ARTICLE

Towards an understanding of community organization against crime: The case of Ciudad Juarez, Mexico

Carlos J. Vilalta*

Ciudad Juarez¹ is the second largest Mexican border city and one of most violent cities worldwide. Over the past five years, it has suffered from a dramatic wave of homicidal violence related to organized crime. Residents have reacted in different ways to such violence: some have migrated whereas others have decided to stay and organize against it. This is an empirical study of community organization for crime prevention. This study found some of the factors that facilitate and impede community organization against crime. The results constitute a first step in the empirical study of community organization for crime prevention in Mexico.

Introduction

According to recent results of the National Victimization and Public Security Perception Survey of 2011, many urban dwellers in Mexico show a genuine interest in organizing against crime. Likewise, Mexican media give wide coverage to often thrilling political speeches in favour of citizen participation against violence. As such, from a policy-oriented point of view, one basic research question would be the following: what makes people, in many cases unknown to each other, collaborate with each other in the implementation of crime prevention solutions? In this study I tried to answer this question by examining the correlates of community organization for crime prevention.

This study focuses on Ciudad Juarez, Mexico, for two reasons. One is that in contrast

to other cities in Mexico, Ciudad Juarez has suffered tremendously from extreme levels of criminal violence in the last six years. Most of this violence is related to organized crime. Another reason is that in comparison to other Mexican cities, community organization against crime in Ciudad Juarez has been very active² and federal government support has been strong as well.³ In this sense, the choice of Ciudad Juarez can help us to better understand the effects of extreme violence on community organization.

This study followed several steps. The reader will first find a brief description of Ciudad Juarez. Afterwards, a (very) preliminary and descriptive model for community organization in crime prevention is proposed. After that, I analyzed what was being done in 2010 in terms of crime prevention nationwide and in Ciudad Juarez particularly. Here I followed a comparative approach searching for probabilistic differences. The aim here was to get a detailed breakdown of what people were actually

^{*} Centro de Investigación y Docencia Económicas (CIDE) carlos.vilalta@cide.edu

doing to protect themselves from crime. Then I closely examined what citizens were doing with regards to collective crime prevention. Finally, I tested the model of community organization. As a result, a profile of the civic collaborator for crime prevention was detected.

One note of caution must be made in this introduction: one undesirable side effect of Juarez´s extremely violent nature is that many distractions often arise in its study. Here I have tried to avoid two of the typical mistakes that hold up the development of community solutions to violent crime, namely:⁴

- a. The why-o-why distraction, that is engaging in nonstop discussions about why criminals are violent towards their victims.
- b. The who-is-who distraction, that is spending way too much time discussing which drug dealer, drug lord or which drug cartel is responsible for most of the violence.

Of course the previous issues are necessary for crime investigation purposes. But these are not the most important for crime prevention. From a policy perspective, this study investigated the correlates of community organization in a practical attempt to influence the likelihood of future policy debates and actions.

1. Case study: Ciudad Juarez

Ciudad Juarez was founded in 1659 under the name of *Misión de Nuestra Señora de Guadalupe de Mansos del Paso del Río del Norte* in what is today the city of El Paso, Texas, United States. It is located within the Mexican state of Chihuahua now in the northern international border with El Paso, Texas. In the 2010 census it had a population of about 1.3 million. It is the second most populated border city after Tijuana in Baja California and the eighth most populated metropolitan area in the country. Together with El Paso, Texas, the total number of inhabitants in the region amounts to near 2.5 million.

The city is in the desertic climate zone and has a very hot season ranging from April to October with quite cold winters in the months of January and February. Precipitation is low. With a high population density and desertic dry climate, the city has to tap groundwater for its domestic and industrial use.

As most Mexican border cities with the United States (US), Ciudad Juarez has somewhat of a 'social dichotomy' character. It is a city of rich entrepreneurs and poor workers. It is an industrial city with high productivity levels, yet workers´ salaries are low. It has a large manufacturing base, particularly of *maquiladoras*. This is the name given to factories that make products solely for foreign markets, yet do not pay for the import of the raw materials. These factories tend to hire unskilled workers with low wages.

Homicidal violence exploded in 2008 (Figure 1) when the Mexican military entered the city in order to control the rising level of drug cartel confrontation. Ciudad Juarez became one of the most hotly disputed cities between drug cartels. This wave of homicidal violence is not a random event or merely the effect of social disruption, but it derived also from the decision of the Cartel de Sinaloa (i.e. El Chapo Guzman) to take control of the city over the Cartel de Juarez. This strategic move was not only made for the purpose of trafficking drugs into the US, but for the control of a growing local market for marihuana and cocaine (Vilalta and Muggah 2012).

2. A preliminary theoretical framework of community organization for the provision of collective security

To protect from crime, individuals have the choice to organize in community, rely on individual solutions, or try a combination of both. Collective security is any crime solution provided for an open or closed society beyond the individual. Put another way, collective security can be provided in two ways: officially (open) or unofficially (closed). Official collective security (OCS) can be any means or solution against crime provided

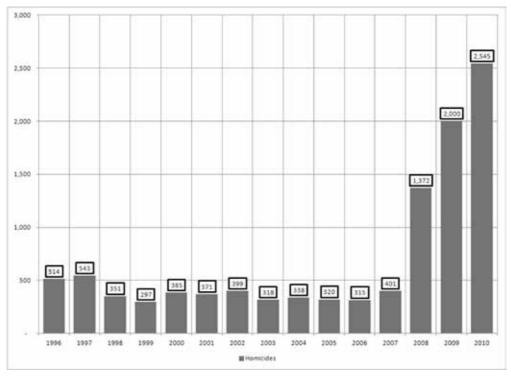


Figure 1: Total number of homicides in Ciudad Juarez, 1996–2010. Source: Author's reconstruction based on INEGI data.

by government officials only. It is open to the collectivity in the sense that it is for all, society pays for it, and (supposedly) society monitors and controls it. It can consist of any action implemented by government agencies. As such it is also legally regulated. Police agencies (criminal arrests), courts (sentencing of criminals), and jails (incapacitation of criminals) provide society with OCS. Theoretically, the benefits of OCS are open to everybody.

Unofficial collective security (UCS) is provided outside the government by a closed society (e.g. neighbourhood association) and for the benefit of them only, that is, benefits are closed to the community members. It generally requires neither the action nor consent of the government. As such, it may or may not be legally regulated. Examples are neighbourhood watch, community policing actions, residents in gated communities, and/or those that hire private security services for their neighbourhoods or streets.

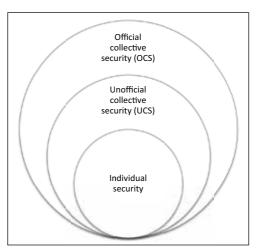


Figure 2: Providers of security against crime. Source: Author's own.

Finally, individual security choices are any solution provided by the individual himself, such as gun ownership or the installing of home security systems (Figure 2).



Figure 3: A theoretical framework of community organization for unofficial collective security (UCS). Source: Author's own.

The collective security model (Young et al. 1987) rests upon the premise that criminal violence will be less severe if security is provided by the community rather than individuals or families (Figure 3). It is then assumed that security will be more effective if efforts and resources are collectively shared. Collective security is obviously associated with the desirable notion of the preservation of social order and the control of disorder. Social disorder is, in simple terms, a 'signal that no one cares' (Wilson and Kelling: 31) leading to a higher likelihood of criminal activity (Chappell et al. 2011). Thus, as social order may decline in one place, collective security may also fail. Specifically, OCS may fail if police agencies or courts cannot be trusted. Likewise, UCS may fail if community members withdraw from the group, lack sufficient cohesion and resources, or leadership weakens over time. This is why some time ago McDowall and Loftin (1983, cited by Young et al. 1987) argued that violent crime boosts individual vs. community solutions against crime, especially if institutional means or community controls are weak.

There are *pros* and *cons* to each kind of security. The OCS or UCS responses may increase the odds of being victimized if official or unofficial providers lack planning, resources, cohesion, or if crime risks are simply too high. But it can decrease the odds of being victimized if neighbours actively protect each other. On the other hand, individual security responses (e.g. installing alarm systems) may reduce the odds of victimization only in some places and at certain times (e.g. at home).

In any event, UCS requires organization and the community must be willing to enforce norms of civility and social order. As such, it is expensive in several respects. As OCS only requires citizens to pay taxes, UCS requires extra time and effort. So it follows that it will be present only if OCS is considered ineffective. OCS can be considered ineffective in at least two different ways: If the general opinion of the criminal justice system is poor, whether this opinion is based on fact or fiction, and/or an individual has previously been victimized by crime. The experience of criminal victimization may be traumatic and long lasting. It has been found in Mexico that crime victims feel more vulnerable and have a poorer opinion of the local police (Vilalta 2011, 2012a, 2012b). As such, I would theorize that previous experience with crime must have a positive effect on looking for crime solutions, including unofficial collective security actions as well as individual actions. Thus, individuals with a poor opinion of OCS will have a higher proclivity to invest their resources in UCS.

It follows that UCS solutions will be easier to develop by individuals with sufficient resources to participate and to follow its implementation. The availability of resources will increase the capacity to organize against crime. Also, if the opinion of these individuals on OCS responses is poor, this may give them even more motives to organize in the community.

Still, UCS cannot depend only on the individual's capacity to organize or his/her evaluation of OCS. Community organization requires some sense of shared expectations and civil reciprocity. I would then argue that

individuals that perceive signs of disorder in their neighbourhoods, will have a higher expectation of fellow neighbours, will tend to have a higher proclivity to restrain antisocial behaviours, and all this leading to a higher interest in organizing in community. Naturally, community expectations and the sense and need of reciprocity are developed over time. This is why I would argue too that long time residents will have a higher inclination to organize than recently arrived residents.

In the next section, I present the data, hypotheses, and methods that allowed the test of the model.

3. Data, hypotheses and methods

This study is based on the National Victimization and Public Security Perception Survey of 2011 (ENVIPE). The ENVIPE 2011 consists of a scientific sample of 78,179 households nationwide. It offers victimization and other public security data at the national level, plus the possibility to compare across 17 metropolitan areas (independent samples) including Ciudad Juarez. The data concerns only those 18 years old and above. This survey was conducted by the Mexican National Institute of Statistics and Geography (INEGI). Methodologically, it is a substantial improvement over previous national and local victimization surveys for at least the following two reasons: the database is available for the public and the way

it measures victimization is in accordance with the best practices.⁵

The dependent variable in this study is the collective organization against crime or UCS. In general, I consider UCS to be a rational reaction to the threat of violent crime. It is also the result of a multitude of other factors. First of all, I believe that individuals will collectively organize against crime only if official collective security (OCS) (e.g. local police) is considered ineffective. In addition, I hypothesize that efforts for collective organization for the provision of private security (Y1) and other actions (Y2) in the neighbourhood will be fostered by the individual capacity to do it, and by the social expectations developed over time in the community. The distinction between private provision of security (Y1) and other actions (Y2) is central in this study as the two types of collective organization are necessary to understand the amplitude of possible reactions to crime. One is very specific and the other is general, as there is a variety of possible collective solutions against crime. The ENVIPE 2011 survey did not cover all the possibilities. Both measures were dichotomous (1 = No, 2 = Yes).

Meanwhile, the independent variables were a set of demographic, socioeconomic, and opinion-based categorical variables available from the ENVIPE 2011 database (Table 1). In this sense, the findings of this study can be replicated. All these variables

Concept	Variables	Measurement
OCS failure	Public opinion of local police Indirect victimization Direct victimization	Ordinal, 1–4 Dichotomous, 1–2 Dichotomous, 1–2
Individual resources	Level of schooling Employment status	Ordinal, 1–7 Dichotomous, 1–2
Social expectations	Signs of civil disorder (Kidnappings, drug use, and theft in neighborhood) Time of residence in the neighborhood	Dichotomous, 1–2 Ordinal, 1–3

Table 1: Independent variables. Source: Author's own.

are critical to understand cooperation. Age and sex were included as control variables in the model.

The descriptive model was fitted using a logistic binary regression modeling approach. The analytical strategy was to run two regression analyses, one for each measure of the dependent variable, considering all independent variables simultaneously, yet finally selecting only those that provided the best fit to the data. The selection method utilized was a forward-selection Wald-statistics method, which selected the best resulting model based on the significance of each variable score statistic and by removing superfluous correlations based on the probability of the Wald statistic. A 'p' value of ≤0.05 was the cut-off level of significance. A Hosmer-Lemeshow test of goodness of fit for the model was included.

4. Results

4.1. Crime prevention measures in Mexico: What is being done?

Overall, the percent of households that organized collectively for the provision of private protection (1.4%) and/or acted with neighbours (11.2%) in other ways to protect themselves against crime in Ciudad Juarez was comparatively low in comparison to other options (Table 2). Nationwide, the typical crime prevention solution was to change or install new door locks (19.3%). The most likely reason is that it represents the least expensive option. Interestingly, this inclination for changing or installing new door locks increases to 31.8% of households for the case of Ciudad Juarez. The second most preferred crime prevention solution nationwide was the installation bars or fences (12.2% of households). And once again, Ciudad Juarez shows a much larger proportion of households using this individual crime prevention solution with a 19.2% of the total.

Attention should be drawn to the large percentage of households in Ciudad Juarez that decided to switch home or place of residence in order to protect from crime (3.3%). This proportion is significantly higher than the nation's general (i.e. 1.5%), which intuitively,

is already a high number. In this sense, with the exception of firearm purchases, which remains the least utilized crime prevention measure nationwide (0.5%), we can see statistically significant differences in crime prevention measures across areas in all cases. The most notable difference across geographical areas is the change or installation of door locks (Chi-square = 657.329). However, other crime prevention solutions were also utilized extensively in Ciudad Juarez. Among others, people have: had a guard dog (19.9%), changed doors or windows (19.4%), and /or installed bars or fences (19.2%). The typical combination of measures was the installation of new doors or windows with (new) door locks (Table 3).

4.2. Are Mexican communities organized against crime?

The ENVIPE 2011 survey considers only two different ways to measure neighbourhood organization against crime: hiring private security at the street or neighborhood levels, or taking other collaborative actions with neighbours (different from the previous).

With regards to the use of private security, we found notable differences between geographical areas as well. The Mexico state side of the Mexico City Metropolitan Area (MCMA) ranks first nationwide with approximately 4.4% of households having organized for the provision of private security, either at the street level or the neighbourhood level. It is followed by Morelia (3.8%), Cancun and Toluca (2.8%). On the opposite side, Acapulco, Guadalajara, and Nuevo Laredo all have less than 1% of households in this case (Table 4).

The ranking of cities or metropolitan areas was significantly different for 'other collaborative actions with neighbours'. In fact, there is no correlation between the two rankings. In this case, the metropolitan areas with the highest proportion of households that organized for cooperative action with neighbours were Oaxaca in the southern side of the country, Cancun in the Caribbean, and the city of Chihuahua in the north. On the opposite side, with the lowest proportions

	Ciudad Juarez	Other metro areas	Non-metro areas	General	Test of difference*
	1	Changed door	rs or windows:		
No	80.6%	86.9%	89.2%	88.0%	$\chi^2 = 159.988$
Yes	19.4%	13.1%	10.8%	12.0%	p < 0.001
		Changed/insta	lled door locks:		
No	68.2%	76.9%	84.0%	80.7%	$\chi^2 = 657.329$
Yes	31.8%	23.1%	16.0%	19.3%	p < 0.001
		Installed ba	rs or fences:		
No	80.8%	85.4%	89.8%	87.8%	$\chi^2 = 349.622$
Yes	19.2%	14.6%	10.2%	12.2%	p < 0.001
	,	Installed al	arm system:		
No	95.5%	96.5%	98.6%	97.7%	$\chi^2 = 316.035$
Yes	4.5%	3.5%	1.4%	2.3%	p < 0.001
	Hired priva	ate security on t	he street or neig	ghborhood:	
No	98.6%	98.1%	98.7%	98.5%	$\chi^2 = 44.132$
Yes	1.4%	1.9%	1.3%	1.5%	p < 0.001
		Joint actions w	ith neighbours:		
No	88.8%	89.5%	91.4%	90.6%	$\chi^2 = 74.017$
Yes	11.2%	10.5%	8.6%	9.4%	p < 0.001
		Hire ins	surance:		
No	96.1%	96.9%	98.5%	97.8%	$\chi^2 = 200.726$
Yes	3.9%	3.1%	1.5%	2.2%	p < 0.001
		Have a g	uard dog:		
No	80.1%	94.6%	94.9%	94.4%	$\chi^2 = 579.790$
Yes	19.9%	5.4%	5.1%	5.6%	p < 0.001
		Purchase	a firearm:		
No	99.5%	99.4%	99.5%	99.5%	$\chi^2 = 0.800$
Yes	0.5%	0.6%	0.5%	0.5%	p = 0.670
	S	witch home or p	lace of residenc	e:	
No	97.0%	98.2%	98.8%	98.5%	$\chi^2 = 53.449$
Yes	3.0%	1.8%	1.2%	1.5%	p < 0.001
	1	Another	measure:		1
No	98.3%	98.6%	98.2%	98.3%	$\chi^2 = 19.827$
Yes	1.7%	1.4%	1.8%	1.7%	p < 0.001
	,-	-,-	2,2	- ,-	
n =	1,452	26,933	37,528	65,914	

^{*}Pearson´s Chi-square and corresponding statistical significance (p values).

 Table 2: Measures taken in households against crime, 2010. Source: Own calculations based
on ENVIPE, 2011

	Ciudad Juarez	Other metro areas	Non-metro areas	General	
No measures	44.2%	59.9%	67.6%	63.9%	
Only 1 measure	25.2%	19.4%	17.7%	18.6%	
Between 2 and 3 measures	27.6%	18.8%	13.6%	16.0%	
More than 3 measures	3.0%	1.9%	1.1%	1.4%	
Total	100.0%	100.0%	100.0%	100.0	
n =	1,452	26,933	37,528	65,914	
Test of difference*	$\chi^2 = 826.789 \text{ p} < 0.001$				

^{*}Pearson's Chi-square and corresponding statistical significance (p values).

Table 3: Number of different measures taken against crime in households, 2010. Source: Own calculations based on ENVIPE, 2011

of organized communities we have Nuevo Laredo, Acapulco, and the Federal District side of the MCMA.

Even though the rankings of metropolitan areas are not correlated, there is a significant positive correlation between the two types of community organization at the individual level, in other words, there is a tendency among individuals to both hire private security and take other collective actions with neighbours. This tendency is comparatively strong in Ciudad Juarez, as 1.2% of the surveyed households implemented both kinds of actions that is, hiring private protection and conducting other actions at the same time (Table 6). This percentage is significantly larger than in the other areas of the country.7 As such, even though a very small proportion organized in the community against crime, it seems that when together, they collaborated more actively in Ciudad Juarez than in other areas.

4.3. The social cement of crime prevention: Who is interested in organizing for collective security in Ciudad Juarez?

To look into the relationship of a variety of correlates of community organization with the provision of private security against crime, I conducted a regression analysis that allowed to detect spurious correlations and

to control for compositional factors such as the gender or age of the individual surveyed. In essence, the analysis allowed for the prediction of proclivity to organize in community for the provision of private security (Table 7). The test found four positive correlates for this type of community effort: mistrust in the local police, individual's level of schooling, the report of kidnapping crimes in the neighbourhood, and the female gender. Interestingly, more reports of drug use in the neighbourhood made it less likely for individuals to organize collectively. Figure 4 shows the relative importance and sign of each correlate.

The second test of the model allowed for the prediction of the proclivity to organize in community for other actions than the provision of private security (Table 8). These actions can be of any nature and level of compromise. In this case, other five correlates were detected (Figure 5). Once again the level of mistrust of the local police increased the proclivity to organize, as well as the level of schooling of the individual, and reports of kidnapping crimes in the neighbourhood. However, two differences with the previous test were found. In this case, the report of theft crimes in the neighbourhood and the age of the respondent were detected as positive correlates of community organization.

Ranking	Metropolitan area	No	Yes	n	
1	MCMA (Mexico state)**	95.6	4.4	1,721	
2	Morelia	96.2	3.8	1,699	
3	Cancun	97.2	2.8	1,412	
4	Toluca	97.2	2.8	1,771	
5	Villahermosa	97.6	2.4	1,614	
6	MCMA (Federal District)**	97.9	2.1	1,790	
7	Cuernavaca	98.0	2.0	1,617	
8	Tijuana	98.2	1.8	1,645	
9	Monterrey	98.4	1.6	1,518	
10	Chihuahua	98.4	1.6	1,544	
11	General	98.5	1.5	65,832	
12	Ciudad Juarez	98.6	1.4	1,451	
13	Non-metro areas	98.7	1.3	37,483	
14	Mexicali	98.8	1.2	1,642	
15	Oaxaca	99.0	1.0	1,820	
16	Culiacan	99.0	1.0	2,276	
17	Nuevo Laredo	99.2	0.8	1,618	
18	Guadalajara	99.3	0.7	1,646	
19	Acapulco	99.4	0.6	1,565	
	n =	59,616	6,216	65,832	
	Test of difference*	χ^2 = 247.567 p < 0.001			

^{*}Pearson´s Chi-square and corresponding statistical significance (p values).

Table 4: Percent of households that organized for the provision of private security at the street or neighborhood, 2010. Source: Own calculations based on ENVIPE, 2011

Figure 4 shows the relative importance and directionality of each correlate in the model.

Both tests offered consistent results with the predictions proposed by the model. Likewise, the explanatory capacity for the prediction of private security provision is considerable. Almost 99 per cent of the cases were correctly predicted. The second test is not as strong, yet remains conceptually consistent with the predictions explicitly considered in the model.

5. Discussion

This is a preliminary test of a descriptive model for community organization against crime. It was found that residents in Ciudad Juarez have organized themselves against crime, but not much more than residents in other cities in Mexico. Actually, in terms of organizing for providing private security in the street or neighbourhood, they ranked 12th out of 19 geographical areas (Table 4). And in terms of organizing for other types of actions, they ranked 6th (Table 5). In Ciu-

^{**}MCMA stands for Mexico City Metropolitan Area.

Ranking	Metropolitan area	No	Yes	n
1	Oaxaca	73.0	27.0	1,820
2	Cancun	82.2	17.8	1,412
3	Chihuahua	84.9	15.1	1,544
4	Morelia	87.9	12.1	1,699
5	Guadalajara	88.6	11.4	1,646
6	Ciudad Juarez	88.8	11.2	1,451
7	Mexicali	90.0	10.0	1,642
8	Toluca	90.0	10.0	1,771
9	General	90.6	9.4	65,832
10	MCMA (Mexico state)**	90.8	9.2	1,721
11	Culiacan	91.0	9.0	2,276
12	Cuernavaca	91.1	8.9	1,617
13	Non-metro areas	91.4	8.6	37,483
14	Villahermosa	91.8	8.2	1,614
15	Monterrey	93.2	6.8	1,518
16	Tijuana	93.9	6.1	1,645
17	MCMA (Federal District)**	94.1	5.9	1,790
18	Acapulco	94.4	5.6	1,565
19	Nuevo Laredo	94.7	5.3	1,618
	n =	59,616	6,216	65,832
	Test of difference*	χ^2 = 1,010.010 p < 0.001		

^{*}Pearson´s Chi-square and corresponding statistical significance (p values).

Table 5: Percent of households that organized for cooperative action with neighbours, 2010. Source: Own calculations based on ENVIPE, 2011

	Ciudad Juarez	Other metro areas	Non-metro areas	General
Percentage of the total doing both actions	1.2%	1.1%	0.7%	0.9%
Correlation coefficient*	φ = 0.287 p < 0.001	φ = 0.215 p < 0.001	φ = 0.186 p < 0.001	φ = 0.203 p < 0.001
n=	1,451	26,891	37,466	65,208

^{*}Phi coefficient and corresponding statistical significance (p values).

Table 6: Correlation coefficients between hiring private security and taking other collective decisions and actions with neighbours. Source: Own calculations based on ENVIPE, 2011

^{**}MCMA stands for Mexico City Metropolitan Area.

	В	S.E.	Wald	Sig.	Exp(B)	Odd ratios
	Inde	oendent var	riables			
Trust in local police	-1.068	0.324	10.857	0.001	0.334	66.6%
Schooling	0.742	0.206	12.932	0.001	2.101	110.1%
Drug use in neighbourhood	-2.325	0.805	8.339	0.004	0.098	90.2%
Kidnappings in neighbourhood	3.546	0.670	28.038	0.001	34.657	3,365.7%
	Со	ntrol varial	oles:			
Gender*	-1.387	0.569	5.945	0.015	0.250	75.0%
Constant	-4.390	1.952	5.057	0.025	-	

Diagnostics:

Model significance: Pearson's Chi-square = 89.774, p < 0.001

Pseudo R2 Nagelkerke: 0.448

Hosmer-Lemeshow test: Pearson's Chi-square = 5.676, p = 0.684

Valid cases: 1,382 (95.0% of the total)

Correctly classified: 98.7%

Table 7: Results of the regression: organized for the provision of private security against crime in the street or neighborhood

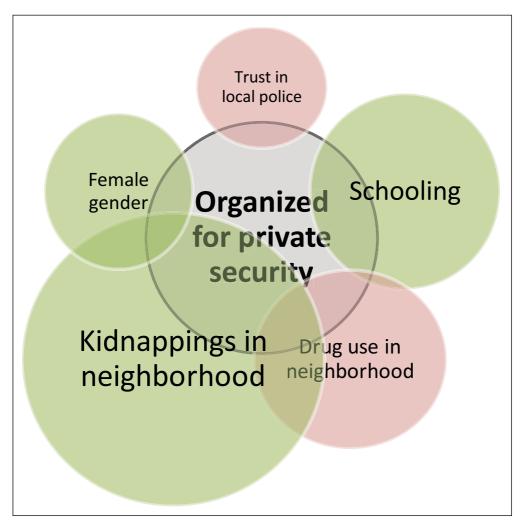
dad Juarez, only 1.4% organized in 2010 for the provision of private security in their streets or neighborhoods, whereas 11.2% participated in other community actions. Likewise, not all *Juarenses* protected themselves in the same way as residents in other cities. Still, one coincidence with other fellow Mexicans is that most will still tend to prefer individual security solutions such as changing or installing door locks, changing doors or windows, or retaining a guard dog, over other options.

Why does this research matter? It matters because it points towards solutions. It was found that community organization against crime had two main correlates (and likely causes): the report of kidnapping crimes and theft crimes in the neighbourhood. The first type of crime increased the individual odds to organize for the provision of private security in the neighbourhood by more than three thousand percent. The second crime increased the odds for community action against crime by 120 percent. It is evident that crime incidence, particularly violent

crime, propelled civic organization in Ciudad Juarez. Similarly, the public perception of the failure of official security (OCS) was evident. Knowing this is obviously important for local police agencies. For both types of community organization, namely private security and other cooperative solutions, the analysis shows that *Juarenses* mistrust local police.

But, as noted above, not all Juarenses organized or demonstrated the same proclivity to collaborate with their neighbours. Those with more schooling appeared to have a higher inclination to act together (Figure 4). Interestingly, those that reported use of drugs in their neighbourhoods actually tended to show less community organization. In terms of compositional variables (control variables), both gender and age were less relevant. Female respondents tended to organize for the provision of private security, whereas older respondents tended to organize in other ways. So for community crime prevention policy purposes, these correlates must not be seen as controls. In fact, these

^{*}Male is the category of reference



*The size of the circle represents its relative importance.

Figure 4: Correlates of community organization for the provision of private security against crime

demographic groups are allies for community organization efforts. None of the other correlates in the model showed statistical significance. Neither the employment status, nor the time of residence in the neighbourhood, or the experience of victimization (direct nor indirect) made a difference in the individual odds to organize collectively against crime.

Does community organization lead to more or less sense of security?8 We have to

ponder that the sense of security is a state of mind in which both factual and perception variables play an important role. The model only pointed to the possibility that both factual and perception variables are important elements in the individual's decision to participate collectively against crime. However, the model cannot predict fear of crime, whether the individual is or is not organized in community. Still, the combination of facts with opinions implies the need

	В	S.E.	Wald	Sig.	Exp(B)	Odd ratios
	Inde	pendent var	iables			
Trust in local police	-0.268	0.117	5.288	0.021	0.765	23.5%
Schooling	0.202	0.058	12.008	0.001	1.224	22.4%
Thefts in neighbourhood	0.796	0.185	18.581	0.001	2.217	121.7%
Kidnappings in neighbourhood	0.429	0.201	4.554	0.033	1.535	53.5%
	Со	ntrol variab	les:			
Age	0.248	0.110	5.088	0.024	1.281	28.1%
Constant	-4.090	0.609	45.156	0.000	-	

Diagnostics:

Model significance: Pearson's Chi-square = 50.827, p < 0.001

Pseudo R2 Nagelkerke: 0.071

Hosmer-Lemeshow test: Pearson's Chi-square = 2.888, p = 0.895

Valid cases: 1,381 (94.9% of the total)

Correctly classified: 88.6%

Table 8: Results of the regression: organized for other cooperative action with neighbours

of promoting public policies that attend to both elements, and may actually also impact the sense of security. For instance, the reporting of kidnappings in the neighbourhood and having a poor opinion of the local police independently predicted community organization, which means that individuals may be subjected to actual and perceived sources of information about insecurity (Figure 5). It follows that local police must fight crime and improve their public image at the same time. According to the model, if local police succeeded in reducing crime and improving their reputation, citizens would have a lesser proclivity to organize for crime prevention. But if police keep focusing on fighting crime exclusively, Juarenses will continue to depend on their own devices, that is, on unofficial community security solutions. Community organization for crime prevention is a positive effort that strengthens social cohesion, but it should not be a correlate (or consequence) of the failure of the state to provide security.

What can be concluded so far? First, that Ciudad Juarez is not representative of the entire country and there are no easy generalizations in this matter. Crime prevention measures and community reactions varied significantly across Mexican cities. This points to the importance of conducting case studies in addition to national studies. In addition, does individual capacity (e.g. schooling and employment status) increase community organization? Not necessarily. Schooling did increase the individual proclivity for organization, but employment status was not relevant. It did not matter if the individual was employed or unemployed. As such, it is not entirely clear if income is a predictor of community organization. What it is clear though, is that schooling promotes neighbour communication and association for crime prevention. Finally, did the individual preference for the use of individual security measures limit his/her interest in community organization? There is no simple answer to this question. Even though we do know at this point, in retrospect I think one possible way to further improve the model would be to include these other types of security meas-



*The size of the circle represents its relative importance.

Figure 5: Correlates of community organization for cooperative action with neighbours

ures as independent variables. After all, it was found that only a minority organized in community against crime while many installed new door locks and/or combined different types of home security systems.

Notes

¹ In memory of my Professor Sergio Campos-Ortega, one more fatal victim of criminal violence: sorry I missed your last lecture but I am always remembering your sympathy and superb classes. I

- also want to thank two reviewers for their comments and suggestions.
- ² See for example the work of *Mesa de Seguridad*: http://www.mesadeseguridad.org/
- ³ Such as the "Programa de Coinversion Social" which is intended for the development of social capital for crime prevention purposes.
- ⁴ This list is partly inspired by Cohen and Felson's 2012 piece on crime prevention against organized crime.

- ⁵ That is by showing to the survey respondent a card with a list of criminal events and asking which of these would apply, instead of just asking the respondent if he or she has or has not been a victim of a crime.
- ⁶ Table omitted due to lack of space. The results of the Spearman's rho correlation test were r = 0.156, p = 0.523.
- ⁷ There is a statistically significant difference between the Ciudad Juarez and other metro areas correlation coefficients (Z = 2.850, p = 0.004). As such, there must be also a significant difference between the Ciudad Juarez correlation coefficient and the other coefficients.
- 8 This question was correctly asked by one of the reviewers.

References

- **Chappell, A, Monk-Turner, E** and **Payne, B** 2011 Broken Windows or Window Breakers: The Influence of Physical and Social Disorder on Quality of Life. *Justice Quarterly*, 28(3): 522–540.
- **McDowall, D** and **Loftin, C** 1983 Collective Security and Demand for Legal Handguns. *American Journal of Sociology*. 88(6): 1146–1161.

- Mexican National Institute of Statistics and Geography (INEGI) 2011 National Victimization and Public Security Perception Survey of 2011 (ENVIPE). Mexico: INEGI.
- **Vilalta, C** 2011 Fear of crime in gated communities and apartment buildings: A comparison of housing types and a test of theories. *Journal of Housing and the Built Environment*, 26(2): 107–121.
- **Vilalta, C** 2012a Fear of crime and home security systems. *Police Practice and Research*, 13(1): 4–14.
- **Vilalta, C** 2012b Los determinantes de la percepción de inseguridad frente al delito en México. Working Paper No. 78738. Inter-American Development Bank (IDB).
- **Vilalta, C** and **Muggah, R** 2012 Violent Disorder in Ciudad Juarez: A Spatial Analysis of Homicide. Humanitarian Action in Situations other than War (HASOW), discussion paper 1.
- **Wilson, J** and **Kelling, G** 1982 Broken windows. *Atlantic Monthly*, 249(3): 29–38.
- Young, R, Mcdowall, D and Loftin, C 1987 Collective security and the ownership of firearms for protection. *Criminology*, 25(1): 47–62.

How to cite this article: Vilalta, C 2013 Towards an understanding of community organization against crime: The case of Ciudad Juarez, Mexico. *Stability*, 2(1): 5, pp. 1-15, DOI: http://dx.doi. org/10.5334/sta.ao

Published: 8 March 2013

Copyright: © 2013 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 3.0 Unported License (CC-BY 3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See http://creativecommons.org/licenses/by/3.0/.

Stability is a peer-reviewed open access journal published by Ubiquity Press

OPEN ACCESS &