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Impact Evaluation of Situational Prevention Strategies and CPTED (Crime Prevention through Environmental Design) in Vulnerable Neighborhoods in Latin America

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ABSTRACT

Latin America is the most criminogenic region of the world from the perspective of murder according to studies by international agencies. This problem affects phenomena such as drug trafficking and organized crime among others. Since the year 2000, interventions in Latin America to reduce crime and fear of crime, based on Situational prevention strategies and Crime Prevention through Environmental Design (CPTED) modifications to the urban environment as well as the social network of certain areas have been implemented. However there is no impact assessment model of such interventions. This research advances the development of a model to measure the impact of Situational and CPTED prevention strategies in highly vulnerable neighborhoods in Latin America and evidence it with early case studies.

KEYWORDS

Urban security; drug trafficking; robbery; situational prevention; CPTED; Latin America; local government

INTRODUCTION

Urban Safety has become a priority issue on the public agenda of various countries in Latin America in the last decade, especially with regard to rising violent crime (Vilalta Perdomo, Castillo, & Torres, 2016). Crime prevention aims to reduce the environmental and social factors of risk that cause criminal behavior and promote factors that protect against participation in antisocial or criminal activities, before these behaviors become apparent. While often confused with social policies in general, crime prevention is distinguished from those that are not universally applied, but includes actions targeted at groups of people and territories that are particularly vulnerable. It aims to both focus on behaviors associated with crime and/or locate them spatially and suggest interventions.

The homicide rate is the most widely used internationally indicator to compare levels of crime in countries around the world. Although the Latin America and the Caribbean (LAC) has only 8% of the global population, it

has more than 30% of the homicides in the world. The homicide rate in LAC is four times higher than the international average (Vilalta Perdomo, Castillo, & Torres, 2016).

A study by UNODC (United Nations Office on Drugs and Crime) conducted in 2013 suggests that murders in 2012 concentrated 36% in the Americas, 31% in Africa, 28% in Asia, while in Europe (5%) and Oceania (0.3%) the lowest homicide rates at the regional level were presented. Although the global average homicide is 6.2 per 100,000 inhabitants, South Africa and Central America show four times higher averages (above 24 victims per 100,000 inhabitants), which makes them the subregions with the highest rates of homicide, followed by South America, Central Africa, and the Caribbean (16 to 23 homicides per 100,000 inhabitants).

One effect of this criminal phenomenon is in urban and architectural configuration of cities in the subregion of Central and South America and has led to “gated” or defendable architecture (Newman, 1996) where residents prefer spatially segregating against the probability of being victims of crime or the perception of high levels of insecurity (fear of crime). Insecurity is one of the variables that explain urban spatial segregation, which has led to the formation of such neighborhoods compartmentalized self-enclosed, with perimeter walls and other additional security measures such as electric fences and alarms, among others often referred to as gated communities or “urban ghettos.” In various countries the problem of urban insecurity faced with balancing measures on one hand, the control of crime (police intelligence)—reactive and, secondly, to both social and situational crime prevention—proactive.

Since 2002 Central and South America have applied situational prevention strategies aimed at violence and crime, complementary to social prevention strategies to achieve higher levels of citizen security in various vulnerable neighborhoods (Hein & Rau, 2004). For example, to reduce criminal opportunity changes involved using urban setting variables such as lighting, signage, paths, use of vacant lots, among others.

There are different approaches within these interventions, whose implementation depends on the type of crime and the government that applies, but if it is evident that there is still insufficient measurements of process, outcome, and impact of these strategies in the region. In particular, in Latin America, that approach is of Canadian origin and is known as Crime Prevention Through Environmental Design (CPTED; Rau, 2012) methodology has been used. CPTED methodology has as one of its fundamental premises that the urban dweller is the native environmental security expert (Rau, Castillo et al., 2007). Therefore, various community participatory methods are developed to diagnose, design, implement, and evaluate strategies for urban safety in neighborhoods.

Notwithstanding the various prevention interventions, Situational and CPTED, in different countries in the region since 2000 to date, there is still

a not a model for evaluating processes, results, and impact of these interventions in terms of reducing crime indicators and perception of insecurity. Therefore, this article is aiming to develop and implement an evaluation model to measure and weigh the impact that urban settings, the process of citizen participation and local public management have in reducing both the perception of fear, using Situational/CPTED prevention interventions in vulnerable neighborhoods.

THEORETICAL FRAMEWORK

There are theoretical concepts (Rau, Castillo. Revista INVI No. 64, 2008, revistainvi.uchile.cl/index.php/INVI/article/view/451) and guidelines from criminology and urban planning approach underpinning the Situational Prevention and CPTED described as follows.

Citizen Security

While it is clearly important that the issues of crime and security have gained importance in recent years in the LAC region, it is necessary to clarify the concept of security and its different meanings. From a broad perspective, security is related to the whole system of protection of life and property of citizens against risks or threats caused by various factors, both psychosocial and associated with urban development. Conceptualized, security is linked to the social values of respect for life, physical integrity, and property of others, their economic freedoms, political and social (United Nations Program for Development, 2014, www.youthpolicy.org/library/wp-content/uploads/library/2014_UNDP).

To achieve citizen security requires the responsibility of both the state and its various agencies, and the general public. In this regard, the active participation of citizens in overcoming the problem of security through their community organizations is essential to increase levels of prevention and satisfaction of the people. The concept of citizen security is commonly understood in two key dimensions: first, as threats to people and property derived from criminal activity, particularly robberies, burglaries, and various forms of aggression; and second, as the hazards associated with the occurrence of disasters and disasters caused by earthquakes, floods, landslides, ecological crisis, among others (Jaramillo, 2002, www.bdigital.unal.edu.co/2242/1/70060838.2002.pdf).

Social Prevention

Social prevention is based on noncriminal interventions on potential offenders, aimed at mitigating their criminal propensity, sustained in the classical theories of the etiology of crime, according to which the criminal

action is explained by the existence of various factors (family, school, friends, family, employment, drugs, alcohol, etc.). That is, it is intended to act on the structures of crime and creating bonds of social solidarity, favoring prevention of illicit behavior, increasing the quality of life of citizens and their results could only occur in the medium and long term.

Situational Prevention

Situational Prevention has become a cornerstone in public policy and research since the early 1980s in various countries. This coincided with a favorable situation both political and academic in the United Kingdom, United States, and Australia, countries where more situational research has expanded since that date (Felson, Clarke, 1998, <http://webarchive.nationalarchives.gov.uk/20110218140739/http://rds.homeoffice.gov.uk/rds/prgpdfs/fprs98.pdf>).

In this sense and specifically, the development of a situational crime prevention approach, with theoretical foundations and empirical research, is strongly linked to the work of the Urban Planning Unit Home Office,¹ United Kingdom, in the early 1980s, and especially with the work of criminologist Ronald Clarke.

In criminological terms situational prevention is a way to:

- prioritize crime prevention to control through practice policies,
- give an emphasis on the physical environment changes,
- emphasize the relevance of the process of informal social control, and
- aggression rather than the aggressor as the first focus, and located in a spatial context.

Historically, criminologists associated with the Chicago school since 1920 and subsequently linked to other British investigations have identified the importance of informal control and the environment in the study of crime patterns. In this context, Hough defines situational prevention as:

- strategies aimed at addressing a specific pattern of crime,
- involving the management, design, and transformation of the immediate environment in which these crimes occur.
- The goal of these strategies is to reduce the chance that these crimes occur.

Within this view, reducing criminal opportunity may present three inter-related and overlapping shapes (Clarke, 1992, www.popcenter.org/library/reading/PDFs/scp2_intro.pdf):

- increases the effort linked to the commission of an offense making it difficult to obtain criminal target;

- increases the risk of detection or apprehension of the offender, actual or perceived; and
- reduces the reward of the crime.

Situational prevention is also linked to strengthening community processes of informal social control. In this sense, situational strategies should have a community emphasis. For example, residential environments should be designed to help strengthen informal social control process between residents to facilitate natural surveillance.

This research is about a lot of crime responds to an opportunity and is likely to be modified by varying opportunities grew in the early 1970's view was supported by research especially based on interviews with residential criminals, Brantingham and Brantingham (1975); Bennett and Wright (1984). These authors suggested that avoiding risk plays an important part in the decision-making process offender against a possible crime situation.

Crime Prevention through Environmental Design (CPTED)

One of the areas where it has demonstrated the value of the theory of opportunity is planning, urban development, and architectural design (Rau, 2012). In Canada, the United States, and other countries, this approach is known under the name of "Crime Prevention Through Environmental Design" (Crime Prevention Through Environmental Design or CPTED).

The CPTED concept, coined in 1972 by C. Ray Jeffery, is based on the idea that crimes occur in certain areas due to location opportunities offered by the physical environment. This allows us to suggest that it is possible to alter the physical environment so as to decrease the likelihood of such crimes.

According to Jeffrey:

The urban environment can influence criminal behavior in particular and general behavior in two ways: physically, providing the physical environment to which individuals respond; Socially, providing social relationships that individuals respond. Physical urban environment features are more negative noise, pollution and overpopulation. The social features are alignment, loneliness, anxiety and dehumanization. (Jeffrey, 1972)

The first version of CPTED, termed First generation CPTED, proposes four basic concepts: natural access control, natural surveillance, maintenance, and territorial reinforcement. The first three are basically instrumental and common to other theories, whereas, the fourth is linked to the theory of territoriality, which is part of ecological science. CPTED second generation from 1996 adds a fifth principle which is that of community participation.

Natural Access Control

Natural access control is a design strategy aimed at reducing criminal opportunity. It promotes the design of architectural elements as a threshold for

potential attackers to create the perception that there is a risk in choosing that area because it has a specific user. The main physical recommendations considered are: connecting shortcuts to observable areas; prevent placement of access in areas not observed; design spaces that guide users, giving natural indication of output or input; and provide a limited number of paths.

Natural Surveillance

Natural surveillance is a design strategy that seeks to increase the visibility of a space through an appropriate location, design of windows, lighting, and landscape design. It seeks to increase the capacity of urban dwellers to observe the activity occurring in the environment, which provides the opportunity to modify inappropriate behavior or report them to the police or the owner of the property. When natural surveillance is used to its full potential, the possibility of inhibiting the crime, by making the behavior of the aggressor easily identifiable.

Maintenance

The concept of maintenance of urban spaces refers to the need for management plans, cleaning, maintaining, and gardening of public spaces. According to the CPTED program, it is very important that urban space is perceived by users as a space that is cared for. In this sense, the concept of maintenance of urban space is associated with the theory known as “broken windows syndrome” which means that locations in damaged and unmaintained space leads to more crimes of opportunity than another in well-maintained area.

Territorial Reinforcement

The concept of territorial reinforcement refers to the sense of ownership that the inhabitant feels with their immediate environment and therefore, care. The design of spaces that seek to increase a sense of ownership for their users using many techniques deliberately placing safe activities in potentially unsafe areas can achieve this effect. That way not only the use but also the maintenance of the area is increased.

CPTED second generation in particular has taken this approach in developing countries and considers community participation as a key variable in the environmental design of CPTED solutions.

Community Involvement

Most CPTED projects that have been conducted in the LAC region consider the inhabitant of urban space as “Expert Native of their Environment” from their sense of environmental safety and, therefore, should be a key player in all components of a strategy including four

phases: diagnosis, design, implementation, and evaluation. It is considered that this native possesses an innate wisdom about their environment and using this with appropriate methodologies may make the attainment of local strategies more effective in reducing crime indicators and insecurity, based on the initial theory of Paulo Freire (1970).

Citizen Participation in Public Security Policies

Traditionally, public safety has been understood as the set of conditions that allow people a normal development in their daily lives, free from the possibility of being a victim of crime, and whose responsibility belongs solely to the supervisory bodies (White, 2006, www.scribd.com/document/39209049/Crime-Prevention). That is, policing, prosecution, and criminal enforcement as the only holders of the monopoly of force and criminal state power. In this perspective, citizens and their organizations are objects rather passive protection by state institutions. Also, state action is mainly focused on the consequences of crimes, once they have already occurred.

The concept of citizen security, however, proposes to citizens not only as an object of protection, but as an active subject of its own security, promoting social control. It also recognizes that the problem of insecurity comes not only from the lack of repressive action by the state, but was mainly due to the conditions of development of social life. Therefore, crime is seen as a social problem that cannot be addressed one dimensionally. Slowly, concepts of “coproduction” security and social and situational prevention are incorporated, while increasing the emphasis on the rehabilitation of offenders and the alternative resolution of criminal conflicts, among others. Thus, it is introduced for the design of a Crime Prevention Strategy, the participation of different organizations such as research centers, nongovernmental organizations, neighborhood associations, and so forth, and not only the traditional state.

As with this problem, in any area of public policies, to ensure effective participation, there must be at least four basic conditions: willingness to participate, ability to do so, photo opportunities, and a regulatory framework to resolve conflicts among social actors.

The main activities of citizen involvement in local security policies are neighbors’ involvement in the development of safety diagnostics, design proposals and portfolios of projects of social and situational intervention, and participation in the implementation thereof.

Local Governance in Public Security Policies

The mayors are increasingly required to take action by neighbors and communities exposed to certain factors of insecurity such as incivilities, damages, and urban degradation in general.

Situations like drinking alcohol in public, drunkenness, illicit substances, damage to street furniture, vacant lots, abandoned buildings, and illegal trade, among others, are everyday problems of neighborhoods that affect the quality of life of its inhabitants and/or users.

Depending on decentralization and autonomy of local governments in LAC, as well as relations between the state and the market, political authority has more or less interference in local public security policies. However, an active political role of the mayor and his technical team together with local participatory processes and active coordination with local and/or national police can fully develop Situational prevention projects (Rau, 2005, <http://www.pazciudadana.cl/tag/disenio-urbano-seguro/>).

Local governance in public security policies is the active participation of the mayor or mayor, with his municipal technical team, in the diagnosis, design, and implementation of social and situational crime prevention strategies and perception of fear in close coordination with police in each territory.

Perception of Insecurity versus Crime

There are several theories that support the perception of insecurity from crime. Among these they include the theories of incivility, victimization, physical vulnerability, social vulnerability, and social networks. Although some of these theories are partly related either to causal mechanisms or indicators that have been used for testing, all have distinctive elements (Vilalta Perdomo, Castillo, & Torres, 2016). The perception of insecurity from crime is subjective and connects in every human being with the instinct of survival and fear of death.

Research Question

Crime affects all levels of the society in different ways: men and women, young and old, rich and especially the poorest. The economic costs of crime are extremely high. The most recent comparable estimates indicate that Latin America and the Caribbean (including 32 countries) is the region with the highest rate of homicides per capita average 27.5 homicides per 100,000 inhabitants; followed by Africa with 22.2 homicides, while the world average is 8.8 homicides per 100,000 population (WHO, 2002: 274, www.who.int).

Crime and urban violence also generate a climate of widespread fear that results in serious threats to social stability of cities, economic and sustainable development, quality of life, and human rights. Children and adolescents are the most vulnerable to violence, being disproportionately represented as victims, perpetrators, and/or witnesses.

In this context of concern, criminal reality and in the absence of a scientifically validated model to measure and weigh the impact of urban settings,

the processes of citizen participation and local municipal management in the success of situational prevention and CPTED strategies in vulnerable neighborhoods in Latin America that are both reducing crime and fear of perceived posed the following research questions:

1. Does Situational Prevention and CPTED impact on reducing crime (murder and robbery in public space) and perception of insecurity and if it is true?
2. How can we measure the impact?

METHODOLOGY

To answer questions nonprobabilistically, an investigation into independent experimental variables that have an effect on the dependent variables is designed. The classic form of experimental design research is selecting an experimental group, a measurement and control “before” and “after” in both groups (Briones, 1996).

In this research, the dependent variables measured are murder in the case of Honduras and theft in the case of Chile. In both cases insecurity and crime are a critical problem. The independent variables are the Situational Prevention and CPTED interventions being built in vulnerable areas such as placement of lights, alarm installation, paving, and installation of play areas, among others. To identify these groups of independent variables related to a project Situational Prevention and CPTED, three areas related to the project will be defined:

Scope 1: Urban Architecture

In this area the CPTED methodology is linked to define variables according to the five fundamental principles.

- **Natural surveillance:** lighting, natural vigilantes, visual fields, formal surveillance, visual fields.
- **Territorial reinforcement:** muralismo versus graffiti territorial trademarks and equipment, land marks in places, signage
- **Natural access control:** urban access, residential passages alarms
- **Maintenance:** vandalism and abandonment
- **Community participation:** neighbors or residents

Area 2: Community Involvement

- Occupation of neighboring public space
- Participation of residents in the project design situational prevention
- Engaging young people

Scope 3: Local Public Management

- Municipal coordination meetings
- Mobile security in the neighborhood
- Police operations
- Police officers in the neighborhood

These variables are framed as questions in the questionnaire component of the Impact Assessment Model. This has been piloted on two vulnerable neighborhoods that have already been operated on with projects of situational prevention and CPTED; the results being compared to a controlled neighborhood which did not have an intervention and will not have any in the near future. One site was in Chile and the other in Honduras. These were chosen to present both conditions, criminal, and social and environmental vulnerability. So far the results of testing are in the vulnerable area of Chile, Pedro Aguirre Cerda (PAC) Population in Puente Alto.

RESULTS

PAC is located in the western sector of the commune of Puente Alto in Santiago between the streets; Concha y Toro, Covadonga, Abate Molina, and Ramón Barros Luco, with more peripheral features, leading to poor access to public transport and services.

It is comprised of neighborhoods such as; PAC 1 PAC 2, Oscar Bonilla, and María Magdalena, where there is significant crime and drug microtrafficking, as well as possession and consumption of drugs, (AUPOL 2013 and three police statistics). The breakdown of the population is summarized in the sentence that follows. As can be seen the proportion of females is higher than males—the norm would be around 50:50. This is important as experienced women are more likely to engage in community initiatives than men.

Regarding the survey, results were applied to a sample of 60 people in the operated area (PAC) and 60 people in the neighborhood control after the interventions. The results showed that crime victimization was 69.6% for respondents in PAC during the past year slightly higher than the percentage that says yes in the control site, villas Puente Alto, adjacent to the PAC, which did not have situational intervention ([Figure 1](#)).

This may be a surprising result as you might have expected the areas with the crime prevention interventions to have less crime. A number of explanations may explain this. First, the intervention did not work. Second, the population, always reluctant to report crime because of fear of reprisal, may now have greater confidence in their security and are more likely to report crime increasing the reporting rate. And/or thirdly, it may be crime switch. We can find evidence for this by looking at crime type. In the case

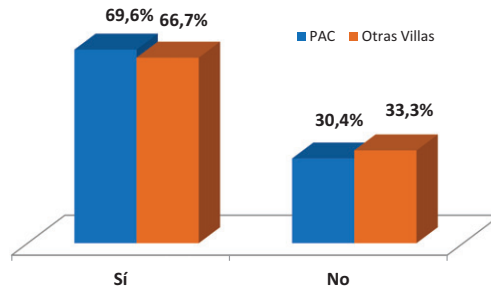


Figure 1. Over the past year, have you suffered directly from an act of crime? Source: Prepared based on own study of Puente Alto, August–September 2016.

of crime type from which they suffered, it is observed that in the case of PAC it was mainly theft (30.4%) and theft by surprise (26.1%)—these are crimes of opportunity that occur in the street and although serious are not as impactful as assaults or burglaries. In the case of the Control theft by surprise (28.2%) and theft (12.8%) also lead the ranking but also burglaries (12.8%) and crimes of violence 7.7%. The latter two crimes are considered by the police and the community as far more serious. This might suggest that crime switch has occurred and the PAC site is safer (Figure 2).

This argument is further supported by reviewing where the victimization occurred. In the case of PAC respondents they indicate that these happened in the commune (39.1%), unlike the inhabitants of the Control, stating that these occurred in the villa (41.0%). This suggests that the criminals are shifting their attention from targeting people in their homes to targeting people in public areas (Figure 3).

With respect to the time of day when those interviewed were victims, the results are marked. PAC were victimized in the day (26.1%) and at night (21.7%), that is, when they go to work or study.

These data further indicate that the schedule where there is greater frequency of “theft by surprise,” is between 4 p.m. and 8:30 p.m., when people return home from work. While the second schedule where the crime occurs is in the early morning, between 5:50 a.m. and until 9:00 a.m., when most people moving through the streets heading to their workplaces. This result suggest criminals are shifting from more planned crimes such as burglary to crime of opportunity such as theft by surprise.

Having looked at the quantity of crime we next looked at what were the biggest issues of people living in PAC. The issues that most concern the people of PAC are drug trafficking (26.1%) and theft (21.7%), the same is true even with a higher incidence in the case of the Control with 28.2% in both types of crimes. That is, is the drug crime most worried the respondents of both groups of analysis, which can be connected to the existence of local bands or microdrug trafficking in neighborhoods and villages of this

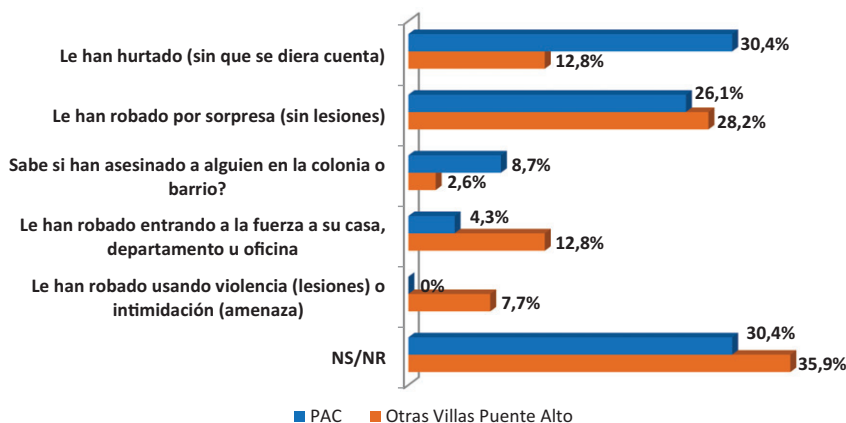


Figure 2. Type of Crime: Indicate which of the following situations has happened. Source: Prepared based on own study of Puente Alto, August–September 2016.

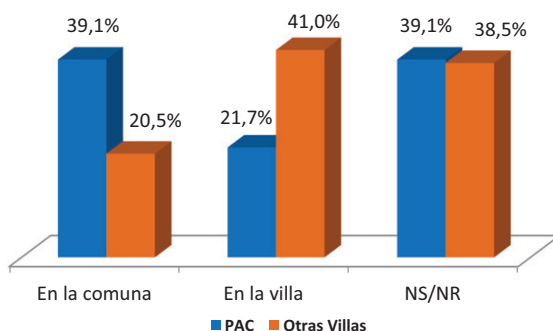


Figure 3. Where does the act or acts occurred? Source: Prepared based on own study of Puente Alto, August–September 2016.

commune. However, fear of drug crime is less in the PAC than the Control but the impact of drugs has to be considered (Figure 4).

In the same vein, in December 2016, the National Prosecuting Authority issued a “Report of Drug Trafficking in Chile,” which revealed the existence of 426 critical areas in relation to illicit drug sales in Chile, where Puente Alto is one of the communes Metropolitan Region with the most drug trafficking with 32 of their populations identified in the list, including Villa Pedro Aguirre Cerda. Trafficking and drug use begins to appear as an important intervening variable between dependent and independent variables (Photo 1).

The report of the National Prosecuting Authority on Drug Trafficking 2016 states:

statistical information, as the result of monitoring the neighborhood traffic in some of the country’s communes, one can easily conclude that the drug trade in our country is a growing phenomenon, with a strong presence in the population sectors with a high rate of repetition of sentences, where we can even find subjects with 59

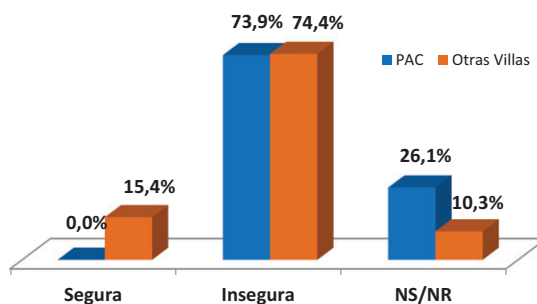


Figure 5. How do you consider your home? Source: Prepared based on own study of Puente Alto, August–September 2016.

operations conducted in the first 6 months of that year they identified 152 criminal gangs in the great Santiago, who had firearms in their possession and are concentrated in communes like Peñalolén, Conchalí and La Pintana. In the case of Puente Alto, police map identifies the following bands: Del Ale, El Paragua, lawyers, Fito, Los Guatones, Los Lobos, Los Telches, Nunez, and Segua (Figure 5).

The impact of drugs crime and other crimes have a large impact on the feeling of insecurity or fear of crime. Both the PAC and the Control are fairly similar, 73.9% and 74.4% respectively. However, bearing in mind that the PAC has had the interventions which inadvertently focus the community's attention on crime, you might initially expect the fear of crime to be higher in the PAC but over time reducing.

Insecurity across the variables with the issues that most concern them respondents PAC neighbors and other towns of Puente Alto, it is observed that in the case of the first to those who manifest insecurity in 29.4% indicated a preference for the issue of drug trafficking and theft respectively leading their concerns. Something similar happens in the case of the latter, even more inclination towards illegal drug trade (34.5%) over the theft (31.0%).

Regarding the sense of fear in your neighborhood or colony, we see in the case of PAC, it reached 43.5%, which is slightly below the level of the other surveyed villages (48.7%), which may mean in the case of the latter the criminal acts occur with greater incidence in their own neighborhood, something that relates to the analysis we have made in the previous questions, where the occurrence of crime is significantly higher in households than in the case of respondents PAC (Figure 6).

In this sense, situations where there is a greater sense of fear among the inhabitants of PAC are “when they walk through your neighborhood” (39.1%) and “when to take public transportation” (30.8%). The same applies in the case of those interviewed inhabitants of the other towns, however, it notes that in the case of “into your home” (20.5%) is significantly higher than for PAC respondents (30.8%), which may have to do

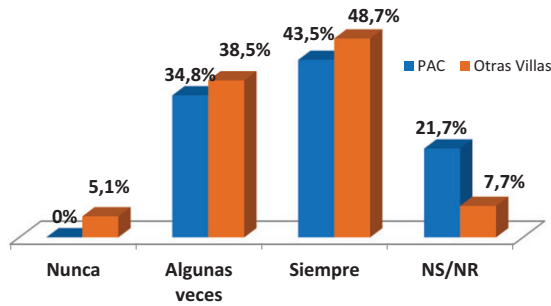


Figure 6. Do you feel fear to be a victim of crime in your neighborhood or in others? Source: Prepared based on own study of Puente Alto, August–September 2016.

with the type of crime (possibly “portonazos” or theft at their homes) and the places where they have suffered victimization.

By observing the map of people movement it is observed that the main connection of the PAC with the center of the commune is the Av. Concha y Toro, however, this is a complex street at peak hours because of the road junction that occurs between vehicles transiting between Pirque and Puente Alto (Maipo river crossing). That is to say, it is a neighborhood with access problems, with only two main streets, where one of them “the Salvador Allende is a transit route for trucks, which will Pirque, can go very fast, where more trucks are that mini buses.”

This corroborates the position of PAC respondents in the study, where only 39.1% said that there are well-defined access to the population, unlike respondents from other towns in the district (71.8% reported the same; [Photo 2](#)).

There are several bus stops in the town of Transantiago, as indicated from the municipality, for improving public transport routes and lighting at bus stops.

On the other hand, respondents noted that both PAC and the other towns mostly indicate that there are no “community alarms” in 65.2% and 53.8%, respectively. The higher percentage in the case of PAC can influence the response of trust with neighbors in a dangerous situation, since this type of alarm tends to strengthen relations and ties between them like networking groups WhatsApp.

DISCUSSION

In setting the context of situational prevention and CPTED, this article makes the case that there is no model available to evaluate, measure, and monitor the impact of those interventions in the Latin America context. The article then suggests a framework for such a model and pilots that model with real examples of interventions.

In analyzing the results of this study, it is observed that in the case of the PAC in Chile there is a high degree of victimization and perception of

insecurity, which is associated with a high fear of being a victim of crime or violence by its inhabitants, which goes hand in hand with lack of access to the population, security activities carried out by the municipality perceived by the community and police patrols or rounds. However, people recognize some degree of improvement of infrastructure of the village by the municipality over the last 2 years. The results suggest that the interventions in the PAC have had a beneficial impact compared to the control.

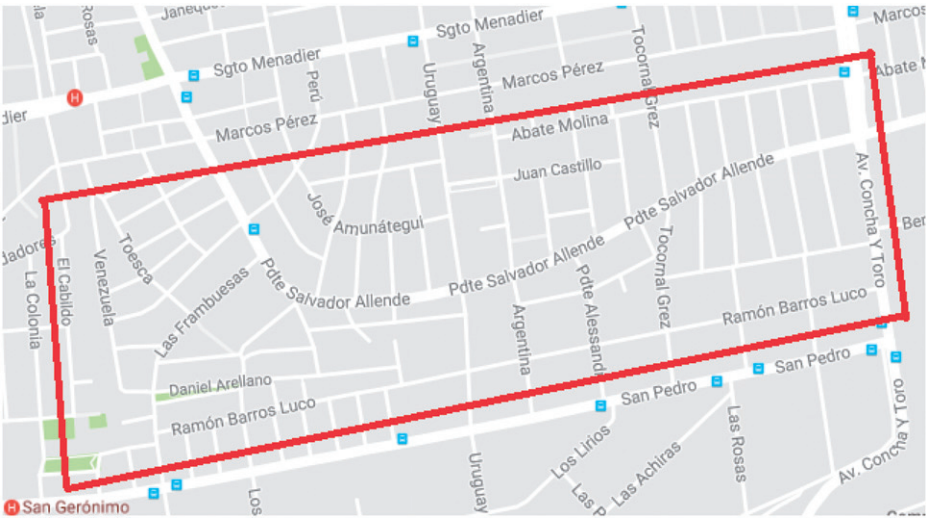


Photo 2. Villa Pedro Aguirre Cerda, Chile Puente Alto.

Table 1. Population by sex and age range of the Pedro Aguirre Cerda.

Rank age/sex	Female	Male
0–5 years	65	38
6–10 Years	85	55
11–17 years	99	79
18–29 years	105	65
30–59 years old	79	35
60 years later	65	39
Total	498	311

Source: Prepared based on own study of Puente Alto, August–September 2016.

Table 2. Cross between insecurity and issues of concern to respondents pac and other towns of puente alto

Of the following topics, ¿Which is the one That worries you the most?	¿How do you consider your village?					
	PAC			Other Villages of Puente Alto		
	Safe	Unsafe	NK/NA	Safe	Unsafe	NK/NA
Drug Trafficking	0%	29,4%	16,7%	16,7%	34,5%	0,0%
Robberies	0%	29,4%	0,0%	16,7%	31,0%	25,0%
Assaults	0%	17,6%	16,7%	50,0%	6,9%	0,0%
Insecurity	0%	11,8%	16,7%	0,0%	3,4%	0,0%
Gangs	0%	5,9%	0,0%	0,0%	13,8%	0,0%
Homicide	0%	5,9%	0,0%	16,7%	6,9%	0,0%
Impunity	0%	0,0%	0,0%	0,0%	3,4%	0,0%
NK/NA	0%	0,0%	50,0%	0,0%	0,0%	75,0%

At the same time the data of the exploratory study PAC, together with data obtained from the Secretariat for Crime Prevention, National Prosecuting Authority and the police, it can be inferred that drug trafficking or microtrafficking is a serious problem affecting the residents of this population and other towns of Puente Alto. This can affect the high level of victimization of neighbors PAC ² and high feeling of insecurity and fear felt by neighbors to see drug gangs or criminal act in complete impunity, recruiting “soldiers” from neighborhood residents.

In this regard, residents of PAC and other towns in the district are victims who must live either, when going to their workplace, study, shopping, or a personal process, daily with a crime that is not high in the local media, but is rather quiet, but that affects the environment in which the neighbors live; leads to shootings, consumption, sale or “exported” drugs, and ultimately a vicious cycle that will devastate family life, and destroy neighborhoods. The survey data and official figures reflect this and confirm. It is also suggests that the evaluation methodology must take the “drug” impact into account.

Looking at the other area of CPTED intervention, that is, the case of La Laguna in Honduras, draws attention to the low degree of victimization and insecurity on the part of those interviewed neighbors, which is related to the fact that the colony has good access, coupled with the perception that the area is regularly patrolled by police, which seems to be critical for the perceived safety of neighbors.

This article reports on an exploratory study in some villages or neighborhoods where situational and CPTED interventions were developed. The results are based on a self-survey—an Estructurado—instrument made to people aged 18 or older, residents of neighborhoods intervened and nonintervened and is intended to be a first step in producing instruments to evaluate the CPTED impact in LA.

The questionnaire considers dimensions of dependent variables (Victimization, perception of insecurity, Community Networks) and independent variables (Setting Urban, Community Participation, Public Local management). Finally, this field study contributes in designing and developing the Model Impact Assessment of the Impact of Situational and CPTED Prevention in reducing theft and murder, which represents a great leap in public policy Recovery of Public Spaces and prevention of Crime and Violence in Latin America and the Caribbean, because it allows scientific evidence that actions work and also which actions do not. This is part of the global trend to develop comprehensive strategies for crime prevention based on evidence (“Evidence Based Approach”) approach.

Answering research questions with the evidence analyzed so far in this article, it can be concluded that there is encouraging results but no conclusive evidence that strategies Situational Prevention and CPTED in the

territory analyzed, impact on reducing theft and perception fear. If CPTED also explored the phenomenon of drug trafficking and its relationship to theft and perception of fear, we would expect a much larger impact.

Notes

1. Government department in the United Kingdom.
2. For the consumer's need to obtain drugs that are known as "anguish."

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