more sensitive to harsher punishments. Indeed, in many cases brutal, graphic violence seems designed to make victims perceive perpetrators as irrational or extremely dedicated to their efforts.

Given that not all of the three scenarios passed the manipulation check, we also turn to a disaggregated analysis to help interpret these results. Figure 5 shows that Scenario 1, in which a group of narcos is abusing young children in the outrageous version of the crime and the narcos are lynched in the town square in the vigilante outcome, caused significant increases in all three substantive outcomes. In that scenario, respondents are 6-7 percentage points more likely to prefer the vigilante solution and to find it more just and more effective.

Taken together, the results suggest that violence that causes moral outrage causes an increase in support for harsh, vigilante punishments, under some circumstances. The statistically significant result on perceptions of effectiveness in the pooled analysis was driven in part by a slightly higher level of perceived effectiveness of the vigilante solution in the third scenario, which did not pass our manipulation check. This suggests that we should not conclude that moral outrage causes increases in perceived effectiveness of vigilantism but not perceived justice or overall preferences for vigilante solutions. The disaggregated results, on the other hand, suggest that some scenarios, perhaps particularly those that involve the violence against children, do cause people to prefer

Figure 5: Effect of disaggregated outrage scenarios on preferences and attitudes towards vigilantism



harsh, vigilante solutions, and to perceive them as both more just and more effective.

These three scenarios were designed to use specific language to maximize the amount of outrage that respondents would feel. However, because a number of factors change across the three scenarios, they do not allow us to definitively pinpoint the elements of a crime that make citizens outraged. In the next study, we turn to an experimental research design that uses a much larger range of variation in crime scenarios to do just that.

7 Study 3: Which Crimes Increase Support for Harsh, Vigilante Policies?

Study 2 suggested that crimes that generate moral outrage might have a causal effect on support for harsh, vigilante punishments and related cognitions under some circumstances. It also raised questions about what type of crime might actually generate moral outrage. In Study 3, we test whether the severity of a crime and the innocence of a victim are general properties that make

people more likely to support a punitive or vigilante solution. We generate a survey experiment with 120 unique scenarios with different perpetrators, victims, and crimes that represent realistic crime profiles in Western Mexico.

The survey enumerators read a script to the participants during the interview that described a randomly generated crime. Each element was independently randomly assigned with equal probability. Table 5 presents the scenario with randomized segments in bold:

Table 5: Crime scenarios in Study 3

Imagine that a **grandmother / student / local small business owner / soldier / narco** has been **robbed / extorted for money / tortured / disappeared / killed** in your community by a **narco / autodefensas member / local police officer / federal police officer / soldier**.

In order to test hypotheses about the general elements of crimes that citizens find outrageous, we code the individual crime scenarios along two distinct dimensions:

- Victim: Innocence: can take a value of -1 (narco), 0 (soldier), or 1 (grandmother, small business owner, student)
- Violence: Severity: can take a value of -1 (robbed), 0 (extorted for money, tortured), or 1 (disappeared, killed)

We did not have specific hypotheses about how the identity of the perpetrator would affect outrage or preferences for harsh, vigilante punishments.

We use reactions to these crime scenarios to test first whether crimes that involve more severe violence and have more innocent victims are more likely to induce anger, but not fear (Prediction 1). To measure the outcomes for this hypothesis, we asked participants to assess how angry and afraid they would be on a four-point scale if the crime happened in their locality. Second, we test whether participants prefer harsher punishments for crimes that involve more severe violence and have more innocent victims (Prediction 2). In order to measure this outcome, we asked participants to choose from a list of possible punishments the one they would be most satisfied with for the perpetrators of the crime described. We then coded the punishments by severity according to logical criteria that we specified in advance, so that the outcome variable Severity of Punishment can take

a value of 0 (no punishment), 1 (beaten, one year of jail), 2 (ten years of jail), or 3 (death penalty, lynched, shot). Similarly, in order to test Prediction 3 that participants would be more likely to prefer extrajudicial punishments for perpetrators of more violent crimes against more innocent victims, we code the same preferences according to whether they are legal or extrajudicial: in this case, the variable takes a value of 1 for punishments that are clearly extrajudicial, such as beating, lynching, or shooting the perpetrator, and zero otherwise. After they reported their preferred punishment, we also asked participants to rank the relative importance of punitiveness, effectiveness in preventing future crimes, and legality in their decision about the appropriate punishment for this crime. As per Predictions 2 and 3, we expect that punitiveness will increase and legality will decrease in this ranking for crimes involving more severe violence and innocent victims.

We carry out our main hypothesis tests using OLS. In order to calculate an estimate of the treatment effects that is as close as possible to the effect of violence that this population is exposed to in the real world, we weight each scenario by how likely respondents found it to be. Appendix F.1 (page 12) provides more information on how the weights were calculated.

Table 6: Characteristics of scenarios that induce anger and fear

	<i>Dependent variable:</i>			
	Anger		Fear	
	(1)	(2)	(3)	(4)
Victim: Innocence	0.68*** (0.03)	0.67*** (0.03)	0.22*** (0.04)	0.20*** (0.04)
Violence: Severity	-0.07** (0.03)	-0.06* (0.04)	0.04 (0.04)	0.04 (0.04)
Perpetrator Treatment	✓	✓	✓	✓
Individual Controls		✓		✓
Observations	1,153	1,104	1,162	1,111
R ²	0.29	0.39	0.03	0.22

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

Standard errors in parentheses.

Scenarios are weighted by their likelihood as estimated by the participants. Individual Controls include gender, education, age, an assets index, marital status, and employment status of the household head.

Table 6 shows first that Victim: Innocence has a strong, positive effect on both how angry and fearful respondents say they would be in response to a crime. The magnitude of the effect on anger is about three times the magnitude of the effect on fear. Altogether, this is strong evidence that

crimes against innocent victims generate outrage. Turning to Violence: Severity, there is no support for our hypothesis that more severe crimes induce more outrage. In fact, the severity of the crime may be negatively associated with anger. There is also no relationship between severity of violence and fear.

Table 7: Characteristics of scenarios that would lead participants to prefer harsher and extrajudicial punishments

	<i>Dependent variable:</i>			
	Harsh Punishment		Vigilante Punishment	
	(1)	(2)	(3)	(4)
Victim: Innocence	0.178*** (0.040)	0.185*** (0.042)	0.002 (0.008)	0.001 (0.009)
Violence: Severity	0.121*** (0.042)	0.113*** (0.044)	0.002 (0.009)	-0.006 (0.010)
Perpetrator Treatment Controls	✓	✓	✓	✓
Observations	993	959	1,041	1,005
R ²	0.057	0.240	0.006	0.178

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

Standard errors in parentheses.

Scenarios are weighted by their likelihood as estimated by the participants. Individual Controls include gender, education, age, an assets index, marital status, and employment status of the household head.

Table 7 examines what leads people to prefer harsher punishments (Columns 1-2) and extrajudicial punishments (Columns 3-4). The results show strong support for our prediction that the severity of violence and the innocence of the victim would lead to higher levels of support for harsh punishments. However, neither characteristic of the crimes actually increases support for extrajudicial punishments, independent of how harsh they are. This suggests that no matter the crime, citizens do not have a particular taste for extrajudicial punishments.

Finally, Table 8 provides an additional test based on a question in which we directly asked respondents to rank several punishment principles in order of importance for the specific crime scenario with which they were presented.³² In Table 8 the dependent variables are binary measures that take a value of 1 if participants reported that the most important principle is to the punitiveness of the punishment (Columns 1-2), its legality (Columns 3-4), or its effectiveness in preventing future

³²This question came after we asked participants what their preferred punishment was in order to avoid influencing their decision process.

violence (Columns 5-6).

Table 8: Characteristics of scenarios and ranking of punishment principles

	<i>Dependent variable:</i>					
	Punitiveness Rank=1		Legality Rank=1		Effectiveness Rank=1	
	(1)	(2)	(3)	(4)	(5)	(6)
Victim: Innocence	0.019 (0.017)	0.014 (0.018)	-0.034* (0.019)	-0.035* (0.021)	0.015 (0.016)	0.021 (0.018)
Violence: Severity	0.009 (0.017)	0.007 (0.019)	-0.010 (0.020)	-0.008 (0.021)	0.001 (0.017)	0.002 (0.018)
Perpetrator Treatment Controls	✓	✓	✓	✓	✓	✓
Observations	1,121	1,078	1,121	1,078	1,121	1,078
R ²	0.006	0.137	0.006	0.147	0.003	0.139

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

Standard errors in parentheses.

Scenarios are weighted by their likelihood as estimated by the participants. Individual Controls include gender, education, age, an assets index, marital status, and employment status of the household head.

Consistent with the results in Tables 6 and 7, the results in Table 8 also suggest that the innocence of the victim of a crime has a much stronger effect on the punishment principle that citizens invoke than the severity of violence. When victims are innocents, participants rank the legality of the punishment as significantly less important.

Altogether, these results present strong evidence that particularly heinous crimes 1) make civilians angry, and 2) increase support for harsh punishments, even at the expense of their legality. Overall, they suggest that the severity of violence is not the primary factor determining how outrageous a crime is. Instead, the innocence of the victim has the strongest effect on both emotions and punishment preferences.

8 Conclusion

Across three different observational and experimental studies, our research links exposure to violence to the negative emotion of anger and preferences over security and justice policies. All three studies suggest that violence induces anger that shapes citizens' attitudes towards security and justice policies. Study 1 presents strong evidence that the relationships between violence, anger, and policy preferences are substantively meaningful. Respondents exposed to more violence are more frequently angry, more supportive of harsh vigilante justice, and hold a wide range of actors

more responsible for narcotrafficking violence. Studies 2 and 3 suggest that the relationship between anger and criminal justice preferences is in fact causal. For crimes that induce anger and moral outrage, particularly the harming of innocents, citizens are much more punitive, and care less about due process.

Studies 2 and 3 shed light on the types of violence that citizens find most outrageous. Violence that is seen as senselessly targeting innocent civilians has the largest effect on outrage and criminal justice preferences. Interestingly, the severity of violence does not seem to affect the degree of outrage that citizens feel. This pattern suggests that situations in which violent actors like criminal groups directly target civilians, even with relatively minor crimes like extortion, will be most likely to explode into cycles of retribution because civilians are willing to pay a steep price in order to punish their abusers.

These findings provide important insights into when citizens will support retributive violence. Past research has largely viewed support for vigilante groups as the best response of communities afflicted by both violence and weak state security forces. However, our results suggest that emotional responses in the wake of violence may cause citizens to increase the value they place on punitiveness and decrease the value they place on the rule of law. This may help explain why citizens support vigilante groups even though vigilantes often end up abusing their power and further eroding the capacity of state security forces. It further provides a new and important mechanism of how communities that are exposed to violence can end up stuck in a sub-optimal violent equilibrium. Violence erodes support for less punitive security policies, even if they are effective in preventing violence. Instead, angry individuals favor harsh punishments, and when vigilante groups are able to provide these punishments more quickly and effectively than the state, this preference for punitiveness weakens the rule of the law.

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