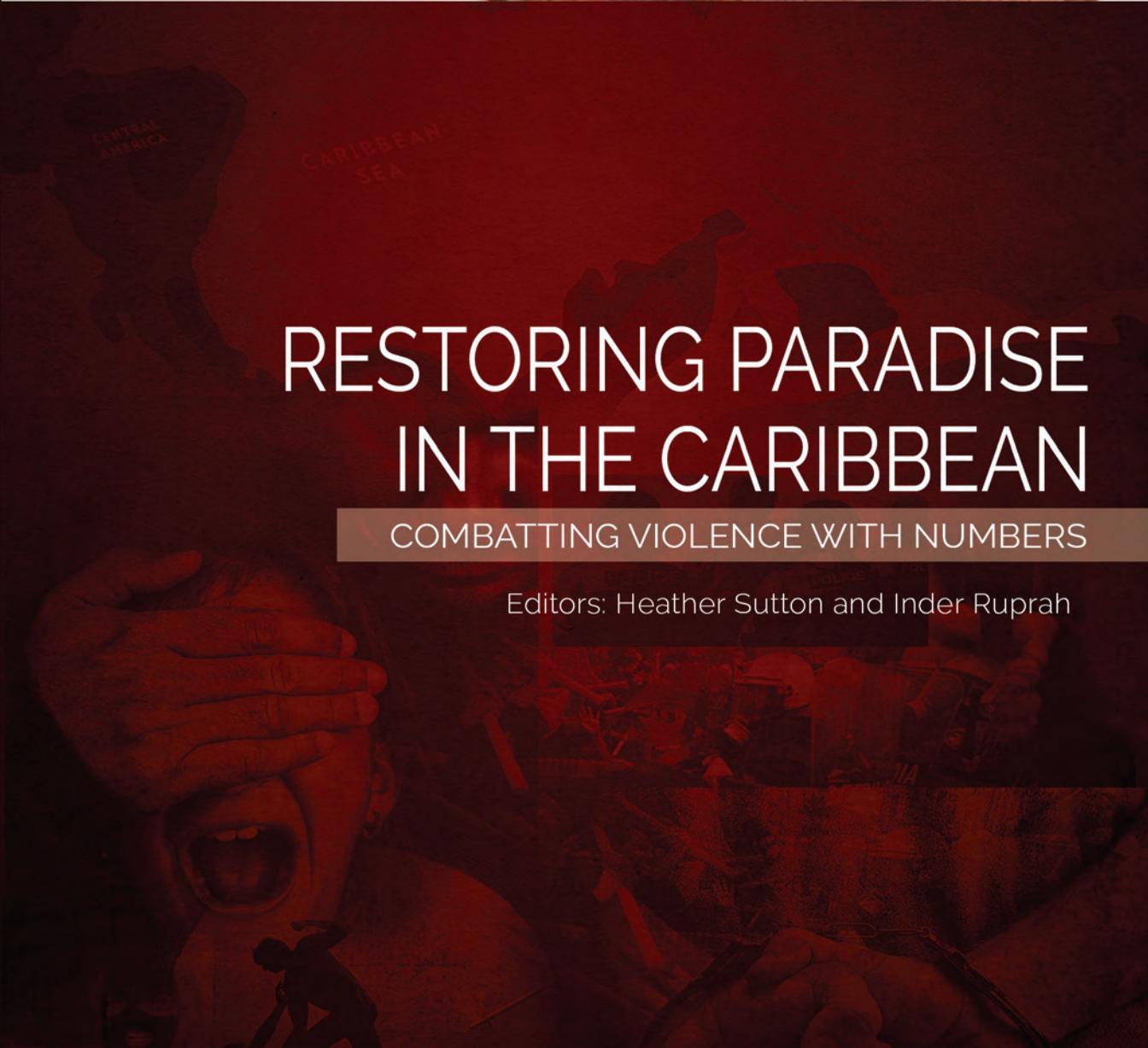




RESTORING PARADISE IN THE CARIBBEAN

COMBATTING VIOLENCE WITH NUMBERS

Editors: Heather Sutton and Inder Ruprah



Restoring Paradise in the Caribbean

Combatting Violence with Numbers

Heather Sutton and Inder Ruprah, Editors



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Foreword

Crime and violence are serious obstacles to long-term growth and development. They lead to injury and the loss of human life, erode confidence in government, reduce the competitiveness of industries and services, negatively alter the investment climate, contribute to emigration, and can lead to the loss of skilled and educated citizens. Consequently, improving citizen security has become a priority of the Inter-American Development Bank in its efforts to support the governments and citizens of Latin America and the Caribbean.

While citizen security has become an ever-increasing concern for many Caribbean countries, the magnitude of the problem has not been matched with an equally robust response in terms of research. Cross-national studies on the prevalence, causes, and effects of violence in the region are few. Empirical studies showing which policies have worked to reduce crime in the Caribbean are even scarcer.

This volume analyses new data collected in household and business victimization surveys. These surveys allow us to understand crime from a primary source—the victims themselves. As such, this study goes beyond much of the existing literature, which relies primarily on police data. It contributes new information to our understanding of crime patterns, victim profiles, determinants of particular types of crime, and directions for crime reduction in the region.

While the crime situation varies among countries, broadly speaking the Caribbean suffers from uniquely high levels of violent crime. After providing an overview of crime in five Caribbean capital cities, this volume addresses several factors associated with violent crime. These include youth, violence against women and children, neighbourhood characteristics, gangs, guns, and the police and criminal justice systems. The cost of this crime and violence to the Caribbean—about 3 percent of GDP—is significant. The study finds that victimization has negative ramifications for businesses, economic growth, tourism arrivals, emigration, and life satisfaction.

However, perhaps the most unique aspect of this study is that it has been written with the specific intention of informing policy and programme design. The authors' optimism, and ours, about the potential to restore paradise in the Caribbean rests on the growing base of evidence on what we have already learned about crime prevention

worldwide. The authors recognize the gaps in knowledge and data collection that exist in the Caribbean, but wisely argue that countries need not wait for further studies to begin to reduce violence. Making use of the risk and protective factors identified here, policymakers can adapt evidence-based programmes that have been successful in other settings, while monitoring and evaluating their results in the Caribbean context.

There is much work in the region that is promising and much that is ineffective. This report helps to identify both, and urges that rigorous evaluations of the more promising programmes be conducted. National strategies should include policies and interventions based on sound knowledge of what actually works, and not on what might or should work.

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Introduction: Combatting Crime and Restoring Paradise

Heather Sutton and Inder Ruprah

Crime is undoubtedly an issue of concern for policymakers and citizens in the Caribbean region. An average of 40 percent of the Caribbean population identifies crime and security-related issues as the main problem facing their country, even above poverty, the economy, or inequality. In several Caribbean countries, crime has increased over the last decade, with homicide rates more than doubling and the countries concurrently becoming more violent.

However, there is great intra-regional variance. Jamaica, for example, stands out for its extraordinarily high rates of homicide since 2000. And while Jamaica and Trinidad and Tobago have generally dominated regional attention in this regard, homicide rates generally have significantly declined in both countries since 2009. Homicide rates in The Bahamas surpassed Trinidad and Tobago in 2011 and are now nearing those of Jamaica. On the other hand, homicide rates in Barbados and Suriname have remained fairly constant at much lower levels over time.

This report tackles the following questions. *What are the size and dimensions of the crime problem? How is the Caribbean similar to or different from the rest of the world? Who are the victims? What are the drivers of crime, and hence the areas that provide the best opportunities for intervention? What are the societal costs?*

The answers to these questions support our central hypothesis that the Caribbean suffers from particularly high levels of interpersonal violence relative to the rest of the world. This interpersonal violence is related to a number of factors, including experiences of and attitudes toward violence in the home, early experiences with violence and risky behaviours among youth, gang activity, community violence, and the use of guns, which makes violence more lethal. These are issues that cannot be solved through arrests alone, but instead are best addressed through a balance of targeted prevention and smarter criminal justice systems.

Crime is a complex social problem that evades simple solutions. It requires a clear diagnosis of the problem and approaches that are data-driven, monitored, and tested for effectiveness. However, understanding the problem, its consequences, and possible solutions to it has been limited by the lack of adequate and reliable data in the region. Even recent studies by international organizations (UNODC and World Bank 2007; UNDP 2012) relied largely on police data or citizen security surveys. These sources not only are dated but present at best a partial understanding of victimization. Police data suffer from under-reporting (as we examine in Chapter 1). Additionally, because definitions of crimes are based on national legislation, police statistics do not allow for cross-regional or international comparisons to understand where the Caribbean stands relative to the rest of the world. Victimization surveys in the Caribbean have been few and infrequent, and the limited data produced are not widely available to academics and the public. Further, different survey sample sizes, sampling methods, and wording of questions can lead to vastly different estimates for the same countries in the same time frame and have reduced comparability across countries.

This report aims to provide a more complete picture of crime and violence and their covariates in the region based on newly generated data. The data used in this report come predominantly from two primary data-generation initiatives undertaken in 2014/2015 by the Inter-American Development Bank (IDB): (1) A Caribbean Crime Victimization Survey (CCVS) module attached to the Latin American Public Opinion Project (LAPOP) Survey; and (2) a business victimization module attached to the 2014 Productivity, Technology and Innovation (PROTEqIN) Survey and applied to a representative sample of firms in Caribbean countries. The central analysis of the victimization of citizens is focused on the capital city metropolitan areas—where crime is generally higher—in five Caribbean countries: New Providence, The Bahamas; Bridgetown, Barbados; Kingston, Jamaica; Paramaribo, Suriname; and Port of Spain, Trinidad and Tobago. Throughout the volume we refer to these five countries as the C5. International comparisons are made against countries where the International Crime Victimization Survey (ICVS) has been implemented. Inter-regional variance is also addressed.

However, some key topics are not covered in this report. The topics of drug trafficking and organized crime are clear omissions that are undoubtedly important for understanding the dynamics of crime, but are not easily measured and understood through victimization surveys. While these topics are the focus of much discussion in the Caribbean, accurately measuring and understanding them requires innovative approaches and data that are beyond the scope of this report. Furthermore, like all other research based on cross-sectional survey data, this report is limited to exploring factors related to crime, but is unable to statistically explore and untangle the direction of causality.

The report is divided into four sections. **Section One** is dedicated to measuring and describing the problem. **Chapter 1** discusses how to measure crime and explains

the problems with existing crime data in the Caribbean. It explores the level and characteristics of crimes that go unreported to the police, the problem with surveys on crime in the region, and the new data generated for this report. Based on victimization surveys in the five Caribbean countries (C5), **Chapter 2** presents the prevalence rates for property and violent crimes compared to the rest of the world. It finds that the violent crimes committed in victims' neighbourhood and by someone they know are particularly acute. **Chapter 3** examines the victims by socio-demographic characteristics for different types of crime. Here we find that the Caribbean is not unlike most places in the world—victims of common street crimes tend to be young (ages 18–25) and low-income males.

Section Two explores key risk and protective factors associated with violence that are examined in the international literature, and then looks at their relevance in the Caribbean. Extensive and robust international studies find evidence that cycles of violence begin in the home when children witness and experience violence. While little reliable data are available on intimate partner violence and child abuse in the region, **Chapter 4** examines attitudes on violence in the home in the Caribbean and finds tolerance of violence to be significantly higher than elsewhere in Latin America. **Chapter 5** examines victimization of youth and the perpetration of violence by youth, as well as risk and protective factors associated with youth violence and delinquency. Much of the recent literature in criminology shows that crime is highly concentrated in specific neighbourhoods and street segments. **Chapter 6** explores the characteristics of neighbourhoods associated with higher victimization rates, as well as potential mitigating factors that help reduce crime in vulnerable neighbourhoods. **Chapter 7** looks at the prevalence of gangs in Caribbean neighbourhoods and their association with victimization. **Chapter 8** examines the tools of violence—specifically firearms—and their use in and relationship with violent crime. Finally, **Chapter 9** looks at the institutions of the criminal justice system.

Section Three is dedicated to understanding the costs and consequences of crime. **Chapter 10** explores victimization of businesses and the impact of crime on the private sector. **Chapter 11** applies the accounting approach to estimate the dollar amount of the direct costs of crime in the Caribbean and explores its impact on tourism arrivals and GDP growth. Finally, **Chapter 12** looks at some specific costs such as the impact of crime on economic growth, tourism, life satisfaction, and intentions to emigrate.

Section Four discusses the potential gains from prioritizing effective policy interventions in the areas explored in the previous sections: violence in the home, youth, neighbourhoods, gangs, guns, and the criminal justice system. **Chapter 13** examines current legislation and programmes in the Caribbean in these areas and compares them to model legislation and evidence of what works in other contexts around the

globe. We find evidence of many promising initiatives, but a fundamental lack of testing and evaluating their impact. Among the key recommendations in **Chapter 14** is that the Caribbean invest heavily in monitoring and evaluation to build the understanding and evidence base of what works to reduce crime in the region. National strategies should be clearly based on ensuring that targeted individuals, communities, and institutions have access to the programmes that work.

How Do We Measure Crime?

Heather Sutton and Lucciana Alvarez

“If you cannot measure it, you cannot improve it.”

—Lord Kelvin

Accurately measuring the size and dimensions of crime and violence in the Caribbean is essential for designing effective crime prevention and reduction policies. But how do we measure and understand crime? Police crime statistics can be a fairly inaccurate measure of actual crime levels in the Caribbean due to under-reporting by the public and under-recording of crimes by the police. This can lead policymakers to make poor decisions regarding prevention policies and the allocation of resources. Victimization surveys enable us to measure the phenomenon of crime from a primary source—the victims themselves—but such surveys are conducted less frequently in the Caribbean than in many other world regions.

This chapter begins by explaining some of the problems with police data generally, and then explores the under-reporting of crime to law enforcement in the Caribbean specifically. We compare crime reporting in the region with that of other capital cities across the world, and we further identify the types of crime and the characteristics of victims of unreported crimes. We then examine the victimization and citizen security surveys that have been conducted in the region to date. Finally, we summarize the main differences between the data source used for this publication—the Inter-American Development Bank’s Caribbean Crime Victimization Survey (CCVS)—and previous surveys, highlighting the distinct contributions of the CCVS.

1.1 Police Crime Statistics

The police are normally considered the first source of information about crimes that have been committed. Police-recorded crime data do present some benefits: (1) they may provide the ability to study crime location via Geographic Information System

(GIS) codes; and (2) they are produced with regular frequency and often provide details on the characteristics of both the victim and offender. However, police crime statistics are only the tip of the iceberg when it comes to measuring and understanding crime. According to International Crime Victimization Surveys from 1990–2005, it is estimated globally that less than half of common crimes are reported to the police. For some crimes (i.e., assault and sexual crimes) the percentage is even lower than half—sometimes 10 percent lower or more.

At best, police statistics give a partial view of what is happening in a country; at worst, they distort our understanding of the actual problem. When police crime statistics rise or fall, this does not necessarily mean that actual crime is increasing or decreasing. It is possible that more or fewer citizens are reporting crime, or that the police are more or less thorough in recording crime data. Entire groups at risk of victimization may be unknown. The most problematic crimes may not be those that appear in police statistics.

Additionally, police data are notoriously difficult to compare from one country to the next, so understanding regional crime is more difficult. There have been some attempts to create uniform international statistics on crime and violence for comparing between nations.¹ However, even the commonly used United Nations Crime Statistics are derived from national police figures and still subject to under-reporting by the public or gaps in recording by the police. Police-reported data can be so unreliable for comparative analysis that Interpol and some criminologists have suggested a “global moratorium” on their publication and use in comparative studies (Van Dijk 2008).

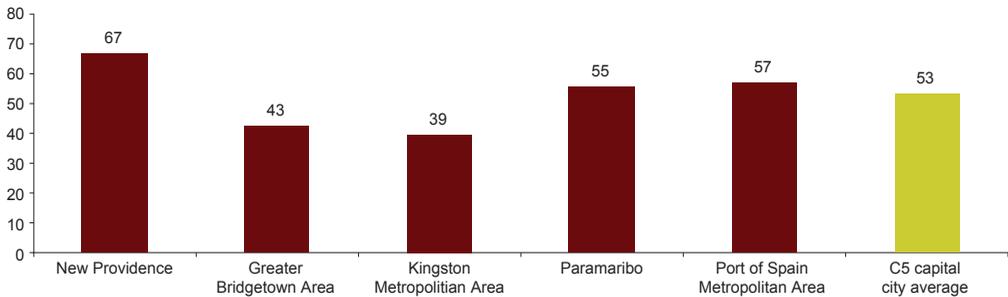
1.1.1 Reporting of Crime in the Caribbean

The CCVS asked respondents who have been crime victims whether they reported the incident to the police. Figure 1.1 depicts the reporting rates of victims in five Caribbean capital city metropolitan areas and the average rate for the C5. On average, 53 percent of crimes were reported and 47 percent of crimes went unreported. The lowest overall reporting rates were found in Kingston, Jamaica (39 percent) and Bridgetown, Barbados (43 percent). Reporting rates were highest in New Providence, The Bahamas, which is consistent with high levels of trust in the police further examined in Chapter 9.

When excluding car theft (given universally higher reporting rates), the C5’s 51 percent crime reporting rate stands very close to the international average (49 percent). Reporting is significantly higher than in Latin American capital cities (35 percent) for all five crimes examined here (car theft, burglary, robbery, theft of personal property,

¹ Interpol and UN Crime Survey data reflect broad categories of “common crimes” (theft, burglary, rape, and murder) that are reported by national police agencies via a standardized questionnaire. The World Health Organization is a further source of standardized information on violence, particularly homicides.

Figure 1.1: Percentage of Five Crimes Reported to the Police in Five Caribbean Capital City Metropolitan Areas



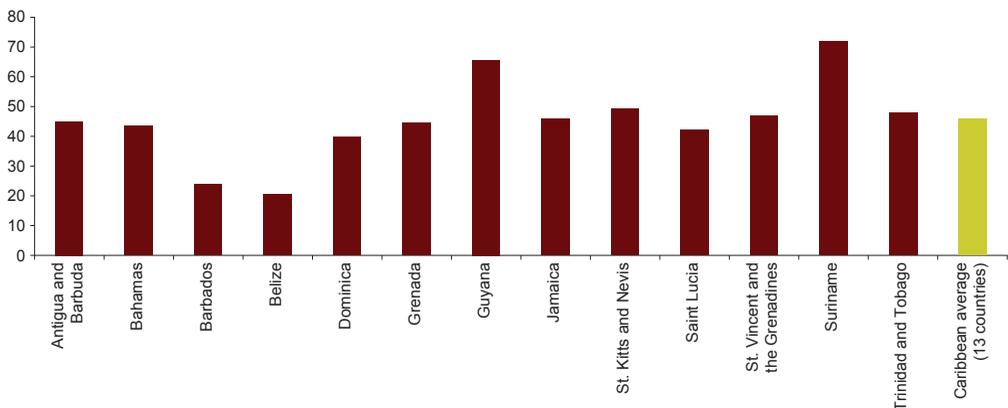
Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five crimes cited in the figure are car theft, burglary, robbery, theft of personal property, and assaults and threats.

and assaults and threats) and is comparable to New York (57 percent) and the European Union (60 percent).² Reporting levels are particularly high relative to Latin American cities for violent crimes such as robbery (23 percent in Latin America versus 63 percent in the C5) and assault (25 percent in Latin America versus 44 percent in the C5). The results indicate that Caribbean victims likely have more confidence in the police than victims in Latin America. This hypothesis is further supported in Chapter 9.

Regarding crimes against businesses, according to responses to the 2013/2014 Productivity, Technology, and Innovation (PROTEqIN) Survey, only 46 percent of these crimes were reported to the police (Figure 1.2). The pattern of reporting of crime

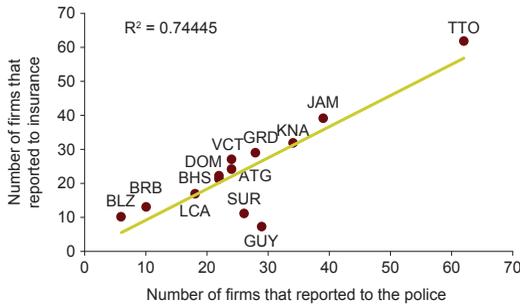
Figure 1.2: Percentage of Crimes against Businesses Reported to the Police, by Caribbean Country



Source: Prepared by the authors using data from Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014.

² Comparative results on reporting rates from the International Crime Victimization Survey database per world region are provided in Appendix 1.2.

Figure 1.3: Correlation between Reporting to the Police and Filing an Insurance Claim, by Caribbean Country



Source: Prepared by the authors using data from Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014.

by businesses in C5 countries follows that of individuals, with lower reporting in Barbados (24 percent) and Jamaica (46 percent). Figure 1.3 indicates that there is a significant correlation between the percentage of crimes reported to the police and the percentage of crimes reported to insurance companies.

1.1.2 Which Crimes Get Reported?

An extensive amount of literature examines levels and predictors of police notification by crime victims (Finkelhor and Ormrod 1999; Fisher et al.

2003; Hindelang 1976; Lizotte 1985; Ruback, Greenberg, and Westcott 1984; Tjaden and Thoennes 2000; Zawitz et al. 1993). While the degree to which crimes are reported to the police varies widely by country and type of crime, there does seem to be a general pattern: the more serious the offence, the more likely it is to be reported (Alvazzi del Frate 1998; Van Dijk 2008).

Similar to other countries around the world where victimization surveys have been conducted, we find that in the C5 crime reporting is highest for car theft (84 percent) and burglary (70 percent) and lower for assaults (48 percent) and threats (37 percent).³ Crime reporting in nearly all crime categories was lower in Kingston and Bridgetown (Table 1.1). More severe crimes that involved a weapon, or where medical services were sought, were more likely to be reported. Violent crimes were also more likely to be reported if there were two offenders and if the offender was a stranger rather than someone known to the victim (Table 1.2).

1.1.3 Who Is Less Likely to Report?

Victim characteristics also are associated with police notification. Table 1.3 shows that for violent crimes (robbery, assault and threat) in the five Caribbean capital cities, females are overall less likely than males to report violent crime, as are youth and those who are single or cohabitating but not married. Reporting rates across income quintiles vary by country.

³ For details on both the percentage and number of individuals reporting for the five types of crime, see Appendix 1.1.

Table 1.1: Percentage of Crimes Reported by Type and Seriousness in Five Caribbean Capital City Metropolitan Areas

Type of Crime	New Providence	Greater Bridgetown Area	Kingston Metropolitan Area	Paramaribo	Port of Spain Metropolitan Area	C5 Capital City Average
Four crimes (excl. car theft)	63	42	37	54	54	51
Car theft	84	77	92	67	85	84
Theft	63	40	36	55	52	50
Burglary	84	69	46	73	77	70
Loss of property	87	68	48	76	82	73
Household member intimidated	94	67	79	92	86	87
Robbery	70	56	47	65	71	63
With a weapon	81	54	53	75	83	71
Victim required medical services	95	90	85	80	82	88
Assault	54	36	47	49	51	48
With a weapon	74	51	55	57	63	61
Victim required medical services	90	83	87	92	73	84
Threat of assault	50	28	28	41	42	37

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: Cells with gray shading should be interpreted with caution because they are based on 10 or fewer cases.

Table 1.2: Percentage of Violent Crimes (Robbery and Assaults and Threats) Reported to the Police by Characteristics of the Offenders in Five Caribbean Capital City Metropolitan Areas

Offender Characteristics	New Providence	Greater Bridgetown Area	Kingston Metropolitan Area	Paramaribo	Port of Spain Metropolitan Area	C5 Capital City Average
Number of offenders						
One	52	29	38	45	45	41
Two	69	55	59	59	67	64
Three or more	65	31	34	39	51	45
Relation to victim						
Stranger	67	58	41	62	65	58
Non-stranger	58	29	41	40	47	44

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Table 1.3: Percentage of Violent Crimes (Robbery and Assaults and Threats) Reported to Police, by Characteristics of the Victim, in Five Caribbean Capital City Metropolitan Areas

Victim Characteristics	New Providence	Greater Bridgetown Area	Kingston Metropolitan Area	Paramaribo	Port of Spain Metropolitan Area	C5 Capital City Average
Gender						
Male	57	47	44	57	64	54
Female	62	31	38	44	46	45
Age						
18-24	47	32	32	34	58	41
25-34	64	38	37	46	51	49
35-49	68	32	52	64	44	52
50-64	72	45	53	68	65	61
65+	100	64	31	25	82	59
Household Income (quintile)						
1	72	35	39	47	56	50
2	62	42	45	52	46	51
3	63	24	43	53	65	51
4	78	33	51	36	42	45
5	30	42	47	48	77	48
Marital Status						
Single	55	36	41	37	54	45
Married	75	43	44	64	54	60
Living together	88	27	37	57	48	46
Divorced	75	57	67	67	67	66
Separated	65	50	60	—	75	64
Widowed	50	50	75	83	71	68
Civil union	—	—	—	—	—	—

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: Cells with gray shading should be interpreted with caution because they are based on 10 or fewer cases.

1.2 The Alternative Measure of Crime: Victimization Surveys

Victimization surveys are an alternative way of studying crime. Essentially a sample of the population is surveyed and respondents are asked if they have recently been a victim of a set of concretely defined types of crime. Because many victims do not report crimes to the police, estimates from victimization surveys are typically far higher than those generated using police records (Alvazzi del Frate 1998; Van Dijk, Van Kesteren, and Smit 2007; Zawitz et al. 1993) and may not even correlate with police

crime statistics.⁴ They may also include questions on perceptions (fear of crime, trust in police, neighbourhood conditions, etc.). While victimization surveys can be more reliable than police statistics, these surveys also have limitations. Under-reporting can be a function of memory lapse, trauma, fear of reprisal, cultural sensitivities, or the exclusion of hard-to-reach communities. Over-reporting can result from the temptation to include an incident that does not belong in the survey time frame,⁵ or from the chance that victims rather than non-victims choose to respond to the survey (Alvazzi del Frate, Zvekic, and van Dijk 1993).

Countries around the world have been implementing National Victimization Surveys (NCVS) for over four decades.⁶ These surveys typically use a large nationally representative sample (> 30,000) that can be analysed at the subnational level. Unfortunately, the results of these surveys are often not comparable between countries due to differences in questionnaire wording, sample size, and design.⁷ The International Crime Victimization Survey (ICVS) collects small samples (1,000–2,000) from countries around the world, using a less detailed set of questions.⁸ It has been conducted in 90 countries and is useful for making international comparisons of national crime rates. The ICVS serves a very narrow (but important) purpose, as many details of national surveys make them very difficult to compare with each other.

1.2.1 Victimization Surveys in the Caribbean

Victimization surveys in the Caribbean have been few and infrequent, and the limited data produced are not widely available to academics or the public. Only three of the five countries examined in this report have conducted dedicated national victimization surveys: Jamaica (2006, 2009, 2012–2013), Barbados (2002, 2009), and Trinidad and Tobago (2015).

The Barbados Crime Survey used the same questionnaire as the ICVS and is therefore comparable to other countries. It found that in 2001, Barbados had one of the lowest victimization rates (15 percent for 10 common crimes) among countries where

⁴ Van Dijk (2008) found no correlation between the actual measures of victimization (measured via the ICVS) and the rates of police-recorded crime in 39 countries ($r = 0.212$). Positive correlations were found only for robbery and auto theft.

⁵ This can be largely corrected through survey techniques designed to correct for “telescoping,” which is the inclusion of incidents that happened before or after the survey time period.

⁶ The first pilot victimization survey was conducted in the United States in 1967 and later developed into the routinely conducted U.S. NCVS, which is a main source of crime data in the United States. The British Crime Survey, now known as the Crime Survey for England and Wales, has also been a source of data on crime and public attitudes towards crime since 1982.

⁷ For an overview on some of the challenges and some guidelines on designing and implementing victimization surveys, see Vrinotus (2015).

⁸ The ICVS is run by researchers affiliated with the University of Lausanne in Switzerland.

the ICVS was implemented, with a relatively higher rate only for burglary (6.3 percent, compared to the 3.3 percent average for industrialized countries the same year) (Nuttall et al. 2003).

The Jamaican National Crime Victimization Survey is not comparable with other victimization surveys. It found that between 2006 and 2009, one-year victimization prevalence for any crime increased in Jamaica (from 23.7 to 30.2 percent), but then significantly declined between 2009 and 2012–2013 (from 30.2 to 27.2 percent) (Wortley and Seepersad 2013). The drop was observed for both violent and property crimes.

In Trinidad and Tobago, the Ministry of National Security's Citizen Security Programme conducted a survey including some victimization questions in 2007 in 19 communities. The survey was expanded in 2015 to be nationally representative.

In The Bahamas, the Ministry of National Security conducted a survey that contained several victimization questions in 2014. However, the survey was administered by police officers themselves (introducing potential barriers for respondents to truthfully report victimization) and only in certain neighbourhoods.

In Suriname, a question regarding being a victim of a crime was added for the first time to the 2012 national census. However, no national victimization survey has ever been carried out.

At the regional level, the United Nations Development Programme (UNDP) conducted a regional Citizen Security Survey in the Caribbean in 2010. Using a catch-all question asking if respondents had experienced any crime in the last year (referring to 2009), the UNDP estimated a seven-country Caribbean average victimization rate of 9.3 percent (including, among the countries examined here, 5.6 percent in Jamaica, 10.2 percent in Trinidad and Tobago, 10.8 percent in Barbados, and 9.7 percent in Suriname).⁹ The far-lower victimization rates compared to national victimization surveys are likely a function of the small sample sizes and differences in question wording and order. Similarly, the Latin American Public Opinion Poll (LAPOP), which was conducted in Jamaica, Trinidad and Tobago, Guyana, and Suriname from 2010 to 2013, also uses a single question on crime and offers results that are comparable between countries. Table 1.4 illustrates how different survey sample sizes, sampling methods, and question wording can lead to vastly different estimates for the same countries in the same time frame.

1.2.2 The IDB Caribbean Crime Victimization Survey Data and Methodology

The CCVS data analysed for this report were obtained by including some of the core questions of the ICVS in a victimization module that was attached to the LAPOP Survey on democracy and civic engagement. Of the 10 types of crime covered by the

⁹ The other three Caribbean countries surveyed were Antigua and Barbuda, Guyana, and Saint Lucia.

Table 1.4: Range of Victimization Prevalence Estimates Found through Different Surveys in Jamaica

	LAPOP 2010	UNDP 2010	JNCVS 2009
Sample size	1,500	2,000	3,556
Sampling	Quota	Multi-stage probability	Multi-stage probability
Total victimization	10 percent	5.6 percent	30 percent

Sources: Prepared by the authors using findings from the Latin American Public Opinion Poll (LAPOP); United Nations Development Programme (UNDP) Citizen Security Survey; and the Jamaican National Crime Victimization Survey (JNCVS).

standard ICVS instrument, five were included (car theft, burglary, robbery, other personal theft, and assaults and threats).¹⁰ Also included were follow-up questions on the details of crimes experienced (number of perpetrators, place of crime, etc.), reporting to the police, satisfaction with the treatment received, fear of crime, and firearm ownership.

As in past survey years, the LAPOP Survey collected data from national samples of 1,500 respondents. As a condition for the CCVS module, an additional 3,000 respondent oversample was used in each of the five capital cities, where crime is typically higher. This was in order to obtain the most reliable estimates and have the statistical power to draw conclusions about the victims and their experiences. The survey followed commonly adopted techniques applied in vetted victimization survey instruments.¹¹ For additional information on the methodology of the CCVS see Appendix 1.3.

In addition to the importance of sample size and sampling methodology (Table 1.4), the questionnaire wording and techniques used in the CCVS are very important. Given that the LAPOP Survey maintained its own questions on crime used in previous survey editions,¹² together with the CCVS module we were able to compare the effect of these techniques on estimates of victimization. LAPOP-designed questions produced significantly lower prevalence estimates (ranging from 1 to 12 percentage points lower) than those captured by the CCVS module (Appendix 1.4).

1.3 Conclusions

About half of common crimes in the Caribbean (C5) went unreported to the police. The problem of under-reporting of crimes to the police is not unique to the Caribbean.

¹⁰ In the Caribbean version, the screener question on assaults and threats was split into two separate screener questions, while the ICVS reports on only the combined assault and threat results.

¹¹ Some of these techniques include the use of screener questions, ordering, and standard vetted question wording (including crime definitions).

¹² These include the VIC series (VICIEXT, VICEXTA, VIC2AA and VICIHOGAR).

In fact, reporting rates in the region are on par with the international average and higher than in Latin America. Consistent with international findings, violent crimes such as assault and threat are less frequently reported than other crimes. This is particularly problematic given that these are precisely the crimes that are most prevalent in the Caribbean (as we will see in the next chapter). More severe violent crimes where a weapon was used or that resulted in injury were more likely to be reported. Women, youth, and single individuals were all less likely to report violent crimes to the police, especially when the victim was known to the offender.

Police notification rates can be indicators of public confidence in the police and the legitimacy of the criminal justice system. These topics are further addressed in Chapter 9. Information on changes in the likelihood that crime is reported to the police can provide some insight into broader trends in police-community relations. This is important considering that public communication is a key goal of strategies such as community-oriented policing, which aim to improve trust and reduce the fear of crime. Finally, a lack of reporting might worsen public safety and the quality of life in neighbourhoods where residents cannot or are unwilling to call on law enforcement for assistance. In this manner, “non-reporting subverts our interest in the goal of equity in the criminal justice system” (Skogan 1984, 116).

Furthermore, while levels of crime reporting to the police are high in the Caribbean compared to Latin America, still at least half of common crimes are not captured in police statistics. Given the limitations of police data due to under-reporting, victimization surveys can be particularly useful. Unfortunately, their use in the Caribbean has been limited. In this sense, this publication fills an important gap in helping to understand the crime problem in the Caribbean.

Appendix 1.1. Crimes Reported to the Police in Five Caribbean Capital City Metropolitan Areas

	Five Crimes (including car theft)		Four Crimes (excluding car theft)		Car Theft		Burglary		Robbery		Theft of Personal Property		Assault and Threat	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N
New Providence	67	417	63	341	84	118	84	115	70	83	63	126	55	147
Greater Bridgetown Area	43	157	42	152	77	10	69	66	56	32	40	41	32	59
Kingston Metropolitan Area	39	193	37	175	92	33	46	56	47	41	36	60	38	96
Paramaribo	55	184	54	174	67	12	73	99	65	30	55	55	45	67
Port of Spain Metropolitan Area	57	267	54	231	85	64	77	98	71	74	52	77	48	84
Average	53	1,218	51	1,073	84	237	70	434	63	260	50	359	44	453

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey, IVOL dataset series (questions identified by IVOL number).

Appendix 1.2. Percentage of Victims Who Have Notified the Police, by World Region

	Four Crimes (excluding car theft)	Car Theft	Burglary	Robbery	Theft of Personal Property	Assault and Threat
Africa (10 cities)	49	89	63	37	22	28
Asia (Six cities)	35	78	43	38	16	28
Caribbean (Five cities)	51	84	70	63	50	44
Eastern Europe (18 cities)	48	83	64	36	23	25
Latin America (Seven cities)	35	90	36	23	13	25
United States (New York)	57	97	77	52	36	35
Western Europe (15 cities)	60	89	78	55	54	32
World average	49	87	65	44	31	31

Source: Van Dijk and Van Kesteren (2015) based on data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey and the 1990–2005 International Crime Victimization Survey.

Note: The five capital cities in the Caribbean are New Providence, The Bahamas; Greater Bridgetown Area, Barbados; Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and Port of Spain Metropolitan Area, Trinidad and Tobago.

Appendix 1.3. Caribbean Crime Victimization Survey Methodology Note

As in regular ICVS surveys carried out in developing or middle-income countries, all CCVS interviews were conducted using face-to-face interviews. The surveys were conducted among samples from the national populations as well as among booster samples from the populations of the capital cities. This sampling design was, as previously stated, also used in the 2004/2005 ICVS (Van Dijk, Van Kesteren, and Smit 2008). In order to secure sufficient numbers of identified victims for further analysis, the net total sample sizes were 3,000 or more. The booster samples allow for the calculation of separate rates for the five capitals. Since victimization rates tend to be significantly higher in capital cities than elsewhere, the booster sample has the additional advantage that more victims of crime can be identified with the same amount of interviews, allowing for more detailed analyses of results. In the calculation of the national results, the booster samples were weighted down proportionately. The national sample sizes were 3,429 in The Bahamas, 3,999 in Barbados, 4,511 in Jamaica, 4,206 in Trinidad and Tobago, and 3,998 in Suriname. These sample sizes include boosters of 3,000 per city that were drawn from capital city populations. With total sample sizes varying between 4,000 and 7,000, the Caribbean surveys are among the largest ICVS-based surveys ever conducted. Field work was conducted in the course of 2014 in The Bahamas, Jamaica, Trinidad and Tobago, and Suriname, and in 2015 in Barbados. The table below provides an overview of the sample sizes.

National Surveys	Number	Main City	Number
Bahamas	3,429	New Providence	3,011
Barbados	3,999	Greater Bridgetown Area	3,004
Jamaica	1,506	Kingston Metropolitan Area	3,005
Suriname	3,998	Paramaribo	3,004
Trinidad and Tobago	4,206	Port of Spain Metropolitan Area	3,011
Total	17,138	Total	15,036

Response rates were generally low (below 50 percent), especially in Barbados. All five surveys were carried out through face-to-face personal interviews. For a summary of the methodology of the LAPOP Surveys, we refer to the field work reports and methodological notes available for download together with the complete datasets and questionnaires available at:

Jamaica: <https://mydata.iadb.org/Citizen-Security/Latin-American-Public-Opinion-Project-Victimization/gcdp-egct>

The Bahamas: <https://mydata.iadb.org/Citizen-Security/Latin-American-Public-Opinion-Project-Victimization/wvqg-mskf>

Suriname: <https://mydata.iadb.org/Citizen-Security/Latin-American-Public-Opinion-Project-Victimization/b9hm-5fk2>

Barbados: <https://mydata.iadb.org/Citizen-Security/Latin-American-Public-Opinion-Project-Victimization/b5c5-tz6z>

Trinidad and Tobago: <https://mydata.iadb.org/Citizen-Security/Latin-American-Public-Opinion-Project-Victimization/ckk5-3fah>

Appendix 1.4. Comparison of Prevalence Estimates Obtained Using Recognized Victimization Techniques (CCVS) versus Non-standard Techniques (LAPOP)

	LAPOP Victim of Any Crime (1)	CCVS Victim of Five Common Crimes (2)	Percentage Point Difference	LAPOP Assault (3)	CCVS Assault (4)	Percentage Point Difference	LAPOP Theft (5)	CCVS Theft (6)	Percentage Point Difference
The Bahamas	9.83%	18.30%	-0.08***	1.80%	5.13%	-0.03***	1.34%	6.27%	-0.05***
Barbados	6.77%	9.25%	-0.02***	0.90%	3.10%	-0.02***	1.30%	2.68%	-0.01***
Jamaica	6.64%	19.06%	-0.12***	0.80%	5.91%	-0.05***	2.26%	8.90%	-0.07***
Suriname	9.37%	11.95%	-0.03***	0.51%	3.02%	-0.03***	2.14%	3.54%	-0.01***
Trinidad and Tobago	9.50%	11.09%	-0.02**	0.53%	2.79%	-0.02***	2.72%	3.66%	-0.01*
New Providence	10.69%	20.69%	-0.1***	2.19%	6.04%	-0.04***	1.13%	6.64%	-0.06***
Greater Bridgetown Area	8.75%	12.28%	-0.04***	1.03%	3.20%	-0.02***	1.43%	3.43%	-0.02***
Kingston Metropolitan Area	8.18%	16.32%	-0.08***	0.96%	5.32%	-0.04***	2.49%	5.62%	-0.03***
Paramaribo	10.78%	11.05%	0	0.60%	2.46%	-0.02***	2.20%	3.33%	-0.01**
Port of Spain Metropolitan Area	13.22%	15.54%	-0.02**	1.33%	4.05%	-0.03***	2.23%	4.95%	-0.03***

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey (CCVS) module attached to the 2014/2015 Latin American Public Opinion Project (LAPOP) Survey, IVOL dataset series (questions identified by IVOL number).

Note: ***, **, * : significant at the .01, .05 and .1 levels.

The Size and Dimensions of Victimization in the Caribbean

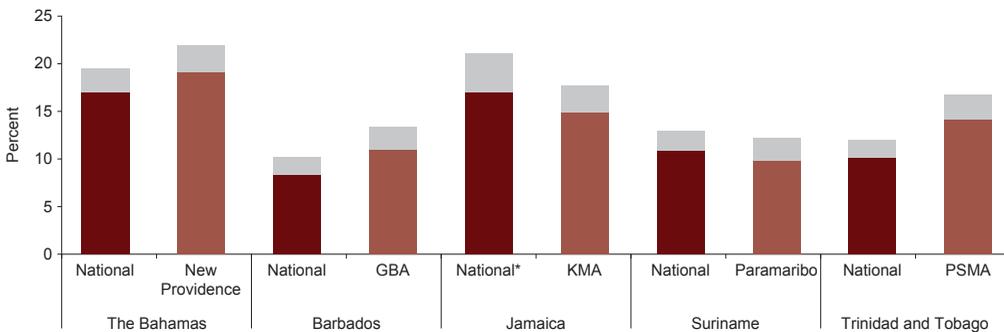
Heather Sutton, Jan van Dijk, and John van Kesteren

How big is the Caribbean's crime problem? As we highlighted in the Introduction to this volume, the Caribbean has one of the highest regional homicide rates in the world. However, given the data limitations described in Chapter 1, it has been difficult to accurately determine the size and dimensions of the overall crime scenario and to study the risk and protective factors involved. By using universally common definitions of the main types of crime, developed for the International Crime Victimization Survey (ICVS), this volume offers an understanding of crime as perceived by ordinary people and not domestic legal definitions. For the first time, crime data are directly comparable not only between countries in the Caribbean region, but also with the rest of the world. This is not possible using police data, or other previous surveys, given the challenges identified in Chapter 1.

This chapter presents the key findings of victimization surveys conducted in 2014 and 2015 across five Caribbean countries identified here as the C5: The Bahamas, Barbados, Jamaica, Suriname, and Trinidad and Tobago.¹ The prevalence and incidence of victimization are estimated for five specific types of common crime (car theft, burglary, robbery, personal theft, and assault and threat of assault) in the capital city metropolitan areas of the five countries. We place the Caribbean on the global map by comparing our survey findings with those of previous rounds of the ICVS around the world. Finally, we examine crime specifics about offenders (their numbers and their relationships to their victims), where crimes take place, and the consequences for the victims. The final section presents conclusions and policy implications.

¹ For further information on the methodology see Chapter 1.

Figure 2.1: One-Year Victimization Prevalence Rate for at Least One of Five Types of Crime in Five Caribbean Countries and Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five capital cities listed are New Providence, The Bahamas; GBA: Greater Bridgetown Area, Barbados; KMA: Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and PSMA: Port of Spain Metropolitan Area, Trinidad and Tobago. The five types of crime are car theft, burglary, robbery, personal theft, and assaults and threats of assaults.

* Jamaica's calculation of national prevalence does not include crimes of car theft or burglary.

2.1 How Much Crime Is There?

2.1.1 Prevalence Rates

Using responses from victimization surveys, we can calculate prevalence rates, which are estimates of the percentage of the population that was a victim of a crime. Figure 2.1 shows the one-year prevalence estimates for victimization for at least one of the five types of crime mentioned above. The gray shading in the figure represents the margin of error; in other words, we can say with 95 percent confidence that rates lie within the gray shading. On average, 13 percent of the Caribbean population was a victim of at least one of the five common crimes in a one-year period.² This rate increased to 15 percent for residents of capital city metropolitan areas.

A tentative ranking of the five countries according to their overall lower-bound victimization rates shows Barbados as most secure, followed in declining order by Suriname, Trinidad and Tobago, Jamaica, and The Bahamas. At the national level of the five countries, Barbados seems clearly the least affected by common crime. It has the lowest rates of victimization for all five types of crime. Nevertheless, even in Barbados the level of assaults and threats is considerable by international comparison, as will be discussed further in the chapter.

As expected, the prevalence of victimization is generally higher in capital city metropolitan areas. Exceptions were Jamaica, where national and capital rates are not comparable due to differences in survey questionnaires, and Suriname, where the difference

² Since most interviews were conducted in the summer of 2014, the reference period for the one-year victimization rates is 2013/2014 (2014/2015 for Barbados). Links to the data and the complete questionnaire used in the surveys can be found in Appendix 1.3 in Chapter 1.

Table 2.1: One-Year Incidence Rates and Prevalence Rates in Five Caribbean Capital City Metropolitan Areas (percent)

	Incidence (all 5 crimes)	Prevalence (all 5 crimes)
New Providence (The Bahamas)	40.9	20.7
Kingston Metropolitan Area (Jamaica)	38.8	16.3
Port of Spain Metropolitan Area (Trinidad and Tobago)	32.3	15.5
Paramaribo (Suriname)	29.2	11.0
Greater Bridgetown Area (Barbados)	27.4	12.3
Caribbean average (C5)	33.7	15.2

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five types of crime are car theft, burglary, robbery, personal theft, and assaults and threats of assaults.

is insignificant. The concentration of crime in the capital cities seems somewhat less pronounced in the Caribbean than in other world regions (Van Dijk and Van Kesteren 2015). This may be largely due to the relatively high proportion of the Caribbean population that lives in capital metropolitan areas (i.e., 70 percent of Bahamians live in New Providence). Differences between capital and national rates are larger in countries with a larger population (Jamaica and Trinidad and Tobago) and smaller in countries with smaller populations.

2.1.2 Incidence Rates

While prevalence rates are based on the number of persons who were victimized during a 12-month period, incidence rates measure the number of *victimizations* that took place within that period. For example, a person who experienced two robberies on separate occasions within the past year would be counted twice in the incidence rate, but counted once in the prevalence rate. Since respondents are asked how often they have been victimized by the five types of crime during the year, the incidence rates can be calculated.³ Incidence rates are significantly higher than prevalence rates, as seen below. The ranking of the five Caribbean countries in terms of incidence rates is very similar to that of prevalence rates (Table 2.1). A complete table of incidence rates by type of crime can be found in Appendix 2.2.

2.1.3 Repeat Victimization

Most crime victims in the Caribbean reported being victimized only once (average of 52 percent) (Table 2.2) in one year. Nearly one in three victims was victimized two or

³ The key distinction between victimization incidence rates and prevalence rates is whether the numerator consists of the number of victimizations or the number of victims. Incidence rates are estimated by dividing the number of victimizations that occur during a 12-month period by the population at risk for those victimizations and multiplying by 100.

Table 2.2: Frequency of Victimization, Five Types of Crime, by Caribbean Capital City Metropolitan Area During One Year (percent)

	1 time	2-3 times	4-5 times	6+ times
New Providence (The Bahamas)	55.7	35.2	7.8	1.4
Greater Bridgetown Area (Barbados)	53.1	30.2	9.5	7.2
Kingston Metropolitan Area (Jamaica)	50.9	31.2	10.7	7.2
Paramaribo (Suriname)	47.4	34.7	11.6	6.4
Port of Spain Metropolitan Area (Trinidad and Tobago)	52.7	32.6	11.2	3.4
Caribbean average (C5)	52.0	32.8	10.2	5.1

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five types of crime are car theft, burglary, robbery, personal theft, and assaults and threats of assaults.

three times (33 percent). More than one in seven was victimized four times or more (15 percent). The relatively high number of repeat victimizations is worthy of attention. This suggests that a small percentage of the population is disproportionately the target of crime in the region.

It is worth noting that while New Providence has the highest overall prevalence and incidence rates, its percentage for those who have been victimized four or more times (9.2 percent) is notably lower than the other cities examined. This suggests that crime is more widespread and affects more individuals in The Bahamas. On the other hand, Paramaribo, Kingston, and Bridgetown show above-average rates of high-frequency repeat victimization (more than four times in a year).⁴ This signals that victimization is likely more concentrated among specific groups of individuals. We explore the characteristics of groups more vulnerable to crime in the following chapters.

2.1.4 Indirect Victimization

The Caribbean crime victimization surveys also ask respondents about experiences of indirect victimization. The data indicate that one in four (24.8 percent) Caribbean adults have lost someone they felt close to due to violence in their lifetime (Figure 2.2). This rate increases to nearly one in three (31.3 percent) for residents of capital city metropolitan areas. The highest rate is found in Kingston, where nearly half the population (48.8 percent) reported having lost someone close to violence, followed by New Providence (39.4 percent). This information should be interpreted with caution given the small size of Caribbean countries. Nevertheless, the implications are staggering

⁴ Note that, unlike some national victimization surveys (such as the U.S. National Crime Victimization Survey), this survey does not allow the interviewer to code for series victimizations (victimizations that occur with such frequency that a victim is unable to recall each individual event).

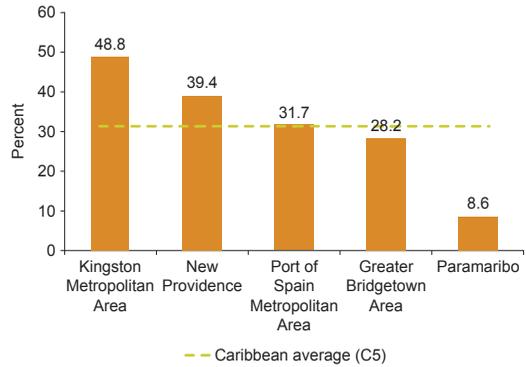
and may reflect a ripple effect whereby each homicide has wide traumatic effects on small, tightly connected populations.

Similar results were found when respondents were asked if they have, in their lifetime, “ever witnessed a serious attack, shooting, or beating in which another person was badly injured or killed?” Among the national-level samples, one in four (25.7 percent) had witnessed such an attack (Figure 2.3). This rate increased to one in three (30.2 percent) among residents of capital city metropolitan areas.

2.2 For Which Crimes Are Prevalence Rates Highest in Caribbean Capital Cities?

This section looks at prevalence by type of crime in Caribbean capital city metropolitan areas (see complete table in Appendix 2.1).⁵ When breaking down the victimization prevalence rates by type of crime, several observations can be made. As shown in Figure 2.4, assault and threat as well as personal theft were the most common types of victimization reported in the region. The combined measure of assault and threat was the most commonly reported crime in the region. Further, compared to international averages for

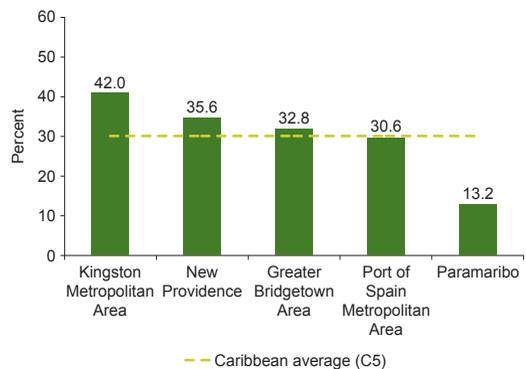
Figure 2.2: Lifetime Prevalence of Losing Someone Close to Violence, Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The survey question asked (identified as IVOL 8) was: *In your lifetime, has anyone you felt very close to been killed by violence?*

Figure 2.3: Lifetime Prevalence of Witnessing a Serious Attack, Five Caribbean Capital City Metropolitan Areas (percent)

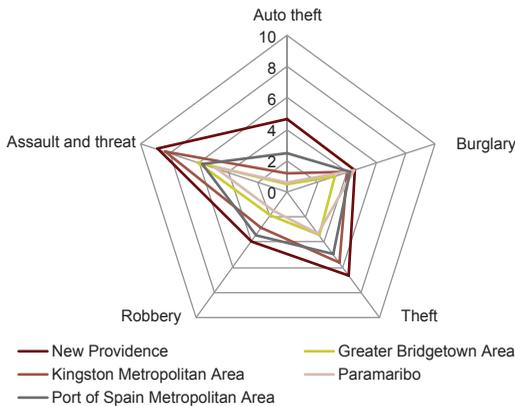


Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The survey question asked (identified as IVOL 8) was: *In your lifetime, has anyone you felt very close to been killed by violence?*

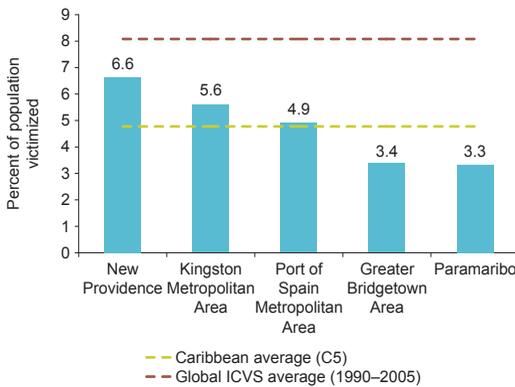
⁵ More accurate prevalence rates can be determined in capital city metropolitan areas where an oversample of 3,000 respondents was drawn.

Figure 2.4: Comparison of Victimization Prevalence Rates for Five Crimes in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Figure 2.5: One-Year Prevalence Rates for Theft in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The survey questions asked were: IVOL4—*Excluding thefts by using force or threat, there are many other types of theft of personal property, such as pick-pocketing or theft of a purse, wallet, clothing, jewelry, mobile phone, and mp3 player, or sports equipment. In the last five years (that is, since 2009) have you personally been victim of any of these incidents? IVOL4A—When this happened was it within the last 12 months, or was it before this, or both?* ICVS: International Crime Victimization Survey.

capital cities recorded in the ICVS, this crime was significantly higher in the Caribbean (Table 2.3). This supports the conclusion that the region suffers predominantly and disproportionately from high levels of violent crime, and specifically assaults and threats.

When burglary rates are included, there is a relatively wide variance in levels of crime within the region between cities. New Providence stands out as having the highest rate of car theft, simple theft, robbery, and assaults. Port of Spain has a relatively high rate of car thefts, robberies, and assaults. Kingston shows medium-to-high rates for all categories except for assaults and threats, which are higher. Bridgetown and Paramaribo show comparatively low rates for most types of common crime.

2.2.1 Property Crime

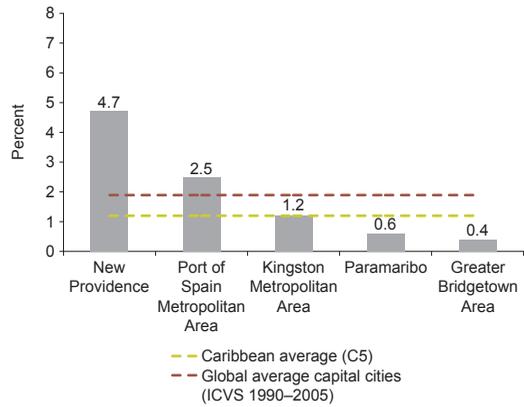
Theft of personal property (without the use of force, including pickpocketing) typically has the highest rate of prevalence around the world, according to past ICVS data. At 4.8 percent of the population, the average prevalence of theft in the Caribbean is the second highest of the five crimes, but considerably below the international average of 8 percent (Figure 2.5). Theft was above the regional average in New Providence (6.6 percent), Kingston (5.6 percent), and Port of Spain (4.9 percent) and below the regional average in Bridgetown (3.4 percent) and Paramaribo (3.3 percent).

On average 1.9 percent of the population in capital city metropolitan areas was a victim of vehicle theft in 2014/2015. Levels of car theft were particularly high in New Providence (4.7 percent of the population) and relatively high in Port of Spain (2.5 percent) as compared with the rest of the region (Figure 2.6). Auto theft is typically higher in countries where car ownership is highest. The high rates in The Bahamas and Trinidad and Tobago are partially explained by relatively high levels of car ownership (Figure 2.7).

The Caribbean Crime Victimization Survey (CCVS) asked individuals if someone had actually entered their home without permission to steal or try to steal something in the last 12 months. On average, 4.1 percent of Caribbean households in the five cities have seen their homes burglarized. This is about on par with the ICVS average for cities (Figure 2.8). Inter-city variation for burglary is considerably less than for other crimes. Burglary is the most common of the five crimes in Paramaribo. Regardless of the value of what is actually stolen (or not), burglaries involve a violation of the privacy of one’s home and are therefore crimes with high psychological impact.

Home invasions, where burglars enter occupied houses using force or threat of force, combine elements of burglary with robbery and may be recorded in various ways by the police in different countries (e.g., as burglary,

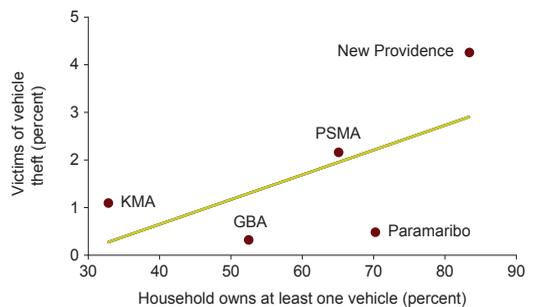
Figure 2.6: One-Year Prevalence of Vehicle Theft in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The survey questions asked were: IVOL1—In the last five years, have you or anyone else in your household had a car, van, SUV or pick-up truck that belonged to you or another household member, stolen or driven away without permission? IVOL1A—When this happened was it within the last 12 months, or was it before this, or both? ICVS: International Crime Victimization Survey.

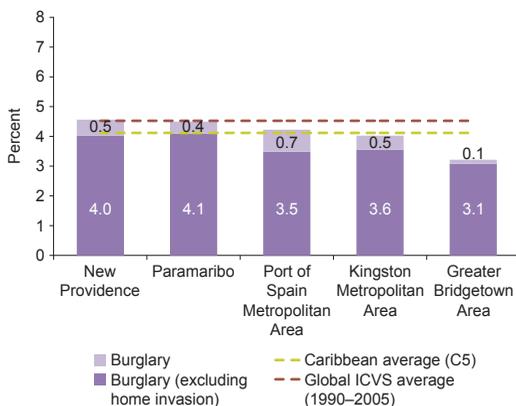
Figure 2.7: Victimization by Vehicle Theft versus Car Ownership in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five capital cities listed are New Providence, The Bahamas; GBA: Greater Bridgetown Area, Barbados; KMA: Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and PSMA: Port of Spain Metropolitan Area, Trinidad and Tobago.

Figure 2.8: One-Year Prevalence of Burglary in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors with data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The survey questions asked were: IVOL2—*In the past five years (that is, since 2009), did anyone actually get into your main home without permission and steal or try to steal something? I am not including here thefts from the garden, garage, shed or lock-up or from a second home.* IVOL2A—*When did this happen? Was it within the last 12 months or was it before this, or both?* Consideration for home invasion was not stipulated in past rounds of the International Crime Victimization Survey (ICVS); therefore, in order to compare with the international average, upper bound estimates should be used. The Caribbean average for the C5 is the average of upper-bound estimates.

or trying to steal something using or threatening force.” Robbery is different from general theft in that it involves the use of force or threat of the use of force. For this reason robbery is often considered a violent crime. In the Caribbean, during the one-year reference period, 2.7 percent (lower bound) to 2.9 percent (upper bound) of the population was a victim of robbery (Figure 2.9). Lower-bound estimates are measured consistent with the ICVS. Upper-bound estimates, shown by the gray shading in Figure 2.9, also include home invasion burglaries recoded as robberies. The Caribbean average was again on par with the international average from the ICVS. However, robbery was notably highest in New Providence (4 to 4.4 percent), followed by Port of Spain (3.5 to 4 percent) and Kingston (2.9 to 3.2 percent). Similar to other crimes measured, robbery was significantly lower in Bridgetown (1.9 percent) and Paramaribo (1.5 to 1.8 percent).

robbery in a residence, home invasion robbery, assault, etc.). CCVS respondents who reported that someone had entered their home without permission to steal something (burglary) were then asked if anyone was home and was intimidated. Where force or threat was used, these crimes could be recoded as home invasion robberies. We thus indicate the adjusted burglary prevalence rates with an upper bound (including home invasions)⁶ and lower bound (excluding home invasion estimates). Home invasion prevalence rates are discussed in Section 2.4.

2.2.2 Violent Crime

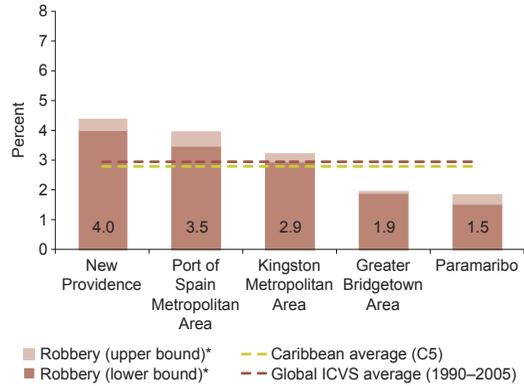
Definitions of robbery vary widely from one jurisdiction to another. This often makes comparisons between countries problematic. The Caribbean victimization survey solves this problem by applying a uniform definition consistent with the ICVS: “stealing,

⁶ Note that upper-bound estimates are consistent with the same measures for burglary prevalence registered in the ICVS.

Assault and threat of assault are typically measured as one crime in crime victimization surveys.⁷ The average prevalence of assault and threat in the five Caribbean cities is 6.8 percent (Figure 2.10). This is considerably above the ICVS average for cities. In fact, Caribbean cities ranked as some of the highest ever measured for this type of crime. When disaggregated, 4.2 percent of individuals in the region were victims of actual physical assault and 4.1 percent were victims of threats. Note that these prevalence rates explicitly exclude incidents related to domestic and sexual violence, which require their own dedicated surveys to be accurately measured.⁸

The combined measure of assault and threat is particularly high in New Providence (8.8 percent) and Kingston (8.3 percent), followed by Bridgetown (6.1 percent), Port of Spain (5.8 percent), and Paramaribo (4.9 percent). In the capitals with the highest assault and threat prevalence, completed physical assaults were more common than mere threats. New Providence had the highest assault prevalence rate (6 percent assault rate compared to 4.6 percent threat rate), followed by Kingston (5.3 percent assault rate versus 5.1 percent threat rate) and Port of Spain (4.1 percent assault rate versus 3.2 percent threat rate). In Bridgetown and Paramaribo, the relationship was reversed—fewer actual assaults were reported compared to threats.

Figure 2.9: One-Year Prevalence of Robbery in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

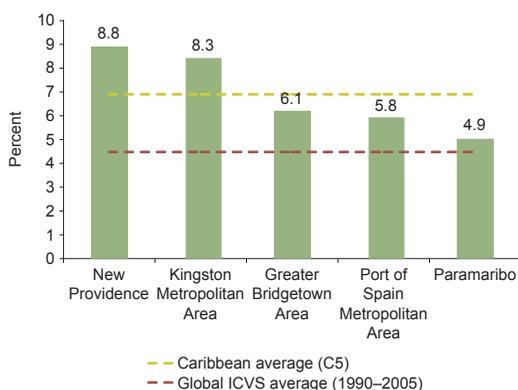
Note: The survey questions asked were: IVOL3—*In the last five years, has anyone stolen, or tried to steal something from you by using force or threatening you with force?* IVOL3A—*When this happened was it within the last 12 months, or was it before this, or both?* ICVS: International Crime Victimization Survey.

*Lower-bound estimates reflect persons who reported being a victim of a robbery, consistent with the ICVS. Upper-bound estimates include the percentage of burglaries that included use of force, recoded as robberies.

⁷ The specific meaning of assault varies between countries, but the definitions of assault and threat used here are provided in the survey questions identified as IVOL3 (see Figure 2.8) and IVOL5 (see Figure 2.10). In common law, the crime of assault is defined as when “an assault is carried out by a threat of bodily harm coupled with an apparent, present ability to cause the harm.”

⁸ Surveys on crime do not take the extra steps needed in terms of survey design and implementation to address the barriers to accurately record these crimes, leading to significant under-estimation of the prevalence of the problem. Experts on violence against women agree the best data come not from police or crime surveys, but instead from surveys on women’s health. The IDB is currently supporting the implementation of such surveys in the Caribbean region.

Figure 2.10: One-Year Prevalence of Assaults and Threats in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The survey questions asked were: IVOL5—*In the past five years, has anyone slapped you, hit or punched you, kicked you, thrown something at you, or attacked you with a weapon in a way that really upset or angered you? Do NOT include horseplay, and do not include incidents of a sexual nature or incidents of domestic violence.* IVOL6—*In the past five years (that is, since 2009), has anyone seriously threatened to slap, hit, punch or kick you, threatened to throw something at you or otherwise injure you, or threatened you with a weapon in a way that really upset or angered you? Do NOT include threats made as jokes, and do not include incidents of a sexual nature or incidents of domestic violence.* ICVS: International Crime Victimization Survey.

2.3 How Does the Caribbean Compare to Other Regions?

The results in Table 2.3 confirm the relatively high average level of car theft in the Caribbean region, given the high rates in New Providence and Port of Spain. In fact, the car theft rates in these two cities of 4.7 percent and 2.5 percent, respectively, are among the highest ever measured in the ICVS, which were 2.9 percent in Rio de Janeiro in 1996 and 3.4 percent in cities in Italy in 2005. Rates of burglary and robbery are significantly lower in the Caribbean than in Africa and Latin America. The average rate of theft of personal property is lower than in any other region. In contrast, the rate of victimization by assault and threat is significantly higher than in any other world region, including Latin America.

Table 2.3: Percentage of the Public Victimized by Crime Over a One-Year Period, by World Region

	Car Theft	Burglary	Robbery	Theft of Personal Property	Assault and Threat
Africa (10 cities)	1.5	8.0	4.0	11.6	5.2
Asia (five cities)	0.2	4.8	0.8	8.1	2.6
Caribbean (five cities)	1.9	4.1	2.7	4.8	6.8
Eastern Europe (20 cities)	0.8	4.4	1.8	8.2	2.9
Latin America (seven cities)	1.4	5.9	7.8	11.0	4.7
United States (New York)	1.6	1.9	2.3	7.7	5.1
Western Europe (18 cities)	1.2	2.3	1.4	5.4	4.1
World average	1.2	4.5	3.0	8.1	4.5

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey, and from the 1990-2005 International Crime Victimization Survey.

Note: The five Caribbean capital cities are New Providence, The Bahamas; Greater Bridgetown Area, Barbados; Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and Port of Spain Metropolitan Area, Trinidad and Tobago.

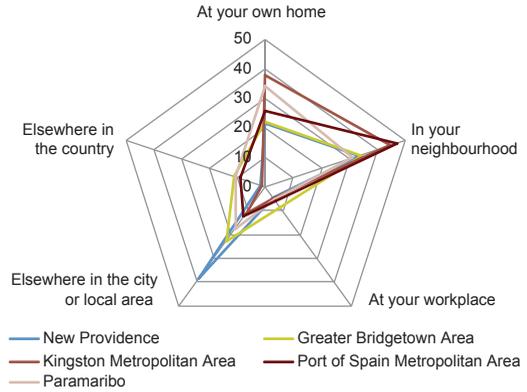
2.4 Where Do Crimes Take Place and What Are the Consequences?

In the capital city metropolitan areas of the C5, 62.1 percent of robberies and 66.2 percent of assaults happened within the victims' own neighbourhood or their own homes. On average, less than 10 percent of assaults and robberies took place outside the victim's city of residence ("elsewhere in the country"). Respondents also reported very few instances of violence within the workplace (on average 6 percent of all assaults and less than 4 percent of robberies).

The relatively high amount of assaults taking place at the victim's home (Figure 2.11), despite explicit instructions for the respondent not to include incidents of domestic violence, may indicate a high degree of assaults resulting from disputes among neighbours and/or close acquaintances that end violently. Such an explanation is supported by literature indicating the intensification of interpersonal conflict and the growth of a "sub-culture of violence" in the region (Harriott 2008). Conversely, it could also be possible that some of these assaults occurred during a break-in or robbery of the home.⁹ Finally, a third option is that incidents of domestic violence were reported as assaults due to the somewhat ambiguous nature, or lack of understanding, of the term.

Home invasion robberies, where robbers enter occupied homes and use force or intimidation, are a growing concern in many countries and can generate considerable feelings of insecurity. On average in the Caribbean (C5), home invasions represented nearly half of all robberies (44.9 percent). Figure 2.12 shows the prevalence rates, or the percentage of the population that reported being a victim, of robberies outside versus inside the home.¹⁰ Prevalence estimates for home invasion robbery were highest in New Providence (2.2 percent) and Port of Spain (1.6 percent) followed by Kingston

Figure 2.11: Location of Assault, in the Last Year, in Five Caribbean Capital City Metropolitan Areas (percent)

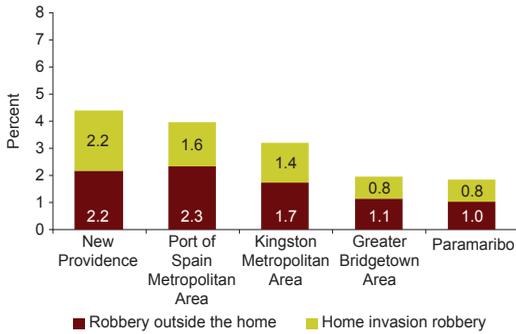


Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

⁹ Burglary occurs when an individual enters a structure in the absence of permission with the intent to commit a crime. However, the proceeding offence after a burglary or break-in could include several other offences such as assault or homicide.

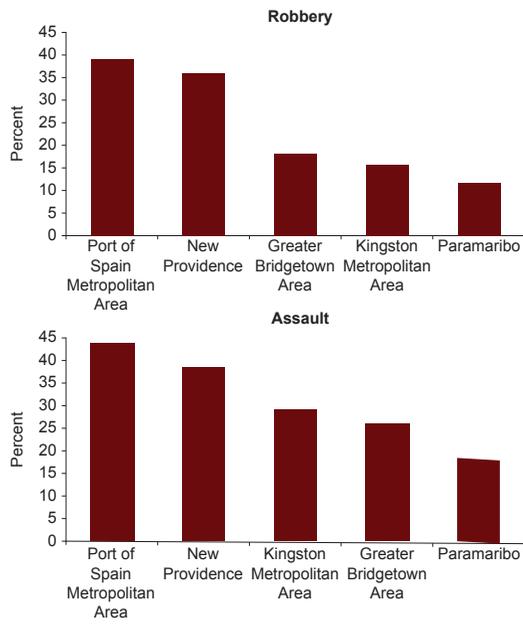
¹⁰ Note that rates for home invasion robberies include the combined measure of burglaries where force or threat were used and robberies that were reported to have taken place in the home.

Figure 2.12: One-Year Prevalence of Robberies In and Outside the Home in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: Home invasion robbery prevalence rates include burglaries where force or threat was used, or robberies reported to have taken place in the home. If both were reported by the same respondent, only one incident was counted to prevent double counting.

Figure 2.13: Percentage of Crimes Resulting in Victims Seeking Medical Attention in Five Caribbean Capital City Metropolitan Areas



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

(1.4 percent), with lower levels in Bridgetown and Paramaribo (0.8 percent). Notably, urban metropolitan areas with generally higher rates of violent crime (New Providence, Port of Spain, and Kingston) also have a larger percentage of robberies taking place in people’s homes. The relatively large amount of home invasions registered here is a red flag for further study of this issue.

Regarding the consequences of crimes, the vast majority of burglaries resulted in the actual loss of money or personal property (ranging from 82 percent in New Providence to 85 percent in Port of Spain). More worrisome perhaps are the consequences of violent crime in the region. One in four robberies (26.6 percent) and one in three assaults (32 percent) in the region resulted in the victims seeking medical attention. Figure 2.13 shows that victims in New Providence and Port of Spain were more likely to report seeking medical attention.

2.5 What Do We Know about the Offenders?

On average, 56.8 percent of assaults were committed by only one individual, while 62.3 percent of robberies were committed by two or more offenders (Figure 2.14). Regarding inter-city variance within the region, particularly notable are the relatively higher numbers of assaults carried out by six or more offenders in Paramaribo

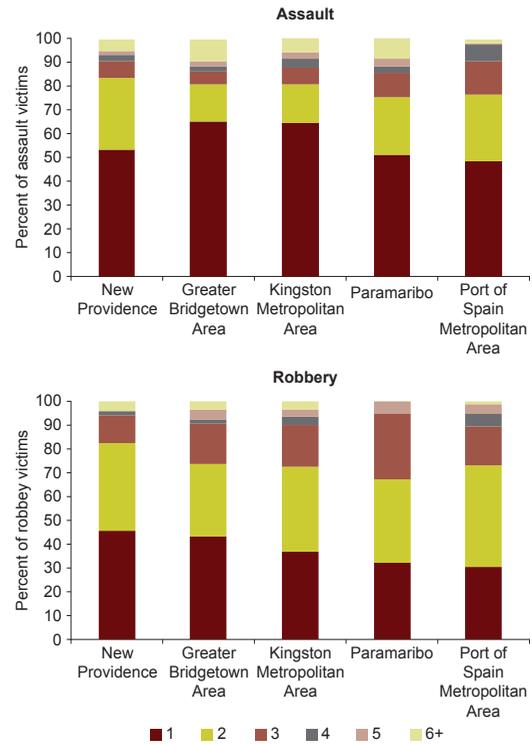
and Bridgetown (9.4 percent and 8.6 percent, respectively). As could be expected, robbery victims most often did not know the offender(s) by name or by sight (59.6 percent), while the opposite is true for victims of assault—74.5 percent knew the offender(s) at least by sight (Figure 2.15). Across the region the proportions of assault victims who knew the offender were 86 percent in Bridgetown, 80 percent in Kingston, 75 percent in New Providence, 63 percent in Port of Spain and 60 percent in Paramaribo.

2.6 Conclusions and Policy Implications

The defining characteristic of crime in the region is the uniquely high level of violent crime, including homicide and victimization by threats and assaults (often with the use of guns; see Chapter 8). The fact that one in three Caribbean adults has lost someone close to violence in their lifetime has significant implications in terms of the trauma experienced by these populations. On the other hand, the region experiences medium to low rates of victimization in terms of property crime, with the exception of car thefts, which are relatively common in New Providence and Port of Spain. The high levels of repeat victimization in the region are worthy of further study and suggest that a small percentage of the population is disproportionately the target of crime.

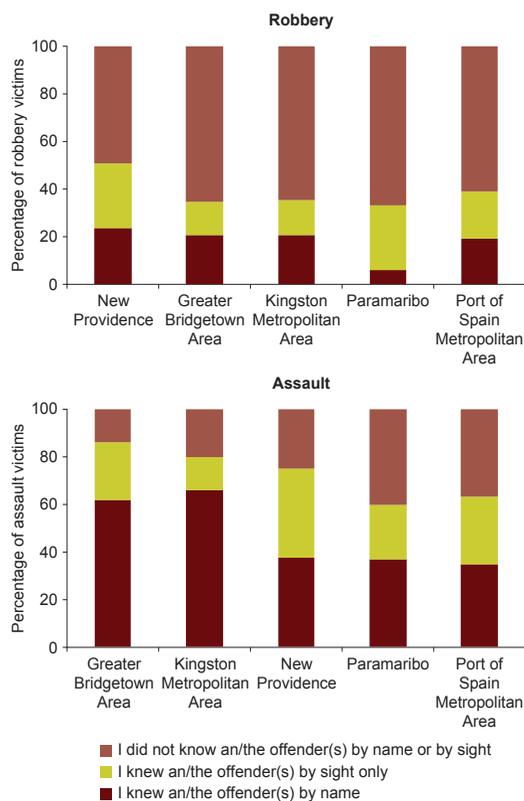
Regarding inter-regional variance, New Providence and Kingston stand out with the highest levels of assault and threat. They have some of the highest levels ever measured in the ICVS. In New Providence and Port of Spain, the level of robbery is comparatively high, as is the number of victims seeking medical care after experiencing robbery or assault. Levels of violent crime are lowest in Paramaribo and Bridgetown. Prevalence of property crime such as burglary is remarkably similar between the countries

Figure 2.14: Number of Offenders in Assault and Robbery in Five Caribbean Capital City Metropolitan Areas (percentage of victims)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Figure 2.15: Relationship of Victim to Offender for Robbery and Assault in Five Caribbean Capital City Metropolitan Areas (percentage of victims)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

of the region and aligned with the international average. Car theft was particularly high in New Providence and Port of Spain. However, this is at least in part a reflection of the higher levels of car ownership in these cities.

Overall, most violent crimes were committed within victims' neighbourhoods or homes. Home invasion robbery has been the subject of very little research, and this chapter suggests it is worthy of further study. Most victims were robbed by strangers, while assaults were committed by someone the victim knew. However, given the high prevalence of assault and threat in the region, residents are more likely to be attacked or threatened by someone they know than robbed by a stranger. The policy implications here are that more efforts and resources ought to be directed towards addressing interpersonal assaults, which may be more effectively tackled via prevention than deterrence. In most cases assaults were carried out by only one individual, while robberies were

likely to be committed in groups of two or more. It is notable that in Paramaribo and New Providence close to 1 in 10 robberies was committed by a group of six or more.

Some of the drivers of the crime problem in the Caribbean are further explored in subsequent chapters, with targeted policy discussions for each contributing factor. Specific factors include individual socio-economic characteristics and early experiences of violence in the home or with peers among youth; neighbourhood characteristics; country-level macro characteristics; gang activity; and the availability of firearms. Other factors cited in the literature that are not addressed in this publication include drug trafficking and deportation of ex-convicts from the United States.

Appendix 2.1. Victimization Prevalence for Five Crimes by Caribbean Country and Capital City Metropolitan Area (percent)

Country	All 5 Crimes +/-	Auto Theft +/-	Burglary +/-	Robbery +/-	Home Invasion +/-	Theft +/-	Assault +/-	Threat +/-	Assault+ Threat +/-
The Bahamas	18.3	1.3	3.7	3.5	1.7	6.3	5.1	3.9	7.4
Barbados	9.3	0.9	1.7	1.2	0.5	2.7	3.1	3.4	5.1
Jamaica	19.1	2.0	4.4	5.2	2.0	8.9	5.9	8.0	10.9
Suriname	11.9	1.0	2.9	1.9	0.5	3.5	3.0	3.8	5.6
Trinidad and Tobago	11.1	0.9	2.9	1.7	0.8	3.7	2.8	1.7	3.9
Caribbean average (C5)	13.0	0.5	2.9	2.3	0.9	4.4	3.7	3.6	5.9
Capital metro area									
Capital City Metropolitan Area	All 5 Crimes +/-	Auto Theft +/-	Burglary +/-	Robbery +/-	Home Invasion +/-	Theft +/-	Assault +/-	Threat +/-	Assault+ Threat +/-
New Providence	20.7	1.4	4.0	4.3	2.2	6.6	6.0	4.6	8.8
Greater Bridgetown Area	12.3	1.2	3.1	1.9	0.8	3.4	3.2	4.3	6.1
Kingston Metropolitan Area	16.3	1.3	3.6	3.2	1.4	5.6	5.3	5.1	8.3
Paramaribo	11.0	1.1	4.1	1.8	0.8	3.3	2.5	3.5	4.9
Port of Spain Metropolitan Area	15.5	1.3	3.5	3.9	1.6	4.9	4.1	3.2	5.8
Caribbean average (C5)	15.2	0.6	3.7	3.0	1.4	4.8	4.2	4.1	6.8

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Appendix 2.2. Victimization Incidence Rates for Five Crimes by Caribbean Country and Capital City Metropolitan Area and Type of Crime

Country	Total	+/-	Auto Theft	+/-	Burglary	+/-	Robbery	+/-	Theft	+/-	Assault	+/-	Threat	+/-	Assault+ Threat	+/-
The Bahamas	31.6	1.6	4.4	0.7	5.3	0.7	3.9	0.6	7.3	0.9	6.2	0.8	4.5	0.7	10.7	1.0
Barbados	22.1	1.3	0.5	0.2	3.0	0.5	1.4	0.4	3.5	0.6	5.9	0.7	7.8	0.8	13.7	1.1
Jamaica	48.1	2.5	0.0	0.0	0.0	0.0	8.0	1.4	14.6	1.8	9.6	1.5	15.9	1.8	25.5	2.2
Suriname	28.1	1.4	0.7	0.3	6.7	0.8	2.5	0.5	5.3	0.7	5.6	0.7	7.2	0.8	12.8	1.0
Trinidad and Tobago	20.3	1.2	1.4	0.4	5.3	0.7	1.9	0.4	4.6	0.6	3.9	0.6	3.3	0.5	7.2	0.8
Caribbean average (C5)	27.2	0.7	1.6	0.2	5.1	0.3	2.9	0.2	5.9	0.4	5.7	0.3	6.6	0.4	12.3	0.5
Capital metro area																
Capital City Metropolitan Area	Total	+/-	Auto Theft	+/-	Burglary	+/-	Robbery	+/-	Theft	+/-	Assault	+/-	Threat	+/-	Assault+ Threat	+/-
New Providence	40.9	1.8	5.5	0.8	6.4	0.9	5.2	0.8	8.7	1.0	8.5	1.0	6.5	0.9	15.0	1.3
Greater Bridgetown Area	27.4	1.6	0.5	0.2	5.2	0.8	2.8	0.6	4.6	0.7	5.6	0.8	8.7	1.0	14.3	1.3
Kingston Metropolitan Area	38.8	1.7	1.7	0.5	6.0	0.9	4.7	0.8	8.0	1.0	8.5	1.0	9.9	1.1	18.4	1.4
Paramaribo	29.2	1.6	0.8	0.3	8.9	1.0	2.4	0.5	5.5	0.8	4.3	0.7	7.4	0.9	11.7	1.1
Port of Spain Metropolitan Area	32.3	1.7	2.8	0.6	6.1	0.9	4.9	0.8	6.9	0.9	6.3	0.9	5.3	0.8	11.6	1.1
Caribbean average (C5)	33.7	0.8	2.2	0.2	6.5	0.4	4.0	0.3	6.7	0.4	6.6	0.4	7.6	0.4	14.2	0.6

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Who Is Most Likely to Be a Victim of Crime?

Heather Sutton and Lucciana Alvarez

Identifying risk and protective factors that make individuals more or less likely to be a victim of a crime is an important step towards evidence-based crime prevention policy. Knowing who is more likely to be a victim can help target interventions for prevention and protection. However, the lack of reliable data on crime in the Caribbean, and particularly on the characteristics of crime victims, has been a major constraint, as explained in the previous chapter.

Results of victim surveys can be used to determine which groups in the population are more or less at risk of being victims of crime than others. This chapter will analyse the statistical significance of individual characteristics associated with the likelihood of being a victim of a crime in five Caribbean countries. We begin with an overview of the literature internationally and from the region. Next, the chapter presents a profile of crime victims in the Caribbean by type of crime, focusing particularly on assaults and threats, which were identified in Chapter 2 as the most problematic in the region. We then turn to a multivariate logistic regression showing the statistically significant characteristics of crime victims.

3.1 Background

Victimization can be analysed from a number of perspectives. Routine activities theory suggests that individual-level factors account for aggregate crime differences over time. This theory posits that individuals spending more time outside of the home, and with increased availability of portable luxury goods, become better targets and create increased opportunities for criminals (Cohen and Felson 1979).

3.1.1 Urban Residence

Worldwide, city residents are more likely than rural residents to be victims of a crime (Alvazzi del Frate 1998; Hinton et al. 2014; Van Dijk, Van Kesteren, and Smit 2008).

This is particularly true in Latin America and the Caribbean. Urban residence was the most significant predictor of victimization in the 28 countries where the Latin American Public Opinion Project (LAPOP) Survey was conducted in 2014/2015. Hinton et al. (2014) found urban residents were twice as likely to be victims of a crime as those living in rural areas. This chapter controls for urban residence by focusing the analysis exclusively on the metropolitan areas of Caribbean capital cities.

Multivariate analysis of International Crime Victimization Survey (ICVS) data confirms that countries with higher proportions of citizens living in urban areas have higher national victimization rates, regardless of other characteristics (Van Dijk 1999, 2008). The degree of overall crime was weakly correlated with urbanization, but significant ($r = .34$, $p < 0.05$, $n = 25$). However, the degree of urbanization was more strongly correlated with levels of violent crime ($r = .59$, $p > 0.05$, $n = 28$) (van Dijk 2008, 94). This can be partially explained by both strain theory and routine activities theory, since cities bring together a confluence of motivated offenders (large pools of unemployed, male youth) and criminal opportunities (good targets, i.e., affluent individuals in the public domain). Other potential contributors to higher levels of crime in cities are weakened family ties and other types of social cohesion, along with high levels of residential turnover. Finally, luxury goods are more abundant and less “socially” guarded.

3.1.2 Young, Single Males

Based on routine activities theory, Hindelang, Gottfredson, and Garofolo (1978) suggest that some socio-demographic groups would have higher victimization levels. They argue that those in the public domain and who share characteristics with the most common offenders are more likely to be targets. Single, young men who are routinely away from the home are more likely to be victims of street crime because they are more likely to meet offenders who are over-represented in their social circles. Equally, because they are away from home, their homes are more vulnerable to being burglarized (Cohen and Cantor 1981).

Empirical evidence supports this. Most offenders, as well as victims of crimes, are young males between the ages of 15 and 30 (Adler, Mueller, and Laufer 1998; Beato and Andrade 2004; Carvalho and Lavor 2008; Cole and Gramajo 2009; Truman and Langton 2014; Van Dijk 2008). Specifically, young men who are unemployed and have a low level of education are more likely to be victims of violent crime. On the other hand, young men who have more education and higher income levels are more likely to be victims of property crime (Bergman 2006). Findings on offending show generally similar age-sex profiles for victims and offenders. Self-reported delinquency surveys from many countries show that young men significantly reduce involvement in crime and delinquency as they enter adulthood (Bartelet 2004).

3.1.3 Wealth and Education

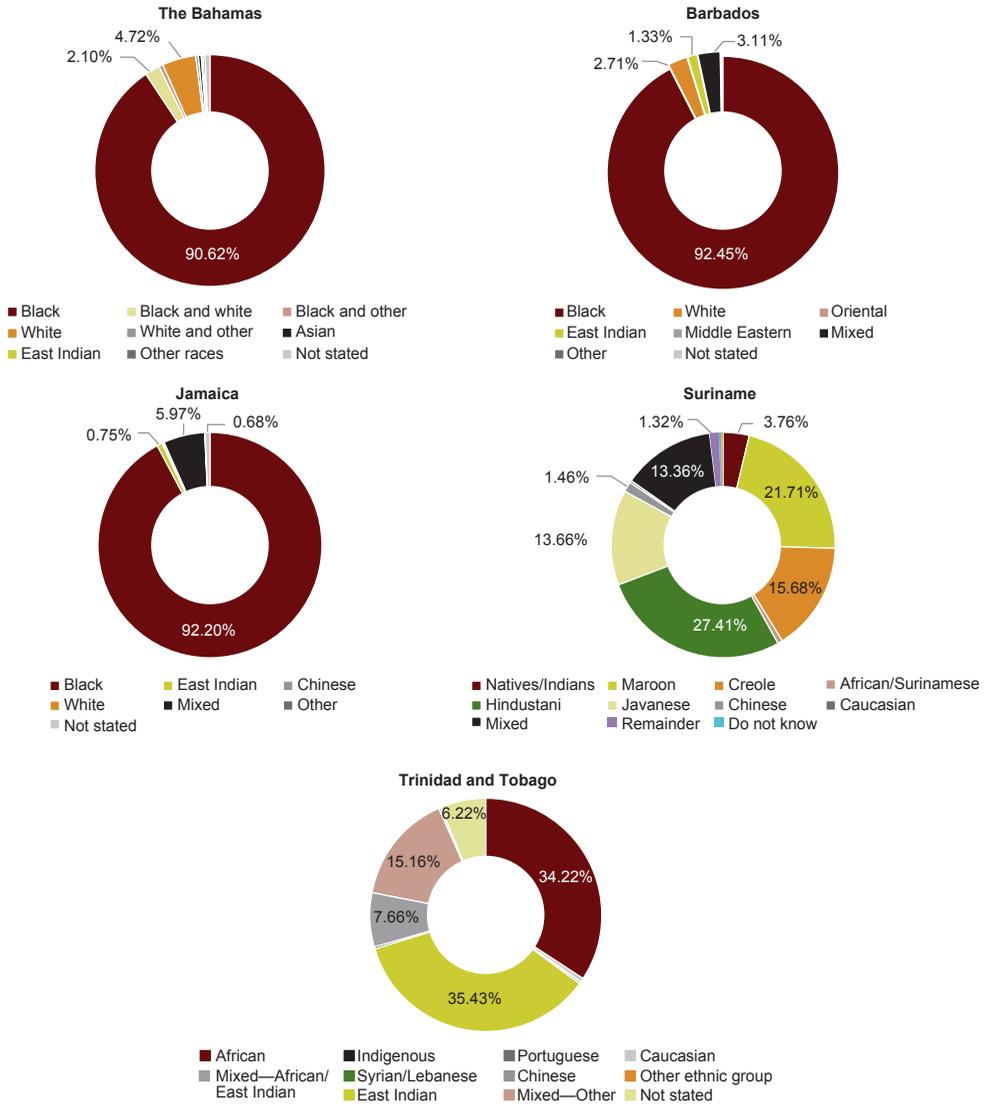
At the individual level, some evidence suggests that more affluent and more educated individuals have a higher likelihood of being a victim, particularly of property crime (Anderson 2009; Felson and Clarke 1998; Hinton et al. 2014). Some studies have found the relationship is not linear—at a certain level of wealth, the likelihood of victimization may diminish (Justus and Kassouf 2007). Other studies find that, specifically in Latin America, as wealth quintiles increase so does the likelihood of being a victim of any crime (Hinton et al. 2014). On the other hand, the same has not been found for violent crime (homicide, shooting, assault). In fact, homicides often tend to be concentrated among disadvantaged youth.

Economic development has not, by itself, led to reductions in crime by eliminating its root causes. This is particularly true in Latin America and the Caribbean, where over the last decade economies have continued to grow and crime has continued to increase. Trends in crime over time are positively related to increasing levels of affluence in the medium term. Routine activities theory offers an explanation given that increased wealth leads to increased consumption of luxury goods, increasing target attractiveness and opportunities for criminals (through increased urbanization and weakening of social ties). In the medium term, the fact that fewer people are driven to offend by income deprivation is outweighed by the fact that there are increased and more profitable opportunities for crime, often with impunity. Some scholars argue that it is only when the societal cost of crime outweighs the cost of prevention and criminal justice that sufficient resources will be invested to bring about a crime reduction—as has been the case of Western Europe and the United States (Van Dijk 2008; Van Dijk, Tseloni, and Farrell 2012).

3.1.4 Ethnicity/Race and Immigrants

Research suggests that race may play an important role in crime. While the relationship between crime and race has been well studied, particularly in the United States, the association is less explored in Caribbean literature. Henry, Dawkins, and Gibson (2012) point out that perpetrators of homicide in Jamaica have been predominantly black, although this is among a population that is predominantly black (Figure 3.1). In Trinidad and Tobago the homicide rate is high in Afro-Trinidadian communities, while Indo-Trinidadians and people of mixed race are less likely to be victims and perpetrators of homicides (Johnson and Kochel 2012). Theory suggests that this may stem from African slaves having suffered high levels of violence during the era of slavery and now constituting a large portion of marginalized and poor communities (Kalunta-Crumpton 2012). On the other hand, communities of voluntary immigrants (white, East-Indian, or Chinese) who were originally introduced to the country as contract workers are less likely today to be involved in crime and violence. Much of this may be

Figure 3.1: Distribution of Population by Ethnicity by Country (percent)



Source: Census data from The Bahamas (2010), Barbados (2010), Jamaica (2011), Suriname (2012), and Trinidad and Tobago (2011).

attributed to the fact that black communities and communities of recent immigrants have historically been poor and subject to urban segregation. The links between crime and marginalized communities have been greatly studied in the international criminology literature. Contrary to popular belief, international studies, mostly from the United States, indicate that immigration does not increase crime. To the contrary, intensified laws and enforcement practices against immigration may make these communities more vulnerable to being victimized (Nunziata 2014; Zatz and Smith 2012). Figure 3.1

shows the distribution of ethnicity in the five countries studied here.

3.2 Facts and Figures

3.2.1 Gender

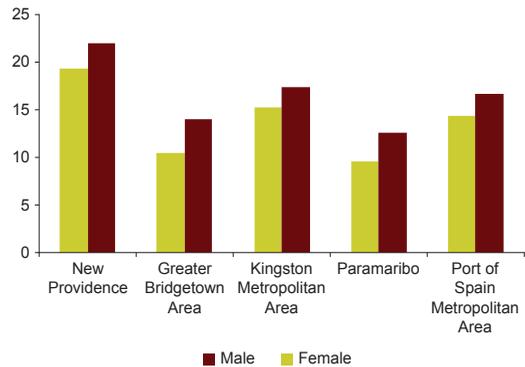
A preliminary look at the crime survey data shows that for five common crimes measured in Caribbean capital city metropolitan areas,¹ the overall percentage of male victims was higher than that of female victims (Figure 3.2). This is of little surprise given that this survey does not measure the types of violence where women are disproportionately victims (i.e., intimate partner and sexual violence).

Figure 3.3 shows victimization prevalence rates disaggregated by gender and type of crime. Property crimes (auto theft, burglary, and theft) are delineated by the black lines and violent crimes (robbery, assaults and threats) are delineated by the gray lines. There was no significant difference between men and women for property crimes. However, assaults and threats were significantly higher for men than women in all capital cities except Kingston. On average, prevalence rates for men for assaults and threats were nearly twice as high as for women (11 percent versus 6.6 percent). Robbery was slightly higher for men in some capitals, but not significantly.

3.2.2 Age

The data show that most victims of all five crimes combined are youths between 18 and 24 years old (Figure 3.4). In New Providence specifically, we see the highest one-year prevalence rates for 18–24 year-olds who are victims of a crime (29 percent versus 20 percent of the overall population), but also high levels of victimization in the category of 25–34 year olds (25 percent). The notable exception is Port of Spain, where a higher percentage of the elderly (15.4 percent) reported being victimized than in other countries. Youth victimization is further discussed in detail in Chapter 5.

Figure 3.2: Victimization Prevalence for Five Crimes by Gender in Five Caribbean Capital City Metropolitan Areas (percent)

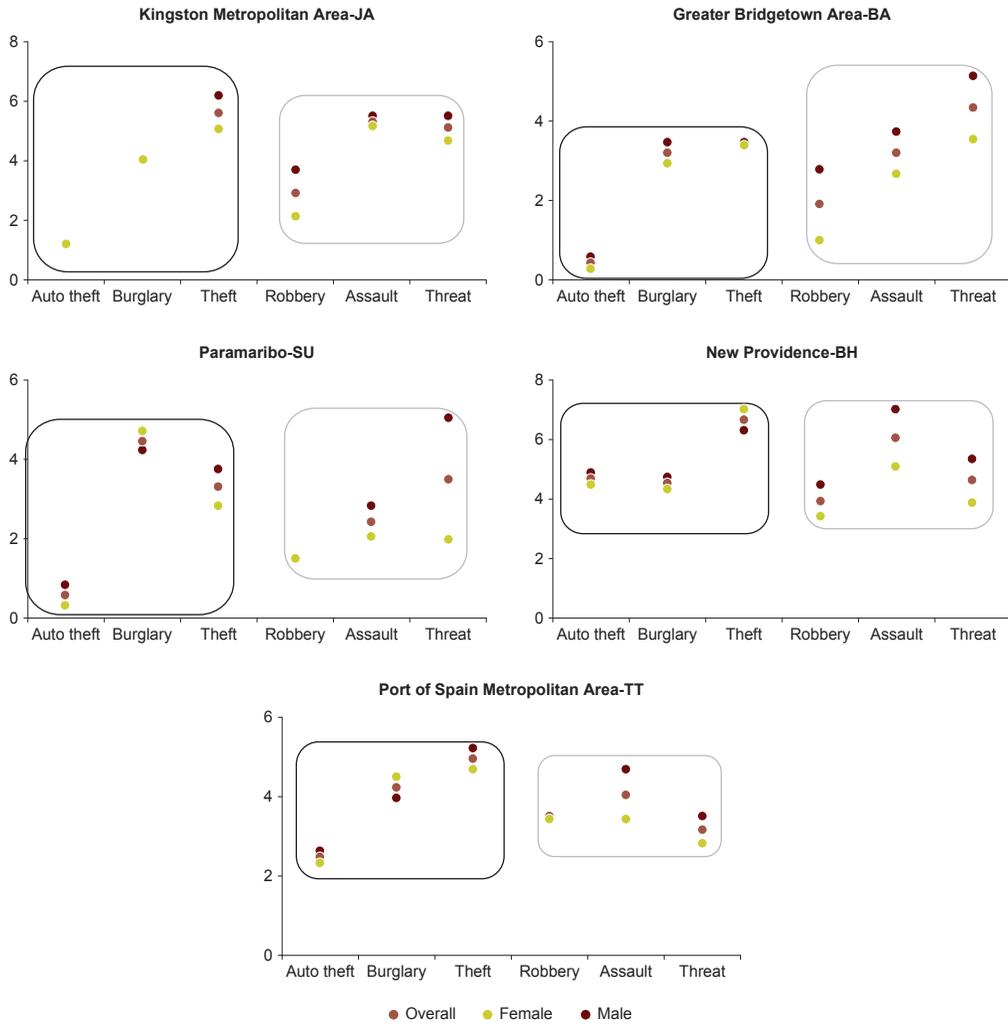


Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five crimes are auto theft, burglary, theft, robbery, and assaults and threats.

¹ The five crimes are auto theft, burglary, theft, robbery, and assaults and threats.

Figure 3.3: Victimization Rates by Type of Crime and Gender in Five Caribbean



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey
 Note: Black lines delineate property crimes and gray lines delineate violent crimes.

3.2.3 Income and Wealth

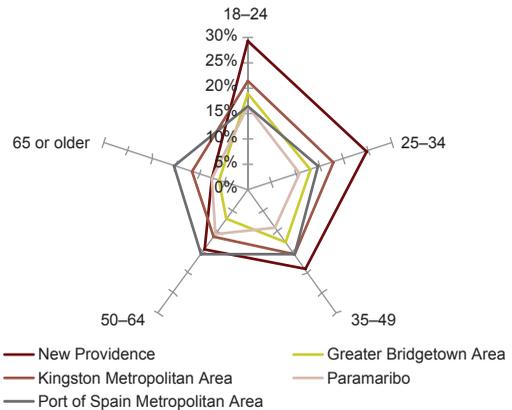
Figure 3.5 shows that, generally, as income quintiles increase, the likelihood of being a victim of any crime decreases, with a slight increase between quintiles 4 and 5. This is particularly true for violent crimes of assault and threat, while burglary and theft appear to have a somewhat curvilinear relationship with income. The explanation is that young and opportunistic burglars and thieves tend to operate on their own in poor neighbourhoods, while professional burglars pursue high-income targets. Car theft increases significantly in the highest income quintile, while robbery is

somewhat consistent across income quintiles. Given the relatively high non-response rate regarding household income, we also present the victimization rates by wealth quintiles, which capture the entire sample and show a similar dynamic (Figure 3.6).² The prevalence of assaults and threats in the lowest wealth quintile was consistently the highest across the region, but was particularly acute in Kingston (11 percent versus 8.3 percent for the total population) and in New Providence (11.5 percent versus 8.8 percent for the total population).

3.2.4 Ethnicity, Race, and Immigration Status

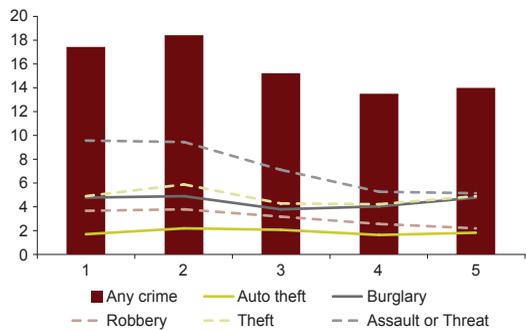
Among the five countries examined here, Trinidad and Tobago and Suriname have the most heterogeneous populations, while in The Bahamas, Barbados, and Jamaica over 90 percent of the population is Afro-Caribbean (Figure 3.1). There was some variation in victimization levels by ethnicity, but results should be interpreted with caution given the small numbers of victims in each ethnicity category (Appendix 3.1). White or Caucasian prevalence rates for being victimized by one of the five types of crime were generally lower than the

Figure 3.4: Prevalence Rates for Five Common Crimes by Age in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The five crimes are auto theft, burglary, theft, robbery, and assaults and threats.

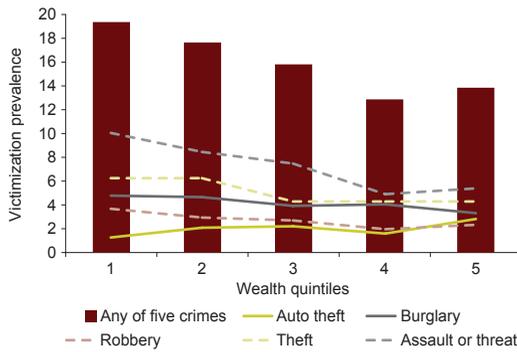
Figure 3.5: Victimization Prevalence Rate by Income Quintile in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The five capital cities listed are New Providence, The Bahamas; Greater Bridgetown Area, Barbados; Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and Port of Spain Metropolitan Area, Trinidad and Tobago.

² Research has shown that expenditure-based economic status indicators are more reliable than indices that are income-based (Deaton 1997). As a result, the LAPOP Surveys also collect information on household assets with the aim of obtaining more precise measures of economic well-being. See Appendix 3.2 for an explanation of the way wealth quintiles were constructed.

Figure 3.6: Victimization Prevalence Rate by Wealth Quintile (Assets Index) in Five Caribbean Capital City Metropolitan Areas (percent)



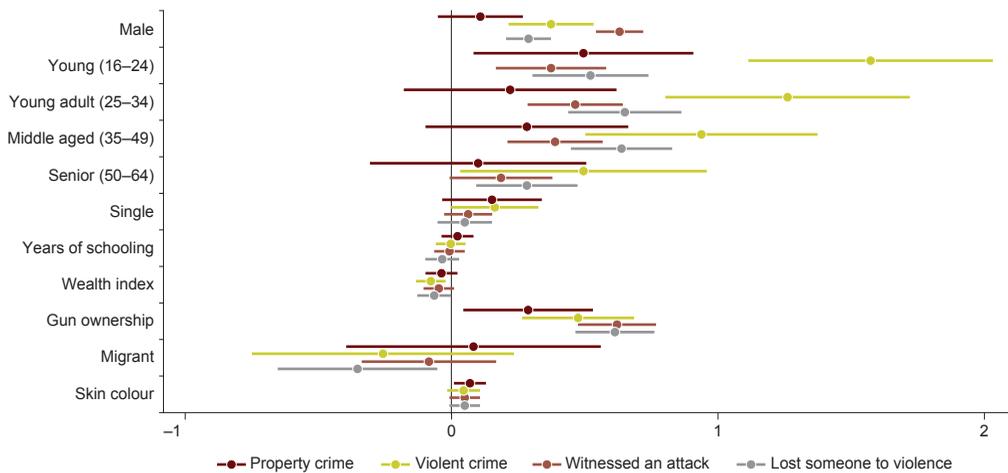
Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The five capital cities listed are New Providence, The Bahamas; Greater Bridgetown Area, Barbados; Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and Port of Spain Metropolitan Area, Trinidad and Tobago.

mean (except in Kingston and Paramaribo), while black or mixed-race individuals were slightly higher or on par with city averages. Box 3.1 further explores the statistical significance of race and ethnicity as predictors of victimization for Trinidad and Tobago.

3.2.5 Correlates of Victimization

To further examine which individual characteristics determine increased risk of victimization in Caribbean capital metropolitan areas, each of the variables discussed at the beginning of the chapter were included in a multivariate logistic regression analysis.³ Figure 3.7 shows the results for the

Figure 3.7: Individual-Level Correlates of Victimization in Five Caribbean Capital Cities (logit coefficient, 95 percent confidence interval; n = 14,025)



Source: Prepared by the authors using the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The five capital cities listed are New Providence, The Bahamas; Greater Bridgetown Area, Barbados; Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and Port of Spain Metropolitan Area, Trinidad and Tobago.

³ See results table in Appendix 3.3.

Box 3.1. Race/Ethnicity and Crime in Trinidad and Tobago

Trinidad and Tobago police records are unique in the region because they capture data on the ethnicity of both the victim and perpetrator of a crime. Analysis of police records shows an over-representation of Afro-Trinidadians and mixed-race individuals among crime victims when compared to their representation in the population. Afro-Trinidadians were twice as likely to be homicide victims (Odds Ratio 2.2) or perpetrators (OR 2.0) when compared to their representation in the population. Mixed-race individuals were over-represented among victims of robbery (OR 1.7), larceny (OR 1.8), burglary (OR 1.7), and sexual assault (OR 2.5).

Box Table 3.1: Crime Victims and Perpetrators by Ethnicity in Trinidad and Tobago

	Percent of Population	Percent of Homicide Victims	Percent of Homicide Perpetrators	Percent of Robbery Victims	Percent of Larceny / Larceny Motor Vehicle Victims	Percent of Burglary Victims	Percent of Sexual Offence Victims
Afro-Trinadadians	34.2	73.7	66.9	40.4	43	46	43.9
East Indian	35.4	17.7	26.1	38.2	35.4	32.1	26.2
Mixed	7.7	6.6	6.3	13.3	14.2	13.4	19.5
Other	22.7	2	0.7	5.2	7.4	8.5	10.4
Odds Ratio							
Afro-Trinadadians		2.2	2.0	1.2	1.3	1.3	1.3
East Indian		0.5	0.7	1.1	1.0	0.9	0.7
Mixed		0.9	0.8	1.7	1.8	1.7	2.5
Other		0.1	0.0	0.2	0.3	0.4	0.5

Source: Authors' calculations based on data from the Crime and Problem Analysis Branch of the Trinidad and Tobago Police Force.

Note: Homicide data are for 2001-2013; data for other crimes are for 2010-2014.

variables of interest (individual characteristics). The figure displays regression coefficients as dots and their 95 percent confidence intervals as horizontal lines. When the horizontal line does not cross the gray vertical line at zero, the variable is statistically significant.⁴

⁴ The analysis controls for macro-level differences between cities by using city fixed effects. Additionally, it controls for neighbourhood conditions as reported by the respondent (i.e., signs of disorder, social cohesion, and informal social control). The relationship between victimization and neighbourhood conditions will be discussed in Chapter 6.

The regression tests the significance of each of the variables in relation to victimization, when controlling for the other variables. Figure 3.7 depicts the main regression results with regards to four outcomes: (1) being a victim of violent crime (assault and threat) in the last year, (2) being a victim of property crime (theft) in the last year, (3) witnessing a shooting or violent attack in one's lifetime, and (4) having lost someone close to violence in one's lifetime.

The results of Figure 3.7 show that:

- Being male was significantly associated with increased risk of victimization for violent crime (OR 1.44, $p > .01$) and indirect victimization (OR 1.87, $p > .01$), but not property crime (theft, burglary).
- Youth and young adults were significantly more likely to be victims of violent crime (youth 16–24 = OR 4.83, $p > .01$), but not property crime (theft).
- Being single was weakly but significantly associated with being a victim of violent and property crime (OR 1.16 and 1.18, $p < .01$).
- Increased education was associated with a very slight increased risk of property crime (theft), however, the effect is very small (OR 1.02, $p < .01$). There were no significant associations between education and being a victim of violent crime.
- Individuals in households with guns were significantly more likely to have been victims of violent crime (OR 1.61, $p < .01$) and indirect victims of violence (witnessed an attack = OR 1.86, $p < .01$ or lost someone to violence = OR 1.84, $p < .01$). Gun ownership had no significant relation with theft.
- The Wealth Index was weakly but significantly correlated with reduced victimization by violent crime (OR 0.93, $p < .01$) and indirect victimization (OR 0.95 and OR 0.93, $p < .01$). Household income seems to have a protective effect (reducing risk of victimization) for violent crime (OR 0.49, $p < .01$) and losing someone to violence (OR 0.68, $p < .01$).⁵ Different from the literature, household income was not a significant factor in the likelihood of being a victim of property crime.⁶
- Being an immigrant and skin colour had significant but generally weak associations with victimization. Migrants were slightly less likely to have witnessed an attack (OR 0.92, $p < .05$) and darker skin colour was associated with slightly higher levels of property crime (OR 1.07, $p < .01$), witnessing an attack, and having lost someone to

⁵ In one regression model, we used a Household Income Index. This significantly reduced the sample size (7,955). We tested for a relationship between those who did not provide information on household income and victimization, but found no relation.

⁶ Note that the same regression was run with the Wealth Index replacing the Household Income Index in order to use the complete sample (including those who did not answer the question on income). All other variables remained largely unchanged in their significance and logit coefficients. The Wealth Index was not significant when controlling for other variables. Therefore we can conclude that the sub-sample after including income is not biased towards a particular income group.

violence (OR 1.05, $p < .01$). This finding may reflect differences in victimization among different ethnic and immigrant groups and may be attributed to other factors that were captured in the model (i.e., wealth, age, neighbourhood, etc.).

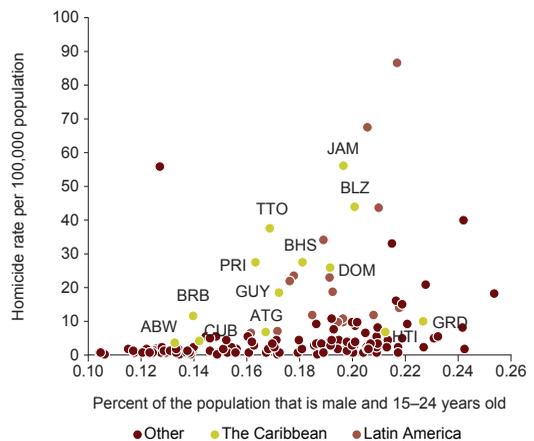
Regressions were also run for each individual capital city (see Appendix 3.4). The specific ethnic groups (which represent 10 percent or more of the population) were also included as dummy independent variables.⁷ Some noteworthy differences between capital cities included the following:

- Being male was not a significant predictor of victimization by assault and threat in Kingston after controlling for other factors, but was associated with witnessing an attack.
- Household gun ownership was a significant predictor of having witnessed an attack or having lost someone to violence in every capital city except Kingston.
- Regarding race, the only statistically significant differences found were for Port of Spain and Bridgetown. In Port of Spain, black and mixed-race individuals were more likely to have witnessed an attack or shooting resulting in injury or death. In Bridgetown, black individuals were less likely to be victims of theft.

3.3 Do Socio-demographic Factors Explain National Crime Rates?

Given the correlations noted above, at the aggregate level we might expect that countries with greater young urban male populations would be likely to experience higher violent crime rates. This correlation has been noted in international studies that find that urbanization and age structure of a country can explain about half of the variation in national victimization rates (Van Dijk 1999). Figure 3.8 shows the moderately strong relationship between the homicide rate and

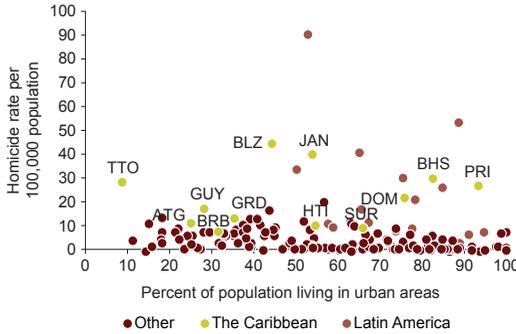
Figure 3.8: Percentage of the Population That is Young and Male versus National Homicide Rates



Sources: Prepared by the authors using homicide data for 2010 from the United Nations Office on Drugs and Crime data; and United Nations <Population Estimates> (2010).

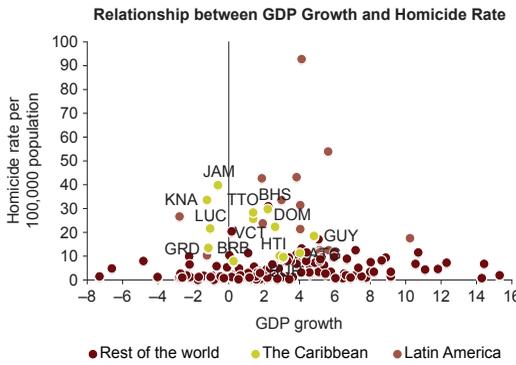
⁷ Full regression results by country can be found in Appendices 3.3 and 3.4.

Figure 3.9: Percentage of the Population That Is Urban versus National Homicide Rates



Sources: Prepared by the authors using data from the World Bank, World Development Indicators; and United Nations Office on Drugs and Crime homicide data for 2012.

Figure 3.10: GDP Growth versus National Homicide Rates



Sources: Prepared by the authors with data from the World Bank, World Development Indicators; and United Nations Office on Drugs and Crime homicide data for 2012.

the percentage of the population that is young and male worldwide (Spearman’s rho = 0.47, p > 0.05, n = 145) for the year of most recently available data (2010). However, it is notable that the entire Latin America and Caribbean region has higher homicide rates than countries in other parts of the world (burgundy), even at the same levels of young male populations.

Similar observations can be made about the relationship between the percentages of the population residing in urban areas and GDP growth compared to homicide rates (Figures 3.9 and 3.10), Latin America and the Caribbean continues to stand out with higher levels of homicide than other countries with similarly urbanized populations and GDP growth rates. This suggests that the region is still more violent than it should be for the level of economic growth and age, gender, and urban composition of the population. We address some of the other potential risk and protective factors contributing to high violent crime rates in the Caribbean in Section Two of this report.

3.4 Conclusions and Policy Implications

Results of victimization surveys can be used to determine which groups in the population are more or less at risk of being victims of crime than others. Burglary rates are household crimes and therefore evenly distributed across gender and age. Victimization by other property crimes, such as theft, shows little differentiation across the various groups.

Chapter 2 showed that that the risk of being assaulted or threatened is uniquely high in the Caribbean. This risk is most elevated among young, low-income males.

The profile of the victims mirrors that of the offenders and is in line with global findings. The under-representation of females among the victims is caused by the survey's purposeful exclusion of domestic and sexual violence, which are better measured via other dedicated instruments and further discussed in Chapter 4.

So what are policymakers to do with this information? Obviously they are unlikely to be able to influence factors such as urbanization and the age and gender composition of the population. Even if they could, these factors alone do not explain the uniquely high levels of violent crime in the Caribbean compared to the rest of the world. However, knowing the profile of victims and perpetrators for the most serious crimes in the region (homicide and assault) can help in the design of victim support services and prevention interventions. Scarce resources should be devoted to the types of prevention programmes that have worked in international contexts, targeting some of the risk and protective factors addressed in the following chapters in Section Two, including early experiences of violence in the home, early youth delinquency and violence, neighbourhood conditions, gangs, and guns.

Appendix 3.1. One-Year Victimization Prevalence by Ethnic Group (percent)

		White	Indigenous	Black	Mixed	Other Ethnicity	Total												
New Providence	Non-victim	83	64	81	82	92	81												
	Victim	17	36	19	18	8	19												
GBA	Non-victim	100	89	Mixed	Indian	Other Ethnicity	Total												
	Victim	0	11	14	11	0	11												
KMA	Non-victim	80	84	87	78	83	67	85											
	Victim	20	16	13	22	17	33	15											
Paramaribo	Non-victim	83	97	90	90	100	90	93											
	Victim	17	3	10	10	0	10	7											
PSMA	Non-victim	98	85	86	86	85	75	78											
	Victim	2	15	14	14	15	25	22											

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Appendix 3.2. Methodological Note: Wealth Index

The Wealth Index has been calculated using Principal Components Analysis (PCA) based on the first principal component. This methodology computes non-arbitrary weights (factor scores) for each of the 10 household assets indicators listed in the table below. The weights were generated separately for each city so that they express the distribution of assets in a specific city. The Wealth Index y for household i established in city c is the result of the following linear combination (Córdova 2009):

$$y_{i,c} = \alpha_{1,c} \left(\frac{X_{1,c} - \bar{X}_{1,c}}{S_{1,c}} \right) + \alpha_{2,c} \left(\frac{X_{2,c} - \bar{X}_{2,c}}{S_{2,c}} \right) + \dots + \alpha_{k,c} \left(\frac{X_{k,c} - \bar{X}_{k,c}}{S_{k,c}} \right),$$

where $\bar{X}_{k,c}$ and $S_{k,c}$ represent the mean and the standard deviation of asset $x_{i,c}$ in city c . Also, $\alpha_{k,c}$ is the weight calculated for each variable $x_{i,c}$ of city c .

Dichotomous Variable Description	LAPOP Question
Television	r1
Refrigerator	r3
Conventional telephone	r4
Cellular phone	r4a
No vehicle	r5
One vehicle	
Two vehicles	
Three vehicles	
Washing machine	r6
Microwave	r7
Computer	r15
Indoor bathroom	r14
Drinking water	r12

Source: Prepared by the authors.

Note: LAPOP: Latin American Public Opinion Project Survey.

Appendix 3.3. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization in Five Caribbean Capital City Metropolitan Areas

	Victim of Any of Five Crimes Odds Ratio/ Standard Error	Victim of Property Crime (Theft) Odds Ratio/ Standard Error	Victim of Violent Crime (Assault and Threat) Odds Ratio/ Standard Error	Victim of Burglary Odds Ratio/ Standard Error	Victim of Robbery Odds Ratio/ Standard Error	Witnessed an Attack Odds Ratio/ Standard Error	Lost Someone to Violence Odds Ratio/ Standard Error
Male	1.24*** (0.06)	1.11* (0.09)	1.44*** (0.10)	0.94 (0.08)	1.40** (0.15)	1.87*** (0.08)	1.33*** (0.05)
Young (16-24)	1.88*** (0.25)	1.64 (0.35)	4.83*** (1.12)	0.88** (0.17)	1.25 (0.32)	1.45*** (0.15)	1.68*** (0.19)
Young Adult (25-34)	1.49** (0.19)	1.24 (0.25)	3.49*** (0.80)	0.75** (0.14)	1.17 (0.29)	1.59*** (0.15)	1.92*** (0.20)
Middle Aged (35-49)	1.39* (0.17)	1.33 (0.26)	2.55*** (0.56)	0.86 (0.15)	1.09 (0.26)	1.48*** (0.14)	1.89*** (0.18)
Senior (50-64)	1.19 (0.16)	1.11 (0.23)	1.65 (0.39)	0.77* (0.16)	0.92 (0.23)	1.21* (0.11)	1.33*** (0.13)
Single	1.15*** (0.07)	1.16** (0.11)	1.18** (0.10)	1.09*** (0.11)	1.02 (0.13)	1.06** (0.05)	1.05 (0.05)
Years of Schooling	1.01** (0.01)	1.02*** (0.02)	1.00 (0.01)	1.02 (0.02)	1.00 (0.02)	0.99 (0.01)	0.97 (0.01)
Wealth Index	0.95*** (0.01)	0.96 (0.02)	0.93*** (0.02)	0.98 (0.02)	0.93 (0.03)	0.95** (0.01)	0.93*** (0.01)
Gun Ownership	1.66*** (0.12)	1.33 (0.16)	1.61*** (0.17)	1.60** (0.21)	1.77** (0.26)	1.86*** (0.14)	1.84*** (0.13)
Migrant	0.81 (0.14)	1.08 (0.26)	0.77 (0.19)	0.63 (0.20)	0.71 (0.27)	0.92** (0.12)	0.70 (0.11)
Neighbourhood Disorder Index	2.90*** (0.35)	2.11*** (0.40)	3.86*** (0.67)	2.59*** (0.51)	1.62*** (0.43)	3.86*** (0.45)	4.04*** (0.52)

(continued on next page)

Appendix 3.3. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization in Five Caribbean Capital City Metropolitan Areas (continued)

	Victim of Any of Five Crimes Odds Ratio/ Standard Error	Victim of Property Crime (Theft) Odds Ratio/ Standard Error	Victim of Violent Crime (Assault and Threat) Odds Ratio/ Standard Error	Victim of Burglary Odds Ratio/ Standard Error	Victim of Robbery Odds Ratio/ Standard Error	Witnessed an Attack Odds Ratio/ Standard Error	Lost Someone to Violence Odds Ratio/ Standard Error
Informal Social Control Index	0.91 (0.11)	0.83 (0.17)	1.19 (0.20)	1.02 (0.22)	0.69 (0.18)	1.27* (0.15)	1.18 (0.15)
Social Cohesion Index	0.54*** (0.09)	0.75* (0.22)	0.37*** (0.09)	0.33*** (0.10)	1.48 (0.54)	0.63*** (0.09)	0.88 (0.12)
Gang Presence	1.54*** (0.09)	1.49*** (0.13)	1.49*** (0.12)	1.65*** (0.17)	1.89*** (0.24)	2.18*** (0.12)	2.02*** (0.11)
Skin Colour	1.04*** (0.02)	1.07*** (0.03)	1.05* (0.02)	1.08*** (0.03)	1.07 (0.03)	1.05** (0.02)	1.05*** (0.02)
Port of Spain	0.93* (0.09)	0.84 (0.11)	0.73 (0.10)	1.00 (0.15)	1.02 (0.17)	0.51*** (0.06)	0.41*** (0.04)
Paramaribo	0.70* (0.06)	0.60** (0.09)	0.70 (0.09)	1.29*** (0.19)	0.48*** (0.10)	0.20*** (0.02)	0.09*** (0.01)
New Providence	1.40* (0.12)	1.20 (0.14)	1.18 (0.13)	1.17 (0.17)	1.29 (0.21)	0.72*** (0.05)	0.65*** (0.05)
GBA	0.82* (0.07)	0.63*** (0.09)	0.89 (0.11)	0.90 (0.14)	0.68* (0.13)	0.82 (0.06)	0.49*** (0.03)
Number of observations	14,042	14,042	14,042	14,042	14,042	14,042	14,042

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: GBA: Greater Bridgetown Area. ***, **, *, : significant at the .01, .05, and .1 levels. Light burgundy shading indicates significance above a .05 level.

Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

	Kingston Metropolitan Area						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Male	(0.119)	1.254 (0.206)	1.148 (0.171)	0.996 (0.187)	1.756** (0.423)	2.031*** (0.170)	1.387*** (0.110)
Young (16–24)	1.576* (0.415)	1.732 (0.698)	6.104*** (3.349)	0.610 (0.238)	0.610 (0.238)	1.190 (0.236)	1.881*** (0.342)
Young Adult (25–34)	1.286 (0.334)	1.150 (0.450)	4.906*** (2.639)	0.523* (0.204)	0.613 (0.290)	1.745*** (0.334)	2.699*** (0.470)
Middle Aged (35–49)	1.132 (0.287)	1.015 (0.380)	3.584** (1.891)	0.559 (0.211)	0.653 (0.273)	1.605*** (0.288)	2.687*** (0.461)
Senior (50–64)	0.833 (0.226)	0.870 (0.349)	1.749 (0.997)	0.244*** (0.112)	0.438* (0.211)	1.462** (0.281)	1.624*** (0.302)
Single	1.152 (0.130)	1.065 (0.198)	1.139 (0.170)	1.384 (0.306)	1.138 (0.282)	1.156* (0.101)	0.892 (0.079)
Years of Schooling	1.012 (0.024)	0.996 (0.041)	0.993 (0.032)	1.036 (0.052)	1.060 (0.054)	0.988 (0.016)	0.970* (0.016)
Wealth Index	0.935** (0.027)	0.940 (0.043)	0.908*** (0.033)	0.965 (0.054)	0.958 (0.060)	0.936*** (0.024)	0.874*** (0.023)
Gun Ownership	1.400 (0.332)	1.291 (0.481)	1.088 (0.375)	1.621 (0.684)	1.451 (0.699)	1.338 (0.275)	1.614** (0.351)
Immigrant	–	–	–	–	–	1.095 (0.503)	0.444 (0.221)
Neighbourhood Disorder Index	1.777** (0.486)	0.955 (0.425)	3.817*** (1.350)	1.091 (0.573)	2.243 (1.220)	2.266*** (0.475)	2.823*** (0.557)
Social Control Index	0.882 (0.226)	1.005 (0.444)	1.525 (0.537)	0.455 (0.227)	0.415* (0.210)	1.365 (0.276)	1.233 (0.264)

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

Kingston Metropolitan Area						
Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
Odds Ratio (Standard Error)						
Social Cohesion Index	0.523** (0.171)	0.267*** (0.115)	0.757 (0.470)	1.959 (1.459)	0.494*** (0.132)	1.367 (0.333)
Gang Presence	1.224 (0.151)	1.231 (0.202)	1.585** (0.342)	1.101 (0.300)	2.760*** (0.261)	2.436*** (0.229)
Black	0.616 (0.198)	0.619 (0.282)	0.642 (0.366)	0.723 (0.452)	0.866 (0.242)	0.839 (0.214)
Mixed	0.501* (0.180)	0.505 (0.248)	0.475 (0.302)	0.498 (0.353)	0.736 (0.213)	0.863 (0.241)
Indian	—	—	—	—	—	—
Number of observations	2,871	2,871	2,871	2,871	2,889	2,889
Port of Spain Metropolitan Area						
Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
Odds Ratio (Standard Error)						
Male	1.242* (0.138)	1.418* (0.267)	0.781 (0.166)	1.067 (0.223)	1.489*** (0.172)	1.180* (0.110)
Young (16–24)	1.084 (0.305)	2.718** (1.258)	0.477* (0.197)	1.422 (0.786)	1.208 (0.333)	2.040** (0.689)
Young Adult (25–34)	0.868 (0.226)	1.672 (0.709)	0.468** (0.163)	0.937 (0.510)	1.218 (0.259)	2.003** (0.600)
Middle Aged (35–49)	0.967 (0.225)	1.717 (0.660)	0.666 (0.183)	1.114 (0.548)	1.105 (0.254)	1.870** (0.469)

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

	Port of Spain Metropolitan Area						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Senior (50–64)	0.938 (0.241)	1.021 (0.390)	0.665 (0.290)	0.797 (0.351)	1.251 (0.677)	0.972 (0.204)	1.276 (0.276)
Single	0.921 (0.122)	1.634** (0.384)	0.800 (0.181)	0.814 (0.220)	0.954 (0.263)	1.003 (0.105)	1.102 (0.159)
Years of Schooling	1.007 (0.017)	1.000 (0.028)	0.986 (0.026)	1.014 (0.030)	0.998 (0.034)	0.953* (0.024)	0.932** (0.026)
Wealth Index	0.956 (0.034)	0.993 (0.050)	0.897** (0.046)	1.036 (0.067)	0.971 (0.059)	0.983 (0.031)	1.024 (0.043)
Gun Ownership	2.217*** (0.318)	1.560* (0.367)	2.782*** (0.566)	1.293 (0.474)	2.760*** (0.670)	2.510*** (0.411)	2.157*** (0.295)
Immigrant	0.813 (0.322)	1.268 (0.592)	0.827 (0.441)	0.588 (0.425)	0.872 (0.509)	1.254 (0.364)	0.871 (0.271)
Neighbourhood Disorder Index	2.319*** (0.549)	1.569 (0.555)	3.728*** (1.547)	2.643*** (0.933)	1.321 (0.784)	4.360*** (1.304)	8.485*** (2.862)
Social Control Index	1.360 (0.375)	1.412 (0.623)	2.256** (0.927)	2.186** (0.861)	0.968 (0.524)	1.824* (0.573)	1.716 (0.606)
Social Cohesion Index	0.856 (0.367)	0.610 (0.418)	0.761 (0.494)	0.165** (0.120)	0.921 (0.712)	0.356*** (0.138)	0.855 (0.259)
Gang Presence	1.878*** (0.217)	1.862*** (0.345)	1.431** (0.247)	1.964*** (0.426)	2.724*** (0.939)	1.655*** (0.194)	1.989*** (0.255)

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

	Port of Spain Metropolitan Area						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Black	1.210 (0.474)	0.636 (0.298)	4.245 (4.420)	1.746 (1.224)	0.462 (0.256)	1.944** (0.578)	1.747* (0.565)
Mixed	1.650 (0.672)	0.972 (0.478)	5.467 (5.722)	1.545 (1.084)	0.403 (0.236)	1.888** (0.555)	1.671 (0.523)
Indian	1.441 (0.603)	1.176 (0.552)	2.219 (2.507)	1.912 (1.530)	0.496 (0.323)	1.639 (0.517)	1.399 (0.470)
Number of observations	2,777	2,777	2,777	2,777	2,777	2,777	2,777
	Paramaribo						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Male	1.307** (0.170)	1.326 (0.299)	1.992*** (0.379)	0.742 (0.140)	0.990 (0.343)	1.703*** (0.197)	1.212 (0.170)
Young (16–24)	2.271** (0.760)	0.997 (0.447)	6.115*** (3.756)	1.043 (0.535)	4.562 (4.843)	1.731* (0.545)	0.665 (0.256)
Young Adult (25–34)	1.418 (0.444)	0.637 (0.287)	3.222* (1.947)	1.209 (0.552)	3.301 (3.499)	1.773** (0.516)	1.224 (0.418)
Middle Aged (35–49)	1.209 (0.382)	0.800 (0.342)	1.420 (0.915)	1.326 (0.594)	4.133 (4.300)	1.760** (0.505)	1.534 (0.516)
Senior (50–64)	1.573 (0.497)	0.607 (0.297)	2.118 (1.299)	1.695 (0.780)	3.181 (3.448)	1.391 (0.446)	1.437 (0.488)
Single	1.015 (0.160)	1.135 (0.264)	1.018 (0.211)	0.855 (0.201)	0.592 (0.229)	0.914 (0.133)	1.095 (0.169)
Years of Schooling	0.989 (0.021)	0.998 (0.039)	0.979 (0.029)	1.015 (0.031)	0.968 (0.048)	1.003 (0.018)	0.989 (0.022)

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

	Paramaribo						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Wealth Index	0.954 (0.033)	0.959 (0.056)	0.983 (0.052)	0.931 (0.049)	0.909 (0.080)	0.894** (0.028)	0.951 (0.035)
Gun Ownership	1.615*** (0.239)	1.541* (0.391)	1.246 (0.298)	2.168*** (0.481)	1.193 (0.498)	2.033*** (0.297)	2.320*** (0.359)
Immigrant	1.293 (0.356)	1.624 (0.654)	1.107 (0.419)	1.016 (0.447)	0.942 (0.711)	0.938 (0.234)	0.911 (0.295)
Neighbourhood Disorder Index	6.943*** (2.027)	5.925*** (3.070)	8.801*** (3.375)	7.362*** (3.320)	2.258 (1.492)	5.956*** (1.736)	2.722*** (0.874)
Social Control Index	1.204 (0.333)	1.270 (0.606)	0.862 (0.341)	1.186 (0.503)	0.670 (0.391)	1.166 (0.331)	1.211 (0.417)
Social Cohesion Index	0.491 (0.244)	0.961 (0.843)	0.256* (0.178)	0.472 (0.324)	15.368* (23.028)	0.786 (0.360)	0.881 (0.454)
Gang Presence	1.746*** (0.252)	1.676** (0.405)	1.617** (0.323)	2.108*** (0.457)	1.573 (0.626)	1.867*** (0.260)	1.281 (0.215)
Black	1.084 (0.222)	1.233 (0.439)	1.040 (0.341)	1.335 (0.470)	1.617 (0.931)	1.179 (0.239)	1.436* (0.303)
Mixed	1.085 (0.225)	1.148 (0.435)	1.159 (0.386)	1.125 (0.414)	0.972 (0.685)	1.084 (0.233)	1.050 (0.258)
Indian	1.216 (0.286)	1.303 (0.533)	1.299 (0.454)	1.288 (0.492)	1.473 (0.852)	0.872 (0.203)	0.779 (0.188)
Number of observations	2,797	2,797	2,797	2,797	2,797	2,797	2,797

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

	New Providence						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
Male	1.237** (0.121)	0.914 (0.133)	1.506*** (0.204)	1.076 (0.187)	1.287 (0.275)	1.816*** (0.157)	1.345*** (0.110)
Young (16–24)	2.794*** (0.900)	2.682** (1.251)	6.986*** (4.661)	2.135 (1.418)	7.432* (7.966)	1.617** (0.367)	1.352 (0.308)
Young Adult (25–34)	2.789*** (0.887)	1.919 (0.892)	5.559*** (3.645)	1.626 (1.044)	8.021** (8.449)	1.252 (0.269)	0.977 (0.218)
Middle Aged (35–49)	2.402*** (0.748)	2.042 (0.952)	3.520** (2.227)	2.080 (1.223)	5.269 (5.610)	1.273 (0.272)	1.051 (0.221)
Senior (50–64)	1.860* (0.627)	1.477 (0.765)	2.558 (1.693)	1.380 (0.897)	4.306 (4.682)	1.211 (0.259)	1.041 (0.233)
Single	1.548*** (0.181)	1.047 (0.181)	1.668** (0.341)	1.873** (0.458)	1.300 (0.317)	1.386*** (0.145)	1.477*** (0.154)
Years of Schooling	1.010 (0.028)	1.039 (0.040)	0.943 (0.035)	1.020 (0.075)	0.953 (0.044)	0.994 (0.023)	0.998 (0.021)
Wealth Index	0.954 (0.032)	0.900** (0.039)	0.947 (0.038)	0.936 (0.047)	0.878*** (0.043)	1.043 (0.028)	0.982 (0.028)
Gun Ownership	1.437** (0.205)	1.442* (0.302)	1.463** (0.278)	1.741** (0.390)	1.447 (0.399)	1.327** (0.172)	1.663*** (0.217)
Immigrant	0.635 (0.217)	0.535 (0.320)	0.678 (0.341)	0.610 (0.454)	0.333 (0.346)	0.622 (0.180)	0.409*** (0.121)
Neighbourhood Disorder Index	2.699*** (0.671)	1.897* (0.708)	2.257** (0.815)	1.510 (0.616)	0.831 (0.420)	4.386*** (1.076)	3.280*** (0.796)
Social Control Index	0.713 (0.195)	0.491* (0.204)	0.819 (0.320)	0.605 (0.297)	1.566 (0.914)	1.363 (0.353)	1.536* (0.382)
Social Cohesion Index	0.502* (0.207)	0.615 (0.366)	0.629 (0.380)	0.223** (0.154)	0.379 (0.253)	0.568 (0.221)	0.397*** (0.136)

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

	New Providence						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Gang Presence	1.549*** (0.174)	1.298 (0.213)	1.743*** (0.283)	1.064 (0.240)	2.135*** (0.453)	2.225*** (0.273)	1.965*** (0.217)
Black	0.924 (0.168)	1.477 (0.521)	0.882 (0.195)	0.586* (0.172)	1.134 (0.452)	0.990 (0.171)	1.322* (0.219)
Mixed	—	—	—	—	—	—	—
Indian	—	—	—	—	—	—	—
Number of observations	2,714	2,714	2,714	2,714	2,714	2,714	2,714
	Greater Bridgetown Area						
	Any Crime	Theft	Assault and Threat	Burglary	Robbery	Witnessed Attack	Lost Someone
	Odds Ratio (Standard Error)						
Male	1.358** (0.165)	1.083 (0.243)	1.613*** (0.255)	1.145 (0.257)	2.541*** (0.819)	2.345*** (0.189)	1.549*** (0.143)
Young (16-24)	2.506*** (0.718)	4.426** (3.291)	4.999*** (2.294)	1.007 (0.458)	0.971 (0.529)	1.878*** (0.382)	2.168*** (0.453)
Young Adult (25-34)	1.714* (0.500)	4.576** (3.257)	3.639*** (1.753)	0.725 (0.315)	0.654 (0.325)	2.300*** (0.422)	3.017*** (0.563)
Middle Aged (35-49)	1.794** (0.503)	5.451** (3.994)	3.200** (1.496)	0.824 (0.334)	0.584 (0.287)	1.926*** (0.345)	2.584*** (0.482)
Senior (50-64)	1.064 (0.321)	2.873 (2.226)	2.281* (1.057)	0.626 (0.299)	0.385 (0.240)	0.969 (0.190)	1.242 (0.242)

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Appendix 3.4. Logit Regression (Odds Ratios) of Individual-Level Correlates with Crime Victimization for Five Caribbean Capital City Metropolitan Areas (continued)

Greater Bridgetown Area								
	Any Crime	Assault and Threat			Robbery		Witnessed Attack	Lost Someone
		Theft	Burglary	Robbery	Witnessed Attack	Lost Someone		
Odds Ratio (Standard Error)								
Single	1.109 (0.156)	1.150 (0.321)	1.212 (0.246)	0.913 (0.234)	1.033 (0.405)	0.814** (0.084)	0.820** (0.080)	
Years of Schooling	1.063*** (0.021)	1.101*** (0.038)	1.057** (0.030)	1.070** (0.036)	1.033 (0.045)	1.039** (0.016)	0.984 (0.014)	
Wealth Index	0.947 (0.032)	1.042 (0.067)	0.915** (0.037)	1.015 (0.066)	1.019 (0.080)	0.891*** (0.023)	0.877*** (0.022)	
Gun Ownership	1.707** (0.397)	0.468 (0.302)	1.771* (0.522)	0.994 (0.465)	1.781 (0.866)	3.323*** (0.710)	1.962*** (0.405)	
Immigrant	0.594 (0.288)	1.353 (0.857)	0.494 (0.380)	— —	0.989 (0.986)	0.991 (0.282)	1.097 (0.349)	
Neighbourhood Disorder Index	3.681*** (1.189)	5.971*** (2.999)	3.950*** (1.887)	4.229** (2.412)	3.405 (2.630)	3.906*** (0.944)	3.091*** (0.793)	
Social Control Index	0.674 (0.188)	0.567 (0.299)	1.040 (0.393)	1.478 (0.888)	0.296* (0.215)	0.987 (0.207)	0.741 (0.165)	
Social Cohesion Index	0.358*** (0.113)	0.904 (0.665)	0.235*** (0.103)	0.161*** (0.097)	2.031 (1.932)	0.934 (0.272)	0.867 (0.223)	
Gang Presence	1.529*** (0.231)	1.637* (0.437)	1.343 (0.266)	2.047*** (0.527)	2.173** (0.760)	2.067*** (0.299)	1.655*** (0.218)	
Black	0.859 (0.199)	0.499** (0.145)	1.490 (0.597)	0.734 (0.288)	0.712 (0.368)	1.202 (0.209)	0.957 (0.156)	
Mixed	—	—	—	—	—	—	—	
Indian	—	—	—	—	—	—	—	
Number of observations	2,838	2,838	2,838	2,776	2,838	2,838	2,838	

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: ***, **, *, : significant at the .01, .05, and .1 levels.

Violence Against Women and Children: How Big Is the Problem and Is It Connected to Other Violence?

Heather Sutton and Lucciana Alvarez

Chapter 3 found that young men are significantly more likely to be the victims of homicide and assault, and Chapter 5 will explore the risk and protective factors surrounding youth violence. If youth violence is the root of the Caribbean crime problem, then why devote this chapter to women and children? The answer is two-fold.

First, police and victimization survey data do not accurately capture the impact of violence on different gender and age groups (men, women, boys, and girls). Literature on crime and violence in the Caribbean often places greatest emphasis on the number of homicides, which tends to overshadow violence suffered by women and children because they are not the majority of homicide victims. While there are signs of increasing recognition of the problem of violence in the home, the region has often failed to consider violence against women and children as “serious” citizen security issues. Rather, this type of violence is often seen as “soft” or a “private” family issue separate from State security concerns. We include this chapter to reinforce that violence against women and children is indeed a crime.

Second, beyond being a violation of the fundamental human rights of women and children, early exposure to violence—whether children are victims of abuse themselves or witness violence against other family members—increases the chances of victims developing emotional problems, becoming aggressive, and perpetrating violence themselves. Different types of violence—notably violence by young people and violence against women and children—are interconnected. Similarly, communities where risk factors are present (i.e., high levels of crime, poverty, or unemployment) are more likely to concentrate other types of violence, including violence against women and children (Wilkins et al. 2014).

This chapter examines the few existing studies on violence against women and children in the Caribbean. Box 4.1 starts by providing definitions of the fundamental terms involved in examining this issue. The chapter then lays out the data from police sources on homicides related to intimate partner and family violence. Given the lack of nationally representative surveys to measure the prevalence of violence against women, we analyse data from the Latin American Public Opinion Project (LAPOP) Survey on attitudes towards intimate partner violence. We also explore beliefs and experiences regarding physical discipline of children and its connection to the acceptance of intimate partner violence. Conclusions and policy recommendations focus on the existing body of evidence-based interventions to interrupt the cycle of violence in the home and how they can be adapted to the Caribbean.

Box 4.1. Definitions

Violence against women: Any act of gender-based violence that results in, or is likely to result in, physical, sexual, or mental harm or suffering to women, including threats of such acts, coercion, or arbitrary deprivation of liberty, whether occurring in public or in private life (United Nations 1993)

Gender-based violence: Violence that is directed at a person on the basis of gender or sex. It includes acts that inflict physical, mental, or sexual harm or suffering, threat of such acts, coercion, and other deprivations of liberty (UNHCR 2003).

Intimate partner violence: Behaviour by an intimate partner or ex-partner that causes physical, sexual, or psychological harm, including physical aggression, sexual coercion, psychological abuse, and controlling behaviours (WHO 2005).

Sexual violence: Any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed against, a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work (WHO 2002).

Physical abuse: Slapping, beating, arm twisting, stabbing, strangling, burning, choking, kicking, threats with an object or weapon, and murder. It also includes traditional practices harmful to women such as female genital mutilation and wife inheritance (the practice of passing on a widow, and her property, to her dead husband's brother) (UNICEF 2000).

Child abuse: Any form of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment, or commercial or other exploitation resulting in actual or potential harm to the child's health, survival, development, or dignity in the context of a relationship of responsibility, trust, or power (WHO 2006).

4.1 Background: What Do Existing Studies in the Region Tell Us?

4.1.1 Violence against Women

Data to measure the size and dimension of the problem of violence against women remain limited. Experts agree that the best estimates of the prevalence of such violence come from population-based surveys of women's health.¹ Despite their widespread use around the world, very few surveys have been conducted in the Caribbean, leaving us with a limited understanding of the extent of the problem in the sub-region.² Existing studies have focused mainly on specific groups of high-risk women (i.e., women treated in hospital emergency rooms or at crisis centres, etc.) or other sub-groups (college or secondary students). The 2008 Jamaica Reproductive Health Survey, although not exclusively focused on violence against women or children, may be the only study in the region that used a nationally representative sample (Box 4.2). The survey contained several questions on intimate partner and sexual violence using a similar methodology.

In Barbados, Jordan (1986) analysed hospital data on victims of intimate partner violence and found that in most cases the violence was committed by boyfriends, followed by fathers and brothers.³ Also in Barbados, Heise, Pitanguay, and Germain (1994) illustrated the regularity with which women were abused in intimate relationships: 30 percent of the women they studied had been victimized.⁴ In Trinidad and Tobago, Rawlins (2000) observed that 27 percent of women from two different communities had witnessed domestic violence in their homes and 8 percent had been victims.⁵ Finally, in the same country, Anyanwu (2011) analysed the extent to which women were victims of nine different abusive acts by their male partners.⁶ Among other findings, 17.6 percent of the women reported lifetime prevalence of being attacked with a weapon; 26.2 percent reported being threatened with violence; 33 percent punched/shoved; 34.6 percent hit; and 16.5 percent forced to have sex.

¹ Such as those used in the WHO (2010) multi-country study. See Garcia-Moreno et al. (2005).

² A forthcoming study from the IDB, in collaboration with UN Women and CARICOM, aims to provide quality data on violence against women in the Caribbean by conducting household surveys of women's health in several countries in the region. The surveys will follow the protocol used in WHO (2005) and will also measure United Nations statistical indicators on violence against women.

³ Jordan (1986) studied 78 cases of victims of intimate partner violence at a hospital in Barbados.

⁴ From a sample of 264 women, Heise, Pitanguay, and Germain (1994) found that 30 percent were beaten as adults. The study also found that 50 percent of the sample (men and women) reported that their mothers were battered women.

⁵ Rawlins (2000) sampled 200 women in two communities in Trinidad, Barataria and Chaguanas.

⁶ Anyanwu (2011) used a survey instrument that was administered via face-to-face interviews by a female doctor in a women's clinic in Trinidad and Tobago. The study collected data from a sample of 176 women between the ages of 18 and 61.

Box 4.2. Jamaica Reproductive Health Survey

What? Household survey of a nationally representative sample of 8,259 women ages 15–49 plus 2,775 men ages 15–24.

When? 2008.

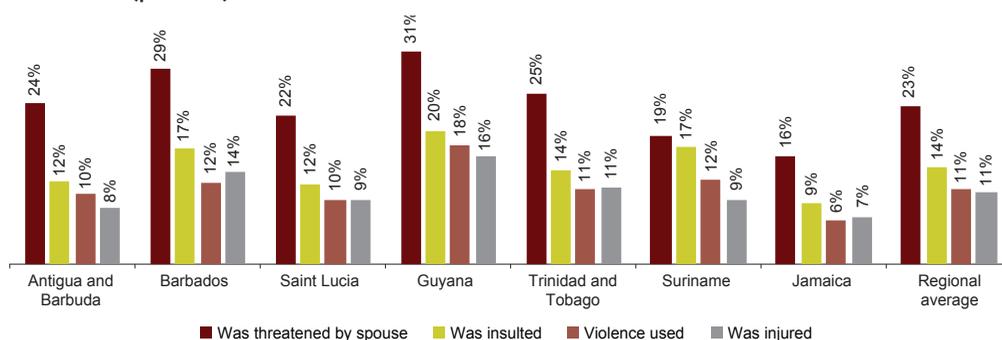
How? The survey employed a three-stage stratified cluster sample design based on the 628 census sectors and stratified by the 14 parishes.

Key Findings

- One in five Jamaican women (under age 15) witnessed physical abuse between parents and two in three were physically abused themselves by their parents.
- Methods of discipline of children reported included hitting the child with an object (36 percent) or a hand or fist (34 percent), cuffing or spanking (23 percent), or locking the child away (9.8 percent).
- 12 percent of female respondents reported being physically forced to have sexual intercourse, half of them before age 20. However, far more (46 percent) described their first experience as “Did not want it but it happened anyway.”
- One in three women (ages 15–49) experienced intimate partner violence in their lifetime and 17 percent experienced it in the last 12 months.
- The three strongest risk predictors of violence against women are childhood experience of violence, controlling behaviour of husband/partner, and alcohol use.

Source: Serrbanescu, Ruiz, and Suchdev (2010).

Figure 4.1: Self-Reported Victimization of Women by Intimate Partners, by Type of Action (percent)



Source: Authors' analysis using data from the United Nations Development Programme 2010 Citizen Security Survey.

The United Nations Development Programme (UNDP) 2010 Citizen Security Survey may be the only cross-national data collected in the region (Figure 4.1).⁷ However,

⁷ The study involved seven countries from the Caribbean, including Jamaica, Suriname, and Trinidad and Tobago.

these percentages are still likely to be far under-representative of actual prevalence, given that surveys on crime do not take the extra steps needed in terms of survey design and implementation to address the barriers to reporting intimate partner violence, leading to significant under-estimation of the prevalence of the problem.⁸

4.1.2 Violence against Children

The negative effects of children witnessing violence have been well established in the international literature.⁹ However, empirical data on this subject are also sparse in the Caribbean. The few studies available seem to suggest high tolerance for physical discipline of children. In Jamaica, for instance, Smith and Mosby (2003) reviewed a body of literature on child-rearing practices and found that a high percentage of Jamaican children were subjected to at least one form of psychological or physical punishment, ranging from aggression to severe means of discipline and punishment.¹⁰

In analysing a sample of juvenile cases before a court in Barbados, Marshall-Harris (2011) found that nearly 30 percent of them came from violent homes. The vast majority witnessed a sibling or a parent being physically, emotionally, verbally, and/or sexually abused by another parent, a parent's lover, or by another sibling.

Similarly, a study conducted by researchers at the College of The Bahamas found that violence against children was regarded as abuse only when it resulted in severe physical harm to the victim (Brennen et al. 2010). The 2011 Bahamas Secondary School Drug Prevalence Survey also showed that 43.8 percent of all students surveyed self-reported having been emotionally or verbally abused in the past, 21.2 percent reported being physically abused, and 9 percent sexually abused. Moreover, female students were significantly more likely than male students to have been emotionally, physically, or sexually abused (National-Anti Drug Secretariat and Ministry of National Security 2012, 23).

4.2 Facts and Figures

4.2.1 Intimate Partner and Family-Related Homicide

While there have been notable efforts by police departments and key ministries to collect administrative data on violence against women and children, lack of comprehensive

⁸ According to the UN Department of Economic and Social Affairs in its Guidelines for Producing Statistics on Violence Against Women 2013, "Surveys on violence against women are most effective when conducted as dedicated surveys, that is, surveys designed primarily, if not exclusively, to gather detailed information on the extent of different forms of violence against women. Such surveys have the potential to produce high-quality statistics, since they use interviewers who are trained specifically for that purpose and who are well equipped to deal with this sensitive topic" (United Nations 2013, 6).

⁹ See Durrant et al. (1994) and Schwartz and Proctor (2000).

¹⁰ Seventy-one percent of rural parents and 55 percent of urban parents reported flogging as the most frequent response to perceived misbehaviour in their children.

and systematic nationally-owned data remains a serious problem. Recording methods and definitions of crimes vary, even within the same country. Perhaps more importantly, official statistics are generally far under-representative of the actual levels of violence because women and child victims may not reach out for help due to fear of retaliation or because of cultural perceptions of acceptance of violence.¹¹

Administrative data on recorded homicides, however, are generally considered to be less affected by variations in reporting rates and recording practices than other types of crime. Throughout the region victims of murder are predominantly male. However, Figure 4.2 shows that females are considerably more likely to be killed by an intimate partner or family member than men. These figures should be interpreted with caution and should not be used for cross-country comparison.¹²

4.2.2 Acceptance of Intimate Partner Violence against Women

While little is known about the prevalence of intimate partner violence across the sub-region, there is evidence of tolerance of violence that is often linked to higher levels of violence against women in societies. Using data from the 2014/2015 LAPOP Survey, this chapter explores the level of acceptance of intimate partner violence against women and children in six Caribbean countries.

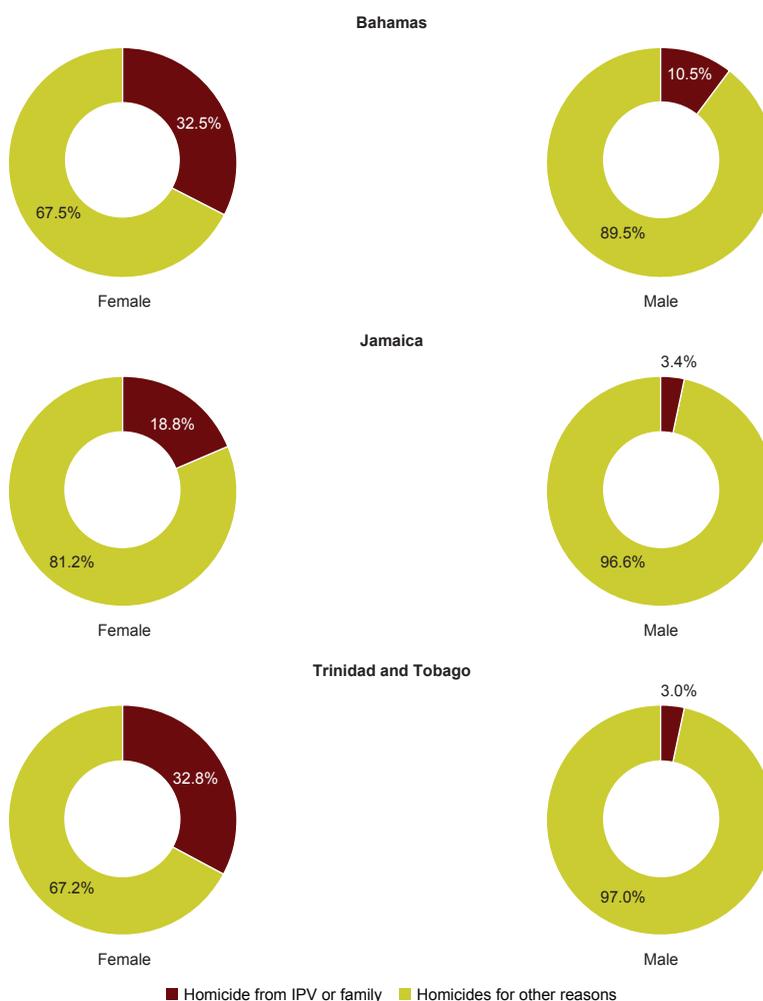
Figure 4.3 shows the tolerance among Caribbean adults of a husband hitting his wife if she neglects the household chores. One in four respondents (27.5 percent of males and 22.6 percent of females) would approve or understand. On average, Caribbean respondents were statistically more likely than Latin American respondents (a difference of 10.9 percentage points) and U.S. respondents (a difference of 13.3 percentage points) to approve of or understand hitting a women under these circumstances.

Tolerance for hitting a woman is higher if she is unfaithful—one in three Caribbean residents would approve of or understand (39 percent of males and 30 percent of females) hitting a woman for this reason. Acceptance is highest in Suriname, where nearly half (46.3 percent) of adults would approve of or understand hitting a woman under these circumstances. Again, Caribbean adults were significantly more likely than Latin American and U.S. respondents to tolerate violence against women if they are

¹¹ Even though administrative data on assault and sexual violence are not comparable between countries, data on these crimes are available in several IDB publications (Bailey 2016; Harriott and Jones 2016; Seepersad 2016; Sutton 2016).

¹² Accurately determining the cause of death is still a challenge in many countries that may have scarce time and resources to conduct crime scene investigations and autopsies. As a result, the numbers shown here could possibly be significantly higher if deaths from intimate partner violence are categorized as “unknown” or “undetermined.” Differences between countries may also be due to more or less accuracy in capturing the cause of death.

Figure 4.2: Percentages of Female and Male Victims of Homicides by Intimate Partners or Family Members as a Percentage of Overall Homicides, 2006–2011



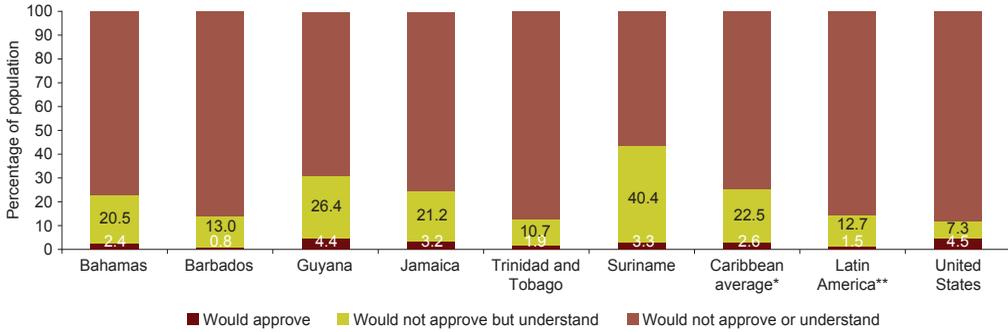
Source: Prepared by the authors using data from the United Nations Office on Drugs Annual Crime Trends Surveys of national law enforcement, March 2016.

Note: No information was available for Barbados or Suriname. IPV: intimate partner violence.

unfaithful (5.7 and 8.2 percentage point differences, respectively). Outright approval was highest in Guyana (10.2 percent), Suriname (8.3 percent), and The Bahamas (7.7 percent). “Understanding,” which might be interpreted as tacit acceptance, was highest in Suriname (38 percent), followed by The Bahamas (29.5 percent) and Guyana (25.4 percent) (Figure 4.4).

It is not surprising that Caribbean males were significantly more likely than females to approve of a man hitting his wife for being unfaithful (7.9 percent of males versus 4.9 percent

Figure 4.3: His Wife Neglects the Household Chores: Would You Approve of the Husband Hitting His Wife, or Would You Not Approve but Understand, or Would You Neither Approve Nor Understand? (percent)

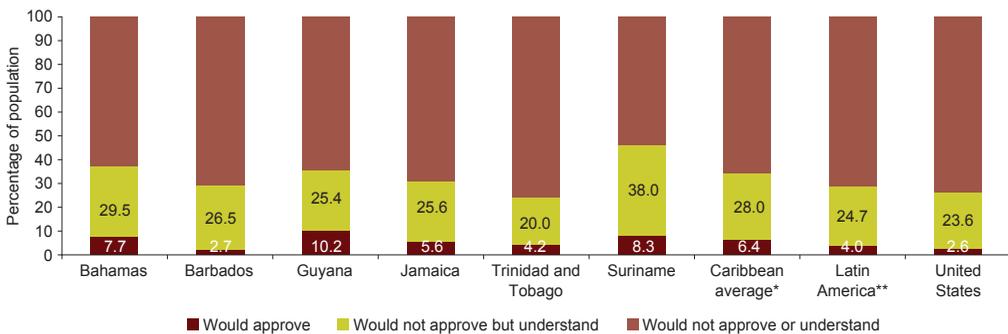


Source: Authors' analysis of data from the 2014/2015 Latin American Public Opinion Project Survey.
 *The Caribbean average includes Jamaica, Guyana, Trinidad and Tobago, Suriname, The Bahamas, and Barbados.
 **The Latin American average includes Mexico, El Salvador, Nicaragua, Colombia, Ecuador, Paraguay, Venezuela, and the Dominican Republic.

of females) (Figure 4.5). Males were also more likely to understand (31 percent of males versus 25.1 percent of females). One interesting exception is Suriname, where women were as likely as men to approve and only slightly less likely to understand. The starkest contrasts between men and women are apparent in Trinidad and Tobago, Jamaica, and Barbados.

The socio-demographic characteristics of survey respondents who tolerate (approve or understand) and do not tolerate intimate partner violence are described in Appendix 4.1.

Figure 4.4: His Wife Is Unfaithful: Would You Approve of the Husband Hitting His Wife, or Would You Not Approve but Understand, or Would You Neither Approve Nor Understand? (percent)



Source: Authors' analysis of data from the 2014/2015 Latin American Public Opinion Project Survey.
 *The Caribbean average includes Jamaica, Guyana, Trinidad and Tobago, Suriname, The Bahamas, and Barbados.
 **The Latin American average includes Mexico, El Salvador, Nicaragua, Colombia, Ecuador, Paraguay, Venezuela, and the Dominican Republic.

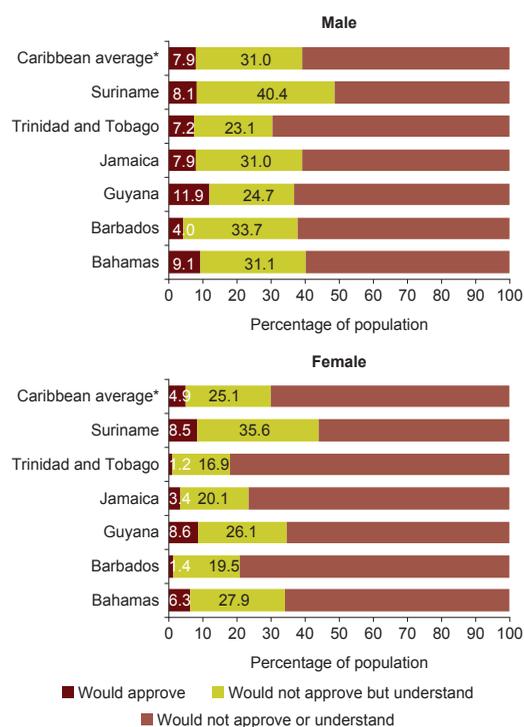
Ordinary least squares regression (Appendix 4.2) reveals that statistically significant factors associated with tolerance of intimate partner violence among men included age (younger), income (lower), and a history of physical punishment as a child. Women were statistically more likely to have tolerant attitudes if they were younger, had lower income, and received government assistance. Significant protective factors (negatively associated with tolerance) included living in an urban area (for women) and completion of secondary school (for men).

When focusing on only those who explicitly approved of intimate partner violence, we find that most of the same correlates continue to be significant for men: younger age, lower income (+), and urban residence (-). For both men and women, completion of secondary school is a significant protective factor. Other cross-country studies have found that the completion of secondary education has a protective effect against the risk of intimate partner violence that primary school alone does not provide (Abramsky et al. 2011). Our findings on tolerant attitudes towards intimate partner violence appear to be consistent with this literature.

4.2.3 Acceptance and Use of Corporal Discipline on Children

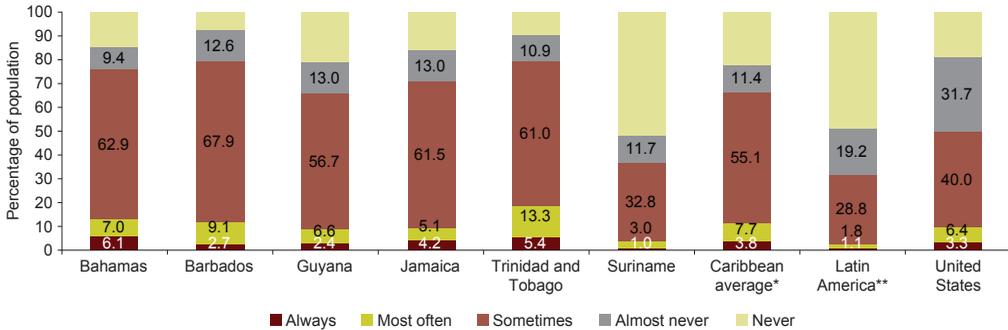
The Caribbean has a unique history with respect to children's rights and corporal discipline. Some regional studies suggest that the legacy of slavery may help to explain the social and cultural traditions that support the use of physical punishment of children (UNICEF 2006a). It has also been suggested that an acceptance of corporal punishment in families and institutions can be traced to both British cultural influences and religious influences (UNICEF 2006a).

Figure 4.5: Male versus Female Responses—His Wife Is Unfaithful: Would You Approve of the Husband Hitting His Wife, or Would You Not Approve but Understand, or Would You Neither Approve Nor Understand? (percent)



Source: Authors' analysis of data from the 2014/2015 Latin American Public Opinion Project Survey.
*The Caribbean average includes Jamaica, Guyana, Trinidad and Tobago, Suriname, The Bahamas, and Barbados.

Figure 4.6: Do You Think That to Correct a Child Who Misbehaves It Is Necessary to Hit or Physically Punish Them? (percent)

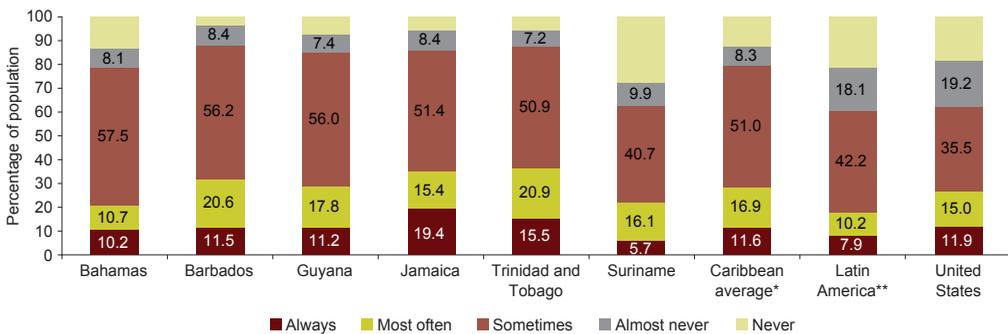


Source: Authors' analysis of data from the 2014/2015 Latin American Public Opinion Project Survey.
 *The Caribbean average includes Jamaica, Guyana, Trinidad and Tobago, Suriname, The Bahamas, and Barbados.
 **The Latin American average includes Mexico, El Salvador, Nicaragua, Colombia, Ecuador, Paraguay, Venezuela, and the Dominican Republic.

Most Caribbean respondents (a total of 67 percent, including 65 percent of males and 68 percent of females) say that it is necessary to physically discipline a child who misbehaves. Caribbean respondents were significantly more likely to believe it is necessary to use physical punishment on children than Latin Americans, with Caribbean respondents 2.7 percent more likely to say always, 5.9 percent more likely to say most often, and 26.3 percent more likely to say sometimes (Figure 4.6).

Of those who support the use of physical punishment in the Caribbean, 91 percent (93 percent of males and 89 percent of females) admit to suffering corporal punishment themselves as children (Figure 4.7). Only 13 percent of those who

Figure 4.7: When You Were a Child, Would Your Parents or Guardians Hit or Physically Punish You in Some Way to Correct Your Misbehaviour? (percent)



Source: Authors' analysis of data from the 2014/2015 Latin American Public Opinion Project Survey.
 *The Caribbean average includes Jamaica, Guyana, Trinidad and Tobago, Suriname, The Bahamas, and Barbados.
 **The Latin American average includes Mexico, El Salvador, Nicaragua, Colombia, Ecuador, Paraguay, Venezuela, and the Dominican Republic.

Table 4.1: Percentage of Children Ages 2–14 Who Experienced Any Physical Punishment, Severe Physical Punishment, or Any Violent Discipline Method in the Past Month

Country	Year	Any Physical Punishment	Severe Physical Punishment*	Any Violent Discipline Method**
Barbados	2012	55.7	6.1	72.1
Guyana	2014	44	6	70
Jamaica	2011	68.4	5.7	84.5
Suriname	2010	59.8	11.8	86.1
Trinidad and Tobago	2006	51.4	4.4	75.1

Source: UNICEF, Multiple Indicator Cluster Survey (MICS4) dataset for Barbados, Guyana, Jamaica, Suriname, and Trinidad and Tobago.

* Includes hitting or slapping the child in the face, head, or ears, beating the child up with an implement, and hitting the child over and over as hard as one can.

** Includes psychological aggression or physical punishment.

suffered physical punishment themselves considered corporal punishment to be unacceptable.

There was little difference between men and women in their experiences with, and attitudes towards, physical discipline of children. The difference between males and females was significant only among those who believed corporal punishment was always necessary (1 percent higher for men). Likewise, there was a slight difference between men and women (3.5 percent higher for men) who were physically punished “most often.” In all other categories the difference was insignificant. This is generally consistent with findings from other surveys in the Caribbean (UNICEF 2006a).¹³

Of course, there is a fine line between discipline and abuse that is highly contested between different cultural settings. Unfortunately, the LAPOP Survey data do not allow for exploring the means and severity of physical discipline. However, UNICEF Multiple Indicator Cluster Survey data indicate that the percentage of households with at least one child 2–14 years of age who was subjected to severe physical punishment in the last year was 4.4 percent in Trinidad and Tobago (2006), 5.7 percent in Jamaica (2011), 6.1 percent in Barbados (2012), 6 percent in Guyana (2014), and 11.8 percent in Suriname (2010) (Table 4.1).¹⁴ The Jamaican Reproductive Health Survey found that an alarmingly high amount of parents—41.6 percent of men and 36.2 percent of

¹³ See also publications with UNICEF’s Multiple Indicator Cluster Survey 2010–2016 datasets for Jamaica, Barbados, Guyana, Trinidad and Tobago, and Suriname, available at <http://mics.unicef.org/surveys> (accessed on 13 November 2016).

¹⁴ Involves interviews of women ages 15–49 and children ages 2–14. Severe physical punishment includes hitting or slapping the child in the face, head, or ears, and beating the child up with an implement (hit over and over as hard as one could). See UNICEF (2010b, 15).

women—reported hitting a child with a belt, stick, or other object as punishment (Serbanescu, Ruiz, and Suchdev 2010, 340–41).

4.2.4 Use of Corporal Discipline in Schools

The Caribbean's tolerance of the use of physical punishment on children can also be perceived through the use of corporal discipline in schools. Although corporal discipline is increasingly banned, most of the countries still condone a few of its variations. In Barbados, for example, the Barbados Education Act allows for corporal punishment to be used by the school principal or someone designated by the principal. Moreover, the Ministry of Education's Student Code of Discipline (2011) outlines a number of disciplinary options,¹⁵ some of which include the use of corporal punishment. While these policies remain in force, the ministry has also implemented UNICEF's positive behaviour management programme in some schools, which promotes non-violent educational methods.

In The Bahamas, the Penal Code also allows for corporal punishment,¹⁶ and the Child Protection Act of 2006 does not forbid it. The Safe Schools Protocol, developed by the Ministry of Education, regulates the use of corporal punishment by teachers. While it promotes the use of non-violent punishments first, it also permits the principal or administrator to use physical punishment (Department of Education of The Bahamas 2012, 30). In fact, a 2012 survey conducted in The Bahamas indicated that 15.3 percent of the teachers surveyed still believed they were authorized to use physical punishment and 4.3 percent were not sure.¹⁷ When separated by grade level, the survey revealed that corporal punishment was used much more frequently in grades 1–3 (nearly 50 percent of the time) (Fielding 2012).

Corporal punishment is lawful in Jamaican homes and only partially prohibited in Jamaica's educational institutions. Although legislation does exist to prohibit corporal punishment in day care, primary schools, penal institutions, and alternative care settings,¹⁸ the Education Act is silent on the matter. While the Ministry of Education

¹⁵ The code of discipline is labelled as a draft. However, the planning officer consulted indicated that it is in use by the ministry.

¹⁶ Article 110 of the Penal Code of 1873.

¹⁷ The survey of 482 school teachers revealed that most teachers knew about the protocol (91.4 percent) and 64 percent claimed that their classroom rules were aligned with it.

¹⁸ Specifically, S. 16(1) of the Early Childhood Act prohibits corporal punishment against a child in an early childhood institution. Section 62 (d) of the Child Care and Protection Act (2004) provides that a child in a place of safety, children's home, or in the care of a fit person shall have the right to be free from corporal punishment. Instead of being addressed through legal means, the Ministry of Education's directives have been "formally introduced to some educators through workshops and brochures." And in partnership with UNICEF, the Ministry of Education has "embraced a comprehensive range of interventions for quality education that includes alternatives to corporal punishment."

has issued a directive prohibiting corporal punishment in all schools,¹⁹ it has also maintained that Jamaica was not ready for anti-beating laws.²⁰

The Children (Amendment) Act of Trinidad and Tobago was passed in 2015 despite numerous calls from teachers, parents, and teachers' unions to reintroduce corporal punishment into schools. According to its section 10A, for teachers "reasonable punishment" does not include corporal punishment.

4.2.5 Connecting Different Types of Violence

There are several parallels between violence against women and violence against children. Both stem from norms that justify the use of violence in order to educate or correct misbehaviour. Co-occurrence of intimate partner violence and child abuse is frequently documented in the literature (Herrenkohl et al. 2008). Both women and children who are beaten often do not seek help due to social norms that see such behaviour as a private matter.²¹ Both types of violence are severely under-estimated because they are under-reported, and legal protections are generally under-enforced. This is especially true where social norms are not in step with legal protection. Finally, there are intergenerational consequences for both violence against women and violence against children.

According to data from the 2014/15 LAPOP Survey in the Caribbean, among adults who approve of or understand a man hitting his wife if she is unfaithful, 86 percent (88 percent of males and 82 percent of females) also reported having been physically disciplined themselves as children. Of course, not all those who are physically disciplined as children display tolerant attitudes towards intimate partner violence. However, when controlling for other individual characteristics (Appendix 4.1), men were statistically more likely to display tolerant attitudes regarding violence against women if they were exposed to frequent physical discipline themselves as children.²² The connection is consistent with international literature that suggests that children who experience or witness violence are more likely than those who do not to perpetrate violence later in life (Capaldi and Clark 1998; Capaldi et al. 2003; Fulu et al. 2013; Kishor and Johnson 2004). Violent discipline has also been found to be more common in households affected by intimate partner violence than in households that are not (Bott et al. 2012).

¹⁹ See "Holness Wants Parents to Abandon Violent Disciplinary Practices," *Jamaica Observer*, May 21, 2010 (http://www.jamaicaobserver.com/news/Holness-wants-parents-to-abandon-violent-disciplinary-practices_7633618); and Ministry of Education School Bulletin 94/8.

²⁰ Jovan Johnson, "Jamaica Is Not Ready for Anti-beating Law, Says Education Minister," *Jamaica Gleaner*, February 11, 2015. Available at: <http://jamaica-gleaner.com/latest/article.php?id=58289>.

²¹ In fact, in 2014, only 14 percent of women in Latin America and the Caribbean formally reported violence against them. See World Bank (2014).

²² Frequent physical discipline was defined as when it was used always, most often, or sometimes.

Longitudinal studies in high-income countries have established childhood experiences of violence as a causal factor for intimate partner violence (Capaldi and Clark 1998; Ehrensaft et al. 2003; Magdol et al. 1998; Swinford et al. 2000). While no such studies have been completed in low- and middle-income countries, cross-sectional studies find a strong and consistent association between partner violence by men who experienced harsh physical punishment as a child and witnessed violence at home (Heise 2011).

International studies connect violence in the home with other types of violence in society. For example, research suggests that child survivors of abuse are more likely to display different types of violence later in life, including violence against their peers (Logan, Leeb, and Barker 2009), bullying and teen dating violence (Duke et al. 2010), child or elder abuse and intimate partner violence (American Psychological Association 1996), and sexual violence (Jewkes 2012). Some slightly less robust studies have also suggested links between intimate partner violence, violence against children, and other types of violence in the Caribbean. In The Bahamas, for example, Plumridge and Fielding (2009) showed that the presence of domestic violence in a household was associated with risks of deviant behaviour, including sexual abuse of household members. In Barbados, a study revealed that a considerable percentage of youngsters (79 of 274) presented to a court were documented as coming from violent homes (Marshall-Harris 2011). A similar study by Fielding (2012) also reported high percentages of prison inmates in The Bahamas who had been brought up in homes with high levels of violence.²³

4.3 Conclusions and Policy Implications

There appears to be relatively high tolerance for both intimate partner violence against women and violence against children in the Caribbean. Collecting more accurate data on the prevalence of violence against women and children by using internationally vetted methodologies is an important next step for Caribbean governments. However, many studies have found that the degree to which both wife beating and physical discipline of children are accepted is one of the strongest and most consistent factors to predict differences in prevalence across sites and countries.²⁴ Therefore it is not unprecedented to use these norms as proxies for levels of intimate partner violence and violence against children within a country.

²³ In fact, of 310 inmates who responded to a questionnaire, 112 (36 percent) said they were victims of abuse and 49.2 percent said they had observed violence in their homes. Although this sample was not necessarily representative of the inmate population of The Bahamas, other data from the region have shown similar results (Fielding 2012).

²⁴ See Abramsky et al. (2011) on acceptance of intimate partner violence and UNICEF (2006b) on acceptance of violence against children.

4.3.1 Legislation

Caribbean countries have generally begun to expand their legislation on violence against women and children. However, more efforts are needed to fully tailor regulations to protect potential victims and prevent violence against women and children. Worldwide, it is increasingly recognized that domestic violence encompasses several types of violence, including sexual, emotional, and/or psychological violence, as well as patrimonial and/or economic violence (UN Women 2011). Globally, many countries have moved towards expanding the scope of the definition of domestic violence victims by including not only spouses, but also individuals who are or have been in intimate relationships, including non-marital, same-sex, and non-cohabiting relationships; individuals with family relationships with one another; and members of the same household (United Nations 2010a). Even though some of these changes in legislation have been adopted by Caribbean countries, many holes in current legislation still exist, particularly criminalization of marital rape and definitions that incorporate an inclusive scope of types of abuse and victims (for an overview of existing legislation see Appendix 4.2).

Trinidad and Tobago, The Bahamas, and Suriname have fairly comprehensive definitions of domestic violence that go beyond simple physical violence. Jamaica and Barbados, on the other hand, have no such clear definitions whatsoever. In terms of victims, Trinidad and Tobago, The Bahamas, and Jamaica include spouses, children, members of the same household, dependents, and partners in the spectrum of potential victims. Barbados, however, does not cover dependents or partners. Across these countries, same-sex couples have limited or no access to relief services as compared to heterosexual couples. Moreover, very few countries are ahead with regards to sexual crimes: only Suriname and Trinidad and Tobago have legislation that explicitly criminalizes marital rape and only The Bahamas regulates sexual harassment.

Protection orders for victims of domestic violence exist in all five countries. Those orders can remove the perpetrator from the home and are granted to any person falling under the definition of being a victim of domestic violence. Unfortunately, in practice the process may be more complicated, often compelling the seeker to meet a high burden of proof. In The Bahamas, for instance, the aggressor must have already committed one or more acts of domestic violence. A lawyer is not required by law, but the complicated nature of the process can make it difficult without one.²⁵ The Family Court's high volume and long backlog of cases also create major obstacles to the process. The other countries, particularly Barbados, have little information on requisites to apply for a protection order, other than notifying the aggressor. Jamaica and Trinidad

²⁵ "The Law and Domestic Violence," *Guardian*, March 2, 2014. Available at: http://www.thenassauguardian.com/index.php?option=com_content&view=article&id=45604:the-law-and-domestic-violence-&catid=35:health-a-wellness.

and Tobago indicate guidelines for the court to grant protection orders that may be too general and difficult to prove for the victim. These include showing proof that the aggressor has used or threatened to use violence or cause physical or mental injury.

Violence against children is regulated both in domestic violence acts as well as in further specific legislation on child abuse/protection across the sub-region. Unfortunately, even in those countries with more advanced laws on violence against children, the line between abuse and permitted discipline remains a nebulous issue, particularly because enforcement and implementation of laws is often not completely effective. It is important to continue to monitor implementation of these laws, identify gaps between the intention and practice, and identify the barriers that continue to impede women and children from accessing the rights these laws provide.

While policymakers are likely to be much more wary about legally interfering with a “parent’s right” to discipline their children, a recent comparative study of the effects of banning corporal punishment in five European countries suggests that it does shift what people define as violence and facilitate reductions in the use of violence. Longitudinal studies from Germany and Switzerland also show that acceptance and use of physical violence have declined over time (Bussmann, Erthal, and Schroth 2011).

4.3.2 Support Services for Victims

Most of the countries have also created special governmental units and/or programmes in charge of preventing and alleviating violence. However, even though these units usually provide an array of services, there are very few shelters available for women or children and those that exist have limited resources.²⁶

In Jamaica, victims of gender-based violence receive support from public institutions such as the Centre for Investigation of Sexual Offences and Child Abuse, as well as from nongovernmental organizations (NGOs) such as the Women’s Resource Outreach Centre, which provides shelter services. Although very little information is available on institutional efforts and programmes on violence against women and children in Suriname, the Department of General Social Work of the Ministry of Social Affairs is in charge of providing services for victims of domestic violence.

In The Bahamas, awareness of the high incidence of domestic violence led to the opening of The Bahamas Crisis Centre in 1982. Moreover, the National Task Force on Gender-Based Violence includes a National Five-Year Strategic Plan for Reducing

²⁶ The following agencies are in charge of enforcement against violence in the home in the respective police forces/units: in The Bahamas, the inter-agency Gender-Based Violence Task Force at the Royal Bahamas Police Force; in Barbados, the Family Conflict Intervention Unit from the Royal Barbados Police Force; and in Jamaica, the Centre for the Investigation of Sexual Offences and Child Abuse of the Jamaica Constabulary Force.

Domestic Violence. A second initiative in the country is a joint project with UN Women called Strengthening State Accountability and Community Action for Ending Gender-Based Violence in the Caribbean. Finally, a National Child Abuse Hotline was also instituted to provide advice and assistance to child victims of violence.

In Trinidad and Tobago, the Ministry of Gender, Youth and Child Development drafted a number of initiatives in 2015 that focus on domestic violence, youth, and family services, including a campaign on gender-based/domestic violence, a registry on domestic violence data, a domestic violence hotline, and a shelter for abused women. A number of NGOs also provide services to victims of crime or persons who have an elevated risk of victimization. For example, the Rape Crisis Society provides counselling and training to victims of sexual and domestic violence and attempts to empower them so that they become less vulnerable and more self-sufficient. Similarly, Madinah House provides accommodation and support to women and children who have been victims of domestic violence.

Finally, the Family Conflict Intervention Unit of Barbados was given the responsibility to record data and respond to family matters. Although there is no government-run shelter for victims of domestic violence in the country, the Business and Professional Women's Club operates as a shelter for women seeking refuge from violence in the home.

4.3.3 Family and Parenting Interventions

International evidence suggests that parenting programmes are central to preventing violence against children and eventually other types of violence that are incubated during childhood and/or adolescence. The next chapter on youth presents further evidence on the effects of parenting in breaking these cycles of violence.

Providing early intervention for families at risk via home visits and parenting programmes not only can reduce childhood exposure to violence, but may also reduce future perpetration of intimate partner violence (Krug et al. 2002). There is strong evidence from high-income countries that parenting programmes can reduce harsh and abusive punishment and reduce behaviour problems in children that are predictive of future perpetration of violence (Gilbert et al. 2009; Kane, Wood, and Barlow 2007; Mikton and Butchart 2009). Emerging studies from low- and middle-income countries are showing similar results (Eshel et al. 2006; Knerr, Gardner, and Cluver 2010). One particular programme that has been evaluated in a number of countries and cultural contexts is the Positive Parenting Program ("Triple P").²⁷

²⁷ The programme, developed by the University of Queensland and currently used in 25 countries, has been shown to work across cultures, socio-economic groups, and family structures. The body of evidence is the most extensive of any parenting programme and includes more than 250 published papers, including eight meta-analyses, 68 randomized clinical trials, 51 effectiveness and service-based evaluations, and 13 single-case studies.

Government-run national parenting programmes are currently in place in a number of Caribbean countries. In The Bahamas, the Ministry of Social Services and Community Development implemented a National Parenting Programme to guide parents in their daily roles. Similarly, the Ministry of Justice/Victim Support Unit in Jamaica offers useful information on positive parenting best practices through its “The Parent’s Place” programme. Finally, Trinidad and Tobago established a National Parenting Strategy coupled with a National Parenting Programme to transmit competencies to meaningfully address common parenting challenges. However, these programmes consistently omit having an evaluation or monitoring component, so while they may be promising, reaching any firm conclusions about their direct impact on violence is not possible. It is important that further analysis of these programmes take place in order to determine what is working or what should be adjusted.

4.3.4 Changing Social Norms

Finally, there is evidence that interventions to change social norms can have a positive effect on reducing levels of intimate partner violence. While many one-off awareness-raising and advocacy campaigns have shown no evidence of impact, there are two strategies that have been more rigorously evaluated and demonstrated modest changes in reported attitudes. These include small group/community participatory workshops and larger-scale educational entertainment campaigns using various media sources (Ellsberg et al. 2014; Heise 2011). For example, a randomized control trial found that applying the South African programme “Sisters for Life” curriculum to small groups of women, combined with an existing microfinance programme,²⁸ reduced partner violence by 51 percent over two years. A second study of the same programme found that the positive impact on violence was more a function of the training than the microcredit component (Kim et al. 2009, 824). Other small-scale community mobilization programmes working with both men and women have also shown promising results.²⁹

Educational entertainment interventions, which develop and deliver radio and television programmes to change norms, have been less rigorously evaluated, but seem to

²⁸ The programme combined the introduction of a poverty-targeted microfinance component and a participatory learning and action gender-focused curriculum (Sisters for Life) for clients. The two components had, among many objectives, the aim to reinforce and improve household well-being, communications, and power relations. Qualitative data indicate that the reduction in violence experienced by the women was the result of their being able to challenge the acceptability of violence, accept better treatment, leave violent behaviour, and raise awareness on the issue in their communities. See Kim et al. (2009).

²⁹ These include a cluster randomized controlled trial on the SASA programme in Uganda (Abramsky et al. 2014), quasi-experimental evaluation of the Tostan Programme in Senegal (Diop et al. 2004), and a cluster randomized controlled trial of the SHARE Programme, also in Uganda (Wagman et al. 2014). For an overview, see Ellsberg et al. (2014).

show promise.³⁰ Additionally, because social hierarchies (men over women and parents over children) are often considered to be justified in religious texts in the Caribbean, it might be important to consider finding faith leaders willing to challenge these social norms.

Interventions to change norms and reduce intimate partner violence are most effective when they target individuals and communities displaying key risk factors. This chapter has shown that the factors associated with having a tolerant attitude toward intimate partner violence in the Caribbean are similar to the risk factors for perpetrating and being a victim of intimate partner violence found in the international literature. Lower income, young age, receiving government assistance (for women), rural residence, and incomplete secondary schooling were all significantly associated with tolerance of intimate partner violence.

Prioritizing programmes that aim to stop violence in the home before it occurs may also have a broader long-term impact on overall societal violence and criminality in the Caribbean. After all, preventing violence in the home against women and children can stop children from growing up with increased aggression and emotional problems, which may in turn prevent them from delinquency and violence later in life.

³⁰ Such is the case of programmes implemented by the Soul City Institute for Health and Development (South Africa), the NGO Breakthrough in India, and Puntos de Encuentro in Nicaragua. These interventions have all attempted to measure their impact, though through imperfect evaluation designs. Highlights of these evaluations are summarized in Heise (2011, 24-27).

Appendix 4.1. Individual Characteristics of Respondents

Sample	Males		Females	
	Approves or understands (frequency [percent] or mean of X)	Does not approve or understand (frequency [percent] or mean of X)	Approves or understands (frequency [percent] or mean of X)	Does not approve or understand (frequency [percent] or mean of X)
Variable				
Age	38.8	40.3	38.5	39.8
Occupation outside the home	42%	45%	33%	40%
Income group (1-16)*	8	9	7	8
Children (number)	1.99	1.93	2.21	2.04
Marital status				
Married	26%	31%	28%	31%
Common law (living together)	16%	14%	18%	15%
Civil union	0%	0%	0%	0%
Single	49%	46%	43%	43%
Divorced	3%	3%	3%	3%
Separated	3%	2%	2%	2%
Widowed	3%	3%	5%	6%
Years of education	10.5	10.9	10.5	11.0
Urban residence	78%	79%	73%	81%
Receives government assistance	14%	10%	18%	12%
Number	3,180	4,907	2,397	5,750

Source: Prepared by the authors using data from the 2014/2015 Latin American Public Opinion Project (LAPOP) Survey for Caribbean countries including Jamaica, Guyana, Trinidad and Tobago, Suriname, The Bahamas, and Barbados.

* In LAPOP Surveys, individuals are asked which income range their household fits into. Possible household income categories go from 1-16, with 1 being the lowest group and 16 being the highest. The corresponding range for each category is based on local currency and represents different amounts in each country.

Appendix 4.2. Ordinary Least Squares Regression Using 2014/2015 Latin American Public Opinion Project Survey Data for The Bahamas, Barbados, Guyana, Jamaica, Trinidad and Tobago, and Suriname (question dvw2 as outcome variable)

Outcome	Male	Female	Male	Female
	Approves and Does Not Approve but Understands	Approves and Does Not Approve but Understands	Approves	Approves
Age	-0.00238* (-0.001)	-0.00138* (-0.0006)	-0.000917* (-0.000406)	-0.000202 (-0.000132)
Occupation outside the home	-0.00908 (-0.022)	-0.0285 (-0.0174)	-0.000517 (-0.0122)	-0.0122 (-0.00813)
Household income	-0.00374** (-0.00128)	-0.00567** (-0.00128)	-0.00331*** (-0.000439)	-0.00201 (-0.001)
Children (number)	0.00369 (-0.00767)	0.00328 (-0.00669)	0.00121 (-0.00399)	-0.000626 (-0.00228)
Single	0.00517 (-0.0219)	0.0505 (-0.0352)	0.00644 (-0.013)	-0.014 (-0.0131)
Married	0.0159 (-0.011)	0.00641 (-0.0379)	0.00597 (-0.0166)	-0.0218 (-0.0143)
Common law	0.00644 (-0.0111)	0.0383 (-0.0501)	0.00653 (-0.0205)	-0.00954 (-0.0134)
Divorced	-0.0187 (-0.0394)	0.0902 (-0.0883)	-0.0288 (-0.0221)	-0.00236 (-0.0274)
Separated	0.0136 (-0.0293)	0.0539 (-0.0414)	-0.00413 (-0.0323)	0.000849 (-0.0334)
Secondary education	-0.0456* (-0.0194)	-0.00858 (-0.0186)	-0.0324* (-0.016)	-0.0241* (-0.0106)
Urban residence	-0.00421 (-0.0231)	-0.0891** (-0.0282)	-0.0141** (-0.00423)	-0.0402** (-0.0151)
Government assistance	0.0529 (-0.0304)	0.0407** (-0.0146)	0.00895 (-0.0187)	0.0175 (-0.00925)
Physical punishment	0.0393** (-0.0108)	-0.019 (-0.0142)	0.00259 (-0.00606)	-0.0119 (-0.0116)
Country fixed effects	Yes	Yes	Yes	Yes
Number	4,647	4,638	4,647	4,638

Source: Authors' analysis of data from the 2014/2015 Latin American Public Opinion Project Survey.
Note: Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.001.

Youth Violence and Delinquency: Reducing Risk and Enhancing Protection

Heather Sutton and Inder Ruprah

Youth are frequent victims and perpetrators of many types of violence and crime, including homicides, gang violence, school violence, and bullying. Youth are also in a unique period of their lives when early problem behaviours can become established patterns, affecting perpetration of violence and delinquency in later life. This places youth in a particularly important position as a key target group for focused interventions to protect against both victimization from and perpetration of violence.¹

This chapter begins with an overview of existing studies on youth violence in the region and internationally. Next we examine data available from the Caribbean on youth as *victims* of homicide, bullying, and other violent crime. Conversely, we also examine the evidence on youth as *perpetrators* using data on arrests and prison admissions. We conclude that, similar to other countries around the world, youth are disproportionately represented among victims as well as among those arrested and imprisoned. This is followed by an analysis of early problem behaviours in the Caribbean that are associated in international literature with later aggression and delinquency. We examine risk and protective factors associated with these problem behaviours. Lastly, policy implications are examined in light of evidence-based interventions that have been proven to work internationally to reduce youth violence (individual, family, and community-based interventions). Box 5.1 provides definitions of some of the key terms involved in the examination of youth violence.

¹ Note that the age range of youth violence depends on data availability. The World Health Organization, for example, largely uses the 10–29 age range, while the official United Nations definition of youth is 15–24 years old. Because data from the Caribbean Crime Victimization Survey were not collected for youth under the age of 18, and given the administrative data available, the age range referred to here for youth is 18–25. We also include the age range of 26–35 as young adults.

Box 5.1. Definitions

Youth violence: Violence occurring between people ages 10–29. This violence often occurs among youths who are not relatives and who may not know each other, and generally takes place outside of the home. It includes harmful behaviours that may start early and continue into adulthood. Some violent acts—such as assault—can lead to serious injury or death. Others, such as bullying, slapping, or hitting, may result more in emotional than physical harm (WHO 2014).

Bullying: A student is being bullied when he or she is exposed repeatedly over time to aggressive behaviour that intentionally inflicts injury or discomfort through physical contact, verbal attacks, fighting, or psychological manipulation. Bullying involves an imbalance of power and can include teasing, taunting, the use of hurtful nicknames, physical violence, or social exclusion (UNESCO 2011).

School violence: Violence perpetrated by teachers and other school staff that includes corporal punishment, cruel and humiliating forms of psychological punishment, sexual and gender-based violence, and bullying. Violence in schools in the form of playground fighting and bullying of students also occurs. Sexual and gender-based violence also occurs in educational settings (UNICEF 2006b).

Risk factor: Risk factors are considerations that make it more likely that people will experience violence (Wilkins et al. 2014).

Protective factor: Factors that make it less likely that people will experience violence or that increase their resilience when they are faced with risk factors (Wilkins et al. 2014).

5.1 Background

Worldwide studies have found that delinquent behaviour is not constant throughout the life cycle of an individual, but tends to be strongly concentrated during youth.² Numerous international studies examine the overwhelming presence of youth on both sides of the equation, as both victims and perpetrators of crime.³ The United Nations Development Programme's *Caribbean Human Development Report 2012* makes the important distinction that while youth are more likely to be both victims and perpetrators of certain types of violence, only a minority of the youth population is involved in violent crime (UNDP 2012). Through self-reported responses by youth to the 2010 Citizen Security Survey,⁴ the report finds that:

² Thornberry (1996) finds empirical evidence that delinquent behaviour begins at ages 12–13, peaks around 17, and usually ends by age 30.

³ See Graham and Bowling (1995) and Flood-Page et al. (2000).

⁴ The countries included in their study were Antigua and Barbuda, Barbados, Guyana, Jamaica, Saint Lucia, Suriname, and Trinidad and Tobago.

- Youth are involved in some serious crimes, but most of their delinquent activities are neither serious nor violent. Only 1.6 percent of youths between the ages of 18 and 24 reported being accused of or arrested for violent crimes with a weapon and 2.2 percent of a violent crime without a weapon.
- There is increasing concern over school violence, but not enough evidence to support empirical analysis.⁵
- Youth violence, especially related to the formation of school gangs, is often in response to threats and fear of victimization.
- Youth are traumatized by community violence, with 48.7 percent of youth expressing fear of being a victim of crime and many experiencing anxiety, fear, and trauma as a result of exposure to community violence.
- Youth are victimized mostly by peers, but also by adults, including police, teachers, parents, and family.

A robust body of international literature also finds connections between early adolescent problem behaviours and a later propensity to offend or commit further violence. For example, several studies connect early antisocial and risky behaviour—such as greater use of tobacco, alcohol, and other drugs—to subsequent increased violence and delinquent behaviour (Barnes et al. 2000; Dishion and McMahon 1998; Fletcher et al. 1995). In the Caribbean, Ohene, Ireland, and Blum (2005) find evidence of a clustering of these risk behaviours among youth. Specifically they find that early initiation of sexual activity was a significant predictor of gang involvement and weapon-carrying among young adolescents and other risk behaviours in older adolescents. Blum and Ireland (2004) found that Caribbean teens who reported having experienced abuse, those who skip school, and those who indicate that they almost always think about hurting or killing someone are much more likely to report involvement with violence, sexual intercourse, cigarette use, and alcohol use.

Studies indicate that decreasing certain risk factors while increasing protective factors can help prevent problem behaviours and their negative consequences. By definition, a risk factor is a variable that predicts increased probability of subsequent offending or violence. Conversely, protective factors are the opposite of risk factors (reducing the probability of offending), that is, they are moderators that help counter risk factors. While any one risk factor alone may not predict delinquency, a combination of many of them increases the likelihood of offending later in life. Outside the

⁵ Adequate data on the phenomenon of school violence are not available across the region, since in most countries authorities do not collect information on school violence on a regular basis. The few studies available on the subject, however, indicate that violence is present in schools. See Marshall-Harris (2011) on Barbados and Lall (2007) on Trinidad and Tobago.

Caribbean, the most rigorous studies have identified prominent individual, family, and peer-level risk and protective factors (for an overview of this literature see Farrington and Welsh 2007 and WHO 2010). Individual factors identified are low intelligence, low empathy, and impulsivity. These are often combined with family and community factors proven to increase the propensity to offend—families with weak parenting skills, that are abusive, and that live in socially deprived areas. Finally, the most prominent peer/school factors found in the international literature include associating with delinquent peers and attending schools with high levels of delinquency.

While there have been no robust longitudinal studies in the Caribbean on risk and protective factors associated with later offending per se, cross-sectional studies have examined many adolescent problem behaviours and their correlates.⁶ At the individual level, Caribbean studies highlight that biological, psychological, and behavioural risk factors are directly associated with high levels of aggression (for a summary, see Maharaj, Nunes, and Renwick, 2009).⁷ Within the family sphere, parental monitoring of adolescents has been recognized as an important protective factor (Blum and Ireland 2004; Maguire 2012; Ohene, Ireland, and Blum 2005). At the macro level, the communities where young people live are also important determinants of families' interactions, the nature of peer relationships among young people, and the way youth are exposed to violence.⁸ Extreme economic deprivation, conflict in the family, a family history of behavioural problems, and a lack of a protective environment are common risk factors for most adolescent delinquency and dropping out of school (Maharaj, Nunes, and Renwick 2009).⁹

5.2 Facts and Figures

5.2.1 Youth Victimization

The profiles of homicide victims based on police data indicate that they are disproportionately young males between the ages of 18 and 35. Table 5.1 shows the percentage of youth in the population versus their representation among homicide victims. The

⁶ See Maharaj, Nunes, and Renwick (2009) for a review and a summary of research on the prevalence of health risk behaviours and their outcomes, as well as risk and protective factors, among adolescents in the English-speaking Caribbean. See Maguire, Wells, and Katz (2011) for a study in Trinidad and Tobago that concluded that existing measures of risk and protective factors from the United States cannot necessarily be transplanted to developing nations without being adapted to the socio-cultural background of the country.

⁷ This research highlighted 14 studies on links between health risk behaviours and violence and delinquency, including Meeks Gardner (2003), Samms-Vaughn, Jackson, and Ashley (2004), Soyibo (2000), and Whittle (1994).

⁸ Studies show that social integration affects youth violence. By studying poor urban communities in Jamaica, Moser and Holland (1997), for instance, found links between violence and lower employment, less educational opportunities and fewer investments in the community.

⁹ The presence of gangs in communities or schools also increases the likelihood of violence in a community. See Chapter 7.

Table 5.1: Youth Population, Percentage of Homicide Victims, and Homicide Rate by Age Group

Country	Percent of Population	Percent of Homicide Victims	Homicide Rate by Age Group (per 100,000 population)	Homicide Rate for the Total Population (per 100,000 population)	Odds Ratio ¹
Under 18 years old					
The Bahamas	32.3	5.0	5.3	33.3	0.2
Barbados	23.9	4.2	1.9	10.6	0.2
Jamaica	31.9	4.0	6.3	47.3	0.1
Trinidad and Tobago	24.8	6.1	8.6	34.8	0.2
18-25 years old					
The Bahamas	12.4	32.0	84.8	33.3	2.0
Barbados	10.7	25.0	24.6	10.6	2.3
Jamaica	15.3	20.0	64.0	47.3	1.3
Trinidad and Tobago	13.8	20.9	52.8	34.8	1.5
26-35 years old					
The Bahamas	15.4	30.0	64.7	33.3	1.9
Barbados	13.7	29.2	22.6	10.6	2.1
Jamaica	14.8	27.0	90.8	47.3	1.8
Trinidad and Tobago	16.7	33.4	69.6	34.8	2.0

Source: Homicide data are for 2013 and were provided by the Royal Bahamas Police Force, Strategic Policy and Planning Unit; the Royal Barbados Police Force; the Economic and Social Survey of Jamaica; and the Crime and Problem Analysis Branch of the Trinidad and Tobago Police Service. The youth population and homicide rates were calculated using The Bahamas 2010 Population and Housing Census; the Barbados 2010 Population and Housing Census; the Jamaica 2011 Population and Housing Census; and the Trinidad and Tobago 2011 Population and Housing Census.

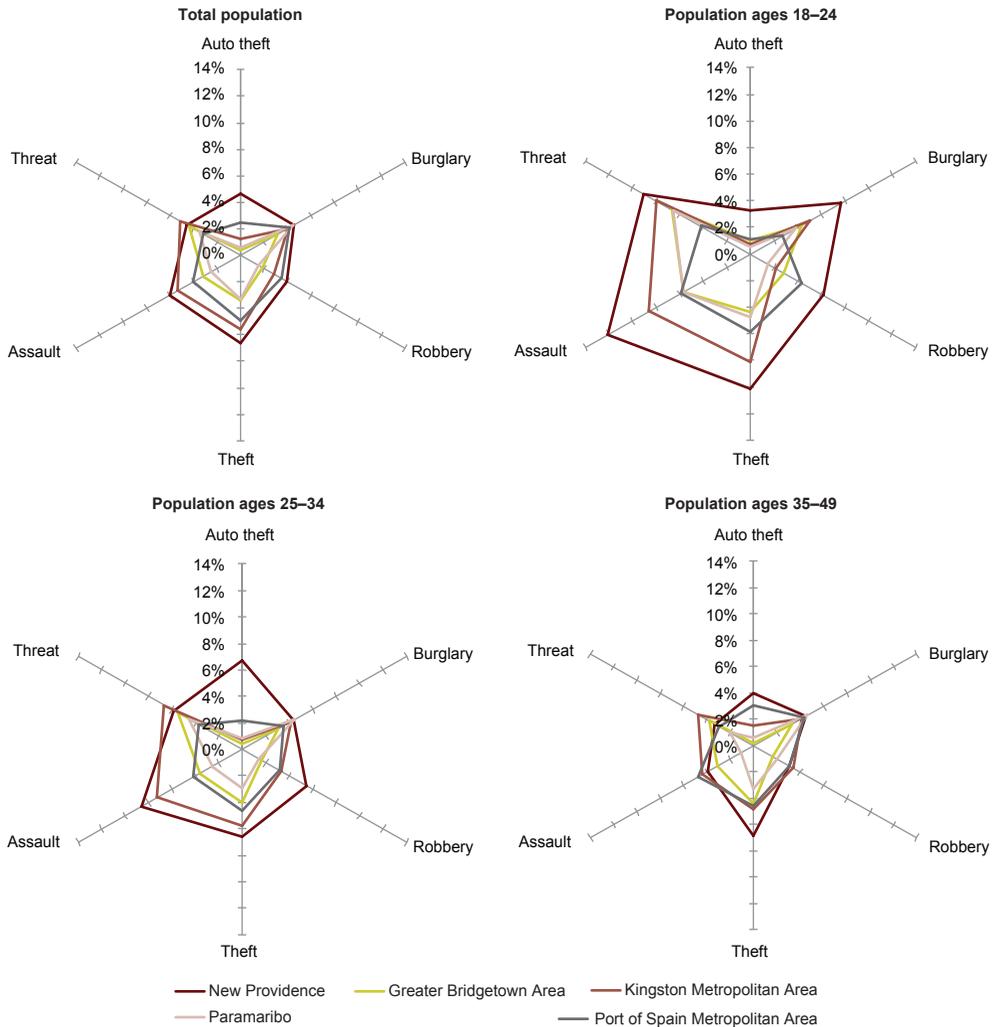
Note: Suriname is not included in this table because the data were not available.

¹ The odds ratio is computed as the percentage of the specified crime involving a particular ethnic group divided by the group's percentage of the population.

odds ratio is an expression of how many more times a group is represented in victimization, compared to its representation in the population.¹⁰ Although those under 18 years old represent nearly 30 percent of the population (of the four countries), they are collectively less than 5 percent of all homicide victims. However, those between the ages of 18-25 and 25-35 are over-represented among homicide victims given their percentage of the population. Homicide rates for these two groups are in many cases double the national rates. In The Bahamas and Barbados, homicide rates were higher for youth (18-25) than for young adults (25-35), while the opposite is true for Trinidad and Tobago and Jamaica.

¹⁰ An odds ratio of 1 implies equal representation, while an odds ratio of more than 1 implies that a group is over-represented in the particular type of victimization.

Figure 5.1: Prevalence of Victimization among Youth versus the Overall Population, by Type of Crime, in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

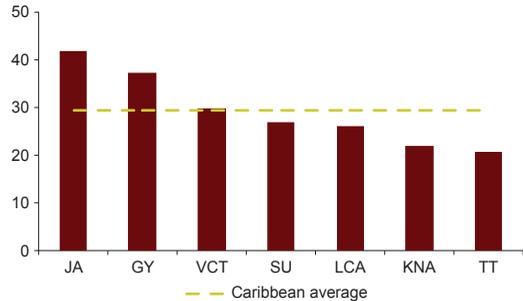
As reported in Chapter 2, young age is also significantly associated with increased risk of victimization for other violent crimes (including robbery and assaults and threats), but has no significant correlation with property crime (theft). Youth prevalence rates for assault were particularly high in Kingston (8.6 percent) and New Providence (12.1 percent). When we compare the victimization rates for the overall population to those of youth (18-24), we find that youth are twice as likely to be victims of assault in New Providence (12 percent versus 6 percent) and one-and-a-half times as likely to be victims of assault in Kingston (8.6 percent versus 5.3 percent)

5.2.2 Bullying

Bullying is another particular type of violence to which youth and children are exposed. It consists of the repeated abuse of power, including deliberate physical or verbal aggression such as name calling, making threats, and, more recently, cyber-aggression. Bullying differs from fighting in that it is used to assert dominance where there is an imbalance in social or physical power. International literature has found correlates between bullying, long-term psychological damage, and potential problem behaviour.¹¹

Data from the most recent Global School Health Surveys (GSHS)¹² in the Caribbean show that nearly 30 percent of youth had been victims of bullying in the past 30 days before the survey (Figures 5.2 and 5.3). Jamaica and Guyana have prevalence rates higher than the world and Caribbean averages. Ruprah and Sierra (2014) found youth lacking enough food at home (a proxy for poverty) were on average 5 percent more prone to be bullied than their peers. Victims of bullying were more often

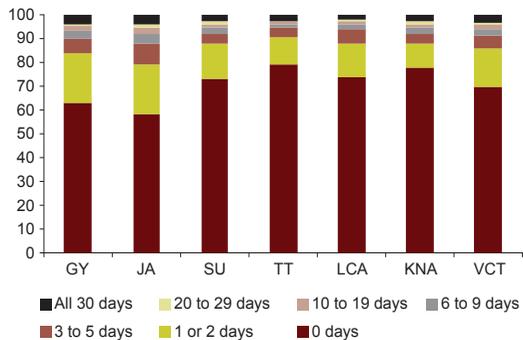
Figure 5.2: Prevalence of Bullying in the Past 30 Days (percent)



Sources: Ruprah and Sierra (2014); and Global School Health Survey Data.

Note: The countries included above are: GY: Guyana, JA: Jamaica, LCA: St. Lucia, SU: Suriname, KNA: St. Kitts and Nevis, TT: Trinidad and Tobago, VCT: St. Vincent and the Grenadines.

Figure 5.3: Composition of Frequency of Bullying in the Past 30 Days (percent)



Sources: Ruprah and Sierra (2014); and Global School Health Survey Data.

Note: The countries included above are: GY: Guyana, JA: Jamaica, LCA: St. Lucia, SU: Suriname, KNA: St. Kitts and Nevis, TT: Trinidad and Tobago, VCT: St. Vincent and the Grenadines.

¹¹ See Wolke et al. (2013) for an analysis of the medium-term consequences of bullying and cyberbullying on different outcomes (e.g., depression, likelihood of smoking, drinking, life satisfaction); see Copeland et al. (2013) for a comparison of behaviours between victims of bullying and non-victims (compared to non-victims of bullying, victims had four times the prevalence of agoraphobia, generalized anxiety, and panic disorder when they became adults).

¹² The GSHS is a self-administered questionnaire given primarily to students 13–17 years old during one regular class period. The survey uses a standardized scientific sample selection process as well as a common school-based methodology, and it features core questionnaire modules, core-expanded questions, and country-specific questions.

Table 5.2: Youth as a Percentage of the Population versus Prison Admissions, The Bahamas and Jamaica

The Bahamas			
	Percent of Population	Percent of Prison Admissions	Odds Ratio
Ages 18–25	12.4	36.9	3.0
Ages 26–35	15.4	31.8	2.1
Jamaica			
	Percent of Population	Percent of Prison Admissions	Odds Ratio
Ages 17–25	17.2	21.4	1.2
Ages 26–35	14.8	33.7	2.3

Sources: Bahamas Correctional Department, 2013; and the 2014 Economic and Social Survey of Jamaica and most recent census data.

Note: Includes both sentenced and remanded admissions. Table should not be used for cross-country comparison, since age categories provided are slightly different.

boys than girls, and on average were lonelier, slept less, and had fewer friends than their non-bullied peers.

5.2.3 Youth as Perpetrators

Administrative data on the age of perpetrators are significantly more limited than those for the victims of crime and violence. Some evidence, however, suggests that large portions of those arrested for homicides (Table 5.3) and imprisoned for crimes (Table 5.2) are disproportionately youth and young adults. In The Bahamas, for instance, prison data indicate that 69 percent of total admissions to the country's only

Table 5.3: Youth as a Percentage of the Population versus Homicide Arrests, Trinidad and Tobago and Barbados

Trinidad and Tobago			
	Percent of Population	Percent of Homicide Arrests	Odds Ratio
Ages 15–24	16.1	24.4	1.5
Ages 25–34	18.7	35.6	1.9
Barbados			
	Percent of Population	Percent of Homicide Arrests	Odds Ratio
Ages 18–25	10.8	33.3	3.1
Ages 26–35	13.7	16.7	1.2

Sources: Royal Barbados Police Force; and the Crime and Problem Analysis Unit of the Trinidad and Tobago Police Service arrest data 2013 and most recent census data.

Note: Table should not be used for cross-country comparison since age categories provided are slightly different.

prison in 2013 were between the ages of 18 and 35. The odds ratio of 3 for Bahamians ages 18–25 indicates that this age group is three times as likely to be imprisoned compared to their representation in the population. In Jamaica (2014), odds ratios for being imprisoned compared to their representation in the population were 1.2 and 2.3 for youth (17–25) and young adults (26–35), respectively.

Similarly, in Barbados (2013), the largest proportion of homicide arrests fell into the age groups of 18–25 and 26–35, with odds ratios of 3.1 and 1.2, respectively.¹³ Finally, in Trinidad and Tobago most arrests for homicide in 2013 were between 15 and 24 years of age (24.4 percent) and 25 and 34 years of age (35.6 percent), with odds ratios of 1.5 and 1.9.¹⁴

5.2.4 Early Problem Behaviours, Risk, and Protective Factors

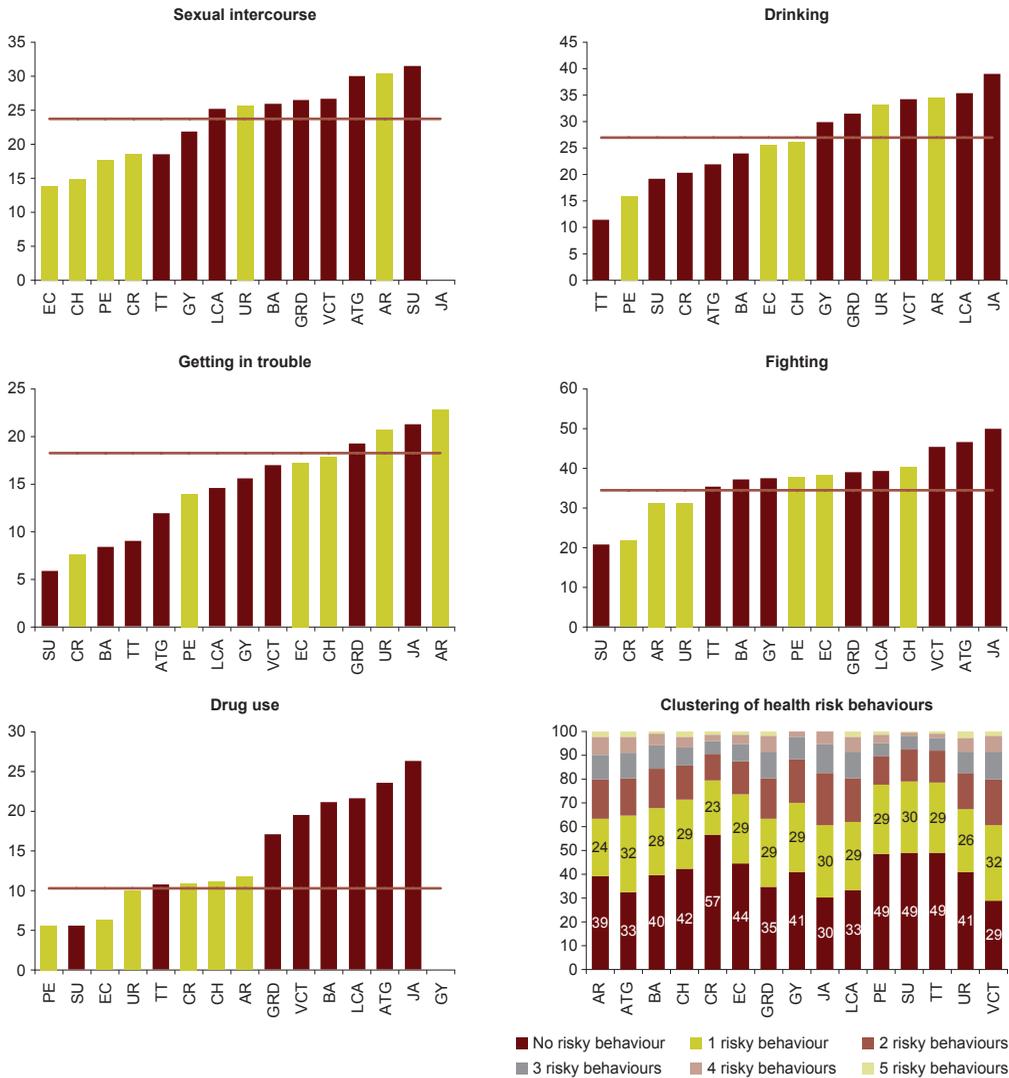
While adolescents under age 18 are a small percentage of victims and perpetrators of serious violent crimes (i.e., homicide), early problem behaviours in adolescents are often linked to later perpetration of violence and offending. A recent IDB study using data from the GSHS investigated the prevalence of five problem behaviours among adolescents ages 13–17—sexual intercourse, drinking, drug use, fighting, and getting in trouble after drinking—in Latin America and the Caribbean (Ruprah, Sierra, and Sutton 2016). Figure 5.4 shows that levels of problem behaviours were generally higher in the Caribbean countries than in the Latin American countries surveyed. Differences between the Caribbean and Latin America were particularly stark for drug use. Finally, similar to previous studies, a clustering of problem behaviours was observed.

Using individual logit regressions for each country, the five problem behaviours were found to be associated with the following risk factors: skipping school, suicidal thoughts, and going hungry (proxy for poverty), with some variation between countries (Appendix 5.1). Protective factors tested included having close friends (social) and engaged parents (measured using a parental supervision index). While having friends was insignificant in many cases, having less engaged parents was significantly associated with problem behaviours in nearly all cases (Figure 5.5 and Appendix 5.1). The prevalence of risk and protective factors in each country is shown in Figure 5.5. A general observation is that risk factors tend to be higher and protective factors lower in Caribbean countries compared to Latin America.

¹³ Homicide perpetrators between 18 and 25 years old were prevalent in the group: 45 percent in 2010, 59 percent in 2011, 38 percent in 2012, and 33 percent in 2013.

¹⁴ Note that data are derived from both convicted and accused persons who have been arrested and charged with a homicide. The available data do not allow for disaggregation into those who have been convicted and those who have been charged but not convicted (some of whom may be innocent). It should also be noted that data on the perpetrator are not available for a large proportion of homicides that occur because in many cases the perpetrators are not identified.

Figure 5.4: Prevalence of Health Risk Behaviours Among Teenagers in the Caribbean and Latin America (percent)

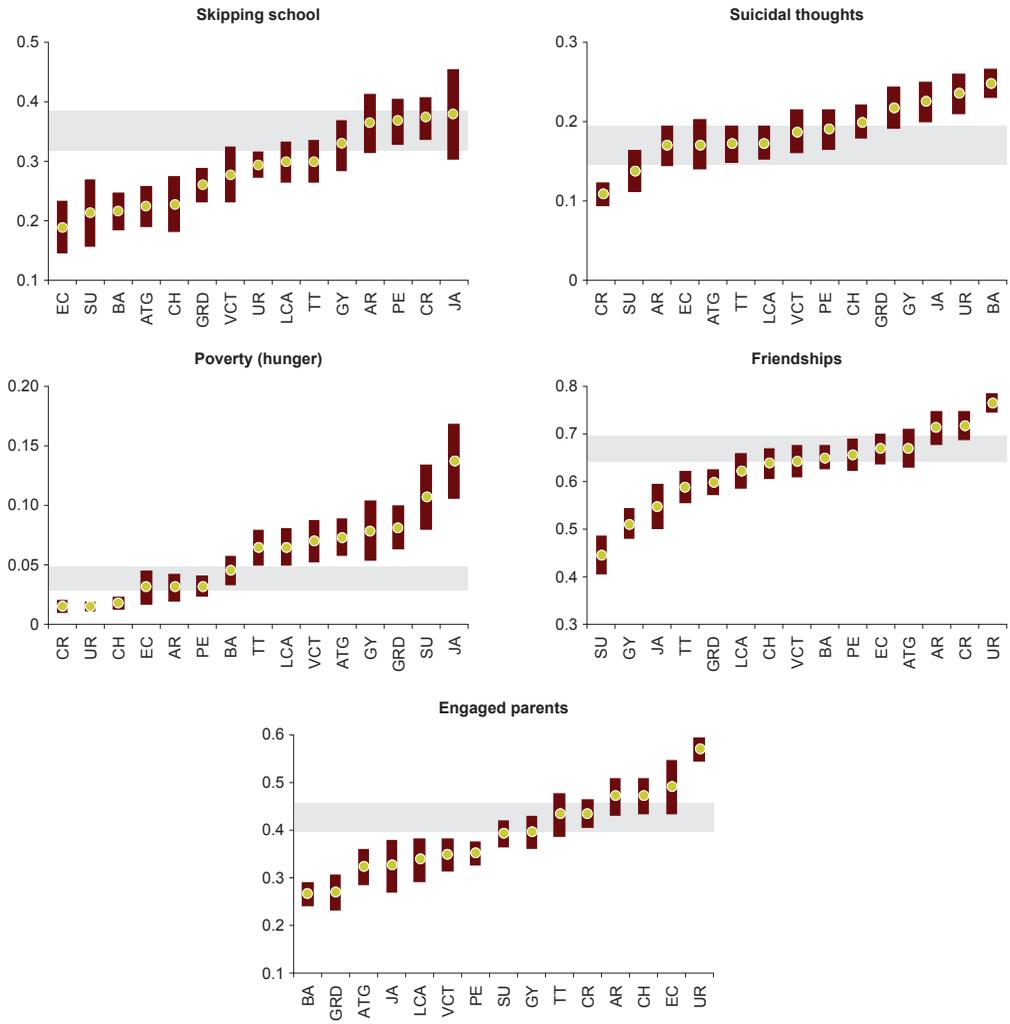


Source: Ruprah, Sierra, and Sutton (2016); and Global School Health Survey data.

Note: The horizontal lines are the unweighted average of the 15 Latin American and Caribbean countries. Green bars indicate Latin American countries and burgundy bars indicate Caribbean countries. The countries included above are: AR: Argentina, ATG: Antigua and Barbuda, BA: Barbados, CH: Chile (Metropolitan), CR: Costa Rica, EC: Ecuador (Quito), GRD: Grenada, GY: Guyana, JA: Jamaica, LCA: St. Lucia, PE: Peru, SU: Suriname, TT: Trinidad and Tobago, UR: Uruguay, VCT: St. Vincent and the Grenadines.

Parenting appears to be one of the most important and significant protective factors for both reducing early problem behaviours and victimization from bullying among youth. Engaged parents were associated with significantly reduced problem behaviours among adolescents in the Caribbean and Latin America (Ruprah, Sierra, and Sutton 2016). While the Caribbean had fewer engaged parents than Latin America,

Figure 5.5: Prevalence of Risk and Protective Factors Among Teenagers in the Caribbean and Latin America



Source: Ruprah, Sierra, and Sutton (2016); and Global School Health Survey data.
 Note: The vertical bars represent the 95 percent confidence intervals. The gray horizontal band represents the average for the 15 Latin American and Caribbean countries within a 95 percent confidence interval. The countries included above are: AR: Argentina, ATG: Antigua and Barbuda, BA: Barbados, CH: Chile (Metropolitan), CR: Costa Rica, EC: Ecuador (Quito), GRD: Grenada, GY: Guyana, JA: Jamaica, LCA: St. Lucia, PE: Peru, SU: Suriname, TT: Trinidad and Tobago, UR: Uruguay, VCT: St. Vincent and the Grenadines.

and the impact of good parenting was weaker in the Caribbean, engaged parenting made a significant difference for both groups of countries (Appendix 5.1).¹⁵ The connection between good parenting and fewer bullying cases is also clear: the regional

¹⁵ See Ruprah, Sierra, and Sutton (2016) for further specifications about the study and its methodology.

victimization rate of teenagers whose parents used better parenting practices was half the rate of those whose parents did not (Ruprah and Sierra 2014).

These findings are consistent with international literature that shows that strong and replicable predictors of offending in later life can include poor parental supervision, criminal parents, parental conflict, and disrupted families (Farrington and Welsh 2007). In fact, longitudinal studies find that poor parental supervision typically predicts double the risk of delinquency (Farrington and Loeber 1999; McCord 1979; Smith and Stern 1997). While more research is needed in the Caribbean on risk factors in other spheres (school, peer, and community), it is clear that family-based programmes that target parental management and supervision have great potential to prevent the development of early problem behaviours, victimization from bullying, and potential subsequent offending, as well as physical abuse and development of aggression.

5.3 Conclusions and Policy Implications

Youth violence is a considerable health and public safety issue in the Caribbean. Youth are over-represented as victims of homicide and other crimes (particularly violent crimes), and they are also over-represented among those arrested and imprisoned in Caribbean countries. This is consistent with much of the international literature that finds that youth is a particularly vulnerable time for individuals who may become involved in early delinquent activity and/or victimized by their peers. Furthermore, youth violence can damage societies at the macro level in a number of ways, including through increased likelihood of participation in criminal organizations, including gangs, a subject that is further discussed in Chapter 7.

There are important gaps in national and regional data on youth violence in the Caribbean, particularly data on its perpetrators. Having better, more reliable, and routine collection methods for information on youth violence both by schools and governments would represent a first step towards effective prevention programmes. While robust longitudinal studies on factors related to later offending are ideal, policymakers in the Caribbean countries need not wait for these studies to be able to reduce youth violence. Making use of the risk and protective factors identified in this chapter and the international literature, policymakers can adapt evidence-based programmes that have been successful in other settings. Programmes should be focused on specific at-risk groups (families and youth displaying a combination of risk factors presented here). The continual testing and evaluation of the impact of these programmes can lead to equally valuable information for reducing crime and violence in the region.

For example, this chapter has highlighted the importance of family as an area of focus for prevention programmes. There are significant potential benefits of improving parenting practices within the Caribbean region. At the international level there are

many parenting programmes that have promising results, such as the Positive Parenting Program (“Triple P”), which has been successful across cultures, socio-economic groups, and various family structures.¹⁶ There are already government-run national parenting programmes in a number of Caribbean countries (including The Bahamas, Jamaica, and Trinidad and Tobago). However, it is not clear what level of resources they receive, to what extent they incorporate evidence-based and data-driven approaches, or how successful they have been. Efforts and resources should be focused on evaluating such interventions so that they may be redesigned, strengthened, or scaled up.

Other programmes targeting at-risk youth can also have an impact on crime and violence, and many are currently being implemented in Caribbean countries. It is important to keep in mind, however, that while some prevention programmes are proven to reduce the likelihood of offending, some are ineffective, and some may be promising but have not been tested adequately. Most of the initiatives in the Caribbean fall into the latter category. Not every social programme will have a direct impact on crime and violence, and it is important that policy in this area be driven by what works, and not by what might work or ought to work.

While an array of other youth programmes have gained popularity—such as military-style boot camps and drug resistance classes taught by the police—the international evidence shows that they do not tend to make much of a difference. On the other hand, a number of programmes targeting risk and protective factors at the individual and family levels have had much success internationally. Social skills training and cognitive-behavioural therapy approaches target risk factors of impulsivity, anger, low empathy, and self-control. They have been found to produce significantly positive results in terms of problem behaviours and subsequent propensity to offend. Early preschool intellectual development programmes directed towards disadvantaged or at-risk children have also shown impressive results in the prevention of subsequent offending and antisocial behaviour. Results of these programmes are not limited to reducing delinquency, but have considerable spinoffs for other life outcomes such as continuing education, employment, family stability, and lower rates of substance abuse. Fortunately, many of the programmes that have already been evaluated worldwide have been held to high scientific standards and the body of evidence is surprisingly accessible for non-experts.¹⁷

¹⁶ The body of evidence of this programme is the most extensive of any parenting programme and is comprised of more than 250 published papers, including eight meta-analyses, 68 randomized clinical trials, 51 effectiveness and service-based evaluations, and 13 single-case studies.

¹⁷ Several websites and interactive tools have been developed to facilitate searches for evidence-based programmes. For examples, see www.crimesolutions.gov, www.blueprintsprograms.com, www.who.int, and www.campbellcollaboration.org.

Appendix 5.1. Regression Results: Odds Ratios

	Argentina					Antigua and Barbuda					Barbados				
	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age	2.034*** (0.16)	1.646*** (0.10)	1.387*** (0.09)	1.002 (0.06)	1.452*** (0.19)	1.526*** (0.19)	1.316** (0.15)	1.144 (0.15)	0.846* (0.08)	1.577*** (0.25)	1.973*** (0.16)	1.032 (0.08)	0.819* (0.09)	0.827** (0.06)	1.372*** (0.12)
Poverty (hunger)	1.215 (0.43)	1.318 (0.54)	1.912* (0.68)	2.724*** (0.89)	2.261** (0.80)	0.964 (0.26)	1.390 (0.33)	1.997** (0.67)	1.726** (0.44)	0.899 (0.27)	0.330*** (0.12)	1.323 (0.43)	0.784 (0.39)	1.321 (0.34)	1.237 (0.41)
Gender (male)	2.327*** (0.32)	1.411*** (0.16)	1.210 (0.18)	3.245*** (0.40)	1.903*** (0.36)	2.506*** (0.52)	1.461** (0.24)	1.586* (0.39)	1.945*** (0.37)	1.836** (0.44)	2.270*** (0.35)	1.732*** (0.24)	1.837** (0.44)	2.411*** (0.33)	1.996*** (0.26)
Social (friends)	1.014 (0.14)	1.101 (0.14)	1.325* (0.21)	1.118 (0.15)	0.804 (0.20)	1.042 (0.17)	1.196 (0.22)	0.904 (0.27)	1.223 (0.16)	1.096 (0.21)	1.127 (0.16)	0.793* (0.09)	0.547*** (0.12)	0.850 (0.09)	0.785 (0.12)
Skipping school	2.072*** (0.21)	2.659*** (0.34)	2.755*** (0.49)	1.606*** (0.24)	2.850*** (0.62)	2.031*** (0.37)	1.705*** (0.28)	2.394*** (0.53)	2.384*** (0.52)	2.549*** (0.50)	1.582*** (0.24)	1.970*** (0.29)	4.536*** (0.89)	1.626*** (0.23)	2.346*** (0.38)
Suicidal thoughts	2.090*** (0.37)	2.587*** (0.44)	2.086*** (0.33)	1.670*** (0.29)	2.165*** (0.58)	2.060*** (0.29)	2.404*** (0.50)	1.892*** (0.41)	1.565** (0.28)	2.475*** (0.43)	—	—	—	—	—
Engaged parenting	0.947 (0.10)	0.579*** (0.08)	0.567*** (0.09)	0.619*** (0.07)	0.576** (0.15)	0.873 (0.14)	0.747 (0.14)	0.789 (0.22)	0.759** (0.10)	0.624** (0.14)	0.705** (0.11)	0.637** (0.11)	0.526*** (0.13)	0.849 (0.10)	0.816 (0.13)
Obs	1,898	1,866	1,878	1,898	1,867	1,115	1,094	1,084	1,115	1,100	1,599	1,528	1,554	1,599	1,543

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Appendix 5.1. Regression Results: Odds Ratios (continued)

	Chile					Costa Rica					Ecuador				
	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age	1.892*** (0.18)	1.728*** (0.10)	1.562*** (0.07)	0.860** (0.06)	2.104*** (0.15)	2.292*** (0.25)	1.953*** (0.16)	1.644*** (0.18)	0.938 (0.05)	1.517*** (0.13)	1.572*** (0.10)	1.593*** (0.07)	1.283*** (0.07)	1.118* (0.06)	1.450*** (0.13)
Poverty (hunger)	1.190	1.176	1.685	1.161	0.312	0.706	1.415	2.113*	1.171	0.797	0.721	0.997	1.365	0.968	2.741***
Gender (male)	3.025*** (0.36)	1.251** (0.40)	1.052 (0.67)	3.724*** (0.38)	1.306 (0.25)	1.517*** (0.36)	1.186 (0.51)	1.574* (0.93)	4.235*** (0.52)	2.648*** (0.41)	3.305*** (0.26)	1.490*** (0.23)	1.180 (0.53)	4.431*** (0.23)	1.552** (0.55)
Social (friends)	(0.49)	(0.12)	(0.10)	(0.55)	(0.28)	(0.20)	(0.16)	(0.36)	(0.51)	(0.36)	(0.72)	(0.16)	(0.12)	(0.74)	(0.23)
	0.852	0.982	0.891	1.126	1.031	1.020	1.078	0.886	0.904	1.752***	1.518**	1.457***	1.159	1.337**	1.498*
	(0.11)	(0.09)	(0.14)	(0.09)	(0.19)	(0.12)	(0.13)	(0.15)	(0.12)	(0.31)	(0.26)	(0.16)	(0.12)	(0.15)	(0.29)
Skipping school	1.558***	2.001***	1.870***	1.675***	2.421***	2.012***	2.093***	2.865***	1.602***	2.115***	2.150***	2.542***	3.159***	1.984***	2.791***
	(0.19)	(0.25)	(0.23)	(0.23)	(0.41)	(0.34)	(0.24)	(0.53)	(0.17)	(0.37)	(0.37)	(0.40)	(0.37)	(0.31)	(0.76)
Suicidal thoughts	2.303***	2.530***	2.341***	1.677***	1.942**	1.880***	2.568***	3.080***	2.024***	2.302***	2.034***	2.296***	2.798***	1.543***	1.590*
	(0.43)	(0.34)	(0.29)	(0.21)	(0.47)	(0.25)	(0.45)	(0.69)	(0.32)	(0.56)	(0.30)	(0.28)	(0.41)	(0.22)	(0.35)
Engaged parenting	0.595**	0.607***	0.480***	0.619***	0.438***	0.616***	0.550***	0.363***	0.579***	0.363***	0.695*	0.630***	0.556***	0.743***	0.391***
	(0.11)	(0.08)	(0.04)	(0.06)	(0.09)	(0.06)	(0.07)	(0.07)	(0.07)	(0.06)	(0.14)	(0.07)	(0.07)	(0.06)	(0.08)
Obs	2,078	2,063	2,064	2,078	2,054	2,611	2,588	2,545	2,611	2,605	2,149	2,139	2,137	2,149	2,140

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Appendix 5.1. Regression Results: Odds Ratios (continued)

	Grenada					Guyana					Jamaica				
	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age	1.555*** (0.10)	1.340*** (0.07)	1.194** (0.08)	1.006 (0.05)	1.584*** (0.16)	1.671*** (0.13)	1.160** (0.06)	1.097 (0.06)	0.864** (0.05)	—	—	1.044 (0.11)	0.838 (0.12)	0.909 (0.11)	1.033 (0.11)
Poverty (hunger)	0.999 (0.25)	1.407** (0.23)	1.444 (0.38)	0.951 (0.19)	1.217 (0.30)	0.746 (0.18)	0.936 (0.15)	1.659*** (0.27)	1.962*** (0.37)	—	—	1.802*** (0.31)	2.908*** (0.69)	1.793*** (0.27)	1.999* (0.72)
Gender (male)	2.704*** (0.39)	1.908*** (0.24)	1.726*** (0.29)	2.879*** (0.45)	3.293*** (0.52)	2.858*** (0.39)	1.596*** (0.16)	1.485** (0.26)	2.863*** (0.30)	—	—	2.048*** (0.32)	2.141*** (0.27)	2.048*** (0.45)	1.542** (0.28)
Social (friends)	1.609** (0.23)	1.142 (0.16)	1.114 (0.27)	0.975 (0.14)	0.711* (0.10)	1.202* (0.13)	1.135 (0.12)	0.991 (0.14)	1.093 (0.08)	—	—	0.821 (0.23)	0.535** (0.11)	0.858 (0.08)	0.848 (0.12)
Skipping school	1.239 (0.16)	2.004*** (0.28)	2.405*** (0.33)	1.586** (0.27)	2.206*** (0.39)	1.477*** (0.17)	1.696*** (0.19)	2.202*** (0.39)	1.771*** (0.22)	—	—	1.756*** (0.21)	2.018*** (0.31)	1.755** (0.35)	1.313*** (0.11)
Suicidal thoughts	1.594*** (0.23)	1.824*** (0.30)	1.666** (0.32)	1.312* (0.18)	2.085*** (0.42)	1.561*** (0.19)	1.914*** (0.21)	2.281*** (0.34)	1.496*** (0.15)	—	—	2.273* (1.00)	1.340 (0.25)	1.335 (0.27)	1.815*** (0.23)
Engaged parenting	0.725* (0.14)	0.700* (0.13)	0.715* (0.13)	0.720* (0.12)	0.647* (0.16)	0.776 (0.12)	0.677*** (0.07)	0.695*** (0.09)	0.699*** (0.07)	—	—	0.829* (0.08)	0.774 (0.20)	0.826 (0.09)	0.518*** (0.06)
Obs	1,411	1,382	1,384	1,411	1,385	2,288	2,177	2,202	2,288	—	—	1,413	1,413	1,475	1,446

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Appendix 5.1. Regression Results: Odds Ratios (continued)

	Saint Lucia					Peru					Suriname				
	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age	1.545*** (0.10)	1.152** (0.06)	1.065 (0.07)	0.793*** (0.04)	1.339*** (0.10)	1.446*** (0.10)	1.464*** (0.10)	1.330*** (0.08)	0.958 (0.04)	1.253** (0.12)	2.244*** (0.16)	1.371*** (0.12)	1.099 (0.12)	0.931 (0.04)	1.484*** (0.17)
Poverty (hunger)	1.339 (0.36)	1.166 (0.35)	1.738 (0.57)	0.814 (0.18)	1.180 (0.36)	0.988 (0.24)	1.122 (0.35)	1.208 (0.41)	1.296 (0.32)	1.182 (0.50)	0.770** (0.08)	1.026 (0.19)	1.481 (0.36)	1.275 (0.21)	1.191 (0.26)
Gender (male)	2.591*** (0.50)	1.730*** (0.26)	1.121 (0.16)	2.172*** (0.35)	2.383*** (0.39)	3.554*** (0.51)	2.129*** (0.38)	1.884*** (0.24)	4.242*** (0.50)	2.946*** (0.69)	1.938*** (0.26)	2.401*** (0.41)	2.257** (0.76)	3.171*** (0.34)	2.102** (0.57)
Social (friends)	0.919 (0.17)	0.836 (0.15)	0.838 (0.21)	1.112 (0.15)	1.015 (0.21)	1.219* (0.13)	1.570*** (0.23)	1.250 (0.18)	1.486*** (0.17)	1.331 (0.28)	0.746** (0.09)	0.989 (0.13)	0.675 (0.20)	0.811 (0.11)	0.675 (0.19)
Skipping school	1.826*** (0.32)	2.719*** (0.48)	2.462*** (0.44)	2.163*** (0.31)	2.492*** (0.37)	1.775*** (0.23)	2.004*** (0.23)	2.494*** (0.30)	1.632*** (0.16)	1.635** (0.31)	1.838*** (0.25)	2.479*** (0.54)	2.722*** (0.53)	1.781*** (0.19)	2.608*** (0.52)
Suicidal thoughts	1.458 (0.27)	1.809*** (0.26)	1.706** (0.38)	1.329* (0.21)	1.949*** (0.33)	2.273*** (0.32)	2.893*** (0.42)	2.557*** (0.35)	1.633*** (0.15)	2.740*** (0.59)	1.772*** (0.27)	2.267*** (0.28)	2.740*** (0.75)	2.031*** (0.28)	1.169 (0.41)
Engaged parenting	0.624*** (0.08)	0.435*** (0.08)	0.556*** (0.12)	0.702*** (0.09)	0.450*** (0.10)	0.711** (0.09)	0.653*** (0.09)	0.575*** (0.09)	0.721*** (0.05)	0.545** (0.15)	0.780** (0.07)	0.795 (0.11)	0.714 (0.14)	0.873 (0.10)	0.623 (0.21)
Obs	1,226	1,205	1,220	1,226	1,196	2,832	2,804	2,687	2,832	2,758	1,641	1,587	1,573	1,641	1,631

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98 **Appendix 5.1. Regression Results: Odds Ratios** (continued)

	Trinidad and Tobago					Uruguay					St. Vincent and Grenadines				
	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs	Sex	Drinking	Trouble	Fighting	Drugs
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Age	1.755*** (0.13)	1.645*** (0.08)	1.326*** (0.10)	1.003 (0.03)	1.589*** (0.10)	1.941*** (0.08)	1.674*** (0.08)	1.428*** (0.06)	0.906** (0.04)	1.623*** (0.11)	1.413*** (0.10)	1.269*** (0.06)	1.090 (0.06)	0.831** (0.07)	1.477*** (0.14)
Poverty (hunger)	0.866 (0.21)	1.247 (0.40)	1.397 (0.35)	1.520** (0.28)	1.088 (0.42)	0.876 (0.30)	1.345 (0.47)	2.490*** (0.81)	1.665 (0.53)	1.054 (0.36)	0.929 (0.24)	1.407 (0.29)	1.597 (0.49)	0.863 (0.21)	1.094 (0.30)
Gender (male)	2.229*** (0.38)	1.970*** (0.43)	1.516 (0.39)	2.672*** (0.36)	2.471*** (0.52)	2.323*** (0.19)	1.099 (0.11)	1.383** (0.17)	3.687*** (0.41)	1.420* (0.28)	5.293*** (0.77)	1.582*** (0.21)	1.370** (0.21)	2.270*** (0.26)	2.515*** (0.43)
Social (friends)	1.187 (0.16)	1.015 (0.14)	0.799** (0.08)	1.090 (0.10)	0.996 (0.06)	0.893 (0.11)	1.194 (0.15)	1.174 (0.16)	0.768*** (0.08)	0.914 (0.17)	1.212 (0.25)	0.987 (0.16)	1.307 (0.24)	1.201 (0.14)	1.089 (0.18)
Skipping school	0.873 (0.14)	1.283* (0.18)	1.350 (0.27)	0.995 (0.10)	1.094 (0.18)	2.151*** (0.25)	2.025*** (0.19)	1.822*** (0.18)	1.901*** (0.17)	2.784*** (0.35)	1.762*** (0.30)	1.865*** (0.21)	2.571*** (0.42)	2.171*** (0.31)	1.793** (0.43)
Suicidal thoughts	2.394*** (0.40)	1.315** (0.15)	2.355*** (0.51)	1.790*** (0.11)	2.947*** (0.50)	—	—	—	—	—	1.950*** (0.40)	1.706*** (0.25)	1.658** (0.34)	1.743*** (0.25)	1.985*** (0.42)
Engaged parenting	0.537*** (0.09)	0.716* (0.13)	0.542*** (0.10)	0.614*** (0.05)	0.446*** (0.09)	0.814** (0.08)	0.597*** (0.05)	0.483*** (0.05)	0.638*** (0.05)	0.475*** (0.08)	0.766* (0.10)	0.752* (0.11)	0.830 (0.11)	0.790* (0.11)	0.469*** (0.09)
Obs	2,680	2,564	2,600	2,680	2,568	3,373	3,328	3,363	3,373	3,325	1,240	1,202	1,221	1,240	1,188

Source: Ruprah, Sierra, and Sutton (2016).

Note: Estimated standard errors, reported in parentheses, are clustered at the classroom level. Significance at the 1, 5, and 10 percent levels is indicated by ***, **, and *, respectively.

How Do Neighbourhood Characteristics Affect Crime?

Heather Sutton and Lucciana Alvarez

The idea that social problems including crime are concentrated disproportionately in certain highly localized geographical locations (i.e., specific municipalities, neighbourhoods, street blocks, etc.) has been the focus of a large body of international literature. What is interesting about these studies is that they focus on places rather than individuals in terms of predicting the likelihood of victimization or perpetration of crime. The extensive literature has led to a better understanding of the tangled web of interaction between neighbourhood socio-economic conditions, physical disorder (trash, graffiti, abandoned buildings, etc.), fear, crime, and social functioning (informal social control, social cohesion, etc.).

The findings on collective efficacy offer potential to explain why some neighbourhoods continue to have lower crime rates despite their unfortunate socio-economic conditions (Sampson 2004). More importantly, they offer hope that concentrated disadvantage in neighbourhoods can be mitigated through bottom-up approaches that help strengthen neighbourhood informal social control and interpersonal trust. Other research on crime hot spots (Braga, Papachristos and Hureau 2014; Sherman and Weisburd 1995; Weisburd 2015) offers evidence that crimes are committed disproportionately in a very small number of street segments and that increasing police presence in these areas can drastically reduce crime. Although studies on how community characteristics affect crime have been primarily conducted in the United States and other developed countries, a few studies have begun to investigate the applicability of these concepts in developing countries. Still, the literature on the implications in the developing world—where violence, poverty, and inequality are typically far greater—is in its infancy. Furthermore, few studies to date have provided a cross-national analysis, and even fewer have analysed how these concepts apply to the Caribbean.

This chapter examines how neighbourhood structural factors and social relations help predict crime. After a review of the international literature, we examine the

differences between neighbourhoods of victims and non-victims. In order to examine the relationship between neighbourhood conditions (disorder, social cohesion, and informal social control) and victimization, we apply a logistic regression controlling for the factors addressed in other chapters in this report. An example of analysis of geo-coded police data in Port of Spain in Trinidad and Tobago offers further evidence of the concentration of crime in micro-territories within neighbourhoods. We wrap up with a discussion on the limitations of this analysis, conclusions, and policy implications.

6.1 Background and Literature Review

More than 30 years of criminological work in the United States and other developed countries has been devoted to a now-familiar theme: social and physical disorder in urban neighbourhoods and their connection to serious crime.¹ Social disorganization scholars have concentrated on the structural socio-economic factors (concentrated disadvantage, urbanization, ethnic homogeneity, residential instability, etc.) associated with crime and violence. Others have focused on tying physical disorder and incivilities to crime. The reasoning was made famous by Kelling and Wilson's (1982) broken window hypothesis, which held that minor public incivilities can escalate into predatory crime because prospective offenders assume that area residents are indifferent to what happens in their neighbourhood. Skogan's disorder and decline hypothesis, which he cemented with empirical research, expands upon the broken windows hypothesis to explore the linkage between public signs of disorder (vacant housing, litter, vandalism) and more serious crime (Skogan 1984, 1990). Sherman (1998) adds that the social rejection of some communities can then lead them to reject common values of society and develop "oppositional sub-cultures" where respect is gained through violence. Over time these problems feed upon one another, threatening to push neighbourhoods deeper down a spiral of decline. An overview of findings over the last 30 years (Skogan 2015; Welsh, Braga, and Bruinsma 2015) reveals empirical evidence that disorder is strongly linked with higher crime levels.

One protective factor examined in the community context is "collective efficacy," defined as trust in neighbours (social cohesion) and willingness to intervene (informal social control). Sampson, Raudenbush, and Earls (1997), using data from Chicago, found that the presence of neighbourhood collective efficacy was associated with a 30 percent lower risk of victimization. More importantly, when collective efficacy was controlled for, the impact of concentrated disadvantage and residential instability on

¹ Many researchers have sub-divided these into social disorder (begging, youth congregating on street corners, public drinking, selling drugs, etc.) and physical disorder (graffiti, broken windows, abandoned cars and buildings, etc.).

victimization was reduced to non-significance. In an extension of this analysis, more recent work has consistently shown that collective efficacy is predictive of crime and disorder levels in cities across the United States and other developed countries.² Additionally, collective efficacy has been negatively associated with youth carrying firearms (Molnar et al. 2004), dating violence (Jain et al. 2010), substance abuse, and violence following exposure to violence (Wright, Fagan, and Pinchevsky 2013).

In the developing world, an increasing number of studies are analysing the influence of neighbourhood characteristics on crime. Some have found that concepts explored by Sampson, Raudenbush, and Earls (1997) and others seem to be applicable to developing-country urban city contexts (Cuesta, Alda, and Lamas 2007; Olavarría-Gambi and Allende-González 2014). Others raise potential questions about the limitations of collective efficacy. Villarreal and Silva (2006) found that disadvantaged neighbourhoods in Belo Horizonte, Brazil, had greater levels of social cohesion that were not significantly associated with lower victimization. Similarly, Cerdá et al. (2008) found that in Medellín, Colombia, collective efficacy was more pronounced in contexts of high disadvantage and associated with higher levels of violence. Morris (2010) presents similar findings regarding homicide in Jamaica—homicides were higher in neighbourhoods with high levels of informal social control and social cohesion. This is explained by the phenomenon of closed garrison communities controlled by organized crime.

Beyond neighbourhoods, there has also been a wave of studies examining police data on “micro-places” (blocks or street segments) where crime is concentrated. As a result of technological advances (including Global Positioning System-coded addresses), the literature on detection and analysis of crime hot spots has steadily grown (Braga, Papachristos, and Hureau 2014; Sherman and Weisburd 1995; Weisburd and Braga 2003). Weisburd (2015) reviews all the findings to date that support the existence of a “law of crime concentration at place.” According to this law, a very large proportion of crime is concentrated in a very small proportion of street segments. More precisely, for eight urban and suburban cities, less than 5 percent of street segments generate more than 50 percent of crime in a given year (Weisburd 2015). Jaitman and Ajzenman (2016) validate this law with similar findings from nine Latin American cities: 50 percent of crimes are concentrated in 3 to 7 percent of street segments.

All of the aforementioned research suggests that in the Caribbean it is worth investigating the geographical locations where victimization and crime occur. Knowing where crime and violence are concentrated, as well as neighbourhood characteristics that might mitigate them, offers potential solutions for targeting these areas with

² For the United States, see Ahern et al. (2013); Maxwell, Garner, and Skogan (2011); Reisig and Cancino (2004); Sampson (2004); and Uchida et al. (2014). For other developed countries see Mazerolle, Wickes, and McBroom (2010); and Sampson and Wikstrom (2007).

practical crime control and prevention interventions. This chapter explores the applicability of this research to the Caribbean capital cities covered in this publication.

6.2 Facts and Figures

6.2.1 Neighbourhood Characteristics and Victimization in Caribbean Cities

Respondents to the Caribbean Crime Victimization Survey (CCVS) module attached to the Latin American Public Opinion Project (LAPOP) Survey were asked a series of questions to gauge their perceptions of *neighbourhood disorder* (physical disorder), *social cohesion* (trust among neighbours), and *informal social control* (willingness of neighbours to intervene for the common good).³ The survey questions used were similar to those used in previous studies (see the methodological note in Appendix 6.1). Index variables were created to measure each of the three concepts.

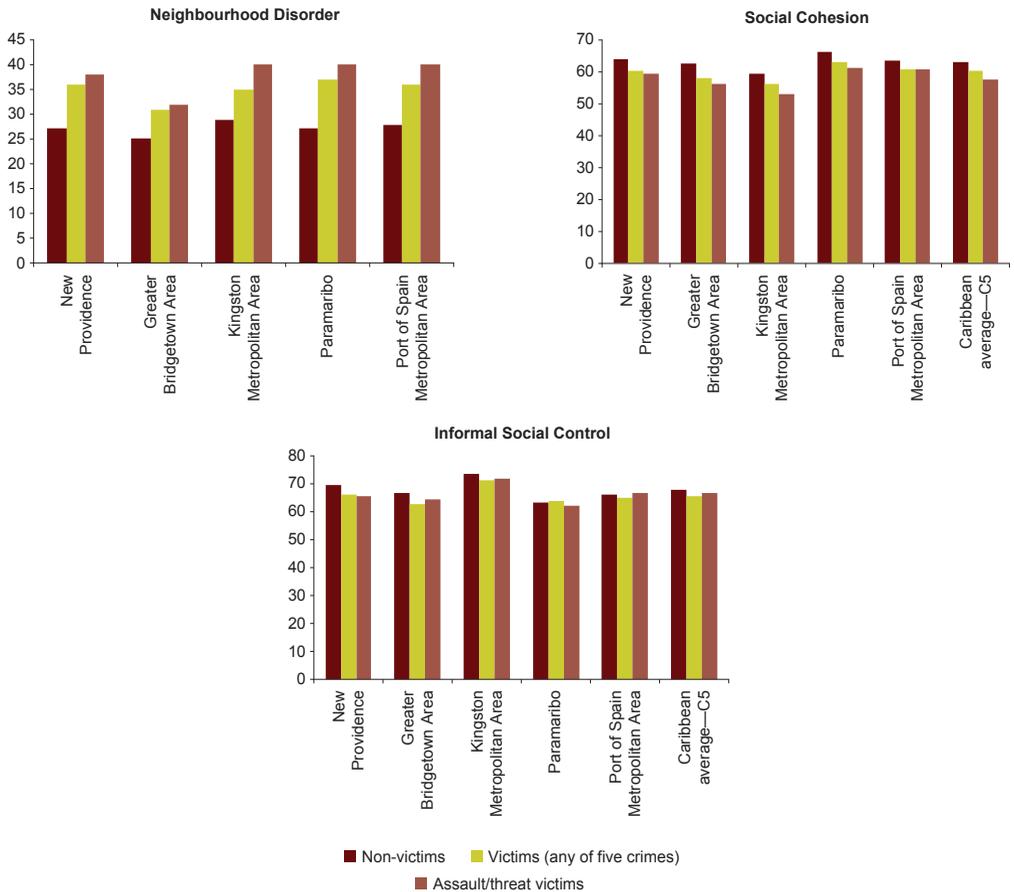
Figure 6.1 shows the average scores of the neighbourhood indexes, recoded on a scale of 0–100, comparing victims and non-victims. Individuals who were victimized in the Caribbean described their neighbourhoods as having higher disorder (8 average points higher), lower social cohesion (3.6 average points lower), and slightly lower informal social control (1.8 average points lower). Differences were even larger between victims of violent crime (assault and threat) and non-victims: disorder (10.3 points higher) and social cohesion (5.3 points lower). It is notable that differences in informal social control were very small and only significant with respect to burglary (T-test, difference 2.3, $p < .05$), but not violent crime (T-test, difference 1.2, $p = .08$).

But could these perceptions of neighbourhood characteristics be capturing the effect of other individual socio-economic characteristics? In order to isolate the relationship between victimization and neighbourhood characteristics, we performed a logit regression controlling for individual characteristics discussed in Chapter 3 (age, sex, marital status, education, and wealth). We also control for gang presence in neighbourhoods, which is covered in Chapter 7. The full regression results are shown in Appendix 3.3 in Chapter 3.

The results show that, even while controlling for other individual characteristics, perception of neighbourhood disorder was the strongest predictor of victimization (Figure 6.2). High perception of neighbourhood disorder was strongly and positively associated with being a victim of any of the five crimes in the last year (Odds Ratio

³ Previous studies have combined social cohesion and informal social control to form a single variable, “collective efficacy” (Sampson, Raudenbush, and Earls 1997). This was based on the finding that they were closely correlated ($r = .80$, $p < 0.001$). However, as in the case of others who suggest that these are separate but related constructs that should be measured separately (Uchida et al. 2014), we found a much weaker correlation ($r = 0.27$, $p < 0.001$ at the individual level and $r = 0.22$ at the district level) and thus maintain the two separate measures.

Figure 6.1: Average Score on Neighbourhood Indexes by Victims versus Non-victims, for Five Crimes, in Five Caribbean Capital City Metropolitan Areas (scale 0-100)



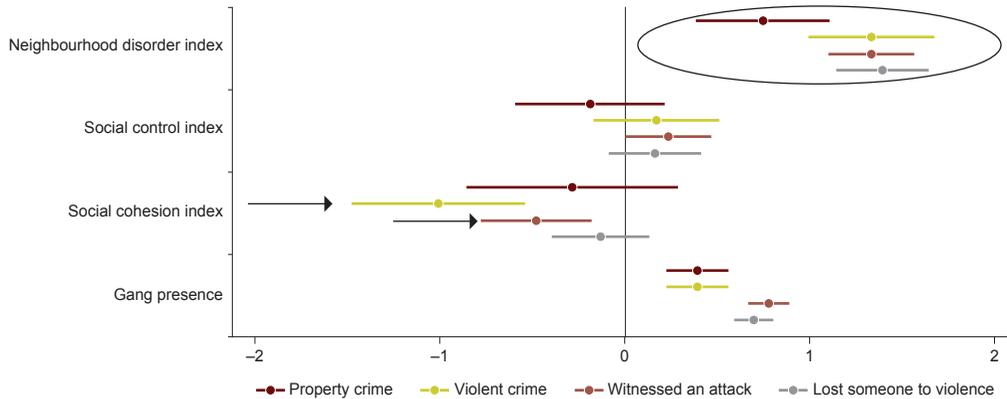
Source: Prepared by the authors with data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project (LAPOP) Survey.

Note: The values shown represent the mean score on the relevant index for each group (non-victims, victims of five crimes, victims of assault and threat) on a scale of 0–100. The five types of crime are car theft, burglary, robbery, personal theft, and assaults and threats of assaults.

2.9, $p < 0.01$). When tested for its relationship to each specific crime type, disorder was associated with property crimes (theft = OR 2.11, $p < .01$; burglary = OR 2.59, $p < .01$). However, the correlation was strongest for violent crime—specifically assault and threat (OR 3.86, $p < .01$), having witnessed an attack where someone was injured or killed (OR 3.86, $p < .01$), and having lost someone to violence (OR 4.04, $p < .01$). This was true for all of the individual capital city metropolitan areas examined.

Social cohesion (trust among neighbours) appears to serve as a protective factor against victimization by violent crime (Figure 6.2). High perception of social cohesion in one’s neighbourhood was strongly and negatively associated with being a victim of

Figure 6.2: Perceptions of Neighbourhood Characteristics Associated with Victimization in Five Caribbean Capital City Metropolitan Areas (logit coefficient, 95 percent confidence interval, n = 14,042)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project (LAPOP) Survey.

Note: The figure displays regression coefficients as dots and their 95 percent confidence intervals as horizontal lines. When a horizontal line does not cross the black vertical line at zero, the variable is statistically significant. The five capital cities are New Providence, The Bahamas; Greater Bridgetown Area, Barbados; Kingston Metropolitan Area, Jamaica; Paramaribo, Suriname; and Port of Spain Metropolitan Area, Trinidad and Tobago.

assaults and threats (OR 0.37, $p < .01$) and having witnessed an attack where someone was injured or killed (OR 0.63, $p < .05$). Regarding property crime, it was predictive of lower odds of being burglarized (OR 0.33, $p < .05$), but had no significant association with theft. Results varied slightly for each of the individual capital city metropolitan areas examined (see Appendix 3.4 in Chapter 3).

Interestingly, informal social control had an insignificant and positive relationship with crime. We would expect that higher informal social control—neighbours being willing to get involved for the common good—would be associated with lower crime levels. However, this factor was only found to be significant in Port of Spain, where it was positively related to prevalence of assaults and threats (OR 2.26, $p < .05$). This is the opposite effect of what is found in much of the international literature. It may be that in circumstances with high levels of violence, and particularly in neighbourhoods with a strong presence of gangs, informal social control is either (1) tapping into the coercive forms of social control exhibited by gangs, and/or (2) not working because neighbourhood efforts to “look out for kids” or intervene may be ineffective against the types of violence perpetuated in these contexts.⁴

⁴ Similar suggestions have been made by Cerdá et al. (2008) in their study of collective efficacy in Medellín, Colombia.

6.3 Conclusions and Policy Implications

Chapter 2 found that most of the crimes that are most acute in the Caribbean—assaults and threat—occur overwhelmingly within the victim’s own neighbourhood. So what are some of the characteristics of these neighbourhoods? This chapter has shown that those victimized in the Caribbean reported their neighbourhoods as having higher disorder, lower social cohesion, and generally lower informal social control compared to the neighbourhoods of non-victims. Differences were even larger between victims of violent crime and non-victims. High perception of social cohesion, or trust among neighbours, seems to be a protective factor against victimization by violent crime and burglary. Interestingly, informal social control had an insignificant relationship with crime when controlling for other factors. Finally, as illustrated by the example of Port of Spain (Box 6.1), crime is also highly concentrated in certain street segments within neighbourhoods.

These findings provide reasonably strong support for concentrating both suppression and prevention initiatives in specific areas where more crimes occur, but also where low social cohesion and high neighbourhood disorder are concentrated. Much research in developed countries (Braga and Bond 2008; Taylor, Koper, and Woods 2011) and some preliminary research in Trinidad and Tobago (Sherman 2013) suggest that focusing attention on highly localized problems can significantly reduce violence and property crime without necessarily displacing crime to other areas.

Hot spot policing, for example, offers potential long- and short-term benefits for the Caribbean. Recent studies indicate that even “soft” policing at hot spots by uniformed civilian police (with few powers and no weapons) can have significant crime reduction effects (Ariel, Weinborn, and Sherman 2016). However, there are a few important factors to keep in mind regarding implementation of hot spot policing in the Caribbean. Quality crime data (with Geographic Information System coordinates) and effective crime analysis is a requirement. Hot spots should also be analysed over the long term. Effective hot spot policing requires what Sherman (2013) describes as the “Triple T approach”: *Targeting* the right places, *Testing* if interventions are reducing crime, and *Tracking* whether officers are actually patrolling where they should be. Furthermore, Sherman et al. (2014) present valuable lessons from the Hot Spot Patrol Strategy in Trinidad and Tobago regarding scaling up from specific hot spot locations to a district-wide focus, and feeding back to the constables on the effects in regular district-level “COP-stat” meetings.

Beyond hot spot policing, community policing and problem-oriented policing can also focus on reducing disorder and increasing social cohesion. In their Campbell Collaboration review report based on 30 randomized experimental and quasi-experimental tests, Braga, Welsh, and Schnell (2015) found that policing disorder was associated with modest reductions in crime. However, police-led problem-solving interventions to

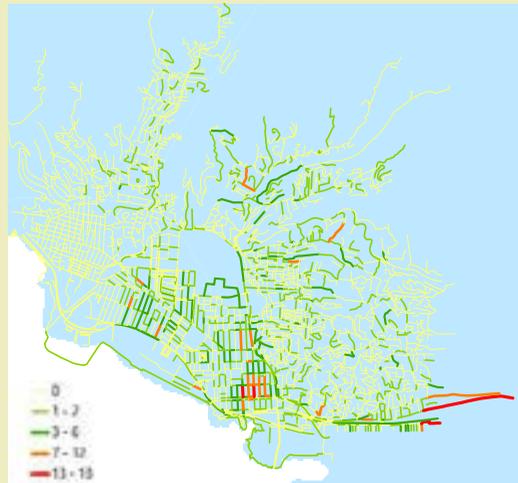
Box 6.1. Crime Concentration in the Port of Spain Metropolitan Area in Trinidad and Tobago^a

An examination of geo-coded crime data from Port of Spain finds three important features that are illustrated in Box Map 6.1.1. First, crime occurs primarily in only a few street segments. Analysing crime incidents recorded by the police in 2014, only 26 percent of the street segments had occurrences of crime. This means that only one in four street segments had a recorded crime in 2014. Second, crime is highly concentrated in the city. Only 3 percent of the street segments concentrate 50 percent of all recorded crime. Third, within most of the neighbourhoods there

are safe and dangerous street segments. This is contrary to the idea that there are bad and good neighbourhoods in terms of recorded crime. As can be seen on the map, the street segments in red had many crime incidents (11 to 18), as did segments in orange (7 to 10) in 2014. Not only are these segments scattered in different parts of the city, they are also adjacent to street segments with no or few crime incidents.

It is important to note that this map is based on police crime records, and that it represents only a portion of the incidents reported in victimization surveys. It is critically important to improve police statistical systems in order to geo-code crime events. Where crime tends to disproportionately occur, how these clustered units evolve, and whether they are stable or sensitive to specific policing interventions are extremely relevant issues to better target policing and, more broadly, crime prevention and control strategies.

Box Map 6.1.1: Number of Crime Incidents in 2014, by Street Segment, in Port of Spain



^a This box was prepared by Laura Jaitman.

change social and physical disorder in specific locations generated the largest impact. Disorder policing should be rooted in community and problem-oriented policing and include community beautification and mobilization components. On the other hand, aggressive approaches such as “zero tolerance” policing do not seem to be effective

Box 6.2. The Bahamas Urban Renewal Programme

Urban Renewal 2.0 is the flagship public safety initiative spearheaded by the Office of the Prime Minister of The Bahamas and administered under the Department of Public Works. The initiative is intended to be a multi-faceted, inter-agency approach to crime prevention and urban deterioration.

From 2002 to 2007, Urban Renewal Centres in high-crime areas in New Providence (nine districts), Grand Bahama, and Abaco (seven districts) provided integrated services through community police officers, social workers, health care professionals, and housing/public works officials. During 2007, the police were removed from the centres, but returned in June 2012. Currently the centres are headed by community police officers.

Generally, centres were reported to have five community police officers (including the head inspector) and one social worker. Other staff—including a nurse, an environmental health inspector, and a housing specialist—may be stationed at one centre or rotate between two or three different centres. Each centre makes its own plan of activities, but some standard activities offered at centres include:

- Boys and girls clubs (after-school activities)
- Youth musical bands
- Programmes for youth suspended from school
- Computer classes (for youth, seniors, and adults)

Source: Sutton (2016).

and can distance police from the community and have negative impacts (Mearns 2015). An interesting Caribbean initiative in this regard is The Bahamas Urban Renewal Programme (Box 6.2). Unfortunately, no evaluations or data have been made available to determine potential programme effects.

Beyond law enforcement, other strategies can be used to build community social cohesion and informal social control. Although the link with violence is significant, little literature exists on effective ways of building social cohesion within communities (Sampson 2004). Some potential steps that could be considered by Caribbean policymakers include (1) educating police, community organizations, social workers, etc., about social cohesion and its importance relative to crime prevention, (2) continuing to fund further research at the neighbourhood level, and (3) developing and implementing community-based strategies. First, it is important to translate these concepts for a larger audience. Continued research can help to identify “strongholds”

and “sinkholes” of social cohesion and social control within neighbourhoods. Community-level strategies can be designed to “build up” existing strongholds and/or “fill in” the sinkholes (Uchida et al. 2014). Based on this identification process, community plans should include strengthening the willingness to do something about community problems, increasing a sense of trust and shared community ownership, reducing incivilities and litter, improving levels of satisfaction with police, and reducing fear. Beck, Ohmer, and Warner (2012) offer several practical examples of how social work practices can be used to build community trust and social control, including through components of restorative justice that work by involving communities in the justice process (discussed further in Chapter 13).

Finally, it is important to recognize that there are limitations to the aforementioned approaches in communities with high levels of violence, gangs, and organized crime. Under such circumstances, communities may in fact already show high levels of internal social cohesion given that they are more closed off and isolated from mainstream society. Residents may develop an oppositional sub-culture that condones violence, and social control may often be determined by gangs providing vigilante justice. In fact, this appears to be the case in several neighbourhoods in Jamaica and Trinidad and Tobago where gangs and organized crime provide policing and welfare services that State institutions can no longer supply. In such circumstances a balanced approach of suppression, intervention, and prevention is critical. Some international programmes, such as the Brazilian UPP (Police Pacification Units) or the U.S. Weed and Seed Program, target intensive police operations to take out high-level criminals in specific territories. This is then followed by intensive investment in community social development in these same areas and a continued community policing presence. These programmes have had mixed results (Lilley 2015; Magaloni, Franco, and Melo 2015; O’Connell, Perkins, and Zepp 2004; Oosterbaan and van Wijk 2015), but in some cases they have been associated with reductions in crime and some improvements in social development and the reintegration of high-crime communities. However, important lessons learned include that when social investment in the community is delayed or fails to occur, community resentment and mistrust builds. Also, the use of lethal force, and corruption involving police forces, are central concerns in the Caribbean context given the history of police invasions in some countries.⁵ The topic of gangs is covered further in the following chapter.

⁵ For example, in Jamaica hundreds of people were killed in crackdowns on gangs in 2009/2010. In Trinidad and Tobago, the Gang/Repeat Offender Task Force was disbanded after it was discovered that it had been involved in kidnappings, tipping off gangs before invasions, and numerous extrajudicial killings.

Appendix 6.1. Methodological Note: Neighbourhood Indexes

This study analyses three neighbourhood indexes: Informal Social Control, Social Cohesion, and Disorder. In order to develop these indexes we selected questions from the CVVS/LAPOP Survey modules that are shown in Table 6A1.1. The index y for household i established in city c has been constructed as a sum of the scores of the questions $x_{i,c}$ divided by the maximum value that a household could obtain for each index X .

$$y_{i,c} = \left(\frac{X_{1,c} + X_{2,c} + \dots + X_{k,c}}{X} \right).$$

For example, if an interviewed household answered that it is very unlikely that the neighbours intervene if children are spray-painting or if there is a fight in the neighbourhood, then the Informal Social Control Index will be the sum of the scores, which is 2, divided by the maximum value that a respondent could obtain, equal to 10. As a result, the Informal Social Control Index in this case is 0.2.

Table 6A1.1: Neighbourhood Indexes

Disorder Index			
LAPOP Question	Variable Description	Score	Label Values
IVOL 20	Amount of Litter in Neighbourhood	1-3	None - A lot
IVOL 21	Amount of Graffiti in Neighbourhood		
IVOL 22	Number of Vacant Lots in Neighbourhood		
Social Control index			
LAPOP Question	Dichotomous Variable Description	Score	Label Values
IVOL 18	Likelihood Neighbours Would Intervene if Children Were Spray-Painting	1-5	Very unlikely - Very likely
IVOL 19	Likelihood Neighbours Would Intervene in a Fight		
Social Cohesion Index			
LAPOP Question	Dichotomous Variable Description	Score	Label Values
IVOL 16	Neighbours Willing to Help Each Other	1-5	Very unlikely - Very likely
IVOL 17	Neighbours Get Along		

Source: Prepared by the authors.

Note: IVOL refers to the series or questions that are part of the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project (LAPOP) Survey.

Gangs and Victimization

Heather Sutton, Lucciana Alvarez, and Luisa Godinez

The appearance of gangs in the Caribbean dates to before the 1970s in Jamaica, Trinidad and Tobago, and The Bahamas, but their proliferation has been especially pervasive since 2000 in the region overall. Some attribute the origin of the early organized violence in Jamaica to the divided electoral disputes of the late 1940s between the founders of the People's National Party and the Jamaica Labour Party. However, during the 1980s and 1990s, most gang violence deviated from political agendas, and began to be related to other types of organized crime including the drug trade (Leslie 2010). Gangs began to develop in The Bahamas in the late 1970s as territorial groups of youths joined together for protection and a sense of group identity. The first violent youth gang in Nassau was named the “Syndicate” and grew out of the East Street area. One of the largest and most well-known gangs, the “Rebellion,” developed as a splinter group, but eventually outgrew the Syndicate in membership and territory (Sutton 2016). In Trinidad and Tobago, gangs multiplied after Sean “Bill” Francis—a community activist and gang leader—was shot 50 times and killed. After that period, police records indicate that both the number of gangs and the number of killings tripled in Trinidad and Tobago (Townsend 2009).

Even though gangs pose a significant problem for the region, data on gangs are, unfortunately, still very limited. Police units have few resources and capabilities to collect and analyse gang information, and very few sound studies have been conducted on the subject in the Caribbean (Harriott and Katz 2015). A marked tendency in legislation and law enforcement, for instance, is to confuse the concepts of organized crime and gangs, which prevents a thorough understanding of each issue. A widely accepted definition of a gang is “any durable street-oriented youth group whose involvement in illegal activity is part of their group identity” (Klein and Maxson 2006, 2). Organized crime, on the other hand, is connected to “enterprise activities, normally drug trafficking, the use of violence, the use of corruption as typical means

and exploitable relationships, and is characterized by its organizational sophistication” (Harriott 2011, 6). Recent scholarly work (Harriott and Katz 2015) has dedicated significant effort to distinguishing between the two. This is important because addressing each may require different approaches.

More attention has recently been directed toward gangs in the region,¹ but increased efforts still need to be made to understand the issue and provide long-term solutions. Currently, police records and self-reported data from gang-involved youth (mainly from school surveys) are the most widely used sources of information on the subject in the Caribbean. This chapter seeks to contribute with yet a new source—nationally representative data comparable among countries on gang presence and activity in individuals’ neighbourhoods. We explore the prevalence of the problem, the characteristics of gang-ridden neighbourhoods, and the connection between gangs and victimization in the Caribbean. The final section of the chapter offers some concluding remarks and policy recommendations.

7.1 Background

Gangs are present in most of the Caribbean, but their power and level of organization varies in each country (Box 7.1). Among the the five Caribbean capital metropolitan areas (C5), Jamaica and Trinidad and Tobago are countries with larger gang problems and where some gangs are more structured. Much less data are available for The Bahamas, Barbados, and Suriname.

7.1.1 U.S. Deportees

Central America and the Caribbean face a somewhat similar situation in terms of the involvement of foreign deportees and/or native returnees in gangs. Following the Los Angeles riots in 1992, the United States began implementing new immigration rules, including repatriation and deportation of non-citizens who had served their prison terms in the United States, most of whom were involved in gangs in the United States. Consequently, between 1998 and 2004, an estimated 31,000 convicted criminals were deported back to countries they barely knew in the Caribbean (UNODC and World Bank 2007). While these numbers have surely fluctuated over time, it is understood that these deportations have continued to occur since the 1990s. Caribbean governments, however, have no idea who the new citizens are: the new U.S. immigration rules banned the disclosing of the criminal backgrounds of the

¹ Harriott and Katz (2015) have recently made a major contribution to the field by providing detailed descriptions of the scope and nature of gangs in the region, as well as thorough discussions on policies and programmes designed to respond to them.

Box 7.1. Gangs in the Caribbean^a

Jamaica:

- 238 gangs operating in 2013 were responsible for 79 percent of all murders during that year, according to the Jamaican Constabulary Force.
- More mature gangs may operate within a hierarchy and have a division of labour (Harriott and Katz 2015), and members of some gangs use symbols and undergo initiation rituals (UNDP 2012).
- Most gangs are concentrated in Kingston (52 percent) and in the larger southern coastal con-urban area from Kingston to Clarendon (68 percent).

Trinidad and Tobago:

- 102 gangs operating in 2012 were often linked with illegal activities such as firearm-related offences, drug trafficking, property offences, and sexual offences.
- Katz and Fox (2010) found that many gangs had one or more of the following organizational qualities: name, territory, regular meetings, rules, punishment, special signs, symbols, clothing, drug sale, and other crimes.

The Bahamas:

- The Royal Bahamas Police Force had no official estimates on gang-related crimes in the country as of 2014.
- Around 18 different gangs have been identified unofficially by the Ministry of Security as operating in The Bahamas. They vary in size, structure, membership, and the extent of involvement with illegal activities.
- Estimates of the number of youth involved in gangs in the country range from 6,000 to 10,000 (Duba and Jencius 2004; OAS 2010).

Barbados:

- Data on gang involvement in Barbados are severely limited, and the Royal Barbados Police Force is unable to estimate the number of gangs or youths involved in gangs.
- Gang violence is not included among the category of motives for criminal activity collected by the police.
- There is an emerging phenomenon of street gangs associated with blocks located in areas with high-rise apartment buildings and districts with State housing. The names of blocks have mimicked names in Jamaica and other societies.
- According to official records, the criminal activities associated with these groups are carried out in a distinctly informal manner and without much organizational structure (Bailey 2016).

^a No data were provided or could be found on gangs in Suriname.

deportees. Upon being extradited back to their country, many of the deportees are reported to have laid the groundwork for the spread of gangs in the region (Black 2004; Duffy and Gillig 2004). While there has been little research on the issue, a joint report by the UNODC and World Bank (2007) found that only a small percentage of deportees were involved in crime, but this small number can be responsible for much gang violence. For example, 224 convicted murderers were deported to Jamaica between 2001 and 2004. Relative to Jamaica's small population, this small group could have had a large impact on crime rates, even if only a small percentage of them participated in crime.

7.1.2 Gang Membership and Structure

Self-reported data from 15,695 school-aged youth surveyed in Antigua and Barbuda, The Bahamas, Barbados, British Virgin Islands, Dominica, Grenada, Guyana, Jamaica, and Saint Lucia show that 17–24 percent of males and 11–16 percent of females reported having been involved in gangs (Ohene, Ireland, and Blum 2005). There is increasing evidence of female participation in gangs. In a national school survey in Trinidad and Tobago, females made up more than 40 percent of self-reported youth gang members in secondary schools (Harriott and Katz 2015) and there is also evidence of a female presence in Jamaican gangs (Meeks 2009). However, female gang members are less likely to come to the attention of the police because they do not generally engage in as many violent acts, or carry a firearm (Small Arms Survey 2010). The role of females in gangs ranges from taking care of the male members to drug transportation, since females get less attention from the police (Small Arms Survey 2010).

The organizational characteristics of Caribbean gangs vary greatly both by country and within countries. Some youth gangs are very loose networks with low-level offending (primarily drug use and fighting). For example, in Trinidad and Tobago, Pyrooz et al. (2011) found that self-identified school-aged gang members reported their gangs to have relatively low levels of organization. Conversely in Jamaica, Leslie (2010) reported that more established street gangs were much more organized. Differentiating between unstructured, low-offending youth gangs and more highly organized street gangs or organized crime is important. This is particularly important when using self-reported secondary school survey data.

7.1.3 Risk and Protective Factors for Joining Gangs

Much international research, some of it in the Caribbean, has centred on the risk and protective factors associated with gang membership, including individual, family, and community-level factors. Ohene, Ireland, and Blum (2005) found that early initiation of sexual activity was associated with gang involvement and weapon carrying among young adolescents. Katz and Fox (2010) found gang involvement in Trinidad and

Tobago was associated with perceived availability of handguns, residential mobility, having parents who favour antisocial behaviour, early initiation of antisocial behaviour, intention to use drugs, having antisocial peers, and having peers who use drugs. Those with social skills, belief in moral order, and interactions with prosocial peers were significantly less likely to self-report gang membership. Additionally, the probability of gang involvement increased as the number of risk factors increased. Although risk factors associated with gang involvement were present in all four domains (individual, family, community, and peer), peer-individual risk factors were disproportionately likely to be associated with gang status. It is important to note the differences in risk and protective factors from one context to another so that programmes can be carefully tailored accordingly (see Box 7.2).

Box 7.2. Similarities and Differences between Street Gangs in Trinidad and Tobago and Arizona (United States)

Data Method: Self-reported data obtained from school-aged youth in Arizona and Trinidad.

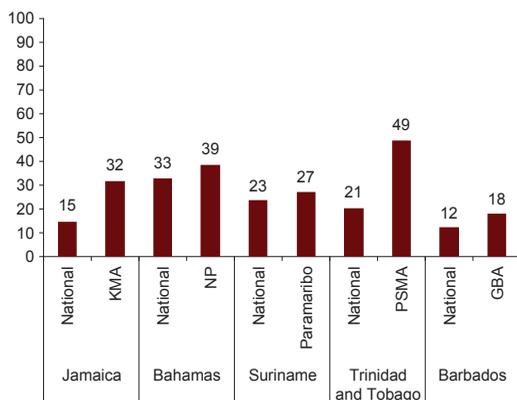
Key Results:

- Youth in Trinidad and Tobago were more likely to report having ever been a member of a gang (12.5 percent versus 7.6 percent in Arizona).
- First gang involvement was significantly older in Trinidad and Tobago (between 11 and 14 years old in Trinidad and Tobago versus 10 to 13 years old in Arizona).
- Gang members in the United States reported significantly higher levels of property crime, drug sales, and marijuana use than in Trinidad and Tobago.
- Most frequently cited reason for joining a gang:
 - Arizona: protection or safety
 - Trinidad and Tobago: friendship
- Strongest risk factors in Arizona: high community disorganization, academic failure, and antisocial peers.
- Strongest risk factors in Trinidad and Tobago: perceived high availability of handguns, high intention to use drugs, low perceived risk involved in drug use, and high sensation seeking.

Conclusion: Researchers and policymakers need to examine the particular sources of membership, risk, and protective factors in different contexts to tailor programmes to each country.

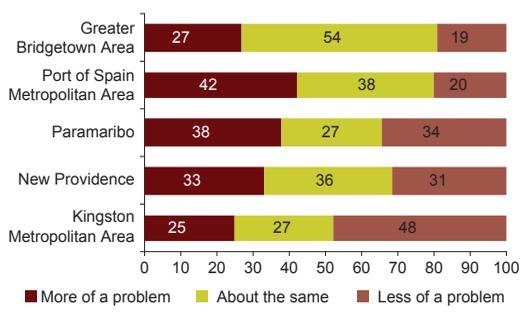
Source: Harriott and Katz (2015).

Figure 7.1: Percentage of Respondents Who Say There Is a Gang Presence in Their Neighbourhood, by Country and Capital City (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The five capital cities listed are KMA: Kingston Metropolitan Area, Jamaica; NP: New Providence, The Bahamas; Paramaribo, Suriname; PSMA: Port of Spain Metropolitan Area, Trinidad and Tobago; and GBA: Greater Bridgetown Area, Barbados.

Figure 7.2: Are Gangs More or Less of a Problem in Your Neighbourhood Compared to One Year Ago? (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: Base: respondents who answered that there was a gang presence in their neighbourhood (N = 3,538).

7.2 Facts and Figures

7.2.1 Prevalence of the Problem

Among respondents to the Caribbean Crime Victimization Survey (CCVS) across the five Caribbean countries examined in this report, one in five (21 percent) reported living in a neighbourhood with a gang presence (Figure 7.1). It is worth noting this is nearly double the percentage found in the United Nations Development Programme’s (UNDP) 2010 Citizen Security Survey (12.5 percent across seven Caribbean countries). Specifically, among the same countries included in the UNDP survey, the CCVS found prevalence to be significantly higher in Jamaica (15 percent versus 10.8 percent), Trinidad and Tobago (21 percent versus 13.9 percent), Suriname (23 percent versus 10.3 percent), and Barbados (12 percent versus 9.2 percent).

The percentage of residents living in areas with a gang presence was higher (28 percent) within the five capital city metropolitan areas in the CCVS survey (Kingston, New Providence, Paramaribo, Port of Spain, and Bridgetown). Gang presence was highest in Port of Spain, where nearly half of the respondents (49 percent) believed that a gang was active in their neighbourhood. Gangs were also believed to be common in New Providence (39 percent) and Kingston (32 percent).

Residents who reported having a gang in their neighbourhood were asked whether they believed that gangs were more of a problem than a year ago, less of a problem, or about the same (Figure 7.2).

In Kingston, almost a majority (48 percent) believed that gangs were less of a problem, while the opposite was true in Port of Spain, where 42 percent believed the problem was worse. The perception of gangs being less of a problem in Kingston may be a reflection of interventions in recent years (Box 7.3).

Box 7.3. Jamaica Case Study: Gang Reduction Community Model—The Example of the Operation against *Presidential Click*

What is the *Presidential Click*? It is one of the oldest and most resilient criminal groups in Jamaica.

What are its characteristics? Greatly embedded in its host community, stable leader, use of violence as a disciplinary tool, creates violent conflicts with other groups and law enforcement, and uses violence to extract protection fees.

What were the components of the operation against *Presidential Click*?

- Requested extradition of Christopher “Dudas” Coke, the leader of the gang.
- Military operation in Tivoli Gardens community to maintain status quo after beginning of operation.
- A national anti-gang campaign.
- Attempted to consolidate Tivoli Gardens as a stronger community.

What is the Gang Prevention Control Strategy that Jamaica has put in place? It is a community-based approach to gang reduction.

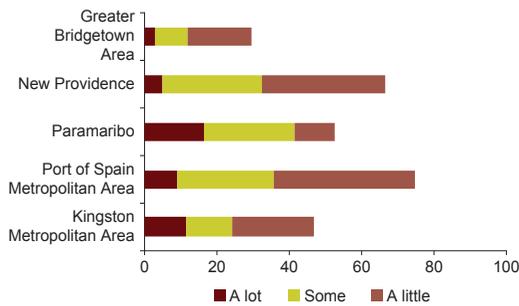
What were its components? ENFORCEMENT to bring gang members into the judicial system and SOCIAL PROGRAMMES to develop community prevention through intervention, social prevention, and law enforcement.

What happened after both the strategy and operation against *Presidential Click* were put in place?

- Homicide rates declined from 62/100,000 in 2009 to 40.3/100,000 in 2012, particularly in Western Kingston, the area where *Presidential Click* is active.
- Even though no thorough impact evaluation has been performed, reductions in homicide rates have been attributed to the decline in gang-related violence (Harriott and Katz 2015).
- There has been gang fragmentation, reflected by an increase in the number of gangs.
- *Presidential Click*'s capabilities and organizational capacity were weakened.

Source: Harriott and Katz (2015).

Figure 7.3: How Much Do Neighbourhood Gangs Get in the Way of You Being Able to Do Everyday Things, Like Going to the Store or Going Out at Night? (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: Base: respondents who answered that there was a gang presence in their neighbourhood (N = 3,474).

Among the same respondents, a total of 59 percent said that gangs get in the way of everyday life activities like going to the store or going out at night (Figure 7.3): 9 percent said gangs get in the way a lot, 22 percent said some, and 28 percent said a little. The impact of gangs on everyday life is most severe in Port of Spain (75 percent say it gets in the way) and New Providence (67 percent say it gets in the way). Interestingly, while gang presence in Kingston was far higher than in Paramaribo, gangs were perceived to be more of an obstacle in Paramaribo. This suggests perhaps a higher threshold for tolerance of gangs

in areas where they are more entrenched and have operated for longer (Kingston).

7.2.2 Gangs and Communities

In many Caribbean communities where State institutions have a limited capacity to control criminal groups, the relationship between the community and gangs has to be considered. Some gangs may act as protectors of the community, others may pose a threat to the community, and some even may do both (Small Arms Survey 2010). For example, it has been reported that citizens in Jamaica often seek justice from local dons (leaders of organized groups) rather than through the country's legal system. Some dons rule by charismatic authority. In some cases they are said to display qualities of individual leadership that inspire loyalty and confidence, and can take on the political administration of territory, seeking the approval of the citizens (Harriott and Katz 2015).

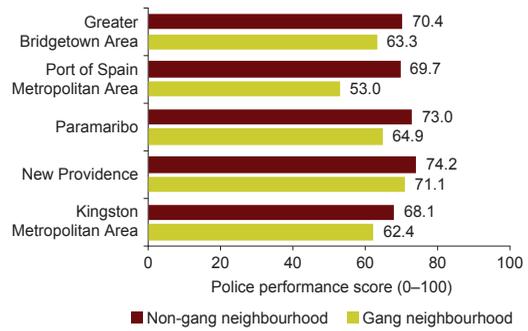
The 2012 UNDP Citizen Security Survey in the Caribbean examined the feelings of the residents towards gangs in their neighbourhoods. While most respondents stated that gangs made their communities less safe, a surprisingly large share of respondents in Barbados (14.3 percent) and Jamaica (14.9 percent) stated that gangs made their neighbourhoods safer. Harriott (2008) notes that leaders of street gangs in Jamaica often become role models in some communities, perpetuating an impression that these criminal organizations bring positive contributions. This belief may also be fuelled by negative perceptions of the police within gang communities.

Residents of gang communities are more disenfranchised from law enforcement. Respondents to the CCVS living in gang neighbourhoods rated police performance lower

(Figure 7.4), and reported police harassment to be far more problematic (Figure 7.5), than residents in neighbourhoods without a gang presence. The greatest discrepancies regarding satisfaction with the police between gang and non-gang neighbourhoods were in Port of Spain (difference of 16.7 points) followed by Paramaribo (8.1 points) Bridgetown (7.1 points), Kingston (5.7 points), and New Providence (3.1 points). It is notable that even in gang neighbourhoods in New Providence the average performance score for police is relatively high. The opposite is true for Kingston, where scores are relatively low among residents of both gang and non-gang neighbourhoods. This is consistent with findings in Chapter 9 regarding generally high levels of trust in the police in The Bahamas and lower levels in Jamaica. Police harassment was particularly acute among respondents in gang neighbourhoods in cities with the highest levels of violent crime—Port of Spain, Kingston, and New Providence.

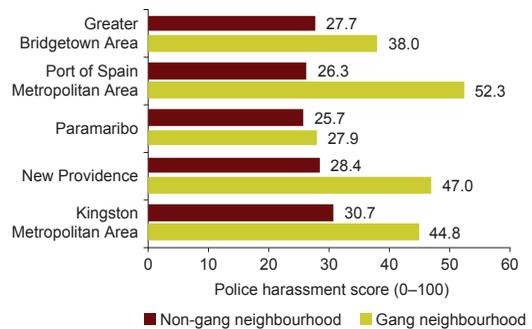
The previous chapter showed that social cohesion, informal social control, and neighbourhood disorder are all related to victimization levels. These three concepts are also highly associated with gang presence (Figure 7.6).² In gang neighbourhoods, residents feel more isolated and less

Figure 7.4: Evaluation of Police Performance in Neighbourhoods with and without a Gang Presence in Five Caribbean Capital City Metropolitan Areas (average score, scale from 0–100)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. *Note:* The question (identified as IVOL14) was: *Taking everything into account, how good do you think the police in your neighbourhood are in controlling crime?* Average scores for respondents from each capital city run from 0–100.

Figure 7.5: To What Extent Is Police Harassment a Problem in Your Neighbourhood? (scale from 1–100)

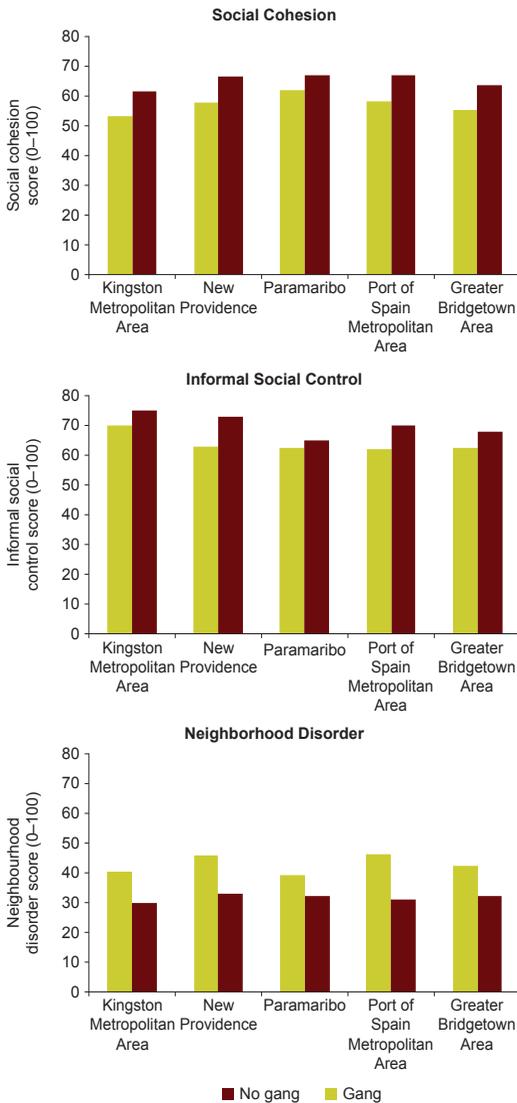


Source: Prepared by the authors using data using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The question (identified as IVOL15) was: *To what extent is police harassment a problem in your neighbourhood?* Average scores for respondents from each capital city run from 0–100.

² To measure these three concepts, one index was created for each concept. See Appendix 6.1 in Chapter 6.

Figure 7.6: Neighbourhood Indexes in Gang versus Non-gang Neighbourhoods in Five Caribbean Capital City Metropolitan Areas



Source: Prepared by the authors using data using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: Average scores for respondents from each capital city run from 0 to 100.

trustful of neighbours (lower social cohesion). They are less willing to intervene for the common good of the neighbourhood (informal social control). Finally, they report higher levels of physical disorder (trash, graffiti, abandoned buildings, etc.)

7.2.3 Gang Violence and Victimization

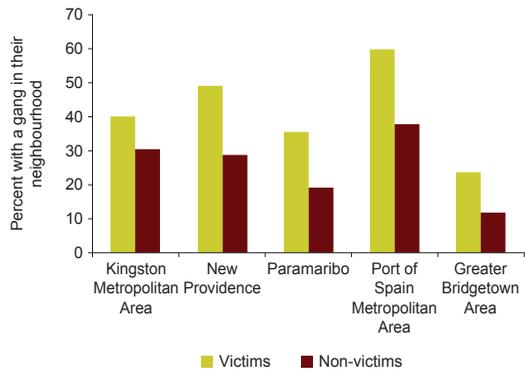
The way gang-related violence is measured is crucial to accurately understand the amount and dynamics of this unique type of violence. Unfortunately, in the Caribbean, law enforcement often does not have a uniform way of accounting for crimes that are gang-related.³ Most of the literature, however, accepts that the lifestyle of a gang member often creates more opportunities for committing a crime and/or being victimized (Harriott and Katz 2015; Higginson et al. 2014; Small Arms Survey 2010). Most gang violence occurs between and within gangs. It is often a response to a threat, real or perceived (Small Arms Survey 2010). Gang members have been found to be more likely than non-gang members to commit property crimes, drug offences, and violent crimes with firearms (Katz and Fox 2013; UNDP 2012). Gang members have also been

³ Law enforcement typically uses two main approaches to classify acts of gang-related violence. First is a member-based approach, which defines a gang-related offence as one that occurs when a gang member is an offender in or a victim of a violent crime. Second is a motive-based approach, which considers the motivation for the crime and if the act of violence was driven by gang interests (Maxson, Whitlock, and Klein 1998).

found to use drugs more frequently than non-gang members, which may increase involvement in crime to finance their addiction (Duffy and Gilling 2004). Finally, gang-related crimes are more likely to occur in public places and involve young offenders and firearms (Small Arms Survey 2010; Spergel 1986).

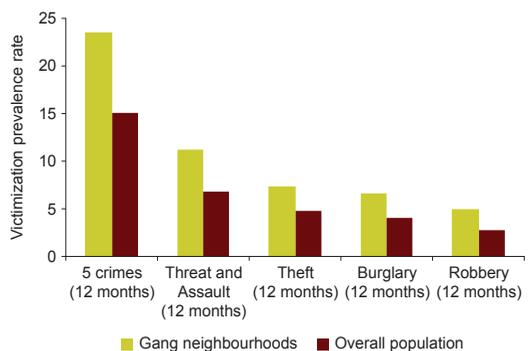
Victims of crime were about 1.6 times as likely to report a gang presence in their neighbourhood (42 percent) compared to non-victims (26 percent) (Figure 7.7). Victimization prevalence for five common crimes among residents in gang neighbourhoods was 8.3 percentage points higher than the overall population in capital city metropolitan areas (23.5 percent versus 15.2 percent) (Figure 7.8). With respect to violent crimes, one-year prevalence of assaults and threats in gang neighbourhoods was 4.4 percentage points higher than the prevalence among the overall population (11.2 percent versus 6.8 percent). Two measures of the prevalence of indirect victimization, that is, having ever witnessed a violent attack or having lost someone to violence, were 17.7 and 17.8 percentage points higher, respectively, for respondents with a gang in their neighbourhoods (Figure 7.9). The most drastic case is Kingston, where 49 percent of the population has lost someone close to violence, and this percentage increases to 69 percent among those living in gang neighbourhoods.

Figure 7.7: Percentage of Victims of Any of Five Crimes and Non-victims with a Gang Presence in Their Neighbourhood in Five Caribbean Capital City Metropolitan Areas



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

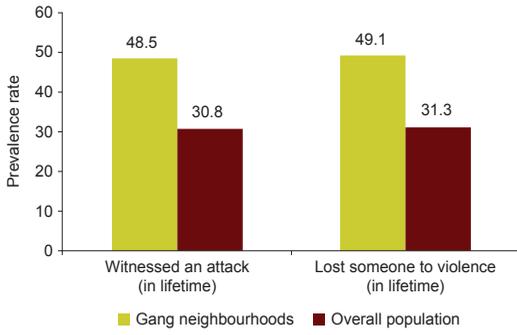
Figure 7.8: Victimization Prevalence Rates in Gang Neighbourhoods versus the Overall Survey Population in Five Caribbean Capital City Metropolitan Areas (percent of population affected)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five capital cities are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados. The five crimes are theft, vehicle theft, burglary, robbery and assault and threat.

Figure 7.9: Prevalence of Indirect Victimization in Gang Neighbourhoods versus the Overall Survey Population in Five Caribbean Capital City Metropolitan Areas (percent of population affected)



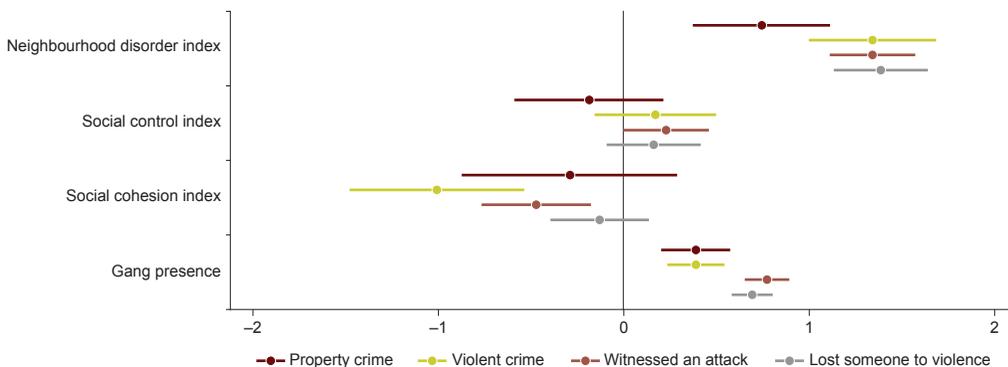
Source: Prepared by the authors using data using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The five capital cities are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

To examine if gang presence in the neighbourhood continues to be a statistically significant predictor of higher victimization even after controlling for other factors, we examine the results of a multivariate logistic regression. We control for the individual characteristics of respondents (see Chapter 3), as well as their reported neighbourhood characteristics (disorder, social cohesion, and social control—see Chapter 6). Figure 7.10 shows that, even after controlling for these factors, living in a gang neighbourhood has a significant and positive relationship with being a victim of crime. Specifically, a gang presence in the neighbourhood was associated with higher victimization

by any of the five crimes (Odds Ratio 1.54, $p < .01$), property crime (theft) (OR 1.48, $p < .01$), violent crime (assault and threat) (OR 1.49, $p < .01$), having witnessed a violent attack (OR 2.18, $p < .01$), and having lost someone to violence (OR 2.02, $p < .01$).

Figure 7.10: Neighbourhood Correlates of Victimization in Five Caribbean Capital City Metropolitan Areas (logit coefficient, 95 percent confidence interval)



Source: Prepared by the authors based on the Latin American Public Opinion Project Survey 2016 dataset.

Note: Determinants to the left of the vertical black line have negative impacts on victimization, while those to the right have positive impacts on victimization. Determinants with confidence intervals that do not cross the vertical black line are considered significant. The five capital cities are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

7.3 Conclusions and Policy Implications

Even though their prevalence and power vary by country, gangs are greatly responsible for crime and violence in the Caribbean. Of CCVS respondents in capital city metropolitan areas, 28 percent reported a gang presence in their neighbourhood (significantly higher than findings of previous surveys). Among respondents with gangs in their neighbourhood, more than half said gangs get in the way of everyday activities. Gang neighbourhoods are associated with lower levels of social cohesion and informal social control and with higher levels of physical disorder. While the direction of causality is unclear, it is likely that gang presence both exacerbates and is fuelled by these neighbourhood characteristics. Finally, it is clear that those living in gang neighbourhoods are statistically more likely to be victims of crime and exposed to violence.

Legally defining what constitutes a gang and gang violence is an important first step. The Bahamas advanced in the right direction by enacting new legislation to this effect in 2015. In Barbados, legislation still treats organized crime and gangs as the same. Trinidad and Tobago has enacted specific gang legislation that criminalizes any participation in or contact with gangs. Yet, its guidelines and principles are vague; they do not limit police or court discretion enough, which may ultimately lead to unintended consequences.⁴

Most gang intervention strategies are varied and multidimensional, and ought to be tailored to the specific risk and protective factors that influence individual gang involvement in each country and community (see Box 7.3 for the case of Jamaica). More efforts need to be made not only to strengthen data collection methods by police units, but also to conduct research to identify specific risk and protective factors that influence gang involvement in each country. Responses that balance legislative actions, suppression, and prevention initiatives appear to be the most effective way forward.

Tougher and more suppressive legal treatment has characterized gang strategies in the Caribbean in the past. As has already been discussed in prior chapters, research indicates that tougher responses to crime are not always the most effective. Investing in police training and developing operational and analytical capacity on gang violence is thus crucial to better shape suppression interventions and to turn away from unstructured reactions to gangs (Harriott and Katz 2015). Increasing specialized police presence in communities with high gang presence is one way to go about it. Removing access to illegal weapons has also been proven to reduce gang violence. Operation Ceasefire, which was implemented in Boston, is an example of a collaborative and

⁴ Too-aggressive suppression strategies may have the unintended result of increasing power and cohesion between gang members (Klein 1995).

comprehensive strategy to address escalating gang activity and the use of guns. It combines law enforcement and prosecution efforts aimed at recovering illegal handguns, prosecuting dangerous felons, increasing public awareness, and promoting public safety and anti-violence measures.

The use of street outreach workers and counselling to help individuals exit gangs has proven successful in reducing gang violence in some contexts.⁵ Locally adapted versions of “outreach workers” and “violence interrupters” are being implemented in several Caribbean communities, including Jamaica (Peace Management Initiative), Trinidad and Tobago (Project REASON), and The Bahamas (Operation Ceasefire). The important next step will be testing these programmes to understand their effectiveness and fine-tune them. Even though there has been no impact evaluation of faith-based interventions, there are also potential benefits from including the faith community in the response against gangs. See Harriott and Katz (2015) for an example of a faith-based intervention in the community of Gonzales in Trinidad and Tobago.

Primary prevention strategies are crucial to achieve longer-term goals such as discouraging youth from joining gangs in the first place. Research shows that focusing on at-risk individuals and specific risk and protective factors can help direct the life trajectories of youth towards more productive and appealing futures. Finally, focusing on vulnerable neighbourhoods, building a sense of community cohesiveness, and improving public services and the institutional presence can be effective in deterring gang membership and growth. Many of these potential approaches are examined in more detail in the final section of this publication.

⁵ For example, a small body of research evidence is now available on the effectiveness of the “Cure Violence” strategy and related strategies. Some communities have experienced the hypothesized reductions in violence (see <http://cureviolence.org/results/scientific-evaluations/>). Others have experienced either no change in violence or even increased violence (Butts et al. 2015).

Guns—The Tools of Violence

Heather Sutton and Lucciana Alvarez

Firearms are a defining feature of violence across the Caribbean. For many years in the region, assaults and homicides were committed mainly with blunt or sharp weapons. However, the rise of crime and violence has been characterized, among other things, by an increased use of guns. While in Jamaica this trend began in the 1970s, Trinidad and Tobago saw an increase in gun use in 2000, followed by the other countries of the Caribbean (UNODC and World Bank 2007). Firearms are now responsible for most murders and many injuries resulting from assaults or armed robberies in the region, especially in Jamaica, Trinidad and Tobago, and The Bahamas. On the other hand, the overall lower levels of homicide with a firearm in crime in the capital cities of Barbados and Suriname are likely related to less frequent use of firearms in violent crimes in these two countries.

This chapter briefly examines the international literature on firearms and violent crime as well as the particular literature regarding the use of guns in crime in the region. We inspect the data from the Caribbean Crime Victimization Survey (CCVS) on the use of guns in crime compared to other countries around the world that have participated in the International Crime Victimization Survey (ICVS). We then turn to determining the levels of gun ownership in the region, the types of guns owned, and the reasons for owning them. Regression analysis used to explore the factors associated with gun ownership finds that the most significant predictors are the belief that guns make you safer and the perception of high levels of gun ownership in one's neighbourhood.

8.1 Review of Literature on Guns, Violence, and Crime

In many countries around the world, including those in the Caribbean, firearms are the “tools” of choice for serious crimes. Globally, firearms were used in 46.3 percent of all

homicides from 2007 to 2011. The Caribbean falls just below Central America as the sub-region with the second-highest average rate (65 percent) of homicides committed with a firearm (Geneva Declaration Secretariat 2015). This is in stark contrast to Asia and Europe, where only 22 percent and 24 percent of homicides were carried out with firearms, respectively. Within the Latin America and Caribbean region, statistical analysis for 23 countries over 1995–2010 reveals a positive correlation between overall homicide rates and the percentage of homicides committed with firearms (Gilgen, Aguirre, and Nowak 2012).

One of the ongoing debates in evidence-based crime prevention involves the relationship between gun ownership and violent crime. International cross-sectional and panel studies have found that gun ownership is associated with higher overall homicide rates (Cerqueira 2014; Hepburn and Hemenway 2004; Kiliyas 1993; Van Kesteren 2013) and particularly with higher rates of female homicides by intimate partners (Small Arms Survey 2004).¹ Similarly, analysis of individual data on victimization and aggregate rates at the country level has found positive relationships between gun ownership and crimes committed with firearms (rates of robbery and assault or threats with guns) (Van Dijk 2008).² This relationship is particularly strong for handguns (Van Kesteren 2013). While some scholars have argued that violent crime has decreased in areas where citizens are allowed to carry weapons (Lot 1998), there seems to be little supporting empirical evidence for this (Wellford, Pepper, and Petrie 2004). Furthermore, a recent meta-analysis of evidence from 130 studies in 10 countries suggests that in certain nations the simultaneous implementation of laws targeting multiple firearms restrictions is associated with reductions in firearm deaths (Santaella-Tenorio et al. 2016). In the Caribbean context it is worth noting that many countries have very rigorous legislation and controls over legal firearm owners and severe penalties for illegal ownership (see Appendix 8.4). Registering a legal firearm is a lengthy and often unsuccessful process (Townsend 2009). Yet, as this chapter will show, firearm use in the commission of violent crime is extraordinarily high. Thus the rise in the availability of guns does not seem to have come about predominantly via legal routes.

Caribbean scholars have examined the evidence of increasing use of firearms in homicides and robberies in Jamaica during the 1990s (Harriott 2002), followed somewhat later by similar trends in Trinidad and Tobago (Agozino et al. 2009). In describing the “weaponization” of civil society connected to illicit drug trafficking in the Caribbean,

¹ Much of this research has been criticized for using inadequate proxies for measuring gun ownership and not using suitable methods to determine causality (i.e., the possibility of crime rates affecting gun rates, instead of the reverse) (Kleck 1991; Wellford, Pepper, and Petrie 2004).

² Using ICVS data from 1996–2000, Van Dijk (2008) finds that countries where firearm ownership is higher have more firearm-related assaults ($r = .26, p < 0.05, n = 56$). That relationship was confirmed in the most recent (2005) ICVS ($r = .62, p < 0.05, n = 30$).

Agozino et al. (2009) noted several consequences of increased drug smuggling through the region: (1) guns became required to protect stockpiles of cash and drugs, (2) the increased availability of guns led to higher levels of violent crime, and (3) once guns permeated local communities, they were often used for interpersonal conflicts not related to the drug market. In Jamaica and Trinidad and Tobago, studies find that the use of guns in homicides is particularly pronounced in gang-related homicides (Leslie 2010; Townsend 2009). Wells, Katz, and Kim (2010), one of the few studies on firearm ownership among offenders, find ownership was greater among arrestees involved in gangs and drug selling. However, Agozino et al. (2009) make it clear that the epidemic of gun violence documented in the West Indies cannot simply be reduced to gang activity, but also involves the broader use of guns in interpersonal conflict.

There is no domestic manufacturing of firearms in the English-speaking Caribbean, although weapons can be imported and sold legally by relatively few local vendors. Few studies investigate the origins of Caribbean guns, but existing information suggests that both legal and illegal guns are obtained in a number of ways. These include being diverted from legal owners in the country and being purchased overseas, legally or illegally, then brought into the country. Diverted weapons can come from both private owners and the protective services. Army and police guns, as well as stockpiles of seized weapons, at times are stolen or go missing (UNODC and World Bank 2007). While there have been few studies on the issue, there is some compelling evidence that many, if not most, of the weapons used in crime are from overseas. Weapons manufactured in the United States, Venezuela, Brazil, Mexico, and the Dominican Republic are both sold legally (for domestic sale to law enforcement and to licensed owners) and smuggled illegally into Caribbean countries (Agozino et al. 2009; UNODC and World Bank 2007). A 2014 report by the U.S. Bureau of Alcohol Tobacco and Firearms (ATF) estimates that, of guns seized in crimes in the Caribbean, the percentages that originated in the United States were 97.9 percent in The Bahamas, 82.6 percent in St. Kitts and Nevis, 57 percent in Jamaica, 46 percent in Trinidad and Tobago, and 40.3 percent in the Dominican Republic.³ Other documented smuggling routes run from South America through Suriname and Guyana to Trinidad and Tobago via fishing vessels and private pleasure boats (UNODC and World Bank 2007).

Firearms procured from the above-mentioned sources, and by the various mechanisms, contribute to the stockpile of circulating firearms. However, due to low capacity to investigate firearm-related crimes and track guns back to their point of origin, it is not possible to know what contribution each of these sources makes to the problem of

³ U.S. Department of Justice, Bureau of Alcohol Tobacco and Firearms, Firearms Tracing System, March 10, 2015. Available at <https://www.atf.gov/resource-center/docs/caribbeancy14152492pdf/download>.

gun violence and criminality. Additionally, there is little evidence regarding the amount of crimes that are committed with legally registered or once-legally registered weapons versus those that have been smuggled illegally into the country. This is certainly a worthy area of research for the Caribbean that should be further explored beyond the confines of this report and may be better tackled with administrative data on guns seized in the commission of a crime.

This chapter makes two unique contributions to the existing literature. Firstly, we examine the amount of violent crimes committed with a firearm in the five Caribbean capital metropolitan areas (C5). Because these figures come from the CCVS, they capture crimes not reported to the police and are comparable to other capital cities around the world in the ICVS database. Secondly, we provide (as far as we know) the first-ever estimate of gun ownership for the C5 based on survey data. While professional criminals are unlikely to have reported illegal firearms in this survey, it is very possible that we have captured information on some firearms that are unregistered for various reasons (they were inherited, registration lapsed and was not renewed, they were purchased informally from a friend or acquaintance for protection, etc.). These are likely not the weapons of organized crime, but they may be weapons used in homicides and assaults that are the result of interpersonal conflict where a deadly weapon was present. Far more research is required to understand the proportion of violent acts that correspond to this type of violence. We also examine the motivations and experiences associated with gun ownership in the region. This contributes to a discussion on the insecurities and anxieties that may be driving some gun ownership.

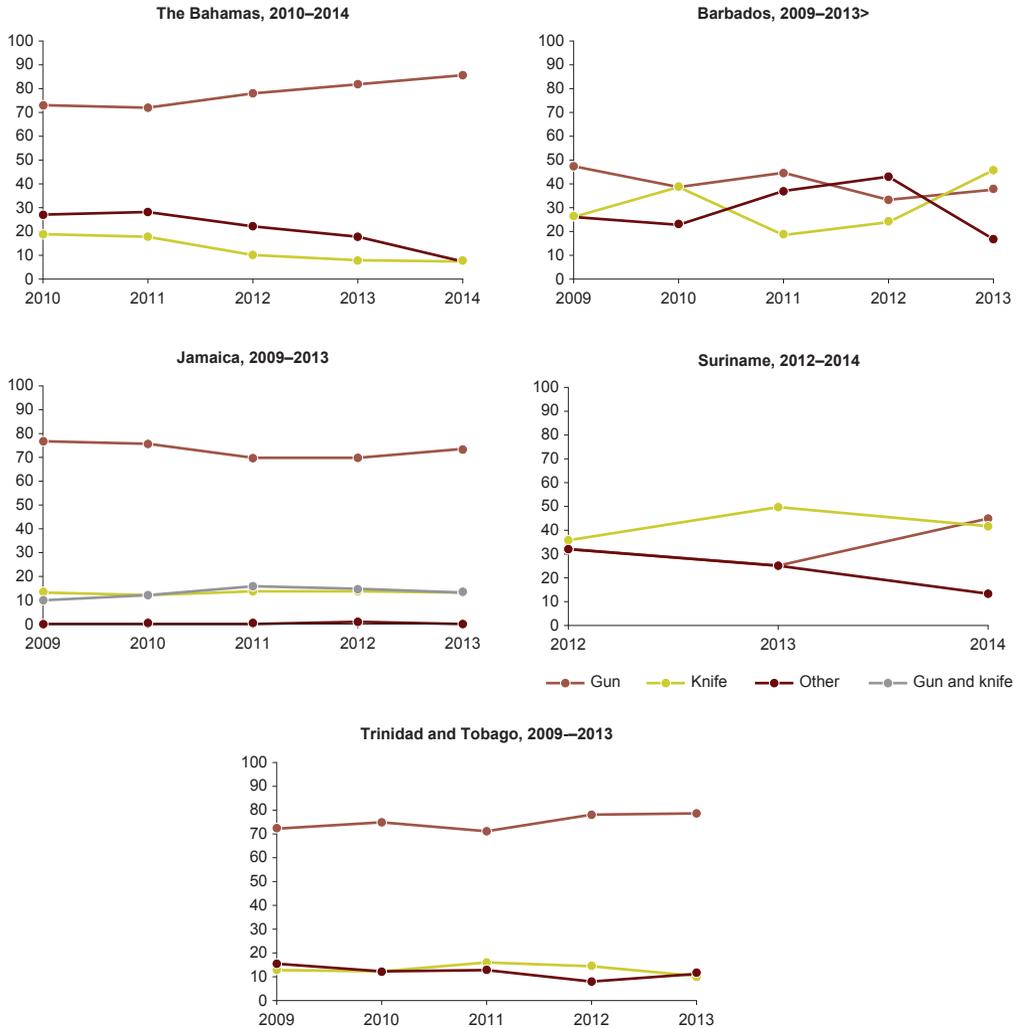
8.2 Facts and Figures

8.2.1 How Often Are Guns Used in Crime?

Within the sub-region, firearms continue to be involved in the vast majority of homicides, including in Jamaica (73.4 percent), Trinidad and Tobago (72.6 percent), and The Bahamas (82.4 percent).⁴ However, the story is different for Barbados and Suriname. In fact, the use of knives in homicides has been more or equally as common in Barbados and Suriname over the last few years for which information is available (Figure 8.1).⁵ One hypothesis for explaining the overall lower homicide rates in these

⁴ Data from 2013 provided by the Jamaican Constabulary Force, Trinidad and Tobago Police Service, and the Royal Bahamas Police Force.

⁵ It is important to note, however, that homicides by firearm may be under-represented by the categories established in official reports. In fact, when looking at homicides and violent deaths of undetermined intent together, we see that homicides by firearms could be significantly higher.

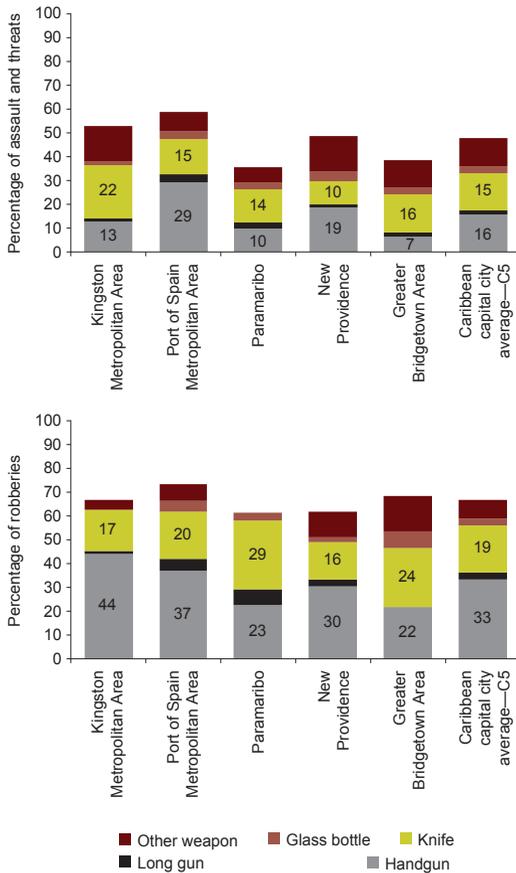
Figure 8.1: Percentage of Murders by Weapon by Country

Sources: Prepared by the authors using data from the Royal Bahamas Police Force, Strategic Policy and Planning Unit; Jamaica Constabulary Force; Crime and Problem Analysis Branch of the Trinidad and Tobago Police Service; Suriname Police Corps; and Royal Barbados Police Force.

two countries is that there are fewer crimes/attacks committed with guns (Figure 8.2), which are more likely to be lethal.

In the five Caribbean capital city metropolitan areas studied here—Bridgetown, Barbados; Kingston, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; and Port of Spain, Trinidad and Tobago—a gun was present in 35 percent of all robberies and in 17 percent of all threats and assaults (Figure 8.2). This is twice as high as the average for other capital cities recorded in the ICVS (Appendix 8.1).

Figure 8.2: Percentages of Crimes Committed by Weapon Type in Five Caribbean Capital City Metropolitan Areas



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Again, inter-regional variance is significant. Gun use in assaults and threats was highest in Port of Spain (31 percent) and New Providence (19 percent). Other cities recorded in the ICVS database with high assault and threats at gunpoint include only Rio de Janeiro (39 percent in 2002). Use of guns in robbery was most common in Kingston (44 percent), Port of Spain (40 percent), and New Providence (33 percent). Other cities where the ICVS has been conducted with similarly high percentages of gun involvement in robbery included Phnom Penh (66 percent in 2001), Rio de Janeiro (56 percent in 2002), Johannesburg (47 percent in 2004), and New York (27 percent in 2004).

8.2.2 Prevalence Rates for Assault and Robbery at Gunpoint

The percentage of the total population assaulted or threatened with a gun in a 12-month period was three times higher in the Caribbean (1.2 percent) than the world average for the ICVS (0.4 percent). In no other world region has that prevalence been as high as in the Caribbean.⁶ However,

residents are more than twice as likely to be attacked with a gun in New Providence (1.9 percent), Port of Spain (1.8 percent), and Kingston (1.1 percent) than in Bridgetown and Paramaribo, which are closer to the international average (0.6 percent and 0.5 percent, respectively). Also uniquely high in the Caribbean are the one-year prevalence rates of assaults and threats with knives (1 percent versus the ICVS average of 0.5 percent).

⁶ See Appendix 8.2 for a breakdown by region.

Table 8.1: Percentage of Households That Own a Firearm, by Type, in Five Caribbean Countries and Capital City Metropolitan Areas

Country	Firearm Owner	Handgun	Long Gun	Rifle
Jamaica	n.a.	n.a.	n.a.	n.a.
Trinidad and Tobago	9.5	4.2	2.6	0.7
Suriname	19.4	6.5	12.9	0.5*
Bahamas	10.9	1.8	4.8	1.0
Barbados	4.1	2.6	0.2*	0.6*
Average	11.1	3.9	5.2	0.7
Capital City Metropolitan Area	Firearm Owner	Handgun	Long Gun	Rifle
Kingston, Jamaica	4.1	2.9	0.5	0.3*
Port of Spain, Trinidad and Tobago	10.1	5.4	1.0	1.2
Paramaribo, Suriname	14.5	8.0	5.7	0.7*
New Providence, The Bahamas	12.3	2.2	5.2	0.9
Bridgetown, Barbados	4.7	3.1	0.1*	0.7*
Average	9.1	4.3	2.5	0.7

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: The question asked (identified as IVOL28) was: *Do you or does anyone else in your household own a firearm, either for self-protection or for another reason?* n.a.: not available.

* Values are based on 10 or fewer observations and should be interpreted with caution.

Prevalence of robbery at gunpoint in the last year was also high (1 percent). This is nearly twice the world average (ICVS) of 0.6 percent.⁷ Again there was great variation within the region, with high rates in Port of Spain and New Providence (both 1.4 percent) and Kingston (1.3 percent), and much lower rates in Bridgetown and Paramaribo (0.4 percent). Higher percentages in the ICVS were found only in some other cities in Latin America.

8.2.3 How Common Is Gun Ownership?

The respondents to the CCVS were asked whether they or someone else in the household owned a firearm and what type. Table 8.1 shows the percentage of households with guns by type at national levels and in capital city metropolitan areas. Note that people are more likely to declare legal guns, and thus these numbers are likely to represent predominantly legal firearms.

On average, 9.1 percent of households in capital city metropolitan areas own a gun. Gun ownership was higher in capital city metropolitan areas than at national levels in all cases except Suriname, where the national rate (19.4 percent) was significantly

⁷ See Appendix 8.2 for a breakdown by region.

Table 8.2: Reasons for Firearm Ownership in Five Caribbean Capital City Metropolitan Areas (percent)

	Kingston Metropolitan Area	New Providence	Paramaribo	Port of Spain Metropolitan Area	Greater Bridgetown Metropolitan Area	Caribbean Average—C5
Hunting	5.2	32.7	37.7	13.4	3.3	18.5
Sport	5.2	16.0	3.1	2.2	8.2	6.9
Collector's item	3.5	1.6	0.2	2.6	3.3	2.2
Protection	63.5	50.3	21.6	64.5	62.3	52.4
Work*	33.9	11.9	47.8	15.6	31.1	28.1
Family property	7.0	2.2	1.9	9.1	9.8	6.0

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

*Armed forces, police, private security.

higher than in Paramaribo (14.5 percent). This is to be expected given that hunting and having a gun for protection from wild animals is common in Suriname's rural interior. Within the region, firearm ownership was highest in Paramaribo (14.5 percent), New Providence (12.3 percent), and Port of Spain (10.1 percent) and lower in Kingston (4.1 percent) and Bridgetown (4.7 percent).

Handgun ownership far outweighs any other type of firearm in Caribbean capital city metropolitan areas. From an international perspective, a handgun ownership rate of 4.3 percent in these cities is relatively high. Rates of other regions and cities are 4.4 percent in Latin America, 7.3 percent in Africa, 3.8 percent in New York, 2.2 percent in Western Europe, and 3.4 percent in Eastern Europe. Ownership of long guns (mainly used for hunting) was more common in The Bahamas and Suriname.

8.2.4 Reasons for Ownership

Around half (52.2 percent) of firearm owners in Caribbean capitals have a gun for protection, 28.1 percent have a gun "in connection to work for army or police,"⁸ and 18.5 percent have a gun for hunting. A relatively high percentage of owners in the region mention crime prevention/protection as a main reason compared to other capital cities in the ICVS database. Having a gun for protection was mentioned as frequently in Latin American capital cities (56 percent), but less often in Asia (44 percent), Eastern Europe (31 percent), Africa (18 percent), and Western Europe (13 percent). The reasons for owning a gun by capital city metropolitan area are shown in Table 8.2. In Paramaribo,

⁸ Survey questions do not allow us to distinguish if these weapons are privately owned or government owned and kept at home.

relatively few owners have a gun for protection (21.6 percent), with most of those who own a gun doing so for work (47.8 percent) and hunting (37.7 percent). This could help explain the high levels of gun ownership, but lower levels of gun violence and crime.

8.2.5 Factors Associated with Gun Ownership

In Chapter 3, the results of a multivariate regression showed that owning a gun is significantly and positively associated with having been indirectly victimized—that is, having someone close die due to violence or witnessing a serious attack, shooting, or beating. In fact, controlling for other variables mentioned in Chapter 1 (individual and neighbourhood characteristics), we find that having a gun in the home is associated with a 5 percent increase of being a victim of one of the five types of crime examined here in the last year, a 4 percent increase in being a victim of assault or threat in the last year, an 11 percent increase in having witnessed a violent attack in one's lifetime, and a 12 percent increase in having lost someone to violence (see Appendix 3.3 for all control variables included in the multivariate regression). Unfortunately, as in all cross-sectional analysis, with only one year of data it is difficult to determine the time order and sequence of events. In other words, we cannot determine whether these guns were acquired before or after a victimization experience. Victimization may be contributing to increased ownership, or the other way around.

In order to better understand the predictors of households with guns, we tested a regression model including several potential explanations for gun ownership found in the literature with relation to households with any gun, households with handguns, and households where a gun is owned for protection.⁹

The covariates tested included:

- Economic resources (household income).
- Fear and experiences of victimization by household members (afraid of walking alone at night in your neighbourhood, burglary in the last year, or having lost someone to violence).
- Beliefs about safety (does having a gun make you safer?).
- Perceptions of collective security (confidence in the police, perceptions of one's neighbourhood disorder, social cohesion, informal social control, gang presence, and availability of guns).

The most important statistically significant predictors of household gun ownership and ownership for protection were the belief that a gun makes you safer. Interestingly,

⁹ See regression results in Appendix 8.3.

neither the home having been burglarized in the last five years, nor the experience of losing someone close to violence, was significantly associated with handgun ownership or having a gun for protection. Confidence in the police, perceived neighbourhood conditions, and the presence of gangs were also not significantly associated with gun ownership.

8.3 Conclusions and Policy Implications

Guns are used in the overwhelming majority of homicides in the Caribbean. Guns are also used about twice as often in robbery and three times as often in assault as the global average. Handgun ownership is relatively high (on par with the average for Latin America and below the average for Africa, but above all other regions) The most common reason reported for owning a gun is for protection (52.2 percent). The best predictor of gun ownership is the belief that having a gun makes you safer, over and above experiences of actual household burglary (in the last five years), fear (being afraid to walk alone in your neighbourhood), neighbourhood conditions, and lack of trust in the police, none of which were significant predictors.

It is clear, particularly from the case of Paramaribo (where gun ownership is high and gun crime low), that firearm availability by itself does not completely explain levels of violent crime. Additionally, in many cases legislation controlling legal gun ownership in Caribbean countries is rigorous. (Appendix 8.4 presents an overview of key components present or missing in Caribbean country legislation.) Legally owned firearms may present different problems from illegally owned firearms. In some countries where ordinary criminal violence is facilitated primarily by access to illegal firearms, tighter control of access to legal firearms may not have a significant impact on homicides. In many Caribbean countries the problem of the illegal arms trade may have to be more effectively tackled. More research is desperately needed on the origins of guns used in crime, smuggling routes, and tactics used. However, the findings of this report are supportive of efforts to continue to implement existing legislation (and identify gaps between the laws on paper and in practice) on legal firearm ownership, while also focusing on reducing illegal movement of firearms in the region.¹⁰ This can be done through a combination of regional and global initiatives, strong national legislation (and its implementation), and police and community initiatives. At the country level the implementation of regulations governing vendors and purchasers of firearms can be a starting point, including background checks and an index of “suspicious” purchasers.

¹⁰ Interventions that act upon factors that predispose individuals to involvement in gun-related crime are discussed in more detail in the chapters on youth violence and policy/programme options.

At the global and regional levels, several initiatives have been undertaken in recent years. These include adoption and ratification of the Arms Trade Treaty. Implementation of national regulations and protocols to implement the Arms Trade Treaty include tighter control of importing, exporting and transshipment among the producing, selling, and destination States that have ratified. Preventing the illicit trafficking in light arms is a responsibility to be shared among all these actors. Some regional initiatives have been undertaken by the Caribbean Community and Organization of American States, with assistance from the United Nations Regional Centre for Peace, Disarmament and Development in Latin America and the Caribbean, to improve marking and tracing of firearms and to destroy surplus weapons deposits. There has also been increased cooperation with the U.S. ATF to trace the origin of firearms used in crimes and apprehended by the police. Given that the illegal movement of firearms is globalized, more international, regional, and bilateral initiatives are necessary.

Furthermore, initiatives such as increased emphasis on the seizure of illegal weapons by police, destruction of stockpiles of seized weapons, and strong protection of police and military weapons stockpiles are key to reducing gun crime. Recommendations have been put forth by the United Nations Programme of Action on Small Arms and Light Weapons in this regard. Chapter 13 examines the evidence related to legislation and programmes that have worked to reduce gun violence internationally.

Appendix 8.1. Percentages of Use of Knives and Guns in Robberies and Threats/Assaults in Five Caribbean Capital City Metropolitan Areas, the Region, and the World

	Percentage of Robberies That Involved a:		Percentage of Assaults and Threats That Involved a:	
	Knife	Gun	Knife	Gun
Greater Bridgetown Area, Barbados	24	22	16	8
Kingston Metropolitan Area, Jamaica	15	44	23	13
New Providence, The Bahamas	16	36	9	22
Paramaribo, Suriname	29	26	13	13
Port of Spain Metropolitan Area, Trinidad and Tobago	16	40	11	32
Average for the Caribbean Capitals—C5	20	33	14	18
Average for capital cities of ICVS world regions	21	15	11	8

Sources: Van Dijk and Van Kesteren (2015) based on the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey; and the International Crime Victimization Surveys (ICVS), 1990–2005.

Appendix 8.2. One-Year Prevalence Rates of Robberies with Knives, Guns, and Overall, and of Assaults/Threats with Knives, Guns, and Overall, for Six World Regions (percent)

One-year prevalence rates	Robberies with knife involved	Robberies with gun involved	All robberies	Assaults and threats with knife involved	Assaults and threats with gun involved	All assaults and threats
Africa (10 cities)	1.0	0.6	4.4	0.8	0.4	6.0
Asia (six cities)	0.3	0.2	1.4	0.2	0.1	2.5
Caribbean (five cities)	0.5	1.0	2.7	1.0	1.2	6.8
Eastern Europe (18 cities)	0.3	0.1	1.9	0.3	0.1	3.3
Latin America (seven cities)	1.7	1.7	6.7	0.6	0.6	4.5
United States (New York)	0.5	0.6	2.3	0.8	0.6	5.1
Western Europe (15 cities)	0.3	0.1	1.4	0.4	0.1	4.0
Average for six world regions	0.7	0.6	3.1	0.5	0.4	4.5

Sources: Van Dijk and Van Kesteren (2015) based on the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey; and the International Crime Victimization Surveys, 1990–2005.

Note: The five cities in the Caribbean are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

Appendix 8.3. Ordinary Least Squares Regression Model 1: Factors Associated with Household Gun Ownership in Five Caribbean Capital Cities

	(1) Gun	(2) Handgun	(3) Protection
Economic Resources			
Household income	0.00614* (0.00250)	0.0038 (0.00234)	0.00329* (0.00142)
Experience and Fear of Victimization			
Victim of burglary (last five years)	0.0254 (0.0208)	0.0103 (0.0165)	0.0209 (0.0193)
Someone close killed by violence	0.0443* (0.0199)	0.0108 (0.0104)	0.0077 (0.00921)
Afraid in neighbourhood at night	-0.0225**	-0.00927	-0.00753
Beliefs			
Having a gun makes you safer	0.129** (0.0261)	0.0670* (0.0274)	0.0897** (0.0202)
Conservative crime ideology	-0.00682 (0.0110)	-0.0161 (0.00795)	0.00247 (0.0126)
Perceptions of Collective Security			
Confidence in the police index	-0.0186 (0.0113)	-0.00923 (0.00581)	-0.013 (0.00789)
Neighbourhood disorder index	-0.0641 (0.0394)	-0.0702 (0.0343)	-0.0399* (0.0164)
Neighbourhood social cohesion index	-0.0091 (0.0408)	-0.019 (0.0304)	-0.0157 (0.0289)
Neighbourhood informal social control index	-0.0554* (0.0252)	-0.03 (0.0324)	-0.0105 (0.0177)
Perception of gun ownership in neighbourhood	0.00141** (0.000304)	0.00104** (0.000220)	0.00108** (0.000231)
Perception of gang presence	0.0076 (0.0107)	-0.0114 (0.00930)	-0.00734 (0.00596)
_cons	0.167** (0.0447)	0.150** (0.0440)	0.0813 (0.0436)
Number	4,188	4,226	4,243

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, and *** $p < 0.001$. The five capital cities are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

Appendix 8.4. Analysis of Existing Gun Control Laws

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Licenses: Only licensed gun owners may lawfully acquire, possess, or transfer a firearm or ammunition	Yes	Yes	Yes	Yes	Yes
Minimum age for firearm possession	18 years old, or 14 years old under the supervision of a person over the age of 21	25 years old	17 years old	None	25 years old
Background checks include:	Criminal, mental health, addiction, and various other records	Criminal, mental health, and addiction	Criminal and mental health	None	Criminal, mental health, domestic violence, and addiction
Domestic violence: Where a past history, or likelihood of family violence exists, does the law stipulate that a gun license should be denied or revoked?	No	No	No	No	Yes
Firearm safety: Is an understanding of firearm safety and the law tested in a theoretical and/or practical training course that is required for a firearm license?	No	No	Yes	No	Yes
Licensing period: Gun owners must re-apply and re-qualify for their firearm license how often?	Every year	Every year	Every 4–5 years	Every year	Every 3 years
Limit on number of guns an individual can possess	No	No	No	One firearm per license	No

(continued on next page)

Appendix 8.4. Analysis of Existing Gun Control Laws *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Limit on quantity of ammunition	A quantity of ammunition authorized by the licensing authority	None	50 rounds of ammunition per year	Up to 100 cartridges for small firearms and no more than 25 cartridges for handguns (pistols, revolvers)	Only the quantity of ammunition indicated in the license
Private gun sales: Are private gun sales allowed?	No	No	Yes, with a special permit	No	Yes
Licensing of dealers: Are dealers required to be licensed?	Yes	Yes	Yes	Yes	Yes
Waiting period: Is there a minimum waiting period for purchasing a gun?	No	No	No	No information	No
Marking: Is a unique identifying mark on each firearm required by law?	Yes	No	Yes	No	Yes
Firearm tracing: Do State authorities carry out recognized arms tracing and tracking procedures?	No	Yes	Yes	No	Yes
Ballistic records: Are ballistic records of firearms and ammunitions required?	No	No	Yes	No information	Yes
Carrying: Is carrying a gun openly in public permitted?	Yes, subject to a valid permit	No	No information	No	No information
Illicit firearms possession: What is the maximum penalty for illegal firearms possession?	7 years in prison and a fine	2 years in prison and/or a \$5,000 fine	15 years in prison and a fine	4 years in prison and a fine	15 years in prison

Source: Prepared by the authors using data from gunpolicy.org and the most recent available legislation in each country.

The Police and Criminal Justice System

Heather Sutton and Lucciana Alvarez

The structure and effectiveness of criminal justice institutions can have an important impact on citizen security. If citizens perceive the police and justice system as legitimate and competent, they will be more willing to report crimes and work with the authorities to enhance their effectiveness. Conversely, these institutions can generate unintended increases in crime and a lower sense of security if they are not transparent, fair, and accountable. Trust in these institutions is important.

Compared to the average for 17 countries in the Latin America and Caribbean region, Caribbean countries have responded to crime with some of the lowest expenditure on the administration of justice and the highest expenditure on the police (Jaitman and Torre 2016). Specifically, The Bahamas, Barbados, and Jamaica are among those that spend the least on justice administration—about 0.06 percent of GDP. Jamaica has the highest percentage of crime-related police expenditures—2.04 percent of GDP in upper-bound estimates—followed by The Bahamas, with police expenditures of 1.59 percent of GDP (upper bound).¹

Using the data available, this chapter examines the effectiveness of and trust in the police and the judicial system. The chapter begins with a review of some of the indicators of police capacity and efficiency: police density, estimated response time, and detection rates. We further explore responses from respondents to the Caribbean Crime Victimization Survey (CCVS) regarding four components of perceived police legitimacy: (1) perception of police performance, (2) victim satisfaction with treatment of their cases, (3) experiences with police corruption, and (4) perceptions of police abuse of power. Where possible, the responses are compared to Latin America (using the 2015 Latin American Public Opinion Project Survey—LAPOP) and other capital cities around the world (using the International Crime Victimization Survey—ICVS).

¹ For more details see Chapter 11.

The extent to which these components influence trust in the police is also explored. We then turn to the available evidence regarding the capacity and effectiveness of the courts and prison and corrections agencies. Case processing delays, backlogs, low conviction rates, high pre-trial detention and prison overcrowding are all examined. Some promising Caribbean initiatives to disrupt this cycle are examined. We finish the chapter with conclusions and policy implications.

9.1 Police

9.1.1 Capacity, Responsiveness, and Effectiveness

Adequate police size and density are necessary but not sufficient conditions for providing citizen security. Relatively high investment in the police (see Chapter 11), coupled with small populations in the Caribbean, has resulted in a high police-to-population density compared to the average for Latin America and around the world (Table 9.1).

Table 9.1: Police Density in Four Caribbean Nations and World Regions

Country	Rate of Police Personnel per 100,000 Population
Jamaica	424
The Bahamas	846
Trinidad and Tobago	477
Barbados	504
World average	366
Regional averages	
Latin America and Caribbean	436
East Asia and Pacific (all income levels)	340
Europe and Central Asia (all income levels)	361
Middle East and North Africa (all income levels)	325
North America	206
South Asia	520
Sub-Saharan Africa (all income levels)	159

Source: Prepared by the authors using United Nations Office on Drugs and Crime criminal justice data for 2014 or the latest available year.

Note: World and regional averages are for the year with the highest amount of countries reporting (2012).

This suggests that in general coverage is not a particularly critical issue. The more challenging elements would seem to be adequate training and effective use of human resources.

High police density has not necessarily resulted in rapid police response or greater police effectiveness in investigating crime. Of those polled in the CCVS in capital city metropolitan areas in five Caribbean countries, an average of 56 percent said that if someone were entering their home, it would take the police more than 30 minutes to arrive on a typical day around noon. Nine percent said that it would take more than three hours, while 2.5 percent said there are no police in their area. Figure 9.1 shows the survey respondents' perception of police response time by capital city metropolitan area. The quickest perceived response times were in Paramaribo and the slowest in Bridgetown. At the national level,

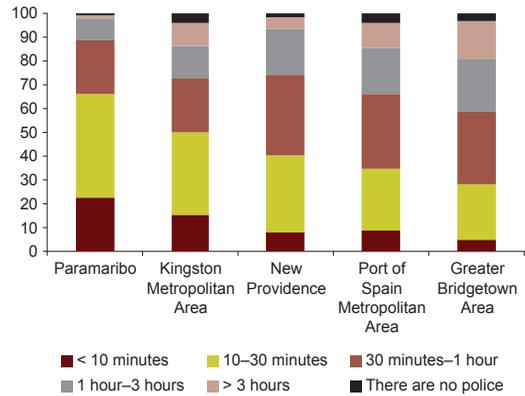
survey responses show perceived police response times in the Caribbean are better than the Latin American average (Latin America Public Opinion Project—LAPOP), but far below Canada, the United States, Argentina, and Uruguay (Figure 9.2).

When it comes to investigation of crimes, police detection rates² for the most violent crimes (i.e., homicide) are generally low (Table 9.2). For the year with the most recent available data, we see that roughly half or less of all homicides were resolved by the police in The Bahamas (51 percent detection), Jamaica (40 percent), and Trinidad and Tobago (14 percent). Clearance rates for homicide in some other countries, where available, include 64 percent in the United States

(2013), 75 percent in Canada (2010), and 90 percent in the United Kingdom (2013).³ Detection rates for other crimes are generally even lower than for homicide: for the year of most recent available data, the average detection rate for all Category 1 Serious Crimes in Jamaica was 32.1 percent (2014) and for Major Crimes in Trinidad and Tobago was 31.7 percent (2015).⁴

Notably, in Trinidad and Tobago detection rates are extremely low and have been declining since 2000 (Figure 9.3). In the case of murder, detection rates averaged 64.8 percent between 1990 and 1999, and then plummeted to 14 percent by 2015. The number of crimes and detections began to diverge substantially in 2000 when crimes began to increase, but clearances did not follow (see the example of homicides

Figure 9.1: Estimated Police Response Time in Five Caribbean Capital City Metropolitan Areas (percent)



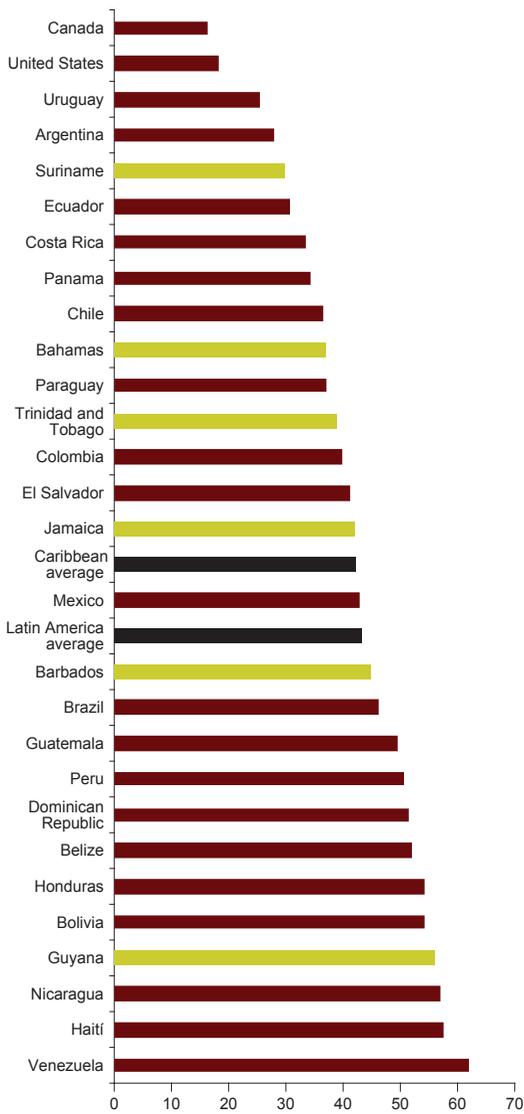
Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as INFRAX) was: *Suppose someone enters your home to burglarize it and you call the police. How long do you think it would take the police to arrive at your house on a typical day around noon?*

² Police forces in these three Caribbean countries use the term “detection rates” instead of clearance rates, but the definition is equivalent.

³ The sources for the three countries mentioned are as follows: the U.S. FBI Unified Crime Reports 2013 and Statistics; the Canadian Centre for Justice Statistics, Homicide Survey 1961–2010; and the Home Office Statistical Bulletin, Crimes Detected in England and Wales 2012/13.

⁴ Category 1 serious crimes in Jamaica include murder, shooting, rape, aggravated assault, robbery, and break-in and larceny from a person, dwelling or motor vehicle. Major crimes in Trinidad and Tobago include murder, woundings and shootings, rapes, incest sexual offences, serious indecency, kidnapping, burglaries and break-ins, robberies, fraud offences, larceny and larceny of motor vehicles, and larceny from a dwelling house. Data were available only for Jamaica and Trinidad and Tobago.

Figure 9.2: Estimated Average Police Response Time by Country in the Americas (Average score 0-100; higher score indicates longer police response time)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as INFRA) was: *Suppose someone enters your home to burglarize it and you call the police. How long do you think it would take the police to arrive at your house on a typical day around noon?*

in Figure 9.4). Changes in the volume and nature of crimes (armed and gang-related), combined with insufficient organizational capacity to detect and respond to these changes, may explain the declining rates (Maguire, Wells, and Katz 2011).

9.1.2 Perceptions of Police Competence and Performance

The public's perception of the performance of the police and their ability to control crime goes to the heart of perceptions of police legitimacy. The 2014/2015 CCVS included two questions to gauge public perception of police competency and performance. Respondents were asked how satisfied they felt with police performance in their neighbourhood, as well as how good a job they believed the police were doing in controlling crime. Most respondents from the five capital city metropolitan areas surveyed (72 percent) were satisfied with the police. However, more than one in four were dissatisfied or very dissatisfied (28 percent). Figure 9.5 shows the breakdown for each city. Satisfaction was notably highest in New Providence and Paramaribo, and lowest in Port of Spain. In Chapter 7 we saw that satisfaction was lower for respondents who reported a gang presence in their neighbourhood.

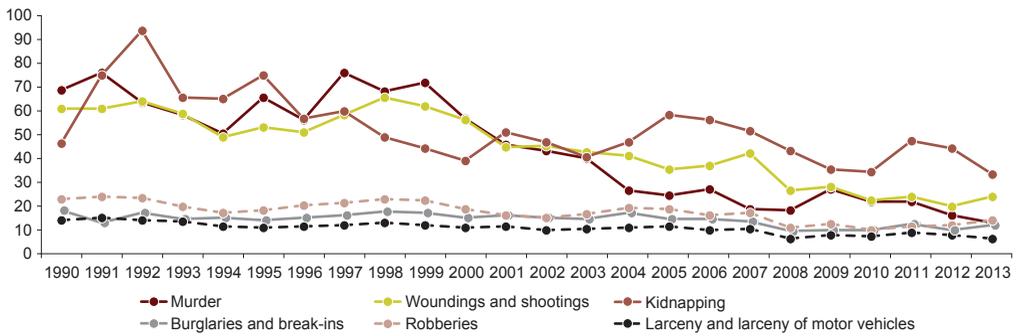
The results of satisfaction were mirrored in the responses regarding the perception of how well police are controlling crime (Figure 9.6). Less than half (44 percent) of respondents in Port of Spain felt the police are doing a very good or fairly

Table 9.2: Percentage of Homicides Resulting in Charging of a Suspect, Jamaica, The Bahamas, and Trinidad and Tobago (percent)

	2010	2011	2012	2013	2014	2015	Average
Jamaica	—	42	39	41	40	—	40
The Bahamas	70	50	71	51	—	—	61
Trinidad and Tobago	22	22	16	13	17	14	18

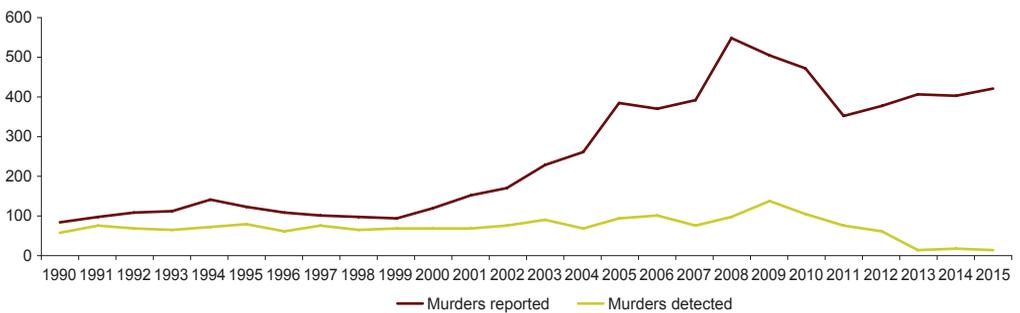
Source: Prepared by the authors. Homicide detection rates were calculated using data from the Jamaica Constabulary Force, Statistics and Information Management Unit; Royal Bahamas Police Force, Strategic Policy and Planning Unit; and the Crime and Problem Analysis Branch of the Trinidad and Tobago Police Service. Data were not provided for Barbados and Suriname.

Figure 9.3: Crime Detection Rates in Trinidad and Tobago (percent)



Source: Prepared by the authors using data provided by the Crime and Problem Analysis Branch of the Trinidad and Tobago Police Service.

Figure 9.4: Murders Reported versus Murders Detected in Trinidad and Tobago

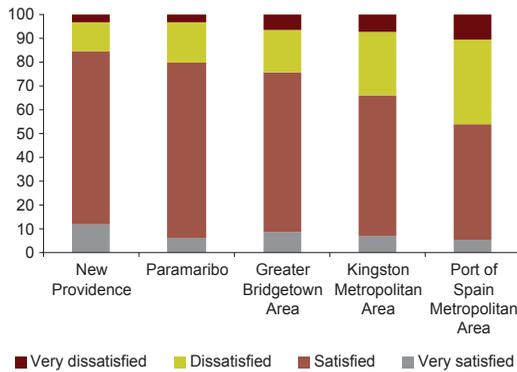


Source: Prepared by the authors using data provided by the Crime and Problem Analysis Branch of the Trinidad and Tobago Police Service.

good job. Conversely, in New Providence 75 percent rated the police as doing a very good or fairly good job.

To put these findings into international perspective, it is worth comparing them with other countries in the Americas polled by LAPOP in 2014 and other capital cities in

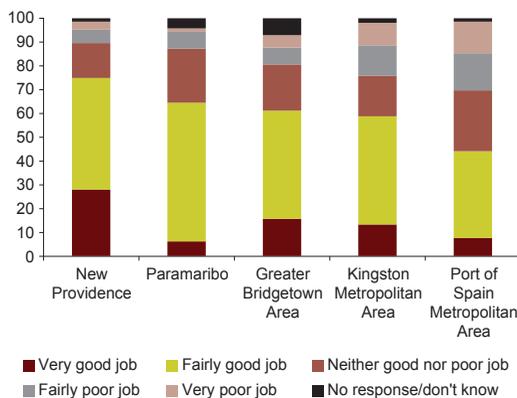
Figure 9.5: Satisfaction with Police Performance in Neighbourhoods in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as Pole2n) was: *In general, are you very satisfied, satisfied, dissatisfied, or very dissatisfied with the performance of the police in your neighbourhood?*

the Caribbean are perhaps more service-oriented towards reporting victims than their peers in Latin America can be tested by looking

Figure 9.6: How Good of a Job Are the Police Doing Controlling Crime? (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as IVOL14) was: *Taking everything into account, how good do you think the police in your neighbourhood are in controlling crime?*

the ICVS database. Figure 9.7 shows that in response to the same question, Caribbean respondents were more satisfied than those in Latin American countries. In fact, respondents in The Bahamas ranked the police on par with respondents from the United States and just below Canada. When comparing Caribbean capital cities to other cities in the ICVS (Table 9.3), the results show that the Caribbean public assesses police performance relatively favourably, and significantly so in comparison with Latin American or Eastern European countries. However performance ratings are still below those in capital cities of the United States, Asia, and Western Europe.

The hypothesis that the police in the Caribbean are perhaps more service-oriented towards reporting victims than their peers in Latin America can be tested by looking at the percentages of victims who reported the crime to the police and are satisfied by their treatment. Table 9.4 shows that, on average, less than half of victims who reported their crimes to the police were satisfied with treatment of their case. While this may seem low, satisfaction is on par with the international average. Although lower than satisfaction in New York or in the European Union countries, satisfaction in the Caribbean was again higher than in Latin America, Africa, and Eastern Europe (Appendix 9.1).

9.1.3 Abuse of Power and Respect for Citizens' Rights

Abuse of power by police forces and disregard for citizens' rights can also

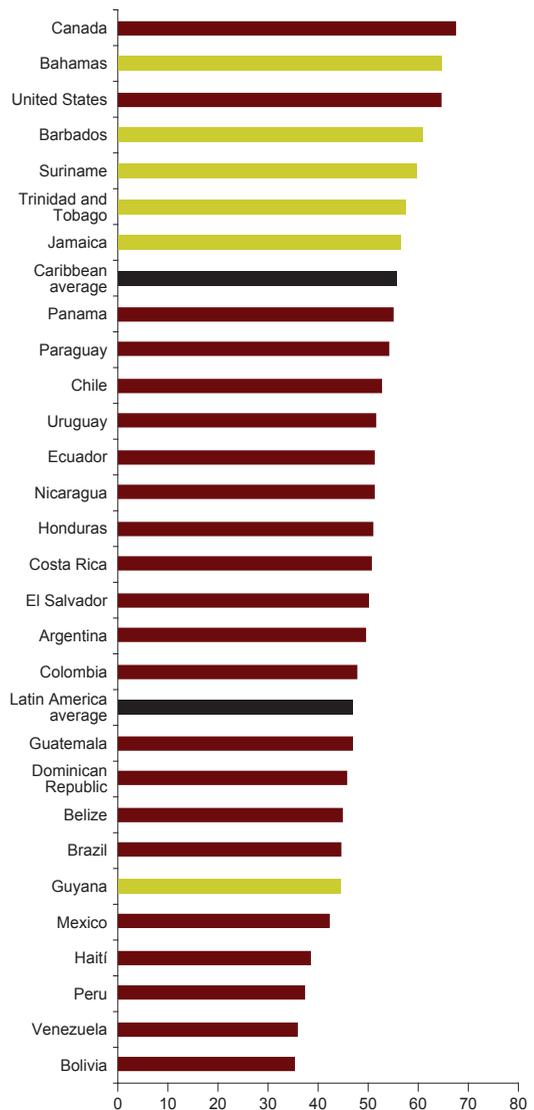
erode the perceived legitimacy of the police. Across the Caribbean, abuse of the use of force by law enforcement varies, with some accounts indicating that there are more violations in countries with more violent crime, particularly related to extrajudicial killings (UNDP 2012).⁵ Governments and police from the region have responded in recent years by attempting to improve accountability and community-police relations, often through community policing initiatives. Has this led to less abuse of power?

CCVS respondents were asked to what extent police harassment is a problem in their neighbourhood (Figure 9.8). Nearly one in four (23 percent) respondents felt that police harassment was at least a small problem, with 9 percent saying it was a big or very big problem. Notably, police harassment was perceived as a bigger problem in Port of Spain and Kingston, but less so in Paramaribo and Bridgetown. Respondents in neighbourhoods with a gang presence reported police harassment as being a far more severe problem (see Chapter 7).

9.1.4 Perceptions of Integrity: Is Corruption a Problem?

Integrity is also tied to citizens' perceptions of legitimacy and willingness to work with the police. Corruption is particularly detrimental

Figure 9.7: Satisfaction with Police Performance in Neighbourhoods in Latin American and Caribbean Countries (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as Pole2n) was: *In general, are you very satisfied, satisfied, dissatisfied, or very dissatisfied with the performance of the police in your neighbourhood?* (average score 0-100, higher = more satisfied).

⁵ For example, over more than two decades, national and international organizations, such as Americas Watch (1986) and Amnesty International (2000), have consistently identified high levels of police brutality

Table 9.3: Assessment of Police Performance in the Caribbean, Latin America, and World Regions

Africa (10 cities)	2.5*
Asia (six cities)	2.9*
Caribbean (5 cities)	2.7
Eastern Europe (18 cities)	2.1
Latin America (seven cities)	2.0*
United States (New York)	3.1
Western Europe (15 cities)	2.8*

Source: Van Dijk and Van Kesteren (2015) based on the 2014/15 Caribbean Crime Victimization Survey and International Crime Victimization Surveys from 1990–2005.

Note: The scores are averages on a four-point scale. A higher score is a better assessment of police performance. The five cities in the Caribbean are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

* The format of this item in the International Crime Victimization Survey has changed over time; categories are matched to obtain better comparisons

to the public's trust in the police force, as well as to law enforcement's ability to effectively control crime. Experiences of being asked to pay a bribe, for example, can lead the population to feel mistrust and alienation. The 2014/2015 LAPOP Survey asked respondents about their personal experience with being asked to pay a bribe to a police officer in the last year. On average, 7 percent of individuals from the Caribbean reported being approached to pay a bribe by a police officer (Figure 9.9). Barbados and Suriname reported low levels of corruption (1 percent and 3 percent, respectively, were asked for bribes),

Table 9.4: Victims Satisfied by the Treatment of their Complaint by the Police in Five Caribbean Capital City Metropolitan Areas (percent)

	Percent Satisfied			
	Three Crimes Combined	Burglary	Robbery	Assault
Kingston Metropolitan Area	52	55	37	51
New Providence	51	48	53	42
Greater Bridgetown Area	49	52	59	37
Paramaribo	32	31	23	39
Port of Spain Metropolitan Area	30	21	34	47
Five-City Average	43	40	42	44
World Average (ICVS 1990–2005)	42	40	40	44

Sources: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. The world average is based on International Crime Victimization Surveys from 1990–2005.

Note: ICVS: International Crime Victimization Survey.

ty and extrajudicial killings in Jamaica. The UN Special Rapporteur—Mission to Jamaica found evidence of excessive use of force by the police and also raised concerns about the outcome of the June 2002 West Kingston Commission of Enquiry. Similar concerns have been raised with respect to law enforcement activities during the May–June 2010 police operations in Tivoli Gardens and the subsequent state of emergency (Amnesty International 2011).

while The Bahamas and Guyana reported higher levels (11 percent and 12 percent, respectively).

9.1.5 Trust in the Police

Perceptions of police performance, abuse of power, and corruption all contribute to assessing the public's trust in the police. Trust in the police is essential for the rule of law and for the police to be effective in controlling and preventing crime. Using data from the CCVS, this section examines two measures of trust in law enforcement: (1) the self-reported level of trust in the police, and (2) the percentage of crimes reported to the police. We then examine which factors most influence public trust in the police force using multivariate regression.

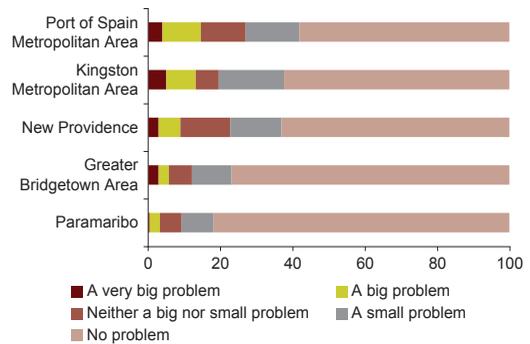
Figure 9.10 shows the inter-regional variance of self-reported trust in the police in the CCVS on a scale of 1 (not at all) to 7 (a lot). Trust was lowest in Jamaica and Trinidad and Tobago, where 37 percent and 25 percent of the population, respectively, said they don't trust the police at all. Conversely, respondents in The Bahamas and Suriname (35 percent and 27 percent, respectively) said they trust the police a lot. Figure 9.11 shows how the Caribbean compares to other countries in the Americas. Again we observe that police in Suriname and The Bahamas are some of the most trusted in the Americas, ranking close to Canada and Chile. Barbados lies around the Caribbean average, while Trinidad and Tobago, Jamaica, and Guyana display some of the lowest levels of trust.

The percentage of crimes reported can also be seen as a measure of the public image of police forces, with low reporting rates suggesting low trust. As reported in Chapter 1, in the Caribbean 53 percent of the five measured crimes (as listed in Table 9.5) were reported to the police. Table 9.5 shows that reporting rates in the Caribbean are significantly higher than in Latin America and Eastern Europe, but lower than those in New York and Western Europe.

9.1.6 What Factors Account for Higher Trust in the Police?

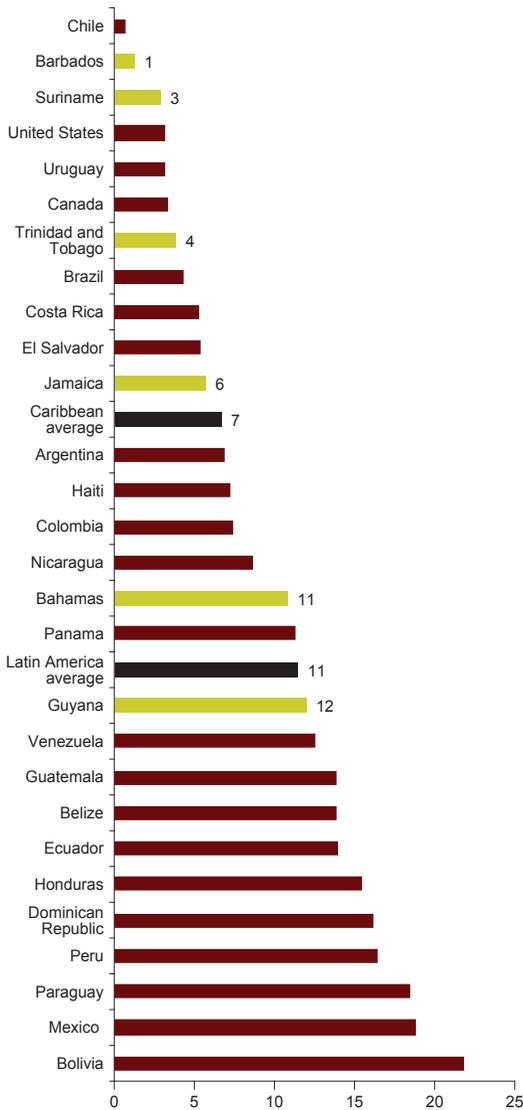
In order to better untangle the factors that significantly influence Caribbean residents' trust in the police, we apply an ordinary least squares multivariate regression (for details see Appendix 9.2). The outcome variable was constructed on a scale of 1 to 7 at the

Figure 9.8: To What Extent Is Police Harassment a Problem in Your Neighbourhood? (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. *Note:* The question asked (identified as IVOL15) was: *To what extent is police harassment a problem in your neighbourhood?*

Figure 9.9: Percentage of Respondents Who Report Being Asked to Pay a Bribe in the Last Year in Latin American and Caribbean Countries (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as EXC2) was: *Has a police officer asked you for a bribe in the last twelve months?*

individual level using the question “To what extent do you trust the National Police?” Independent variables included perceptions of the police, personal experiences with crime, and individual and neighbourhood characteristics. Perceptions of the police included (1) competence in crime control, (2) response time, (3) harassment was a problem, and (4) having paid a bribe to an officer in the last 12 months. Personal experience with crime included (1) having been victim of a crime in the last year, (2) having lost someone to violence, and (3) having witnessed a violent attack. Individual and neighbourhood characteristics controlled for were consistent with previous chapters. Country fixed effects were used to control for variation between countries.

The results show that, overwhelmingly, the strongest significant predictor of trust in the police is the perception of police competence in controlling crime. This was stronger than any other variable in the model. Police response time, perception that harassment was a problem, and having paid a bribe were also significantly and negatively associated with trust in the police. Interestingly, having been a victim of a crime in the last year was insignificant, although having witnessed a violent attack was negatively related to trust. Men were

significantly less likely to trust the police, and older age predicted higher trust. Those in neighbourhoods with higher trust among neighbours (social cohesion) were also more likely to have more trust in the police. Overall, the results suggest that the best

way to increase trust in the police is to prioritize increasing competence of the police to control crime.

9.2 The Judicial System

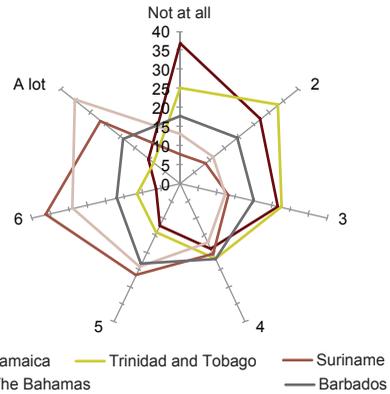
Crime and violence prevention and reduction are also affected by the efficiency and effectiveness of judicial systems, as well as by the level of public confidence in them. The most common performance measure of criminal justice systems is the extent to which cases are processed fairly and efficiently. Unfortunately, even the most basic data on the flow of cases through criminal justice systems are not consistently available in the Caribbean.

However, some special commissions and governmental task force reports have identified specific concerns. For example, the Justice Reform Task Force in 2007 found that Jamaica's justice system is inefficient and identified a number of issues that contribute to the problem, including delays, disrespect of individuals before the court, poor infrastructure, underfunding, outdated and inefficient procedures, and unequal treatment, benefits, and protection. Scattered evidence from each country suggests similar problems plague many Caribbean judicial systems. Low crime detection rates are compounded by long case processing delays and low conviction rates for those who are arrested. Significant delays in one part of the system often have a ripple effect through other parts of the system. This section considers some of these challenges.

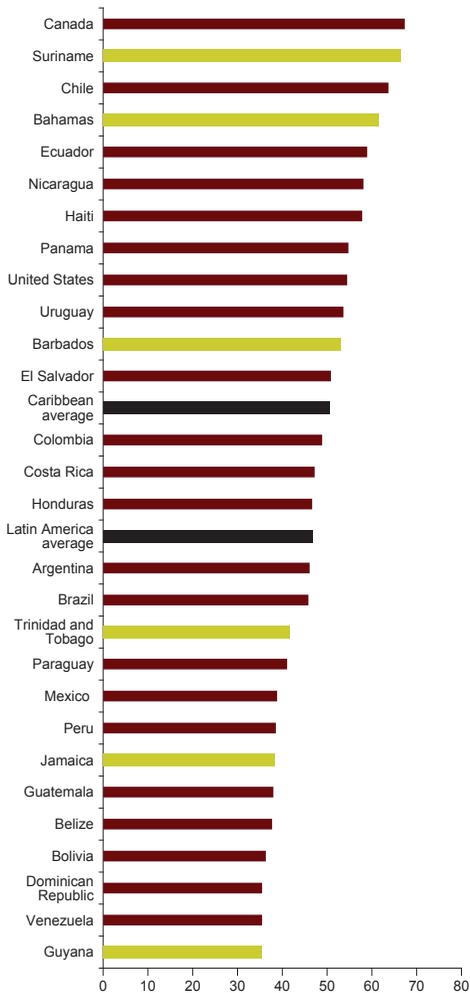
9.2.1 Capacity and Effectiveness

Chapter 11 will show that Caribbean countries spend relatively little on the administration of justice compared to what they spend on the police. In a study of 17 countries in Latin America and the Caribbean, Jaitman and Torre (2016) show that countries from the Caribbean sub-region spend the least amount of GDP on administration of justice. This underpins the limited administrative capacity of the judicial system. While little comparable data are available on the amount of key personnel within the justice system (i.e., lawyers, public defenders, and prosecutors), Table 9.6 shows that the number of judges per population is relatively low in the Caribbean compared to the international average. Anecdotal evidence (Bailey 2016; Harriott and Jones 2016; Seepersad 2016; Sutton 2016)

Figure 9.10: Self-Reported Trust in the Police in Five Caribbean Countries (percent)



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as B18) was: *To what extent do you trust the National Police?* Answers are on a scale of 1 (not at all) to 7 (a lot).

Figure 9.11: How Much Do You Trust the Police?

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as B18) was: *To what extent do you trust the National Police?* Answers on a scale of 1 (not at all) to 7 (a lot). Average scores for each country were recorded on a scale of 0-100.

shows that judicial systems are struggling with caseloads that far exceed the processing capacity.

Part of the challenge in studying the problem is that case processing delays make it difficult to measure conviction rates. Data on case processing and conviction rates are not available in a systematic way throughout the Caribbean, but the available evidence paints a disturbing picture. For example, in May 2014 in The Bahamas, the court calendar was already full through 2016, according to the Office of the Attorney General. In 2014 there were 568 backlogged cases set for trial in the six criminal courts and another 491 cases yet to be scheduled (Sutton 2016). In 2013, only 141 total cases were tried. Of those, 44 percent resulted in convictions, 38 percent in not guilty verdicts, and 18 percent were dismissed (due to a mistrial or lack of evidence, among other reasons) (Sutton 2015). According to Hanna (2011), from 2005–2009 only 5.1 percent of murder cases resulted in convictions. Due to the significant backlog, some case delays are reported to last up to five years.

In Barbados, the Office of the Attorney General has also long been constrained in its ability to quickly and effectively conclude cases, leading to what some have referred to as a 20-year court backlog. It was estimated in 2012 that the backlog consisted of more than 3,000 cases (Bailey 2016). In Jamaica, case clearance rates in resident Magistrates' Courts increased to 94 percent in 2010, up from 80.1 percent in 2009 (Harriott and Jones 2016). However, most other indicators of effective governance showed little or no improvement during the period (PIOJ 2012).

Table 9.5: Percentage of Victims Who Have Notified the Police, by World Region

	Four Crimes (excluding car theft)	Car Theft	Burglary	Robbery	Theft of Personal Property	Assault and Threat
Africa (10 cities)	49	89	63	37	22	28
Asia (six cities)	35	78	43	38	16	28
Caribbean (five cities)	51	84	70	63	50	44
Eastern Europe (18 cities)	48	83	64	36	23	25
Latin America (seven cities)	35	90	36	23	13	25
United States (New York)	57	97	77	52	36	35
Western Europe (15 cities)	60	89	78	55	54	32
World average	48	87	62	44	31	31

Source: Van Dijk and Van Kesteren (2015) based on the 2014/15 Caribbean Crime Victimization Survey and International Crime Victimization Surveys from 1990-2005.

Note: The five cities in the Caribbean are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

Table 9.6: Number of Professional Judges per 100,000 Population, Four Caribbean Countries and World Region

Country	Number of Professional Judges per 100,000 Population
Jamaica	3
The Bahamas	12
Trinidad and Tobago	7
Barbados	8
World average	18
Regional averages	
Latin America and Caribbean	9
East Asia and Pacific (all income levels)	6
Europe and Central Asia (all income levels)	27
Middle East and North Africa (all income levels)	11
North America	1
South Asia	
Sub-Saharan Africa (all income levels)	3

Source: Prepared by the authors using United Nations Office on Drugs and Crime criminal justice data for 2014 or latest available year.

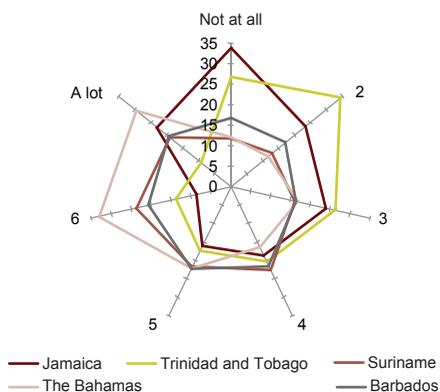
Note: World and Latin American averages are for the year with the highest amount of countries reporting (2012).

While there is convincing evidence that these delays and backlogs exist, understanding the causes is more difficult. One explanation for the low conviction rates has been the increase in case dismissals, which are common because of poor preparation by police and prosecutors, witness intimidation, lack of victim participation, and attorney absenteeism. In some circumstances overlapping cases are scheduled at the same time with the same attorney (which inhibits one of the cases from proceeding), or other court personnel (i.e., court reporters) are not available when the case is to be presented. Finally, an additional problem may be the lack of plea bargaining. For example, authorities in The Bahamas commented that plea bargaining is rare because defendants believe that either they can drag out a case for years before being tried, or count on the weaknesses of the police and prosecution in producing sufficient evidence (Sutton 2016). This means that nearly all cases must go to trial, creating an even longer backlog.

9.2.2 Trust in the Courts

Given the aforementioned scenario, it is relatively unsurprising that trust in the courts to provide a fair trial is relatively low. One in five (20 percent) persons polled in the Caribbean countries say they have no trust at all in the courts to provide a fair trial. Figure 9.12 shows the breakdown by country. Once again, trust is lowest in Jamaica and Trinidad and Tobago, where 34 percent and 27 percent of respondents, respectively, have no trust at all in the courts. Bahamians have relatively higher trust in the courts, as they do in the police.

Figure 9.12: Trust in the Courts to Provide a Fair Trial in Five Caribbean Countries



Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey. Note: The question asked (identified as B1) was: *To what extent do you think the courts to guarantee a fair trial?* Answers on a scale of 1 (not at all) to 7 (a lot).

9.2.3 Promising Initiatives

There have been recent attempts to create task forces to tackle long backlogs and improve the administration of cases by instituting case management systems. In Barbados, Chief Justice Sir Marston Gibson in 2013 proposed restarting the Backlog Reduction Project, with steps taken to have dead cases removed and live cases put back on track (Cumberbatch 2013). In August 2015, the Attorney General announced plans to continue the Backlog Reduction Project with the possible hiring of additional judges as an option to be considered (Barbados Nation 2015).

In The Bahamas, under the Swift Justice Initiative a case management system is being put in place and other issues associated with the backlog are being targeted for improvement, including changes to the Court Reporting Unit responsible for transcripts and a universal case scheduling system to avoid overlaps with the same attorneys.

Progress achieved under the Jamaican Justice Reform Agenda during 2009–2012 includes establishment of the Court Management Service to facilitate more efficient operations of the court system; introduction of the Criminal Case Management System; construction of new courthouses and improvements to physical structures; establishment of the Office of the Special Coroner; development of restorative justice; and an increase in judicial personnel (PIOJ 2013, 9). New units established to advance the justice agenda include the Independent Commission of Investigation, which was put in place pursuant to the 2010 Independent Commission of Investigation Act. These initiatives, among others, have the potential to improve the functioning of the judicial process, but only if they are accompanied by sufficient resources and close monitoring of their effectiveness in terms of attaining the desired outcomes and addressing the bottlenecks that remain.

9.3 Correctional Systems

9.3.1 Capacity and Effectiveness

Long case processing times and backlogs have also resulted in a profound crisis for Caribbean correctional systems (Table 9.7). The crisis is reflected in (1) high prison populations, with prisoner-to-population rates in the region oscillating between 145 and 379 per 100,000 population, which surpasses the world average of 140 per 100,000 inhabitants; (2) overcrowding, with prisoner volume exceeding prison capacity by more than 70 percent; and (3) high pre-trial detention rates, with a regional average of 40 percent of prisoners detained still pending trial. Correctional facilities across the region are operating significantly beyond their built capacity, and many individuals in pre-trial detention sometimes await sentencing for years (see previous section).

Most prison populations in the Caribbean are not primarily comprised of violent offenders. In recent years, those convicted of violent crimes represented 15 percent, 37 percent, and 32 percent of prison admissions in The Bahamas (2013), Barbados (2013), and Jamaica (2014), respectively.⁶ Prisoners sentenced or remanded for murder and manslaughter represented 2 percent of admissions in The Bahamas, 4 percent in Jamaica, and 19 percent in Barbados over the same years. In Barbados, the largest proportion of

⁶ The calculations use the crime categories provided by the respective corrections departments and include any crime with the use, or threat of use, of force (i.e., murder, manslaughter, robbery, rape, sexual offences, assault, shooting, wounding, etc.). Because crime categories are not consistent across countries, cross-country comparison should be avoided. Data were not provided by Trinidad and Tobago or Suriname.

Table 9.7: Prison Statistics, Six Caribbean Countries

	Number of Prisons	Female Facilities	Male Facilities	Juvenile Facilities	Prison Population			Official Capacity	Population Density (percent)
					Number	Rate*	Remand/Pre-Trial (percent)		
The Bahamas	1	—	—	2	1,396	363	42	1,348	97.8
Barbados	1	—	—	—	924	322	42.3	1,250	72.6
Guyana	5	1	4	—	1,967	259	35.6	1,580	126.5
Jamaica	12	1	6	4	4,050	145	16.9	4,690	87.7
Suriname	5	—	4	1	1,000	183	50	1,330	78.9
Trinidad and Tobago	9	1	8	1	3,700	272	60	4,886	71.2

Source: Prepared by the authors using data from World Prison Brief, International Center for Prison Studies, 2016 or latest available year.

*Rate refers to the amount of incarcerated individuals per 100,000 population in each country.

offenders was incarcerated for burglary (20 percent) followed by drug possession (18 percent).⁷ In Jamaica, the categories with highest proportions of admissions were larceny (22 percent) and drug offences (13 percent).⁸ In The Bahamas, the crimes that represented the largest portion of remanded and sentenced prisoners were drug offences (16 percent) and stealing (11 percent).⁹ In summary, while we have seen that the Caribbean suffers from particularly from high levels of violent crime, the prison population is made up largely of individuals who have committed drug offences or burglary/theft. Given the situation of prison overcrowding, it would seem to warrant investigation as to whether many of these offenders could not be serving probation or alternative sentences (i.e., halfway houses, electronic monitoring, substance-abuse treatment and rehabilitation).

Substance abuse and mental illness are important areas for examination with relation to the corrections and criminal justice systems. Using a sample of imprisoned adults in Trinidad and Tobago, Seepersad (2013) indicated that there was a strong linkage between drug use and criminal offences, and that a large proportion of offenders are habitual drug users. This implies that successful drug treatment within prisons could lead to a reduction in recidivism rates, and ultimately a reduction in crime rates in the wider society. Some Caribbean countries have also begun to investigate or experiment with the use of Drug Courts,¹⁰ which aim to reduce the number of

⁷ Authors' calculations based on data provided by Her Majesty's Prison Barbados for 2013.

⁸ Authors' calculations based on data from the Economic and Social Survey of Jamaica for 2014.

⁹ Authors' calculations based on data provided by The Bahamas Department of Corrections for 2013.

¹⁰ One example is a Drug Treatment Court that was set up in Trinidad and Tobago in February 2015 with the assistance of the Organization of American States (Seepersad 2016).

drug-addicted individuals incarcerated and focus on treatment rather than incarceration. This strategy involves judicially supervised court-ordered treatment that would include therapeutic approaches and rigid scrutiny in terms of drug testing to ensure that the addict abstains from further drug use.

Similarly, the mentally ill may make up a portion of prison populations. Corrections departments often lack appropriate facilities and are short of resources and trained personnel to effectively treat mentally ill inmates. Consequently, there are many cases of mentally ill inmates in jails without adjudication of their cases. For example, in 2014 in Jamaica, of 105 incarcerated persons designated unfit to plead (awaiting trial), several had been detained since 1960 without being tried and sentenced (Campbell 2014).

9.3.2 Promising Initiatives

Parole and probation are potential alternatives to reduce overcrowding that also give individuals, especially youth, a chance to turn their lives around. However, their use varies throughout the region, as does the capacity of the agencies that run them and the quality of the services provided (UNDP 2012). While there are no systematic and comparable data available on probation throughout the region, most evidence suggests that only a small share of individuals are diverted from prison systems using this method (UNDP 2012). The recent adoption of electronic ankle-bracelet monitoring of individuals on probation (or in some cases out on bail) offers potential for helping reduce prison populations, but will not be sufficient unless other needed services and monitoring are provided to beneficiaries. Many probation departments struggle with resources, particularly in terms of their capacity to refer clients to adequate rehabilitation and support services. Some countries, such as Jamaica and Barbados, have experimented with connecting probation to community corrections strategies (community service, community-based rehabilitation programmes, appointment of community members to parole boards, etc.). However, such programmes often come and go and shift in times of budget crises or changing political environments. In 2014, The Bahamas approved and Trinidad and Tobago proposed new legislation regarding installing functioning parole systems.¹¹ In both cases, significant work remains to identify, develop, and implement suitable systems and procedures, establish the required infrastructure to select those eligible for parole, and prepare and monitor them prior to and after release.

Another area that should be a priority for policymakers, but often is largely abandoned, is the reintegration of ex-offenders into society after they have served their time. Many of these individuals are at high risk for re-offending and are often given

¹¹ The Bahamas Corrections Services Act 2014 and the Trinidad and Tobago Administration of Justice (Parole) Bill 2014.

little or no support after release to prevent them from returning to a life of crime. In the Caribbean, programmes for rehabilitation, assisted re-entry, and reintegration of former inmates are incipient, small in scale, and often run by nongovernmental organizations, when they exist at all (Bailey 2016; Harriott and Jones 2016; Seepersad 2016; Sutton 2016; UNDP 2012). Some recent positive steps have been made in this regard. In Barbados, a Reintegration Unit was created in 2011 to reduce recidivism. Within the unit there are programmes aimed at drug rehabilitation, behavioural management, and job opportunity. In Trinidad and Tobago, the Prison Service is currently putting into place a Level of Service/Case Management Inventory (LS/CMI), which is a risk/need assessment system for offender treatment planning, placement, and case management. The LS/CMI is a comprehensive measure of risk and need factors, as well as a fully functional case management tool that includes integrated general and specific risk/need components, and addresses other client issues (e.g., social, health, and mental health) and responsivity concerns (e.g., cultural concerns or communication difficulties). As of 2014, the Prison Service had already begun to use the diagnostic instrument and was in the process of training personnel in its usage.

9.4 Conclusions and Policy Implications

Budget allocation speaks volumes about government priorities. As will be shown in Chapter 11, despite increasing attention to the importance of prevention, Caribbean governments are still overwhelmingly responding to rising crime by investing most resources in the police. Low resource allocation to prevention not only minimizes the potential to avert many crimes from happening in the first place; it also overlooks the current strain on judicial and corrections systems.

Police density in the Caribbean is relatively high, but police capacity to respond quickly to citizens and investigate and identify perpetrators of the most severe violent crimes is low. A cursory look at the prison population reveals that most offenders are imprisoned for non-violent crimes, specifically drug offences and theft.

One in four Caribbean residents considered police harassment to be a problem, with significant inter-regional variation and greater concern expressed in neighbourhoods with a gang presence. About 7 percent of individuals reported being asked to pay a bribe in the last year, which is low compared to Latin America, but high compared to the United States, Canada, Uruguay, and Chile. Caribbean residents' trust in the police varies widely by country, with high levels of trust in The Bahamas and Suriname and low levels in Jamaica and Trinidad and Tobago. Trust in the police in the Caribbean is, on average, higher than in Latin America and Eastern Europe, but lower than in the United States, Canada, and Western Europe. One hypothesis could be that higher victimization is responsible for low levels of trust in the police. However, we find through multiple

regression analysis that the factor most strongly associated with trust in the police is the perception of the competence of the police in controlling crime. Thus, increasing police effectiveness and efficiency, while maintaining integrity and respect for citizens' rights, is the best way to increase trust in the police. Some interesting initiatives in the Caribbean and internationally regarding policing are discussed in Chapters 13 and 14.

Limited data were offered in this chapter regarding the functioning and capacity of the criminal justice system as a whole—including the police, courts, and prisons. The partial view of these institutions presented suggests that the judicial and corrections systems suffer from severe constraints that have led to long case backlogs, large numbers of pre-trial detentions, and prison overcrowding. Trust in the courts to provide a fair trial is low. However, this view is incomplete and insufficient for determining the specific bottlenecks that are impeding a well-functioning system. Metrics of administrative capacity and effectiveness of criminal justice institutions, such as those provided by some countries for the criminal justice statistics of the United Nations Office on Drugs and Crime, are not readily available in the Caribbean. Building the statistical infrastructure in Caribbean countries for measuring crime and the responses to it is crucial. Chapter 14 will further discuss this recommendation.

Finally, many promising initiatives exist to divert low-level crimes away from the courts, pay adequate attention to drug offences, and begin to invest in the rehabilitation of offenders. Some of these are mentioned in this chapter, including improving probation and parole, using electronic monitoring, and establishing Drug Treatment Courts. Others, such as the restorative justice approaches being explored by Jamaica and Trinidad and Tobago, are further addressed in Chapters 13 and 14. It is important that these initiatives be given adequate resources, sufficient time to succeed, and continuity across changing political landscapes. They should be closely monitored in their implementation and their results meaningfully evaluated. Policymakers need to continue to emphasize rehabilitation and alternative sanctions, and to construct a regional knowledge base of good practices.

Appendix 9.1. Percentage of Victims Satisfied by the Treatment of Their Complaint by the Police, by World Region

	Three Crimes Combined	Burglary	Robbery	Assault and Threat
Africa (10 cities)	31	28	33	41
Asia (six cities)	45	40	49	48
Caribbean (five cities)	43	42	42	44
Eastern Europe (18 cities)	30	30	28	34
Latin America (seven cities)	29	24	30	39
United States (New York)	54	47	43	69
Western Europe (15 cities)	63	67	58	56
World average	42	40	40	47

Source: Van Dijk and Van Kesteren (2015) based on the 2014/15 Caribbean Crime Victimization Survey and International Crime Victimization Surveys from 1990-2005.

Note: The five cities in the Caribbean are the Kingston Metropolitan Area, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; the Port of Spain Metropolitan Area, Trinidad and Tobago; and the Greater Bridgetown Area, Barbados.

Appendix 9.2. Ordinary Least Squares Regression: Trust in the Police

	Trust in the Police (B18, scale 1–7) Coefficient (standard error)
Perception of police	
Police competence (IVOL14)	0.305*** (0.040)
Police response time (INFRAX)	-0.164** (0.041)
Harassment is a problem (IVOL15)	-0.099*** (0.020)
Paid a bribe to police (EXC2)	-0.056** (0.013)
Personal experience with crime	
Victim any crime	0.006 (0.010)
Lost someone to violence	-0.026* (0.012)
Witnessed a violent attack	-0.036*** (0.008)
Individual characteristics	
Male	-0.026*** (0.005)
Age (years)	0.002*** (0.001)
Years of schooling	0.003 (0.002)
Neighbourhood characteristics	
Neighbourhood Disorder Index	0.022 (0.014)
Neighbourhood Informal Social Control Index	-0.004 (0.044)
Neighbourhood Social Cohesion Index	0.077** (0.023)
Gang presence in neighbourhood	0.039 (0.024)
Country fixed effects	
Number of observations	12,534
Adjusted R ²	0.305

Source: Prepared by the authors using data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

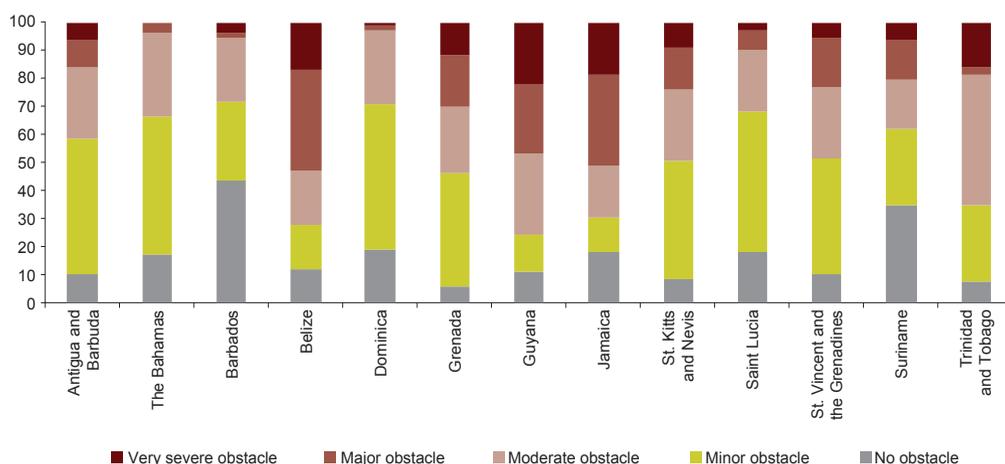
Note: *** .01, ** .05, and * .1.

Crime and the Private Sector

Heather Sutton, Inder Ruprah, and Lucciana Alvarez

In addition to individual citizens, businesses are also frequent targets of crime. The level of crime in society can strongly affect the business environment (Ruprah and Sierra 2016). In 2014, an average of 84 percent of Caribbean businesses reported that crime was an obstacle to doing business (Figure 10.1). Yet, despite the vast body of literature on crime, there is relatively little research—particularly in the Caribbean—on how crime affects businesses. The cost of doing business in a high-crime environment involves not only the direct losses from crime, but also the costs of security measures taken to protect against crime.

Figure 10.1: Are Crime, Theft, and Disorder an Obstacle to Doing Business? (percent)



Source: Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014.

Note: Survey respondents were asked: *Please rate each one of these factors as obstacles that can affect the current operations of your establishment.*

This chapter focuses on understanding crime against firms, an issue that has been the focus of little research primarily because of data limitations. In 2013/2014, the IDB developed a business victimization survey module that was attached to the 2014 Productivity, Technology, and Innovation (PROTEqIN) Survey and applied to a representative sample of firms in 13 Caribbean countries. The module was developed as a panel survey to follow the World Bank's Enterprise Surveys conducted in the region in 2010, which contained more limited questions on crime. Using data from both surveys, we estimate the prevalence and incidence of victimization from various types of common crime that affect businesses in each country. We then examine when, where, and how these crimes occur, as well as the profile of perpetrators and the weapons involved. The chapter then looks at the factors associated with firm victimization such as firm size and investment in private security. In the final section we offer some conclusions and policy recommendations.

10.1 Background

Business victimization surveys are a fundamental tool to better understand how crime affects businesses. Similar to crimes against individuals, crimes against firms are often not well captured in police statistics. Besides providing information about the business environment in countries, some surveys of businesses inform about the types of crime that most affect firms, the impact on firms, and which firms are most affected, among other factors (Box 10.1). The surveys can also provide information on crimes such as racketeering, extortion, and cyber-crime, which are poorly measured via other sources.

Victimization prevalence rates for businesses are generally higher than for private citizens (Van Dijk 2008). This is especially true for theft and burglary. Country rankings based on victimization rates for individuals often correspond closely to the level of victimization against businesses (Van Dijk and Terlouw 1996). One global study by Ernst & Young (2004) found that half of crimes globally were committed by company insiders and 6 percent of crimes (where the perpetrator was identified) were related to organized crime.

World Bank Enterprise Survey data from 2010 show that Latin America and the Caribbean had the highest levels of firm victimization (25 percent of businesses) and the second-highest percentage of firms (62 percent) paying for security (Amin 2014). Crime and security costs impose a heavier burden on firms in Latin America and the Caribbean than do other impediments to doing business, such as power outages. Amin (2009) finds that large firms are more likely to experience crime than small firms. However, the losses due to crime, as a percentage of annual sales, are higher for smaller firms.

Box 10.1. Surveys of Firms with Questions on Crime

World Bank Enterprise Surveys

- Firm-level survey of a representative sample of an economy's private sector.
- Includes questions on losses due to crime and security expenses.
- Covers 130,000 firms in 135 countries.
- Latin American and Caribbean sample: interviewed 12,855 enterprises in 30 countries in the region, including The Bahamas, Barbados, Jamaica, Suriname, and Trinidad and Tobago.
- Latest year of survey for the region: 2010.

International Crime Business Survey

- Firm-level survey of experiences with victimization, perceptions, and attitudes.
- Sample: Firms in nine Central and Eastern European countries.
- Latest year: 2000.

PROductivity, TEchnology and INnovation (PROTEqIN) Survey

- Panel survey of the Caribbean Enterprise and Indicator Survey 2011 (CES 2011).
- Sample: 1,680 firms in the Caribbean.
- Year: 2013/2014.
- Caribbean countries: Barbados, Belize, Jamaica, Guyana, Suriname, Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, The Bahamas, and Trinidad and Tobago.

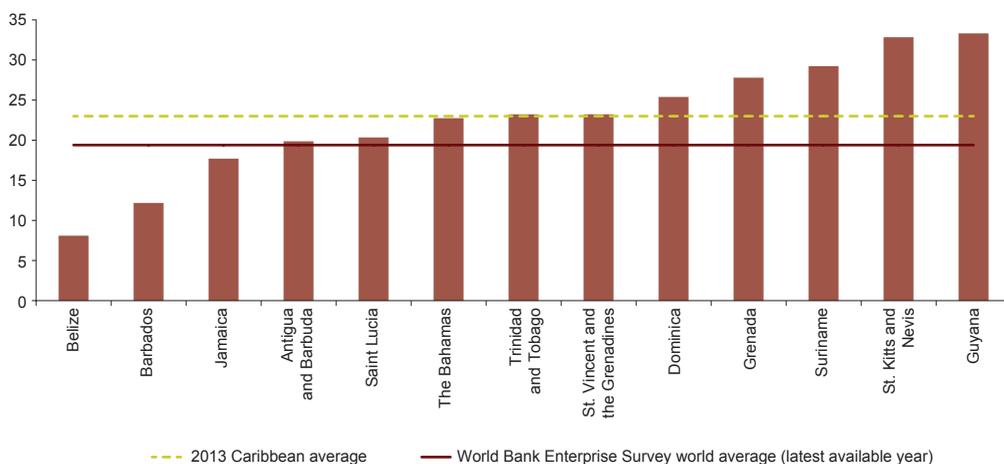
World Economic Forum Executive Opinion Survey

- What is it? Tool for capturing information on a nation's economic and business environment.
- Sample: 15,000 surveys.
- Year: Has been conducted for over 30 years (latest in 2014).
- Countries: In 2011, the survey included 142 economies, including Barbados, Jamaica, Suriname, and Trinidad and Tobago.

10.2 Facts and Figures

10.2.1 How Many Firms Are Victimized?

In 2013/2014, nearly one in five Caribbean businesses (23 percent) reported experiencing losses due to theft, robbery, vandalism, or arson during the fiscal year. This is higher than the average prevalence rate for individuals (13 percent) for five common crimes, as shown in Chapter 2. It is also slightly higher than the world average for the

Figure 10.2: Firms That Experienced Losses as a Result of Theft, Vandalism, Robbery, or Arson in the Previous Fiscal Year, 13 Caribbean Countries (percent)

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014. Note: The question asked was: *In the last fiscal year, did this establishment experience losses as a result of theft, robbery, vandalism or arson?*

World Bank's Enterprise Survey (19.4 percent). The Latin America and Caribbean region has the highest levels of firm victimization of any region in the world.¹

In 2013, prevalence of victimization ranged from 8 percent of firms in Belize to 33 percent in Guyana. Levels of victimization were above average in Guyana, St. Kitts and Nevis, Suriname, Grenada, and Dominica, while Belize showed relatively low levels compared to the rest of the region (Figure 10.2). The ranking of Caribbean countries according to levels of crime against individuals and businesses is somewhat different, with Jamaica showing lower levels and Suriname higher levels of crimes against firms.

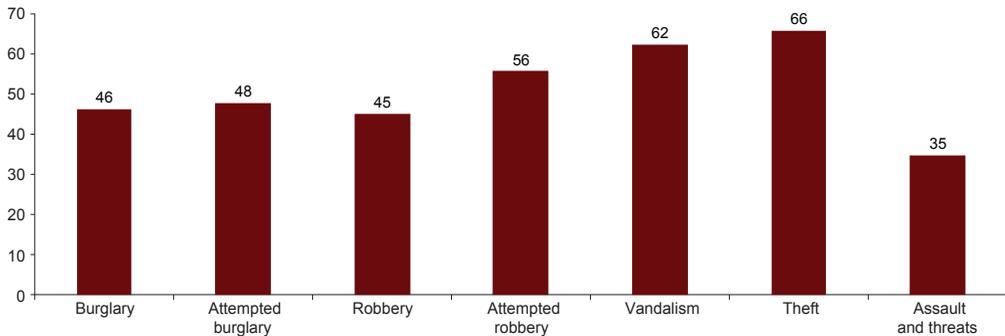
10.2.2 What Type of Crime?

Figure 10.3 shows that among businesses that experienced losses related to crime, the most common types of crime reported were theft (66 percent) and vandalism (62 percent),² with 56 percent experiencing attempted robbery, 48 percent attempted

¹ Using all World Bank Enterprise Surveys conducted as of March 2016, regional averages for firms experiencing losses from crime were as follows: Latin America and the Caribbean, 27.1 percent; sub-Saharan Africa, 22.1 percent; East Asia and Pacific, 17.1 percent; Eastern Europe and Central Asia, 11.2 percent; South Asia, 10.5 percent; and the Middle East and North Africa, 9.6 percent.

² Victimization prevalence rates are likely under-estimated because only businesses that confirmed having suffered losses as a result of crime were asked about the specific types of crime they experienced. Also, definitions of crimes were not supplied within the survey question, as is typical practice in victimization surveys. This reduces the accuracy of results, given potential respondent confusion over what is robbery versus burglary, or what constitutes an assault.

Figure 10.3: Type of Crime Experienced in the Previous Fiscal Year by Businesses with Losses Due to Crime, Average of 13 Caribbean Countries (percent)



Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014. Note: The figure shows the percentage of firms experiencing each crime out of those that experienced losses and that answered the question (N = 433). The question asked was: *In the last fiscal year, did anyone commit or try to commit the following crimes in the premises of this establishment? Burglary, attempted burglary, robbery, attempted robbery, vandalism, theft, assault and threat.* The 13 countries are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

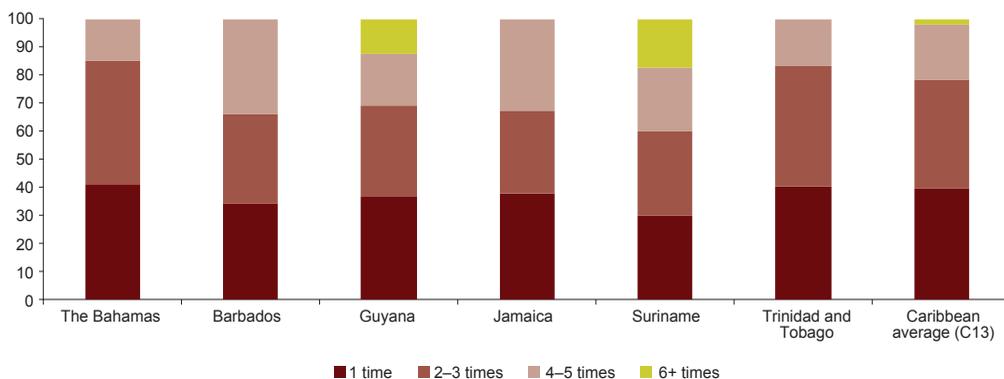
burglary, 46 percent burglary, 45 percent robbery, and 35 percent assault or threat of assault. For individual victimization rates by country and crime see Appendix 10.1.

10.2.3 Cyber-crime and Kidnapping

Overall, 17 percent of firms surveyed in the 13 Caribbean countries reported Internet fraud. Cyber-crime appears to be a bigger problem in The Bahamas and Trinidad and Tobago, with 41 percent and 33 percent of all businesses, respectively, reporting Internet fraud in the last year (Appendix 10.2). No businesses reported this crime in Jamaica and Barbados and only 4 percent (five firms) experienced Internet fraud in Suriname. Kidnapping also does not appear to be a major impediment to firms in the region. With the exceptions of The Bahamas and Trinidad and Tobago (both reporting two cases), the other countries reported no cases of paying ransom for kidnapping victims (Appendix 10.3).

10.2.4 Frequency of Victimization

Sixty percent of Caribbean businesses that experienced losses from crime during the year were targeted more than once (Figure 10.4), and 22 percent were victimized four times or more in the same year. It is notable that Barbados and Jamaica both have overall lower prevalence of victimization, but higher levels of repeat victimization (4+ times in one year). In other words, fewer firms in these countries experience losses due to crime, but those that do experience losses are targeted more often. Firms experienced theft, vandalism, and robbery with the highest frequency—an average of 2.8, 2.2, and 1.6 times in one year, respectively (Appendix 10.4).

Figure 10.4: Frequency of Victimization of Firms Experiencing Losses Due to Crime (percent)

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014. Note: The figure shows the percentage of firms out of the total that experienced losses and that answered the question (N = 433). The question asked was: *How many times have you been victimized?* The 13 countries that constitute the Caribbean average are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

10.2.5 When, Who, and with What Weapon?

Crimes occur fairly equally during working hours (49 percent) and outside of working hours (51 percent), with very little variation between countries (Table 10.1). Theft and robbery occur more frequently during working hours, while vandalism occurs more frequently outside of working hours.

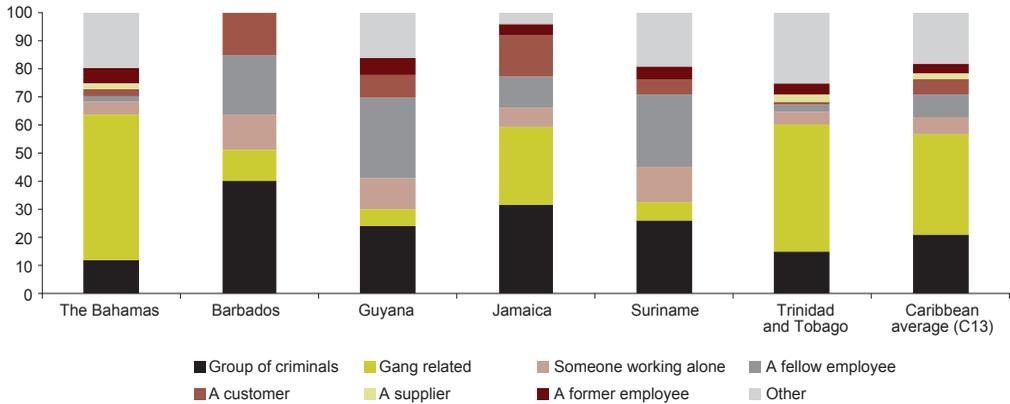
Where respondents answered questions regarding the perpetrator, most perpetrators were thought to be gang-affiliated (36 percent) (Figure 10.5). Within the region, The Bahamas, Trinidad and Tobago, and Jamaica stand out with higher reports of gang-related perpetrators (52 percent, 45 percent, and 28 percent, respectively). In

Table 10.1: When Crimes Occurred, 13 Caribbean Countries (percent of firms)

	During Working Hours	Outside Working Hours
Burglary	15	85
Attempted burglary	14	86
Robbery	70	30
Attempted robbery	73	27
Deliberate damage/vandalism	32	68
Theft	51	49
Assaults and threats	49	51

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014. Note: The table shows the percent of firms out of the total that experienced losses and that answered the question (N = 433). The 13 countries are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Figure 10.5: Perpetrators of Crimes Reported by Businesses (percent)

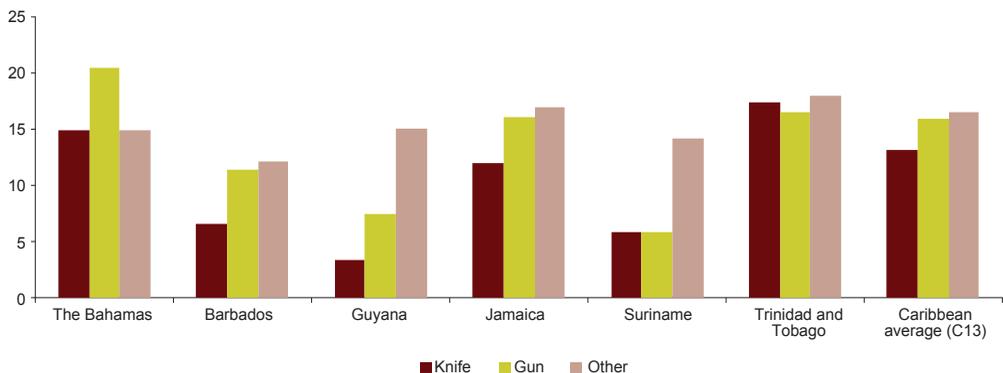


Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014. Note: The figure shows the percent of firms, out of the total, that experienced losses and that answered the question (N = 433). The 13 countries that constitute the Caribbean average are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

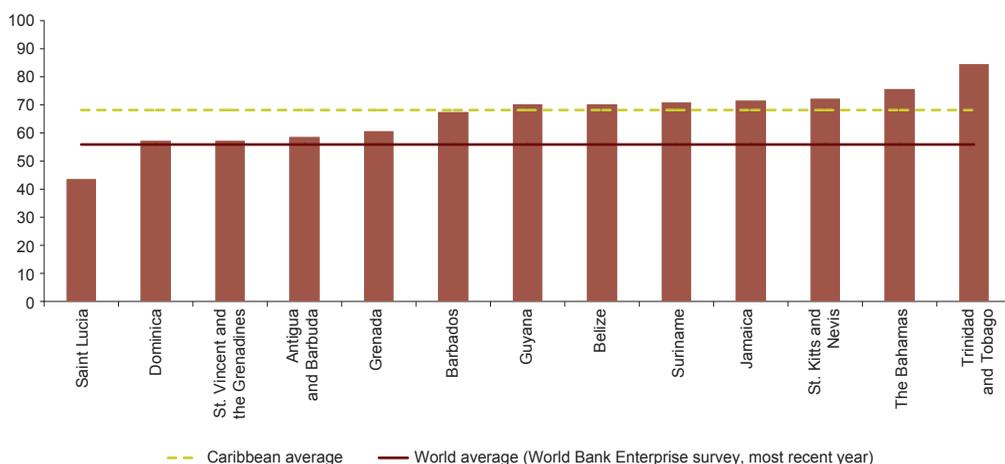
nearly one in five cases (21 percent), the perpetrators were thought to be a criminal group. Roughly the same amount (19 percent) was reported to be someone known to the firm (customer, supplier, employee, or former employee).

Respondents reported a weapon being used in nearly half of the reported crimes (46 percent) in the region (Figure 10.6). Guns were reportedly used in 16 percent of crimes, while knives were used 13 percent of the time. The use of guns was highest in The Bahamas, Jamaica, and Trinidad and Tobago.

Figure 10.6: Percentage of Firms Victimized with a Weapon, by Country and Type of Weapon



Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2014. Note: The question asked was: *What weapons were used?* Percentages are calculated as the number of firms victimized with each weapon, out of the total number of firms surveyed. The countries that constitute the Caribbean average are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Figure 10.7: Percentage of Businesses That Spent Money on Security, by Country

Sources: Prepared by the authors using data from the World Bank Enterprise Survey, 2010; and the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The question asked was: *In the last fiscal year, did this establishment spend money for security, for example, equipment, insurance, personnel, or professional security services?*

10.2.6 Security Costs and Financial Losses

Nearly 70 percent of firms in the region reported spending money on security, including expenditures on equipment, insurance, personnel, or professional security services. This compares with the world average of 55.6 percent in the World Bank's Enterprise Survey (latest available year for each country). The percentage of firms paying for security in the Caribbean ranged from 85 percent in Trinidad and Tobago to 44 percent in Saint Lucia (Figure 10.7). Most firms (63 percent) reported spending on alarm systems, security cameras, and gates. However, the percentage of firms paying for protective windows and door measures was particularly high in Guyana (77 percent) and Suriname (63 percent). Expenditure on security guards or receptionists was prevalent in Guyana (66 percent), Suriname (61 percent), Barbados (54 percent), and Jamaica (56 percent). Some businesses also reported spending money on insurance coverage against theft, especially in Barbados, Guyana, Jamaica, and Suriname (Figure 10.8).

For those companies that spend on security, on average these expenses accounted for 2.4 percent of annual sales.³ Countries with the highest expenditure on security included Suriname, Guyana, and The Bahamas (5.9 percent, 5 percent, and 3.8 percent of annual sales, respectively) (Figure 10.9). Belize and Barbados reported

³ The country figures were 1 percent of total annual sales spent by firms in Barbados and Belize; 2 percent in Antigua and Barbuda, Dominica, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, and Trinidad and Tobago; 3 percent in Grenada; 4 percent in The Bahamas; 5 percent in Guyana; and 6 percent in Suriname.

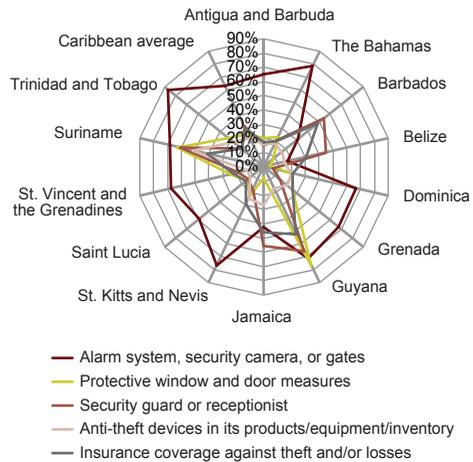
lower than average security expenditure (1.4 percent and 1.5 percent of annual sales, respectively). For firms that experienced losses due to theft, robbery, arson, and vandalism, the percentage of annual sales lost fluctuated between 1.3 percent in Barbados and 5.7 percent in Suriname, with a regional average of 2.3 percent (Figure 10.10).⁴

10.2.7 What Factors Are Associated with Firm Victimization?

Size

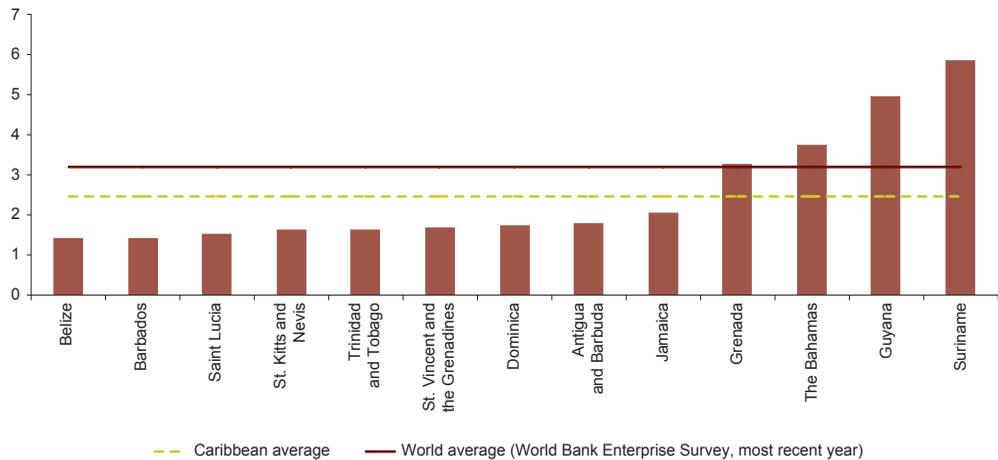
Ruprah and Sierra (2016) find that in 2010 larger firms suffered higher rates of crime, supporting the hypothesis that larger firms (usually

Figure 10.8: Percentage of Businesses That Spent Money on Security by Country and Security Measure



Sources: Prepared by the authors using data from the using the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Figure 10.9: Average Security Costs If the Firm Pays for Security (percent of annual sales)

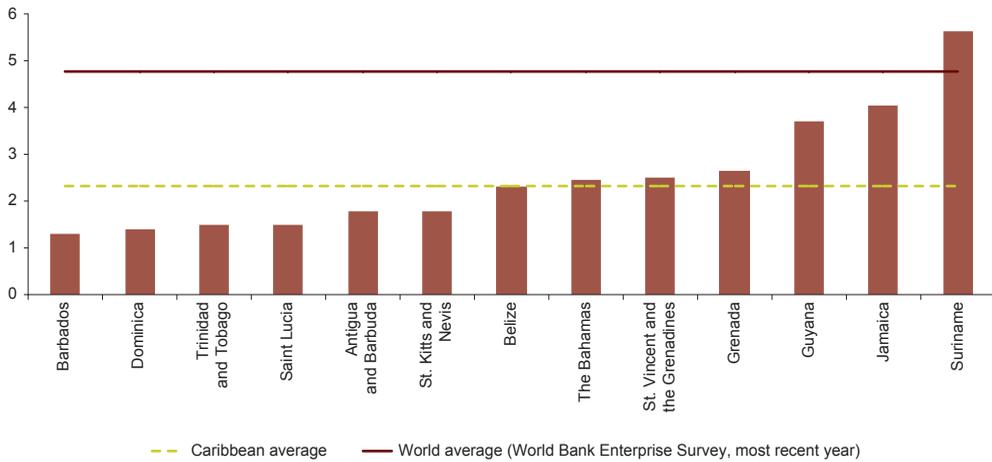


Sources: Prepared by the authors using data from the World Bank Enterprise Survey, 2010; and the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The question asked was: *What percentage of this establishment's total annual sales was paid for security?*

⁴ Please note that only six firms answered this question in Barbados and only three in Belize, which may alter the results.

Figure 10.10: If There Were Losses, What Were the Average Losses Due to Theft and Vandalism (percent of annual sales)



Sources: Prepared by the authors using data from the World Bank Enterprise Survey data, 2010, and the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The question asked was: *(If the firm experienced losses), what was the amount of the losses due to theft and vandalism (percent of annual sales)?*

with higher sales) could be targeted because of higher potential returns. In 2014, larger firms were again found to be more likely to be victims of crime. The percentages of firms suffering losses from crime in the Caribbean were 23 percent for small firms, 21 percent for medium-sized firms, and 25 percent for large firms (for details by country see Appendix 10.5).

Private Security

How does spending on private security affect victimization of firms? In order to answer this question we present the results of an ordinary least squares regression to assess the relationship between firm spending on private security measures in 2010 and their reporting of losses in 2014 (see full results in Appendix 10.6). The covariates tested included those found to be related to annual sales growth in Ruprah and Sierra (2016).

We find that firms that spent on private security in 2010 actually had an increased likelihood (6.33 percentage points) of reporting losses due to crime in 2014 (low significance $p < .10$). This indicated that crime is a complex problem that affects businesses, but cannot be tackled with investment in private security alone. If the private sector truly wants to reduce crime affecting its operating environment, it should seek to partner with government and nongovernmental organizations (NGOs) in one of many ways described in the conclusions and policy implications that follow.

10.3 Conclusions and Policy Implications

Data from the survey show that the private sector in the Caribbean is hit considerably by crime: both the costs as well as the losses attributed to crime and violence are high. Even though there have been some recent investments in crime prevention in the region, data show that the private sector relies more on and is more willing to invest in private security than it is to participate in public programmes against crime and violence. However, there are no studies showing a connection between private security and a reduction of crime. On the contrary, we find that expenditure on private security in 2010 was associated with higher victimization in 2014. On the other hand, many of the broader strategies that have been shown to reduce crime in general would also benefit businesses and the private sector. Therefore, the private sector together with government and civil society would be well served by turning their attention to the following approaches:

1. *Invest in an improved understanding of crime against businesses*

The first step to reduce crime against businesses in the Caribbean is to invest in understanding all relevant aspects of the phenomenon.⁵ Some international studies, reports, and surveys have begun to address this gap in the literature.⁶ This can be accomplished by conducting frequent specialized surveys for the private sector, such as the one used for this chapter or the International Crime Business Survey (Box 10.1).

2. *Invest in evidence-based programmes focused on potential offenders, their families, and communities that affect businesses*

Caribbean policymakers should provide individuals identified as most at risk of perpetrating crime, along with their families, access to programmes that have been proven to reduce involvement in criminal activity. The private sector is uniquely qualified to partner with government to provide some of these programmes, such as mentoring, employment, and vocational training (see more about public-private partnerships below).

3. *Invest in transforming the physical environment in communities to be less conducive to crime*

Commercial burglars and thieves are thought to prefer targets that receive little surveillance (Crowe 1991). Situational crime prevention entails changing the landscape and design of urban areas with the aim of making it more difficult to commit a crime. Although few programmes have been evaluated under experimental conditions, some of the interventions that have modest evidence of affecting crime include installing

⁵ Goldberg, Kim, and Ariano (2014, 27) conclude that despite the growing concern about the impact of crime and violence on businesses and the economy, studies on crime “often lack a strong private sector perspective.”

⁶ For an overview see Capobianco (2005).

closed-circuit television (CCTV) cameras (Welsh and Farrington 2008a)⁷ and improving street lighting (Welsh and Farrington 2008b).⁸

4. *Increase private sector involvement in public-private partnerships focused on increasing security at the community level (government can stimulate this via local ordinances, tax incentives, government grants, etc.)*

The private sector is now emerging as one of the new contributors to community safety. Over the last decade, interest has grown in public-private partnerships (PPPs) to prevent crime and violence. The private sector creates employment and helps to support social and economic progress in communities. It can also provide innovation, resources, and skills to local communities. Many of the social prevention initiatives (i.e., work programmes for youth), situational prevention initiatives (changes to the physical environment of commercial areas), and smart crime controls (through partnerships between businesses, police, and residents and by assisting with reintegration of offenders) can be achieved through PPPs. Policymakers can take actions to encourage private sector involvement in crime prevention PPPs via:

- Indirect involvement, where firms donate resources (money, space, equipment, or services) for projects executed by the public sector, NGOs, or a group of firms.
- Direct involvement, where firms directly manage activities such as jobs or training courses, help evaluate projects, or participate in public policy and community meetings on crime and violence prevention. The jobs and training courses are sometimes offered to prisoners, former prisoners, and high-risk youth.
- Mixed involvement, where firms both donate resources and actively participate in projects (ICPC, World Bank, and the Sou da Paz Institute 2011).

Private sector involvement can be encouraged by policymakers:

- *At the national level:* Examples include the National Platform for Crime Control set up in 1992 to combat crime problems affecting the business sector in the

⁷ By aggregating the results of 41 studies, the authors found an overall effect of 1.19, meaning that CCTV was associated with a 16 percent reduction in overall crime. However, a systematic review by the IDB of the evidence from 11 studies in four developed countries found results from CCTV to be mixed and not highly encouraging (Pousadela 2014). Some important differences were noted related to where cameras were installed, the ways they were monitored (real-time versus videotaping), and the speed of police response.

⁸ The study analysed 13 improved street lighting evaluations carried out in two countries (the United States and the United Kingdom) and found that crimes increased by 27 percent in control areas compared with experimental areas, or, conversely, crimes decreased by 21 percent in experimental areas compared with control areas (a weighted mean of 1.27 [95 percent confidence interval 1.09–1.47, $p = .0008$]). Pousadela (2014) reviewed eight studies (but none at the highest methodological quality) that evaluated street lighting programmes and other situational measures such as alley-gating, target hardening, property marking, buildings constructed along the principles of defensible space, and a crime awareness project. They all yielded noticeable but modest decreases in crime.

Netherlands; and the Business Network on Crime Prevention created in 1999 in Canada. Both initiatives were undertaken by the national governments. In South Africa, Business Against Crime was established in 1996. A wide range of NGOs also are dedicated to combatting crime and violence and have developed partnerships with national governments and private sectors (e.g., NACRO and Crime Concern in the United Kingdom, and the National Council for Crime Prevention in the United States) (ICPC, World Bank, and the Sou da Paz Institute 2011).

- *At the community level:* Two examples of PPPs at the community level in the United States that have completed evaluations and shown promise are Target's Safe City Program and Business Improvement Districts. Results of Safe City—which brings together local police, businesses, and community leaders to address criminal activity in retail stores—were found to be linked to the level of collaboration in analysing problems and the shared development of a response plan. Positive changes were observed in perceptions of safety of personnel in the communities, as well as in reductions in crime in two of the four areas studied (La Vigne, Owens, and Hetrick 2009). A Business Improvement District (BID) is a nonprofit organization created by neighbourhood property owners or merchants to provide services, activities, and programmes to promote local improvements and public safety. The district is a discrete geographical area, and all property owners or merchants within that area are charged an assessment to fund BID-determined services and activities. Crime reductions in BIDs have been confirmed across multiple locations and in multiple studies.⁹

In Latin America and the Caribbean, there is relatively little information about the outcomes of PPPs, but promising examples include Ciudad Juarez, Mexico. In this case, public-private sector forums and social networks have been used to promote collaboration between businesses and the police to report crimes and transform neighbourhoods into safe areas for businesses. In the Caribbean, although several private sector initiatives exist (including those of the Private Sector Organization of Jamaica, Sandals Foundation, Digicel Foundation, and the Grace Kennedy Foundation in Jamaica), no evaluations of these initiatives have been conducted.

⁹ In Philadelphia, Hoyt (2005) found that property crimes and thefts were significantly lower in BID areas than in non-BID areas (5 percent reduction in BID areas compared with 2.3 percent in control areas). In Los Angeles, using a quasi-experimental design, Brooks (2008) found that, compared to control groups formed in a variety of ways, treatment areas experienced reductions in serious crime, less serious crime, and overall crime (declines of 6–10 percent). Crime reductions in BIDs were confirmed by Cook and MacDonald (2011), who also examined whether the reductions in crime and arrests were sustained or whether they quickly wore off by examining the impact on crime over time. The results suggest that the crime reduction effect may increase over time. For an overview of these studies see <https://www.crimesolutions.gov>.

Appendix 10.1. Percentage of Victimization by Type of Crime

	The Bahamas	Barbados	Guyana	Jamaica	Suriname	Trinidad and Tobago	Caribbean average (C13)
Burglary	11	8	9	9	15	10	10
Attempted burglary	10	7	7	13	13	11	11
Robbery	13	9	7	14	8	9	10
Attempted robbery	13	12	5	18	6	12	13
Vandalism	17	7	4	10	13	18	14
Theft	15	12	21	18	21	14	15
Assaults and threats	6	10	3	14	5	8	8

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The Caribbean average is the average of 13 countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Appendix 10.2. Prevalence of Victimization from Internet Fraud

Answer	The Bahamas	Barbados	Guyana	Jamaica	Suriname	Trinidad and Tobago	Caribbean average (C13)
Percent of Firms							
Yes	41	0	4	0	4	33	17
No	59	100	96	100	96	67	83
Number of Firms							
Yes	52	0	5	0	5	111	341
No	75	123	115	242	115	229	1,625

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The question asked was: *In the last fiscal year, did the establishment experience any kind of Internet fraud?*

The Caribbean average is the average of 13 countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Appendix 10.3. Prevalence of Firms Paying for Ransoms from Kidnapping

Answer	The Bahamas	Barbados	Guyana	Jamaica	Suriname	Trinidad and Tobago	Caribbean average (C13)
Percent of Firms							
Yes	1.6	0.0	0.0	0.0	0.0	0.6	0.5
No	98.4	100.0	100.0	100.0	100.0	99.4	99.5
Number of Firms							
Yes	2	0	0	0	0	2	9
No	125	123	120	242	120	338	1,957

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The question asked was: *In the last fiscal year, has any employee or a member of their household been exchanged for a ransom to be paid by this establishment?* The Caribbean average is the average of 13 countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Appendix 10.4. Frequency of Victimization

Answer	The Bahamas	Barbados	Guyana	Jamaica	Suriname	Trinidad and Tobago	Caribbean average (C13)
Percent of Firms							
1 time	41	34	36	38	30	40	40
2-3 times	44	32	33	29	30	43	39
4-5 times	15	34	18	33	23	17	20
6+ times	0	0	13	0	18	0	2

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The Caribbean average is the average of 13 countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Appendix 10.5. Victimization by Size of Firm

	The Bahamas	Barbados	Guyana	Jamaica	Suriname	Trinidad and Tobago	Caribbean average (C13)
Percent of Firms							
Small	22	5	18	22	32	30	23
Medium	25	11	50	13	23	17	21
Large	20	24	67	20	46	20	25

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: The size of firms was defined as small (< 20 employees), medium (20–99 employees), or large (100 and over) using question 12A: *Number of employees at the end of last fiscal year*. The Caribbean average is the average of 13 countries: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

Appendix 10.6. Ordinary Least Squares Regression Results for Factors Related to Crime Losses among Caribbean Firms, 2013/2014

	Losses Due to crime (dummy equal to one if the firm reported losses from crime in 2013/2014)
Paid for security in 2010: Dummy equal to one if firm reported spending on private security in 2010	0.0633* (0.0330)
New product: Dummy equal to one if firm introduced significantly improved products	0.0248 (0.0344)
New process: Dummy equal to one if firm introduced a significantly improved process for producing or supplying products	0.00976 (0.0725)
Labour constraint: Dummy equal to one if firm identified labour as a major problem and provided training to its employees	0.105* (0.0581)
Credit constraint: Dummy equal to one if firm application for credit was rejected	0.00767 (0.0437)
Age: Firm age in years	0.00333 (0.00197)
Age²: Firm age in years squared	-0.0000313 (0.0000200)
Foreign owned: Dummy equal to one if firm is predominately foreign owned	0.0299 (0.0362)
Joint owned: Dummy equal to one if firm is owned jointly by local and foreign entities	0.0105 (0.0699)
Female owned: Dummy equal to one if firm is owned by a female	0.0326 (0.0209)
Female manager: Dummy equal to one if firm is managed by a female	-0.0171 (0.0412)
Size: Number of employees	0.000585** (0.000172)
Size²: Number of employees squared	-0.000000298* (0.000000165)
Privately held: Dummy equal to one if firm is a private limited liability company	-0.392 (0.219)
Sole proprietorship: Dummy equal to one if firm is a sole proprietorship	-0.416* (0.228)
Partnerships: Dummy equal to one if firm is a partnership	-0.310 (0.300)
Limited partnership: Dummy equal to one if firm is a limited partnership	-0.371 (0.246)
Exporter: Dummy equal to one if firm is an exporter	-0.0197 (0.0326)
Importer: Dummy equal to one if firm is an importer	-0.0430 (0.0311)
GIFT Index: share of transactions with informal payments	-0.00391 (0.413)
Corruption Perception Index: Dummy equal to one if firm belongs to a country with a Corruption Perception Index value less than 6. The Corruption Perception Index ranges from 1 to 10 (highly clean)	-0.0870 (0.383)

(continued on next page)

Appendix 10.6. Ordinary Least Squares Regression Results for Factors Related to Crime Losses among Caribbean Firms, 2013/2014 *(continued)*

	Losses Due to crime (dummy equal to one if the firm reported losses from crime in 2013/2014)
Outages: Dummy equal to one if firm reported power outages	0.105* (0.0519)
Outages-generator: Interaction term, which account for firms that experienced an outages and owned or shared a generator	0.0863* (0.0408)
Sector	
Other manufacturing	0 (.)
Food	0.0402 (0.0317)
Textiles	-0.119* (0.0570)
Garments	-0.107 (0.0967)
Chemicals	-0.0272 (0.0836)
Plastics and rubber	-0.216** (0.0855)
Non-metallic mineral products	-0.173* (0.0813)
Basic metals	0.229 (0.154)
Fabricated metal products	-0.223** (0.0600)
Machinery and equipment	-0.0264 (0.0815)
Electronics (31-32)	0.118 (0.0682)
Construction	-0.00380 (0.0280)
Services of motor vehicles	0.135 (0.114)
Wholesale	-0.0547 (0.0338)
Retail	-0.00331 (0.0319)
Hotel and restaurants	-0.0656 (0.0529)
Transport (60-64)	0.0271 (0.0508)
Information technology	0.0397 (0.0792)
Country fixed effects	
Number	1,742

Source: Prepared by the authors using data from the Productivity, Technology, and Innovation (PROTEqIN) Survey, 2013/2014.

Note: Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.001.

The Cost of Crime in the Caribbean: The Accounting Method

Laura Jaitman and Ivan Torre¹

What exactly are the social costs of crime and how can we measure them? These costs certainly include the direct costs as a result of crime: injury, damage, and loss. There are also costs in anticipation of crime, such as public and private expenditure on security. And there are costs in response to crime, such as the cost of the criminal justice system. We should also take into account other indirect or intangible costs such as changes in behaviour due to the fear of crime or the costs to families of victims. Indeed, there are probably many other consequences of crime that are costly and should be considered, including the possibility that what people are willing to pay to reduce crime may sometimes even be much higher than the aggregate costs of crime to society actually turn out to be. The incidence of crime, as well as the fear of crime and violence, thus induces many distortions in the economy (Jaitman 2015).

In the literature on the costs of crime, there is a distinction between “external costs” and “social costs.” External costs are those imposed by one person on another, where the latter person does not voluntarily accept this negative consequence. For example, the external costs associated with a mugging include stolen property, medical costs, lost wages, and pain and suffering endured by the victim. The victim neither asked for, nor voluntarily accepted, compensation for enduring these losses. Moreover, society has deemed that imposing these external costs is morally wrong and against the law, so the aggressor will be charged with a crime and sentenced accordingly. Social costs

¹ The authors would like to thank Heather Sutton for her help and guidance, and Rogelio Granguillhome for providing excellent research assistance.

are those that reduce the aggregate well-being of society. In this case, medical costs and lost wages are clearly social costs because they are resources that could have been spent elsewhere in the economy on a socially productive activity. Although pain and suffering costs are not actual commodities or services exchanged in the marketplace, individuals are willing to pay to avoid the pain, suffering, and consequent lost quality of life associated with being a crime victim. Thus, to the extent that society cares about the well-being of crime victims, these costs should also be considered social costs of victimization.

The aim of this chapter is to provide comparable estimates of the welfare costs of crime and violence in four countries of the Caribbean using the accounting method (of losses and expenditures). The countries included are The Bahamas, Barbados, Jamaica, and Trinidad and Tobago.² The focus of the study is on the costs, valued monetarily, that crime and violence impose on society. More specifically, this analytical perspective encompasses the costs, expenditures, losses, and investments incurred by households, firms, and the State in relation to the phenomenon of crime. The crimes analysed are those committed against persons and property, with a particular focus on homicides, rapes, robberies, and assaults.

The cost studies do not aim to establish exact amounts, but rather to identify orders of magnitude of crime and violence in a given country or community. The reason for this is because, on the one hand, crime in practice is an evolving and dynamic phenomenon, which makes the task of identifying monetary measures and their consequences more difficult. On the other hand, it is important to note that the information necessary to estimate the cost of crime is complex and difficult to obtain, often leading to significant data-cleaning efforts and the use of indirect estimation methods.

To the best of our knowledge this is the first attempt to make a systematic study of the costs of crime for a group of Caribbean countries. We hope this conservative estimate serves as a benchmark to raise awareness about the severity of this problem and to support future crime prevention and crime control interventions.

11.1 An Accounting Classification of Crime-Related Costs

Accounting is the most commonly used strategy to estimate the welfare costs of crime (Soares 2015). It is, in short, a straightforward application of the logic of comparison between the “no-crime” and “crime” scenarios. Its basic justification can be summarized in two points: (1) there are costs incurred by and losses experienced in

² This is a sample of the countries in the Caribbean. We did not include all the countries due to lack of the data necessary for these estimates or because the data are not public and/or were not made available to the IDB, as in the cases of Suriname and Guyana.

economies that would not be observed in the absence of crime; and (2) these represent direct welfare losses that should not occur and resources that potentially could be used for other purposes. The specific dimensions considered in each study using the accounting methodology vary widely. In our study, which focuses on The Bahamas, Barbados, Jamaica, and Trinidad and Tobago, we will classify the costs of crime in three different categories that will provide a conservative estimate given the available information:

- *Costs incurred by the government*, which include the costs of the judiciary system, the provision of police services, and the administration of prisons.
- *Costs incurred by the private sector*, which include expenditure by firms and households on crime prevention, namely, spending on security services. Given the data available for the Caribbean, we will only estimate the costs incurred by firms, not by households. It would be important to collect information on the costs incurred by households in household expenditure surveys and also to be able to estimate other costs as a consequence of crime, such as medical expenditures.
- *Social costs of crime*, which include foregone income from homicides, from other non-fatal crimes, and from persons in jail.

Other costs usually included in the estimates of the accounting methodology are the value of stolen goods. It is important to point out that in this analysis we do not include the value of stolen goods because stolen goods represent a transfer from the legal to the illegal owner. Although there are necessarily efficiency losses involved—the stolen good does not have the same value in the hands of the illegitimate owner as it does in hands of the legitimate one—we do not have sufficient information to estimate these costs. For a formal framework on the stolen goods market, see Galiani, Jaitman, and Weinschelbaum (forthcoming).

11.1.1 Costs Incurred by the Government

Concerning crime-related costs incurred by the government, we collected data on three different concepts: administration of justice, police services, and prison administration. The main source of information was official government budgets. In order to calculate the exact amount spent, we used the executed amounts, not the approved amounts, which are generally modified during the fiscal year.

The second step consisted of attributing a portion of this budget to our estimation of the costs of crime. The administration of justice, for instance, includes many activities that are not in response to any crime. Costs associated with commercial, family, labour, and other non-criminal disputes should be excluded from the welfare costs of crime estimations. Given the available information, it is not easy to calculate the costs

associated with criminal disputes in the total budget related to the administration of justice. Our proxy indicator consists of the percentage of cases filed in courts that correspond to criminal cases. We attributed a share of 23 to 30 percent using information from the Judicial Council of Barbados as a proxy.³ Similarly, we have to determine the share of the police services budget to include in the costs of crime.

There are many activities carried out by the police that are not necessarily related to criminal cases, the most important of them being traffic control. However, many operations related to traffic control also have an impact on crime rates, either by preventing the occurrence of crime simply by way of the police presence, or by the capture of suspects during routine traffic stops. In this sense, it is difficult to separate the costs associated with crime prevention and repression from other non-criminal costs incurred by the police. Based on estimates for other countries of the region (Jaitman and Torre 2016), we provide a lower-bound estimate of crime-related police costs—which consists of 50 percent of the budget allocated to police services—and an upper-bound estimate—which consists of 100 percent of that same budget.

Finally, in the case of prison administration, we include 100 percent of the budget in our estimates. The number of non-criminal cases resulting in imprisonment is very limited and, according to the U.S. State Department's Country Human Rights Reports, there are no political prisoners in any of the four countries under analysis.⁴ Appendix 11.1 provides a detailed summary of the budget allocations we are including in our study for each country.

Figure 11.1 shows public spending on citizen security as a percentage of GDP. In the selected countries the averages of upper-bound and lower-bound estimates range between 1.5 and 2.1 percent and include prison administration, police expenditure, and justice expenditure. Jamaica spends between 1.42 and 2.44 percent of GDP on crime-related costs incurred by the government. Barbados spends between 1.36 and 2 percent, Trinidad and Tobago between 1 and 1.6, and The Bahamas between 1.15 and 1.94 percent. It is noteworthy that although Barbados has significantly lower crime rates, its government expenditure on citizen security is higher than in Trinidad and Tobago and The Bahamas, mainly due to the large share spent on prison administration.

Public spending on citizen security in the Caribbean (1.5 to 2.1 percent of GDP) was above the average for Latin America and the Caribbean (1.14 to 1.5 percent of GDP).⁵

³ The 2008 Report of the Judicial Council of Barbados indicates that about 23 percent of the cases filed in the lower courts of the country that year corresponded to criminal cases. For our estimates of the cost of crime in Barbados we will thus include 23 percent of the total budget of the administration of justice. For the remaining three countries, for which we did not have access to similar information, we will consider a slightly higher figure of 30 percent of the budget, out of caution.

⁴ For further methodological details, see Jaitman and Torre (2016).

⁵ Average for 17 countries (Jaitman and Torre 2016): Argentina, The Bahamas, Barbados, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Paraguay, Peru, Trinidad and Tobago, and Uruguay.

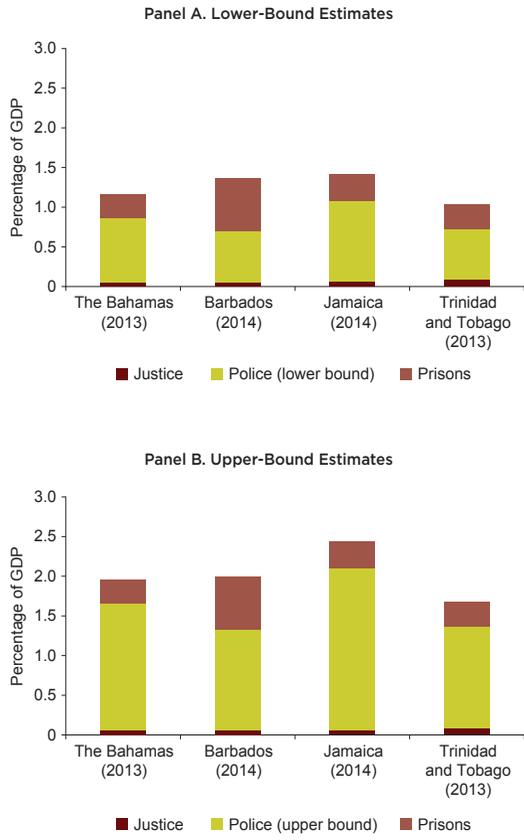
Caribbean countries have some of the lowest expenditure on administration of justice and the highest expenditure on police compared to the average for the Latin America and Caribbean region. The Bahamas, Barbados, and Jamaica, for example, are among the countries that spend the least on justice administration—about 0.06 percent of GDP. Conversely, Jamaica is the country with the highest percentage of crime-related police expenditures at 2.04 percent of GDP, which is in our upper-bound estimates. It is followed by The Bahamas, with police expenditure of 1.59 percent of GDP (upper bound).

Figure 11.2 gives an idea of the amount the government spends on citizen security in comparison with other important sectors such as education and health. Although there is a relatively small variance in security spending, there is a larger one in the other two sectors analysed. In The Bahamas, citizen security spending is two-thirds as high as spending on education or health. In Jamaica, public spending on security is as high as spending on health, but less than half of what is spent on education, while in Barbados and Trinidad and Tobago the share of spending on security is much lower than that spent on the other sectors.

11.1.2 Costs Incurred by the Private Sector

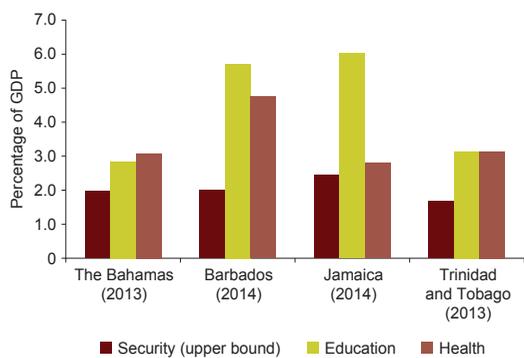
Estimates of crime-related costs of the private sector will be limited to

Figure 11.1: Public Spending on Citizen Security (percent of GDP)



Source: Authors' estimates based on official budget data.

Figure 11.2: Public Spending on Security and Other Sectors (percent of GDP)



Source: Authors' estimates based on official budget data, WHO, and UNESCO.

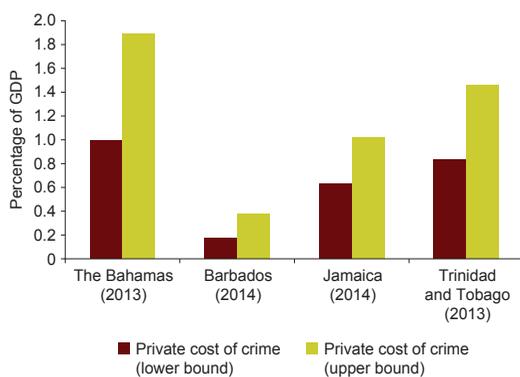
crime prevention costs. In particular, we will only be able to estimate the cost for firms, since there is no household data on crime-related expenditures in the Caribbean. Losses resulting from crime activities are not taken into account for two reasons. First, as mentioned earlier, we are not including the value of stolen goods in our analysis because these goods are not actually destroyed but merely transferred to other agents. Second, we have no satisfactory way of estimating the efficiency costs for private firms of robberies and other crimes. Doing so would require precise information on each firm's activities, which exceeds the scope of this work. The main source of information on crime prevention costs incurred by private firms is the Business Environment and Enterprise Performance Survey (BEEPS) carried out by the World Bank in 2010 across many countries worldwide, including several in the Caribbean. In particular, the survey asks firms how much money they spend on security costs, expressed as a percentage of their annual sales. This percentage, estimated at the firm level, can be aggregated to the sector level by using gross output as a proxy for sales and will be our measure of crime prevention costs incurred by the private sector.

The BEEPS is intended to provide representative figures for the whole private sector of every country. However, not all economic sectors are included in the survey sample: agriculture, mining, utilities, and financial services are excluded. Taking this into account, we will present two estimates of the crime prevention costs of the private sector. The first, understood as a lower bound, will only estimate those costs for the economic sectors included in the BEEPS. The second, understood as an upper bound, will extrapolate those figures to the whole private economy, including those sectors not surveyed in the BEEPS (Figure 11.3). In both cases we will take into account the size of the formal economy. BEEPS numbers are not representative of the informal sector and we are

thus not able to estimate figures for informal firms. In our analysis we use the percentage of GDP corresponding to formal activities as estimated by Vuletin (2008). More details on our estimates are presented in Jaitman and Torre (2016).

In order to complement the information we obtained from the BEEPS on security costs, we also collected data on the size of the private security sector in each country. This figure will also allow us to check for the accuracy of our BEEPS-based estimates, since expenditures on private security

Figure 11.3: Private Spending on Security
(percent of GDP)



Source: Authors' estimates based on the World Bank's Business Environment and Enterprise Performance Survey and national accounts data.

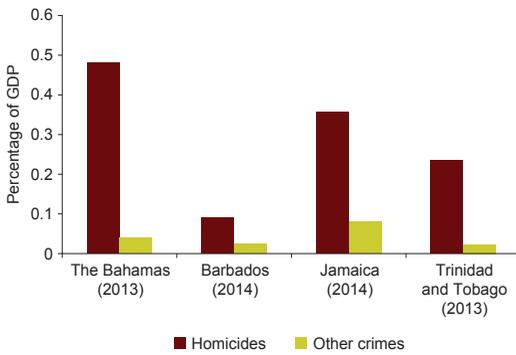
are included in the amount firms reported spending on security. The main data sources for the size of the private security sector are the national census (for the number of employed persons) and annual labour force surveys (for the wages of people employed in that sector). Appendix 11.3 details the exact method of calculation for each country. Data limitations prevent us from providing estimates for Trinidad and Tobago. We report two estimates for the size of the private security sector. The first is the annual wage bill of people employed as security guards, and the second is the annual wage bill of those reporting to work in private security companies. The difference between these two figures comes from the fact that many security guards are not employed by a private security company, but by the company for which they provide their security services. For reasons of simplicity we are not taking into account in these estimates the provision of unmanned security services such as remote monitoring of alarm systems.

11.1.3 Social Costs of Crime

In this chapter the social costs of crime refer to a variety of costs that affect the overall economy as a consequence of crime. The most important of these are victimization costs, which are interpreted as the income foregone by individuals affected by crime. Another set of social costs corresponds to the income foregone by imprisoned individuals.

The estimate of income foregone as a result of victimization uses the human capital methodology and health burden studies. By way of the information provided by these studies, it is possible to identify the years of healthy life lost (DALYs) due to premature death or to becoming disabled from the set of causes that affect health and that have been identified by the World Health Organization (World Bank 1993). The estimates of DALYs already include a social discount rate, which is necessary in order to calculate the present value of future losses. This is useful to calculate the foregone income of crime victims. Dolan et al. (2005) estimate the DALYs for a series of crime events that include murder, rape, robbery, and assault, which are the four types of crimes we will take into account in our analysis. In order to produce a monetary value for these estimates, we value a healthy year of life as the average annual income of a person with the same age and gender as the victim. For the case of non-fatal events like rape, robbery, and assault, this is straightforward. For the case of homicide victims, given the life cycle of income, this calculation may over-estimate the income foregone by older victims (whose annual income at the moment of their premature death is probably higher than what they would have earned in the following years), and may under-estimate the income foregone by younger victims (whose annual income at the moment of their premature death is probably lower than what they would have earned in the following years).⁶

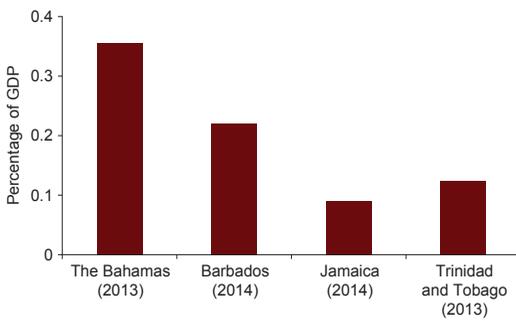
⁶ For more details on the calculations see Jaitman and Torre (2016).

Figure 11.4: Social Costs of Crime as a Percentage of GDP

Source: Authors' estimates based on the Caribbean Crime Victimization Survey, official police data, and labour force surveys. See Appendix 11.4.

four crimes, we estimate the annual income by age and gender using the labour force surveys of the four countries under analysis.

Annual income foregone by imprisoned individuals, the other set of social costs we analyse in this study, is estimated in a similar manner (Figure 11.5). We assign to every prisoner the average annual income of a person of the same age and gender that is estimated from the labour force surveys of each country. We take into account the entire prison population of the four countries analysed, since, according to the U.S. Department of State's Country Human Rights Reports, there are no political prisoners in any of them (these prisoners would have had to be excluded from our analysis because their imprisonment is not crime-related).

Figure 11.5: Foregone Annual Income of Those Imprisoned (percent of GDP)

Source: Authors' estimates based on official data and labour force surveys. See Appendix 11.4.

We combine three different sources for the estimate of foregone income due to victimization (Figure 11.4). The first set of sources consists of the victimization figures reported by the Caribbean Crime Victimization Survey (CCVS), which reports victimization rates by age and gender for a series of crimes that include robbery and assault, two of the four crimes we analyse. For the case of homicide and rapes we use official administrative data, which represent our second source of data. Lastly, in order to give a monetary value to DALYs due to these

11.2 Cost Estimates

The main estimates of crime-related costs are presented in Table 11.1. Overall, crime-related costs seem to hover around 3 percentage points of GDP for the whole region. The country that emerges as having the highest amount of crime-related costs is The Bahamas, where our lower-bound estimate for 2013 indicates that those costs represent about 3.09 percent of the country's GDP. The upper-bound

Table 11.1: Crime-Related Costs (millions of U.S. dollars)

Costs	The Bahamas (2013)	Barbados (2014)	Jamaica (2014)	Trinidad and Tobago (2013)
Costs incurred by the government				
Lower bound	98.80	59.27	197.31	285.44
Upper bound	167.15	87.03	339.44	461.28
Costs incurred by the private sector				
Lower bound	84.39	7.21	88.07	228.44
Upper bound	161.36	16.45	142.05	398.81
Social costs				
Homicides	41.02	3.93	49.56	64.35
Other crimes	8.82	1.06	11.18	6.36
Imprisoned	30.27	9.62	12.55	33.81
Total	80.11	14.61	73.30	104.52
Total (lower bound)	268.31	81.09	358.78	618.66
Percent of GDP	3.09%	1.84%	2.58%	2.26%
Total (upper bound)	408.62	118.09	554.79	964.99
Percent of GDP	4.79%	2.68%	3.99%	3.52%
Private security wage bill				
Occupation-based	94.95	35.50	79.18	
Activity-based	46.15	14.50	61.79	

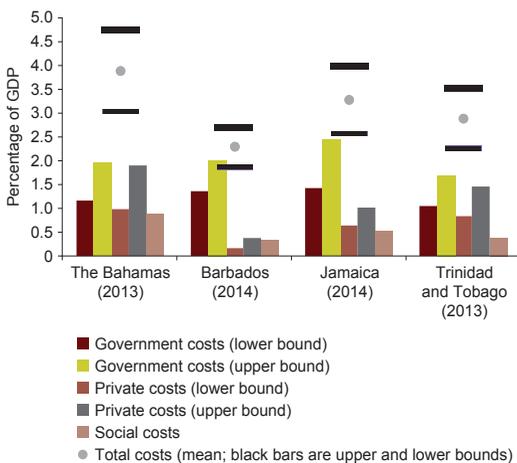
Source: Authors' estimates based on the Caribbean Crime Victimization Survey, the World Bank's Business Environment and Enterprise Performance Survey, official data, and labour force surveys.

Note: Other crimes include rapes, robberies, and assaults.

estimate is 4.8 percent. In fact, The Bahamas has the third-highest cost among 17 countries where the same methodology was applied (Jaitman and Torre 2016), coming just under Honduras (4.8 percent lower/6.5 percent upper) and El Salvador (4.9 percent upper/6.2 percent lower). The lowest figures are reported for Barbados, where our lower-bound estimate for 2014 shows that crime-related costs amount to 1.84 percent of GDP, while our upper estimate amounts to 2.7 percent, almost 2 percentage points lower than The Bahamas' upper estimate. Jamaica and Trinidad and Tobago fall in between.

Figure 11.6 also presents the results of our estimates expressed as a percentage of GDP for each country broken down by government, private, and social costs. It can be seen that between the three categories of crime-related costs, costs incurred by the government are the highest in every country, ranging between 1.5 and 2 percent of GDP. Only the upper estimate of the costs incurred by the private sector in The Bahamas exceeds the costs incurred by the government. In fact, private costs are the

Figure 11.6: Crime-Related Costs as a Percentage of GDP Broken Down by Government, Private, and Social Costs



Source: Authors' estimates based on the Caribbean Crime Victimization Survey, the World Bank's Business Environment and Enterprise Performance Survey, official data, and labour force surveys.

highest in that country, and lowest in Barbados.

Note that Table 11.1 also provides our estimates of the size of private sector security. In The Bahamas and Jamaica, that figure is within the estimated costs incurred by the private sector and represents about 60 percent of those costs. In Barbados, the private security wage bill exceeds the estimated private costs. This may be an indication that our calculations for private costs in that country actually under-estimate the real amount. In any case, costs incurred by the private sector have the greatest variation across countries, moving from as low as 0.2 percent for Barbados to 1.9 percent in The Bahamas. The estimates for Jamaica vary between 0.6 and 1 percent of GDP, while those for Trinidad and Tobago are slightly higher at between 0.8 and 1.5 percent of GDP.

Social costs also show considerable variation across countries, although they are below costs incurred by the private sector in all countries except Barbados. Social costs are the highest in The Bahamas, where they represent almost 0.9 percent of GDP, and lowest in Barbados and Trinidad and Tobago, where they fall between 0.3 and 0.4 percent of GDP. Social costs of crime in Jamaica are about 0.5 percent of GDP.

Concerning our social cost estimates, homicides are by far the largest contributors to social costs in all countries except Barbados. Income foregone because of homicides represents almost 0.5 percent of GDP in The Bahamas. The second most important item among social costs is the foregone income of the imprisoned population. Again, the value is highest in The Bahamas at about 0.35 percent of GDP. Barbados has the second-highest value: slightly more than 0.2 percent of GDP is lost there every year due to the income foregone by prison inmates. Trinidad and Tobago and Jamaica have values that are close to 0.1 percent of GDP. The income foregone for the rest of the crimes taken into account in our analysis is very low, except for the case of robberies in Jamaica, where it represents about 0.05 percent of GDP.

11.3 Conclusions and Policy Implications

This chapter has provided the first estimates of the cost of crime in the Caribbean in a systematic way that allows for comparisons between countries. By using an accounting method, we have estimated that the welfare costs of crime and violence are around 3 percent of GDP of the region, with Barbados being the country least affected and The Bahamas the most. This is a conservative estimate, as it does not include other direct and indirect costs such as violence prevention programmes, health expenses due to violence, or the impact of crime on other outcomes like property prices. Costs incurred by the government appear to be the largest component of the overall cost of crime, representing between 1.5 and 2 percent of GDP. This contrasts with our estimates for private and social costs, which show a great deal of variation across countries. The fact that private costs partly mimic the behaviour of social costs, though at different magnitudes, suggests that private agents may react more quickly to changes in the crime environment, or that the private sector is crowding out public investments to prevent crime. This suggests that there is space for more cost-effective policies led by the government.

To put the 3 percent in context, it is slightly lower than the average welfare costs of crime for Latin America. This is a considerable amount, as it is comparable to what the region spends annually on infrastructure and is roughly equal to the income share of the poorest 30 percent in the region.

Moreover, in institutional terms, the need to improve the production, development, and quality of official indicators to estimate the costs of crime points to the importance of building the capacity of the State and civil society. This would provide sustainability to, for example, crime observatories and other collective efforts in terms of the transfer of knowledge as well as monitoring, communications and cooperation, and promotion and transformation of public policies at the local and regional levels. These efforts help to identify priority areas for intervention and, importantly, to accumulate lessons and experiences on how to reduce crime and its negative effects on the citizenry.

Appendix 11.1. Costs Incurred by the Government—Budget Detail

This appendix describes the budget allocations we included in estimating the three concepts of costs incurred by the government: administration of justice, provision of police services, and prison administration. The names of government agencies indicated correspond to the allocations as stated in each country's budget.

The Bahamas

Administration of Justice: Recurring and capital expenditures of the Judicial Department, Court of Appeal, and Magistrates Court.

Police Services: Recurring and capital expenditures of the Ministry of National Security and the Royal Bahamas Police Force.

Prison Administration: Recurring and capital expenditures of the Prisons Department, the Simpson Penn Centre for Boys, and the Willamae Pratt Centre for Girls.

Barbados

Administration of Justice: Budget for the Judiciary, Public Prosecution, and Administration of Justice, and Treasury allocations to Judges, Public Prosecution, Forensic Services, Supreme Court, and Magistrates Court.

Police Services: Budget for Police Services, and Treasury allocations to Police Headquarters and Management and General Police Services.

Prison Administration: Budget for Corrective and Rehabilitative Services and Treasury allocations to the Prisons Department, Probation Department, and Industrial Schools.

Jamaica

Administration of Justice: Recurrent and capital expenditures of the Court of Appeal, Director of Public Prosecution, Resident Magistrates' Court, Supreme Court, Attorney General, and Court Management Services.

Police Services: Recurrent and capital expenditures for Police Services.

Prison Administration: Recurrent and capital expenditures of the Department of Correctional Services.

Trinidad and Tobago

Administration of Justice: Budget of the Judiciary and the part of the budget of the Ministry of Justice not allocated to the Prison Service.

Police Services: Budget of the Trinidad and Tobago Police Service.

Prison Administration: Budget of the Prison Service.

Appendix 11.2. Crime-Related Costs of the Private Sector

To estimate the crime-related costs of the private sector, our main source was the 2010 round of the Business Environment and Enterprise Performance Survey (BEEPS) carried out by the World Bank.

Gross output by sector was obtained in the following manner for each country:

The Bahamas

The Department of Statistics of The Bahamas' annual National Accounts report provides the figures for the gross output by sector.

Barbados

Caribbean Community statistics provide the gross value added by sector for Barbados. Gross output was obtained by applying the inverse productivity ratio (gross output/gross value added) at the sector level for the average of The Bahamas (average 2010–2014) and for Jamaica (2007).

Jamaica

The gross output by sector for 2014 was obtained by applying the inverse productivity ratio (gross output/gross value added) at the sector level that was presented in the 2007 National Accounts report to the gross value-added figures reported by sector for 2014.

Trinidad and Tobago

Caribbean Community statistics provide the gross value added by sector for Trinidad and Tobago. Gross output was obtained by applying the inverse productivity ratio (gross output/gross value added) at the sector level for the average of The Bahamas (average 2010–2014) and for Jamaica (2007).

Appendix 11.3. Size of the Private Security Sector

The Bahamas

The annual labour force survey reports the occupation and the employer's main activity of all surveyed individuals. The survey, however, is not intended to provide a representative sample of individuals working in each occupation or in each industry; thus, all figures at the occupation or activity level have a very high level of dispersion. To compensate for this fact, we estimate averages across the three labour force surveys that took place during 2010–2014. In particular, for each labour force survey we use the survey-provided weights to estimate the number of people employed in occupation 5414 or employed in firms whose main activity is 8010, and we use those same weights to estimate the average wage for those same groups of people. We then report the averages across 2010–2014 after adjusting for inflation. The annual wage bill is simply the product of the number of people employed and their annual wage.

Barbados

The 2010 population census provides the occupation and the employer's main activity for all the employed population of Barbados. The number of people employed in occupation 5414 and in sector 8010 are obtained from this source. Since this is a census-based number, we prefer to stick to it rather than using the more volatile estimates coming from the labour force survey. The annual wage of those employed in occupation 5414 is obtained as the average across 2010–2013 of that figure from the labour force survey, after adjusting for inflation. As in the case of The Bahamas, the average across the whole time period is used because of the high dispersion of data. The annual wage of people employed in sector 8010 is obtained from the 2010 population census. The labour force survey doesn't allow us to identify those employed in sector 8010. We adjust the 2010 census value to prices in 2013. The annual wage bill is simply the product of the number of people employed and their annual wage.

Jamaica

The 2011 population census provides the occupation and the employer's main activity for all the employed population of Jamaica. The number of people employed in occupation 5414 and in sector 8010⁷ are obtained from this source. Since this is a census-based number, we prefer to stick to it rather than using the more volatile estimates coming from the labour force survey. The annual wage of those employed in occupation 5414 and in sector 8010 is obtained as the average across 2010–2014 of that figure from the labour force survey, after adjusting for inflation. The annual wage bill is simply the product of the number of people employed and their annual wage.

⁷ The 2011 Census uses ISIC rev. 3. In this case private security activities correspond to code 7492.

Appendix 11.4. Social Costs of Crime

The Bahamas

Given the availability of data, the year of our estimates is 2013. For homicides, rapes, and robberies, we use gender and age characteristics of the victims provided by the Royal Bahamas Police Force. These data are only available for 2013. For assaults we use data on the prevalence rate by age and gender estimated by the Caribbean Crime Victimization Survey (CCVS) for 2014, since there are no official data for 2013. The age and gender characteristics of the imprisoned population were obtained from a study by Minnis et al. (2011) that surveyed the age and profile of inmates at the Fox Hill prison in Nassau in 2010. The age-gender profile was extrapolated to the total number of prisoners in 2013 that was reported in the U.S. Department of State Bahamas Human Rights Report of that year. The annual income for all age and gender groups was obtained from the 2013 labour force survey.

Barbados

Given the availability of data, the year of our estimates is 2014. For homicides, we use gender and age characteristics of the victims provided by the Royal Barbados Police Force. For rapes, we only had access to the total number of rapes committed in the country. We applied the age-gender profile of rape victims in The Bahamas to this number. For robbery and assaults we use data on the prevalence rate by age and gender estimated by the CCVS. The prevalence rates were converted into absolute numbers by applying them to the actual population estimates by age and gender published by the Barbados Statistical Service. The age and gender characteristics of the imprisoned population were obtained from the Annual Report of the Barbados Prison Service. The annual income for all age and gender groups was obtained from the 2014 labour force survey.

Jamaica

Given the availability of data, the year of our estimates is 2014. For homicides and rapes, we use gender and age characteristics of the victims provided by the Jamaica Constabulary Force. For robbery and assaults, we use data on the prevalence rate by age and gender estimated by the CCVS. The prevalence rates were converted into absolute numbers by applying them to the actual population estimates by age and gender published by the Statistical Institute of Jamaica. The age and gender characteristics of the imprisoned population were obtained from a study on education and crime commissioned in 2012 by the Jamaica Constabulary Force. The age and gender profile was applied to the prisoner figure reported in 2014. The annual income for all age and gender groups was obtained from the 2014 labour force survey.

Trinidad and Tobago

Given the availability of data, the year of our estimates is 2013. For homicides, we use gender and age characteristics from precise microdata provided by the Trinidad and Tobago Police Service. The dataset is comprised of the period 2001–2013, but for the purpose of our study we only use the 2013 data. For rapes, only the total number of offences is reported. We applied the age-gender profile of rape victims in Jamaica to this number. For robbery and assaults, we use data on the prevalence rate by age and gender estimated by the CCVS. The prevalence rates were converted into absolute numbers by applying them to the actual population estimates by age and gender published by the Trinidad and Tobago Central Statistical Office. Since the CCVS was carried out in 2014, in order to estimate the values of 2013 we took several steps. First we estimated the degree of under-reporting of official figures for robberies and assaults in 2014 with respect to the CCVS. We then estimated the actual number of robberies and assaults in 2013 by augmenting the official values of 2013 with the inverse of the under-reporting ratio of 2014. The age and gender characteristics of the imprisoned population were obtained from the Locking-Up Report of the Prison Service as reported in 2014. The age and gender profile was applied to the prisoner figure reported in 2013. The annual income for all age and gender groups was obtained from the 2013 Continuous Sample Survey of Population.

The Effects of Crime on Economic Growth, Tourism, Fear, Emigration, and Life Satisfaction

Heather Sutton, Inder Ruprah, and Camilo Pecha

The first chapter in this section addressed the costs of crime to businesses, and the next one used the accounting method to consolidate the various costs of crime into a single monetary figure for each country. A single number is indeed useful for summarizing the myriad costs involved. It provides a comparison point to other countries, and it communicates the magnitude of the crime problem to those accustomed to thinking in monetary terms. On the other hand, no single measure can capture all imaginable costs, and sometimes it is useful to examine specific costs of crime to certain sectors (i.e., tourism) or indirect costs that may not be easily captured by other methods.

This chapter drills down to understand and identify some specific costs of crime, including lower economic growth, lower tourism arrivals, fear and insecurity, higher intentions to emigrate, and lower life satisfaction. We begin with a review of the literature on these topics and then explore these costs through a variety of methods. We find that in the Caribbean, crime, and particularly violent crime, has pervasively negative costs to society. Conclusions and policy implications are explored at the end of the chapter.

12.1 Background and Literature

While a number of methodologies can be employed to assess the cost of crime,¹ using panel regressions to estimate the effects of crime on growth provides a summary

¹ For an overview see Jaitman (2015).

measure of effects through many channels.² This method was used by the UNODC and World Bank (2007) to analyse the impact of homicide rates on GDP growth in Jamaica, Guyana, Haiti, and the Dominican Republic from 1975 to 2000. Employing a similar method, we simulate the effect of decreasing the homicide rate in the region.

Tourism is of particular concern because of the key role it plays in many Caribbean economies. The few studies that examine the relationship between crime and tourism in the region find that it mainly involves property crime that tends to be directed at tourists (De Albuquerque and McElroy 1999). While the odds of being victimized as a tourist in the Caribbean are low (especially for violent crime), *perceptions* of crime—driven by media coverage in the sending country rather than actual dangers—do affect tourism (King 2003). Alleyne and Boxill (2003) found that crime has discouraged tourism to Jamaica, particularly from European countries. They posit that the negative effect of crime has been mitigated by an increased number of all-inclusive hotels where tourists never need to venture into the streets. However, these hotels do not foster significant backward linkages to the rest of the local economy.

Other societal costs are related not just to the direct experience of victimization, but to the general fear related to high crime levels. The discrepancy between actual risk of victimization and people's feelings of insecurity has brought increased attention to the topic of fear of crime. Fear of crime affects far more individuals than crime itself, and there are good reasons for treating the two as separate problems. While fear of crime is related to actual crime, the connection is less direct than might be assumed (Van Dijk, Van Kesteren, and Smit 2008; Van Kesteren, Mayhew, and Nieuwebeerta 2000; Van Kesteren, Van Dijk, and Mayhew 2013). In many cities where crime levels have fallen, fear of crime has not. The most fearful individuals are not necessarily those who have suffered the most or are most at risk. Similarly, the most fearful communities are not necessarily the ones with the most crime.

Nonetheless, fear of crime has come to be seen as a problem in its own right because of the way it can constrain people's lives, restrict their use of public space, and sometimes in the process make those places more dangerous. An immense body of international literature finds that fear of crime disrupts neighbourhood cohesion (Nasar 1993), fractures the sense of community and neighbourhood (Box, Hale, and Andrews 1988; Ross and Mirowsky 2000), creates interpersonal distrust (Garofalo 1981), breaks down social relations and attachment (Spelman 2004), leads to social isolation (Doeksen 1997; Ross and Mirowsky 2000), and adds to an erosion of social control and social order (Ross and Mirowsky 2000). When individuals adopt protective or avoidance

² Causality can run in both directions: violence affects growth, but growth—by influencing opportunities for gainful employment—also affects violence. Here, we focus on the causal arrow running from violence to growth.

behaviours, it can lead to a lower quality of life, mistrust, loss of neighbourhood cohesion, neighbourhood decay, and possibly (although contested by some scholars) increased levels of actual crime (Jacobs 1961; Millie and Herrington 2005; Painter 1996; Samuels and Judd 2002).

Finally, another cost of crime and violence is the effect it has on the victims' quality of life and intentions to leave their current residence. Research has consistently found that crime and feelings of insecurity have negative consequences for personal well-being. Some authors have tested this effect in Latin America, and to a limited extent in the Caribbean, using data from the Latin American Public Opinion Project (LAPOP) Survey (Maldonado and Rodríguez 2014; UNODC and World Bank 2007). The connection between crime and emigration from Central America has also received a great deal of attention.³ Using the more precise victimization data collected via the IDB Caribbean Crime Victimization Survey (CCVS) module attached to the 2014/2015 LAPOP Survey, we examine the effect of victimization on both life satisfaction and intentions to emigrate in five Caribbean capital city metropolitan areas: Bridgetown, Barbados; Kingston, Jamaica; New Providence, The Bahamas; Paramaribo, Suriname; and Port of Spain, Trinidad and Tobago.

12.2 Facts and Figures

12.2.1 Impact of Violent Crime on Economic Growth

By employing panel regressions to estimate the effects of crime on growth, we can simulate the effect of decreasing the homicide rate in the region to match the world average for the period 1995–2011.⁴ The results show that GDP growth for the region would have been 1.14 percent higher annually (moving from 3.105 to 3.140 percentage points each year within the period). This can be compared to the rest of the small economies (ROSE) of the world, which would have had an overall change of 0.09 percent annually over the same period.⁵

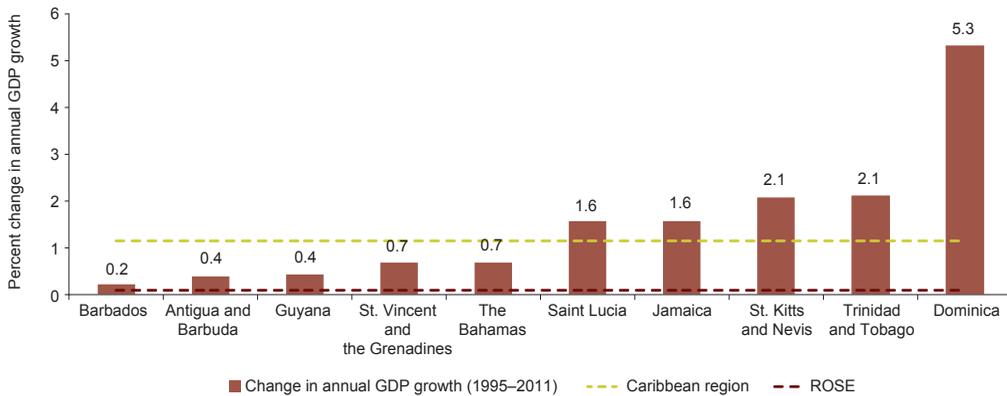
³ See Hiskey, Malone, and Orcé (2014) on violence and migration in Central America. See Azpuru (2014) on factors related to the migration of unaccompanied minors out of Central America.

⁴ For a methodological note see Appendix 12.1. The period 1995–2011 was the period of most data for homicide rates worldwide (UNODC).

⁵ These sets of countries are formed as follows:

- Caribbean: Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.
- ROSE: Belize, Bhutan, Botswana, Cabo Verde, Comoros, Djibouti, Equatorial Guinea, Fiji, Gabon, The Gambia, Guinea-Bissau, Iceland, Kiribati, Lesotho, Luxembourg, Maldives, Mauritius, Montenegro, Namibia, Qatar, Samoa, São Tomé and Príncipe, Seychelles, Solomon Islands, Swaziland, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

Figure 12.1: Potential Increase in Annual Economic Growth Rate for Caribbean Countries from Reducing the Homicide Rate to the Global Average, 1995–2011



Source: Authors' analysis of World Bank World Development Indicators data on GDP and United Nations Office on Drugs and Crime data on homicide rates for 1995–2011.

Note: ROSE: rest of the small economies of the world.

Figure 12.1 shows the potential boost in annual economic growth by country if homicides were reduced to the global average. The country that would have the largest benefit from the reduction in homicides is Dominica (5.3 percent increase in annual GDP growth). GDP growth in Trinidad and Tobago could have been 2.1 percent higher per year (3.88 instead of 3.8 percentage points). Because the estimated effects are on annual growth, they are cumulative and could have a substantial impact over time.

12.2.2 Impact of Violent Crime on Tourism

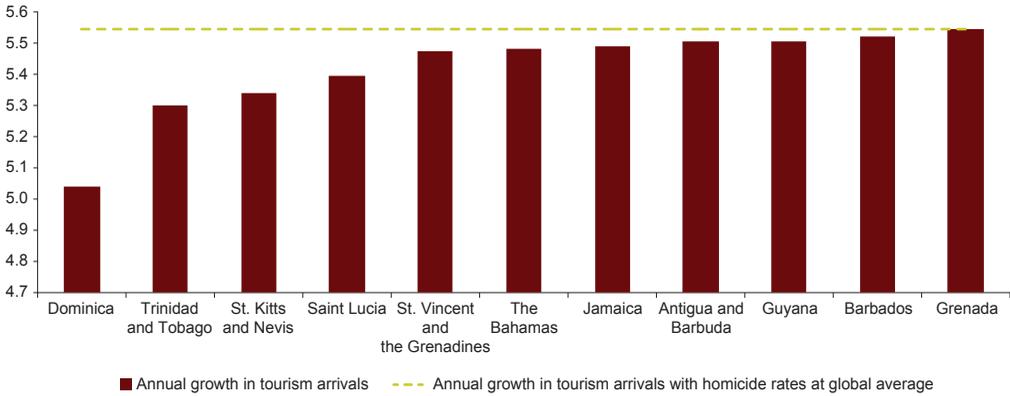
Using a similar model as described previously under economic growth (see Appendix 12.2), we found that an increase in one homicide per 100,000 is correlated with a reduction of 3.26 percentage points in the growth in tourism arrivals.⁶ In other words, if the homicide rate were reduced to the global average, this would imply an increase of 2.14 percent in annual tourism arrival growth from 3.42 to 5.54 percentage points. Figure 12.2 shows that, again, Dominica would have the most to gain from reducing homicide rates. Trinidad and Tobago would also have high gains (moving from 5.3 to 5.54 percentage points).

12.2.3 Fear and Insecurity

Another cost of crime that is difficult to measure in monetary terms is the fear and insecurity associated with crime. On average, one in five (21 percent) Caribbean respondents

⁶ See Appendix 12.1 for methodological note.

Figure 12.2: Potential Increase in the Growth Rate of Tourism Arrivals in Caribbean Countries from Reducing the Homicide Rate to the Global Average, 1995–2011



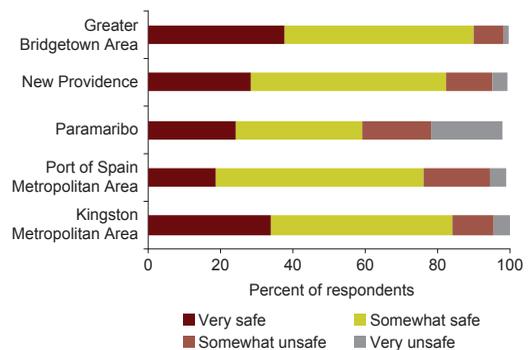
Source: Authors’ analysis of World Bank World Development Indicators data on GDP and United Nations Office on Drugs and Crime data on homicide rates for 1995–2011.

say that their neighbourhood is somewhat or very unsafe. Figure 12.3 illustrates how feelings of safety and security are not necessarily higher in cities with higher victimization rates. For example, while Paramaribo has the lowest victimization rates (see Chapter 2), more city residents there reported feeling their neighbourhood was somewhat or very unsafe than any other capital cities.

To better understand feelings of fear and insecurity, CCVS respondents were asked about their feelings walking alone during the day or night, both within and outside their neighbourhood. Despite the fact that most crimes are perpetuated against victims within their own neighbourhoods (see Chapter 2), respondents in all five capital cities reported feeling more unsafe outside their neighbourhood at night than inside their neighbourhood (Figure 12.4). This is generally consistent with findings of other authors across Latin America and the Caribbean (Juan et al. 2016).

In response to feelings of insecurity, Caribbean residents were more

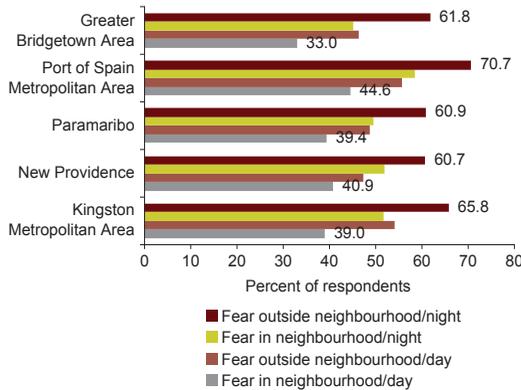
Figure 12.3: Perceptions of Neighbourhood Safety in Five Caribbean Capital City Metropolitan Areas (percent)



Source: Data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

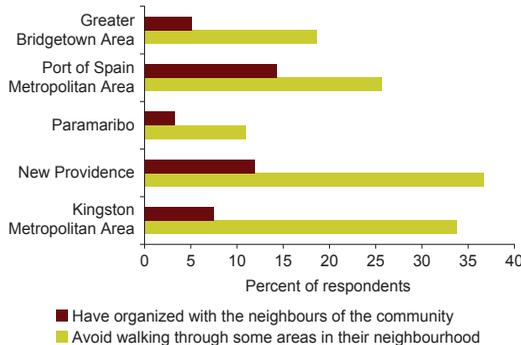
Note: The question asked (identified as AOJ11) was: *Speaking of the neighbourhood where you live and thinking of the possibility of being assaulted or robbed, do you feel very safe, somewhat safe, somewhat unsafe or very unsafe?*

Figure 12.4: Feelings of Insecurity within versus Outside One’s Neighbourhood during the Day/ Night, Five Caribbean Capital City Metropolitan Areas (scale from 0-100)



Source: Data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.
 Note: The question asked (identified as IVOL11, IVOL12, IVOL13) was: *Walking alone (in/outside) your neighbourhood (during the day/after dark), do you feel: very safe, safe, neither, unsafe, very unsafe?* Responses were recoded on a scale of 0-100 with zero being very safe and 100 very unsafe.

Figure 12.5: Actions Taken in the Last 12 Months Because of Fear of Crime, Five Caribbean Capital City Metropolitan Areas (percent)



Source: Data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.
 Note: The questions asked were: (FEAR10) *In order to protect yourself from crime, in the last 12 months, have you taken any measures such as avoiding walking through some areas in your neighbourhood because they are dangerous?* (VIC44) *In the last 12 months, out of fear of crime, have you organized with the neighbours of your community?*

likely to restrict their activities to places or times perceived to be safe (25 percent) than to organize within the neighbourhood (8.5 percent) (Figure 12.5). It is also noteworthy that the percentage of Caribbean respondents who reported having organized with neighbours (out of fear of crime) was almost half that of the 28 countries polled by the LAPOP Survey across the Americas region (17.8 percent) in 2014. Organizing with neighbours to combat insecurity requires more effort than simply avoiding certain neighbourhood areas. Unfortunately, avoidance can contribute to the further breakdown of informal social control, more fear, and eventually more crime itself.

12.2.4 Victimization, Emigration, and Life Satisfaction

Across all five capital city metropolitan areas, 13.8 percent of respondents reported feeling dissatisfied with their lives.⁷ Higher proportions of victims were dissatisfied with their lives (20 percent) than non-victims (12.7 percent). Figure 12.6 shows that this difference is further intensified when we look at those who were victims twice or more in the last year (23.1 percent). Dissatisfaction with life was particularly high among those who had been victims of a crime twice or more

⁷ Overall, for the 28 countries in the Americas polled by the LAPOP Survey in 2014, 12.5 percent claimed to be dissatisfied with their lives.

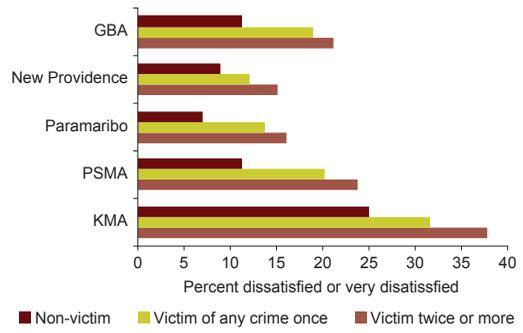
in Kingston (37.7 percent for victims versus 25 percent for non-victims).

Overall 24.4 percent of Caribbean capital city metropolitan area residents reported intentions to live or work abroad in the next three years. This is well above national intentions to emigrate in 2014 for Uruguay or Chile (7.9 percent and 8.1 percent, respectively), far lower than Haiti (61.1 percent), and closest to Central America (23 percent for Nicaragua, 28.4 percent for El Salvador, and 31.8 percent for Honduras).⁸ Figure 12.7 shows that the highest intentions to emigrate in the Caribbean are among residents of Kingston and the lowest in Paramaribo. The percentage of crime victims intending to emigrate (31.9 percent) is higher than the percentage among non-victims (21.6 percent). The highest intentions to emigrate are among victims of a crime twice or more in the last year (37.1 percent). In Kingston, the intention to move abroad among victims of a crime twice or more in the last year (62.6 percent) was comparable to that of Haiti (61.1 percent).

However, it is possible that differences in life satisfaction and intentions to emigrate are not derived from a causal effect of victimization, but rather from the fact that victims and

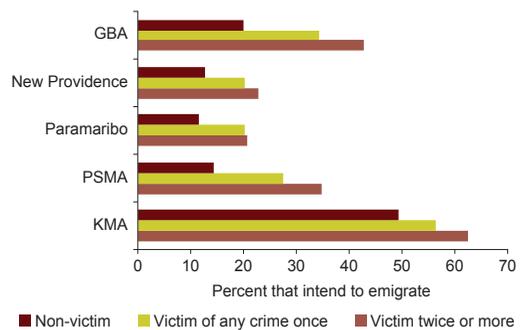
⁸ The percentage of persons with intentions to emigrate in countries outside the Caribbean was calculated using the LAPOP Survey merged dataset for 28 countries in 2014.

Figure 12.6: Percentage of Respondents Who Feel Somewhat or Very Dissatisfied with Their Lives: Victims versus Non-victims in Five Caribbean Capital City Metropolitan Areas



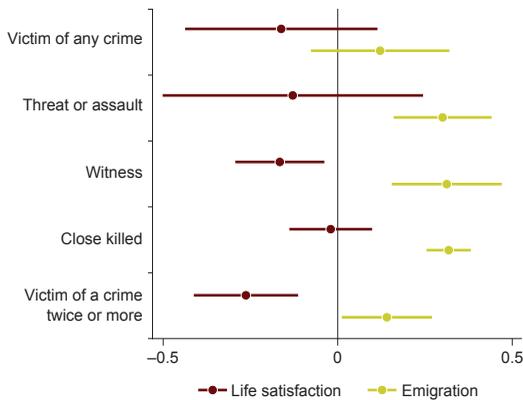
Source: Data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.
 Note: The question asked (identified as LS3) was: *To begin, in general how satisfied are you with your life? Would you say that you are: very satisfied, somewhat satisfied, somewhat dissatisfied or very dissatisfied?* The five capital cities listed are GBA: Greater Bridgetown Area, Barbados; New Providence, The Bahamas; Paramaribo, Suriname; PSMA: Port of Spain Metropolitan Area, Trinidad and Tobago; and KMA: Kingston Metropolitan Area, Jamaica.

Figure 12.7: Percentage of Respondents Who Intend to Emigrate: Victims versus Non-victims in Five Caribbean Capital City Metropolitan Areas



Source: Data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.
 Note: The question asked (identified as Q14) was: *Do you have any intention of going to live or work in another country in the next three years?* The five capital cities listed are GBA: Greater Bridgetown Area, Barbados; New Providence, The Bahamas; Paramaribo, Suriname; PSMA: Port of Spain Metropolitan Area, Trinidad and Tobago; and KMA: Kingston Metropolitan Area, Jamaica.

Figure 12.8: Factors Associated with Life Satisfaction (ordinal logit coefficient) and Intentions to Emigrate (logit coefficient), Five Caribbean Capital City Metropolitan Areas



Source: Data from the IDB Caribbean Crime Victimization Survey module attached to the 2014/2015 Latin American Public Opinion Project Survey.

Note: Ordinal logit (life satisfaction) and logit (intentions to emigrate) coefficients with 95 percent confidence intervals. N = 14,009. The five capital cities are Greater Bridgetown Area, Barbados; New Providence, The Bahamas; Paramaribo, Suriname; Port of Spain Metropolitan Area, Trinidad and Tobago; and Kingston Metropolitan Area, Jamaica.

to emigrate (Figure 12.8). Violent crime victimization is positively and significantly related to intentions to emigrate, holding other factors constant. Odds that one intends to emigrate in the next three years increase 34.9 percent for victims of assault and threat, 36.4 percent for those who witnessed a violent attack, and 37.3 percent for those who have lost someone to violence. The results with respect to life satisfaction are less conclusive: simply being a victim of a crime in the last 12 months, even a violent one, was not enough to make a significant difference in happiness. However, being victimized twice or more in a year or witnessing a violent attack was significantly associated with lower life satisfaction (Odds Ratio = .84 and OR = .83, $p < .05$). Fear (believing your neighbourhood is somewhat or very unsafe) was also associated with significantly lower life satisfaction (OR = 0.80, $p < .01$) but not intentions to emigrate.

non-victims differ along other lines pertaining to personal, socio-economic, and neighbourhood characteristics. To examine the extent to which experiences with crime shape life satisfaction and the intention to emigrate in the region, Figure 12.8 displays the results of a multivariate logistic regression. The model includes the demographic controls accounted for in previous regression models in this publication. Additionally we include variables that have been found to be related to emigration and life satisfaction (fear of crime, being a homeowner, number of children, receiving remittances, and religion). Full results from the analysis are shown in Appendix 12.1.

Controlling for the aforementioned characteristics, those who have been victimized (or had family members victimized) are more likely to be dissatisfied with life and intend

12.3 Conclusions and Policy Implications

This chapter has examined some of the specific costs related to crime in the Caribbean. We find that homicide rates are directly associated with lower economic growth and tourism arrivals in Caribbean countries. Furthermore, fear of crime is an additional cost, though this may be more related to factors other than direct experiences of victimization. Caribbean residents are more fearful of walking outside their own neighbourhoods, although our data show that crimes are more likely to occur within their neighbourhood or their home. One in five individuals reports having avoided walking through certain areas of their neighbourhood because they thought they were dangerous. On the other hand, less than 10 percent organized with neighbours to fight crime—a percentage far lower than other countries in the Americas. The trauma from being victimized also significantly impacts overall feelings of life satisfaction and increases intentions to emigrate.

The policy implications here are that there are significant economic and social welfare gains from reducing crime in the Caribbean. Security-related expenses are a significant portion of the government budgets (see previous chapter), and wise investment of these resources could lead to real crime reduction, have a significantly positive effect on the economy, slow the drain of skilled workers from the countries, and improve life satisfaction of residents. The important next step is for policymakers to invest in evidence-based and data-driven interventions tailored to the crime scenario that is specific to their country. New efforts and resources should be invested in smarter crime control, evidence-based prevention, and improved data collection and evaluation for existing initiatives. Chapter 13 will provide an overview of the evidence on programmes that work to confront some of these scenarios.

Additionally, this chapter finds that reducing fear (making people feel safer) should also be considered as a common goal among public safety and security initiatives. However, since fear of crime is not highly correlated with actual crime, it should not be assumed that policies to reduce crime will also reduce fear. Dedicated policies to increase confidence in law enforcement and the justice system and decrease misinformation about crime can help. Reducing such misinformation could be achieved by providing the public with reliable information about crime, including information about the risk of victimization for different criminal offences, the likelihood of error in these estimates, and the nature of victimization events.

Appendix 12.1. Methodology for Calculating the Impact of Homicide Rate Growth on GDP Growth

A regression approach was used to test the relationship between homicides and GDP growth. Using information regarding intentional homicides per 100,000 population and constant GDP, we performed a regression analysis where we found that an increase of 1 percentage point in the homicide rate would reduce GDP by 0.7 percentage point. The data (World Bank, World Development Indicators) contain information from the above-mentioned variables for 213 countries between 1960 and 2014, but with several gaps, especially for the homicide rate. We tested if the response attrition for the homicide rate was correlated with GDP growth and found no evidence for such relation. We separate the analysis between Caribbean countries and the rest of the small economies (ROSE) of the world.⁹

We used difference-in-log variables to test the hypothesis that homicides negatively affect growth. Two variables were constructed: the Delta-log GDP ($\text{Log}(GDP_t) - \text{Log}(GDP_{t-1})$), and the Delta-log Homicide rate ($\text{Log}(HR_t) - \text{Log}(HR_{t-1})$), which were used to run the regression:

$$\Delta \log(GDP_{it}) = \alpha + \beta \cdot \Delta \log(GDP_{it-1}) + \delta \cdot \Delta \log(HR_{it}) + \varepsilon_{it} \quad (12A1.1)$$

Table 12A1.1: Regression Results

	(1) dlog_gdp	(2) dlog_gdp
dlog_gdp_t_1	0.451*** (0.0223)	0.275*** (0.0352)
dhomicide_rate	-0.00837*** (0.00303)	-0.00789* (0.00468)
_cons	0.0188*** (0.00123)	0.0251*** (0.00124)
Country fixed effect	No	Yes
Number	1,584	1,584
Adjusted R-squared	0.207	0.270

Source: Prepared by the authors.

Note: Standard errors in parentheses in model 1 and clustered at the country level in model 2. * p < 0.1, ** p < 0.05, *** p < 0.01.

Table 12A1.1 shows that, irrespective of the model, the parameter of interest, δ , is negative and statistically significant. Thus, after an increase of 1 percentage point in the homicide rate, GDP growth will decline about 0.8 percentage point when controlling for country characteristics (country fixed effects and error clusters at the country level). With these parameters we predicted the potential GDP growth for the period with the most information (1995–2011).

⁹ These sets of countries are as follows: Caribbean: Antigua and Barbuda, The Bahamas, Barbados, Dominica, Grenada, Guyana, Jamaica, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago. ROSE: Belize, Bhutan, Botswana, Cabo Verde, Comoros, Djibouti, Equatorial Guinea, Fiji, Gabon, The Gambia, Guinea-Bissau, Iceland, Kiribati, Lesotho, Luxembourg, Maldives, Mauritius, Montenegro, Namibia, Qatar, Samoa, São Tomé and Príncipe, Seychelles, Solomon Islands, Swaziland, Timor-Leste, Tonga, Tuvalu, and Vanuatu.

Appendix 12.2. Methodology for Calculating the Impact of Homicide Rate Growth on Tourism Arrivals

Using a panel regression, we estimated a model with the endogenous variable given by the difference in logs of tourism arrivals to the country. The model is as follows:

$$\Delta \log(\text{Tour_arr}_{it}) = \alpha + \delta \cdot \Delta \log(\text{HR}_{it}) + \varepsilon_{it}. \quad (12A2.1)$$

Table 12A2.1 presents the results for this estimation. As can be seen, an increase of 1 percentage point in the homicide rate growth is correlated with a reduction of 3.26 percentage points in the tourism arrival growth.

Table 12A2.1: Regression Tourism Results

	(1) dTourism arrivals	(2) dTourism arrivals
dhomicide_rate	-0.0341** (0.0158)	-0.0326** (0.0150)
_cons	0.0552*** (0.00493)	0.0552*** (0.000116)
Country fixed effect	No	Yes
Number	1,387	1,387
Adjusted R-squared	0.003	0.039

Source: Prepared by the authors.

Note: Standard errors in parentheses in model 1 and clustered at the country level in model 2. * p < 0.1, ** p < 0.05, *** p < 0.01.

Appendix 12.3. Odds Ratios for Life Satisfaction (Ordinal Logit) and Emigration (Logit)

	Life Satisfaction Index (ordinal 1-4)	Emigration (1 if intention to emigrate, 0 otherwise)
Victim of any of five crimes (12 months)	0.95	1.12
Victim of assault or threat (12 months)	0.98	1.35***
Witness to violent attack (lifetime)	0.83**	1.36***
Lost someone to violence (lifetime)	0.94	1.37***
Victim of a crime twice or more	0.84**	1.15**
Male	0.89***	1.09
Age		
Young (16-24)	0.74	10.38***
Middle1 (25-34)	0.62**	7.59***
Middle2 (35-49)	0.64***	4.92***
Senior (50-64)	0.67***	2.62***
Marital status		
Single	0.80**	1.53***
Common law	0.83***	1.40***
Divorced	0.95	1.17
Separated	0.89	1.23
Widowed	1.22	0.81
Education level		
Primary complete	0.74*	1.04
Secondary incomplete	0.88	1.04
Secondary complete	0.76***	1.11
Tertiary incomplete	0.79**	1.38
Tertiary complete	0.96	1.40*
Wealth Index quartile		
Quartile 2	1.22***	0.96
Quartile 3	1.32***	0.97
Quartile 4	1.58***	0.98
Homeowner	1.12	0.85*
Children	0.98	0.93**
Receives remittances	1.15**	2.23***
Importance of religion in life	1.08**	1.05
Neighbourhood Disorder Index	0.83	1.45***
Neighbourhood Informal Social Control Index	1.32**	1.22*
Neighbourhood Social Cohesion Index	2.31***	0.70***

(continued on next page)

Appendix 12.3. Odds Ratios for Life Satisfaction (Ordinal Logit) and Emigration (Logit) *(continued)*

	Life Satisfaction Index (ordinal 1-4)	Emigration (1 if intention to emigrate, 0 otherwise)
Gang presence in neighbourhood	0.96	1.05
Feels unsafe in neighbourhood	0.81***	1.09
Capital city dummies		
Port of Spain	1.36***	0.23***
Paramaribo	3.19***	0.18***
New Providence	3.01***	0.20***
Bridgetown	1.98***	0.36***
Number of observations	13,937	14,009

Source: Prepared by the authors.

Note: .01 - ***; .05 - **; .1 - *.

What the Caribbean Is Doing to Reduce Crime Compared to the Evidence of What Works Internationally

Heather Sutton and Luisa Godinez

Over the past 10 years, a number of programmes have been directed towards reducing crime and violence in the Caribbean. Although these initiatives reflect greater awareness of the problem, the added value of any one policy or programme varies widely. Most new laws and legal amendments focus on suppression of crime rather than on improvement of prosecutorial capabilities or crime prevention, even though evidence supporting a link between suppression and violence reduction is lacking. In parallel with legislative efforts, however, a variety of initiatives targeting both crime suppression and prevention have been designed and implemented through programmes operated either by governments or nongovernmental organizations (NGOs). While many of these programmes may be promising, most have not been rigorously evaluated. Too little research has been conducted using rigorous evaluation methods, and most available research is descriptive and qualitative, based on untested assertions, and lacking an experimental component. As a result, the policymaking process in the region has not been adequately informed by data from methodologically sound programme evaluations. As a result, policies are implemented in the absence of solid information regarding their expected impact on crime and public safety.

Globally, some prevention policies and programmes have been shown to be effective in reducing certain types of crime in certain contexts through multiple experimental and quasi-experimental evaluations. Others show promise, but have mixed findings or too little evidence to be considered successful as yet. A last group has been found to be ineffective, either because the programmes had little impact or even because they had the opposite effect of what was intended.

These internationally recognized interventions have not been tested or demonstrated as to whether they would work in the Caribbean. So how can we be sure these interventions are relevant for the region? The extent to which the results of a study can be generalized to other situations and other people is always of concern. However, as a starting point, it is worth examining what has been effective in other regions. If a certain programme hasn't been effective somewhere else, we would think twice about replicating it in the Caribbean. Conversely, if a programme demonstrates efficacy elsewhere, we should have clear reasons for *not* piloting it in the region. Clearly, discussion of the validity and implementation of these interventions in the Caribbean should be encouraged.

This section begins with a review of some of the most noticeable legislative trends in recent years by highlighting improvements made and identifying legislative gaps that remain.¹ Subsequently, the chapter presents a tentative framework of internationally successful, promising, and unsuccessful programmes, which are assessed vis-à-vis some of the programmes that already exist in the Caribbean.

13.1 Legislative Trends in the Caribbean: Improvements, Setbacks and Gaps

At the international level, Caribbean countries have generally joined the major treaties and conventions on crime, especially with regard to organized crime, drugs, and firearms.² Regionally, the Caribbean Community recently launched a Crime and Security Strategy that stipulates, among other objectives, the harmonization and standardization of criminal legislation in the region.³ Even though the results of this specific strategy remain to be seen, certain legislative trends can already be perceived in the Caribbean (see Appendix 13.1 for a thorough description of recent amendments by country).

13.1.1 Criminal Law

An examination of legislation in the last 10 years indicates that there is a strong focus on increasing penalties for criminal activity (Table 13.1).⁴ In many cases these include

¹ This section does not contain an exhaustive explanation of all the laws and amendments implemented in each country. Rather, it aims to show those changes that have been most important in shaping the definitions of the specific crimes addressed in this publication and the adequate response to them.

² Examples include the Caribbean Mutual Legal Assistance Treaty in Serious Criminal Matters in 2000; several other Mutual Legal Assistance Treaties between the countries in this study and the United States or Latin American countries; the United Nations Convention Against Transnational Organized Crime in 2000; and the Arms Trade Treaty.

³ See Strategic Goal 3 of the plan "Establishing Appropriate Legal Instruments While Ratifying Existing Agreements."

⁴ This holds true in The Bahamas, where magistrates' power to decide the time and severity of sentences has been increased. In Jamaica, amendments also triggered stricter sentences, particularly with respect to

Table 13.1: Summary of Recent Legislative Trends in the Caribbean on Crime since 2010

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Increased and more severe sentences?	Yes	No	Yes	Yes	Yes
Introduction of new types of evidence?	Yes	Yes	No	Insufficient information	Yes
Amendments to firearm legislation?	Yes	No	No	No	No
Regulations for gang involvement?	Yes	No	Yes	No	Yes
New regulations for organized crime?	Yes	Yes	Yes	Yes	Yes

Source: Authors' review of legislation since 2010.

mandatory minimum sentences for certain crimes. Given the challenges widely faced by criminal justice systems in the region—including significant obstacles to efficiently processing criminal trials and the overcrowding of prison systems—it is worth asking if longer and more severe sentences are truly viable solutions to the perceived problem of criminal impunity in the Caribbean.

In recent years, these stricter sentencing policy initiatives have often been enacted with the goal to deter future recidivism. However, while increasing sentencing may contribute to incapacitation, research has also shown that stricter and/or longer sentences are not necessarily associated with deterrence. In fact, the consequences of adopting “tougher” measures may be generally more negative than positive from a societal standpoint. First, excessive use of incarceration has enormous cost implications for a country (Gendreau, Goggin, and Cullen 1999; Travis and Western 2014; Wright 2010). Most importantly, and contrary to popular belief, increased prison time may slightly increase recidivism for high-risk offenders, but also produce negative effects on lower-risk delinquents (Travis and Western 2014). Research suggests that it is by increasing the certainty of punishment, rather than its severity, that governments are more likely to produce deterrent effects (Travis and Western 2014; Wright 2010).

13.1.2 Procedural Law

In addition to implementing stricter sentences, the Caribbean is adopting more restrictive procedural rules. In Barbados, for instance, an amendment to the Criminal Appeal Act (2009) abolished certain rights of appeal, making the process less flexible

shootings and sentences for perpetrators of sexual violence against children. Following the same patterns, Trinidad and Tobago toughened penalties for kidnapping, offences related to firearms, ammunition, and sexual offences.

than before. In Trinidad and Tobago (2013) as well as in The Bahamas (2011), increased requirements for bail have been added in recent years. Beyond the fact that the use of money in the pre-trial process disproportionately impacts vulnerable communities, bail fees that are too high are more likely to keep people in jail who could otherwise remain safely in the community during their judicial process. Moreover, the financial impact of these detentions may also be considerable, especially in terms of prison costs and social costs due to loss of employment.

On the positive side, there is a sustained trend to accept new types of evidence in trials. Trinidad and Tobago, for example, created a whole legal framework on DNA use (DNA Act 2012). The Bahamas has implemented a variety of procedural amendments, including the inclusion of new types of evidence such as videos, previous convictions, and data from electronic devices (Evidence Act 2011). In Jamaica, the Independent Commission of Investigations Act (2010) was implemented to undertake investigations concerning actions by security forces and other agents of the State that result in death or injury to a person, the abuse of the rights of persons, and related issues. Among the matters that fall within the remit of the Independent Commission of Investigations (INDECOM) are police-civilian fatalities. Confessions and admissions may now be recorded in Barbados, and in very specific cases it is accepted to use visual identification evidence adduced by the prosecutor (Evidence Act 2014). While these efforts are certainly conducive to stronger prosecution capabilities, further regulating their implementation will be critical, especially considering that visual or recorded evidence may be extremely misleading when taken out of context.

13.1.3 Police and Criminal System Legislation

There have been minimal changes to improve the functioning of criminal systems as a whole, but those changes that have been made are quite positive. The Bahamas incorporated several amendments, including a cap of 10 years for the police commissioner's tenure and the possibility of imprisonment for police officers using unnecessary violence (Police Act 2009); a new amendment to its Justice Protection Act (2014) regulating matters of obstruction of justice; and a new Correctional Services Act (2014). The Barbados Prison Act Cap (2014) prohibits the use of corporal punishment in prisons. Trinidad and Tobago created a special panel of attorneys to provide legal representation for minors and persons detained on suspicion of capital offences (Legal Aid and Advice Act 2012), and the Children Act 2012 provides for the establishment of a specific Juvenile Court (which is still in the planning phase). However, with the exception of scattered amendments, very few legislative efforts have been directed towards improving the effective functioning of the system, the overall trust of the population towards the institutions of each country, and cooperation between different government entities.

13.1.4 Organized Crime, Gang, Drug, and Firearm Legislation

Caribbean countries have joined and ratified several international agreements on organized crime, drugs, and firearms that may influence the legislative agenda of each country. After the ratification of the Arms Trade Treaty,⁵ which regulates international trade of conventional weapons, The Bahamas amended its Firearms Act in 2011 and 2014, and Trinidad and Tobago amended its Firearms Act in 2011. The 2000 United Nations Convention against Transnational Organized Crime is another example of international cooperation.⁶ In 2008, the International Organization for Migration also launched model legislation for Caribbean countries on counter-trafficking, but since then only Jamaica has implemented comprehensive legislation on the subject. Nevertheless, all countries have ratified the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances. Beyond the adoption of these agreements, the countries have generally created new legislation or amendments with respect to organized crime, gangs, drugs, and firearms.

In response to the proliferation of gangs in the region (see Chapter 7), most countries, with the exception of Barbados, have implemented provisions to define, suppress, and in some cases prevent the formation of these groups. In the lead on these changes were Trinidad and Tobago and Jamaica, two countries where the effects of gang-related activities have been substantial. In 2011, Trinidad and Tobago created an Anti-Gang Act that codified a series of gang-related offences. Unfortunately, while the act was proclaimed in August 2011, no convictions had been recorded through 2015 (Seepersad 2016).⁷ Jamaica also established legislation that criminalized any activity or conduct related to these gangs (the Criminal Justice [Suppression of Criminal Organisations] Act 2014).⁸ The Bahamas amended its Penal Code by including definitions for gangs and creating offences related to them, and also included new anti-gang offences in its Justice Protection Act 2014 (for more detail on these laws see Appendix 13.1).

In recent years, organized crime in a more general sense has been consistently addressed throughout the Caribbean. Jamaica in particular has had an active legislative agenda to combat organized crime and its related activities by regulating the tracing of cash transactions and tax payments, amending the regime on trafficking of persons, and creating new offences for fraudulent transactions. Trinidad and Tobago created

⁵ Ratified by all countries except Suriname.

⁶ Barbados signed the convention but did not ratify it.

⁷ No person had been convicted at the time this information was received in 2014.

⁸ Although no official information has been received, newspaper articles indicate that there have been convictions for organized crime in Jamaica. See “No glory for GANGSTERS—Police use anti-gang legislation to arrest and charge almost 170 suspects,” *Jamaica Gleaner*, August 23, 2015. Available at: <http://jamaica-gleaner.com/article/news/20150823/no-glory-gangsters-police-use-anti-gang-legislation-arrest-and-charge-almost>.

an act for trafficking in persons as well as provisions on money laundering. Barbados regulated transnational organized crime, and the legislative branch in The Bahamas clearly defined organized crime and classified it as an offence.

Regulations on drugs have remained unchanged in recent years for most of the Caribbean, with the exception of an amendment in The Bahamas that recently increased sentences for possession of drugs with intent to supply. What these regulations establish, however, varies by country, from provisions on drug trafficking (in Barbados and Trinidad and Tobago) to regulations of specific drugs (in Jamaica).

Finally, there has been a legislative wave with respect to firearms in the region since 2010. Barbados established specific firearms offences, as well as stricter conditions to hold firearms. In Jamaica, legislation in 2010 established new conditions and penalties for firearm licenses, as well as regulations on imports and exports of weapons. In The Bahamas and Trinidad and Tobago, recent amendments have focused on increased penalties for unlawful firearms possession. While legislation is one part of adequate firearms controls, strict legislation without adequate implementation can be an obstacle. There is no evidence that increased or harsher sentences for firearm crimes have resulted or will result in deterrence. In fact, part of the problem in some countries has been excessive police discretion in the implementation of the law and thus opportunities for corruption and unfair practices of differential access to firearms.

Some studies analysing the connections between firearm legislation and reductions in firearm-related injuries indicate that the simultaneous implementation of different firearms regulations has positive effects on gun violence; some specific restrictions, for example, have been associated with a reduction of firearm crime in certain contexts (firearm storage regulations, permits for ownership, firearm bans for those with mental illness), while others have been unsuccessful (laws restricting the sales of certain firearms, laws for voluntary rendition of firearms, laws establishing sentences and punishments for gun offenders) (Kapusta et al. 2007; Rosengart et al. 2005).

13.1.5 Gender-Based Violence and Child Abuse Legislation

Over the past two decades many countries around the world have adopted comprehensive legislation with gender-neutral and -encompassing definitions that specifically address intimate partner violence, sexual violence, and child abuse. These changes have in part been influenced by international treaties such as the Convention on the Elimination of All Forms of Discrimination against Women and the Convention on the Rights of the Child. Caribbean countries are no exception: they are part of these international agreements, and the region has started to adopt specific legislation to address violence against women and children. Unfortunately, it is often the case that the region is still behind vis-à-vis international standards.

Table 13.2: Legal Regulation of Violence against Women

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Clear and comprehensive definition that goes beyond simple physical violence	✓	X	X	✓	✓
Victims include spouses, children, members of the same household, and dependents	✓	X	X	–	✓
Same-sex couples have access to relief services	X	X	X	X	X
Legislation explicitly criminalizes marital rape	X	X	X	✓	✓
Regulation of sexual harassment	✓	X	X	X	X
Protection orders for victims of domestic violence, removal of perpetrator from home	✓	✓	✓	✓	✓

Source: Prepared by the authors.

At the international level it is increasingly recognized that violence against women and violence against children encompass several types of violence, including sexual, emotional, and/or psychological violence as well as patrimonial and/or economic violence (UN Women 2011). However, not all Caribbean countries have recognized this as yet (Table 13.2). There have been some initiatives to increase the severity and time of sentences related to violence against women and sexual violence,⁹ but it remains to be seen if harsher penalties have led or will lead to any deterrent effect. Additionally, implementation is a serious problem (further discussed in Chapter 4). Most domestic violence laws are not accompanied by budget allocations and there continue to be severe obstacles for women to access the justice system. While there is little experimental research on the subject, there is quantitative evidence from developed countries (Post et al. 2010) and qualitative research in low- to medium-income countries (Ellsberg et al. 2014) which suggests that training and improved legislation alone do not improve outcomes for women or reduce violence at a community level, and that system-wide changes are needed to improve the enforcement of laws.

There have also been other isolated legal efforts to reduce sexual violence in the countries of the region. Jamaica, for instance, changed the definition of “carnal abuse” (sexual violence) to create a more gender-neutral provision. Both The Bahamas and Jamaica recently established a registry of sexual offenders.¹⁰ Yet, research shows that

⁹ The Bahamas increased penalties for rape and serious sexual offences. Jamaica increased penalties for perpetrators of sexual violence against children.

¹⁰ The Bahamas also established a registry of sexual offenders toward children.

these types of registries are not necessarily effective tools to combat sexual offences, mostly because they do not reduce offending, might only function as a means for penal segregation, and have high costs to society (Letourneau et al. 2010). Effectively reintegrating offenders into society, on the other hand, can be more effective in decreasing the likelihood of recidivism (Petrunik 2002).

Finally, although legislation to address domestic violence in the Caribbean includes provisions on child abuse, the countries have also adopted specific legislation for children.¹¹ Trinidad and Tobago has developed the most comprehensive definition of child abuse that includes physical and non-physical acts, penetrative or non-penetrative acts, activities that expose children to inappropriate sexual material, and activities of prostitution or pornography of children. The Bahamas also passed its Child Protection Act (2007), which, *inter alia*, increased the punishment for child abuse and created a mandate for a sex offender registry. Subsequent amendments included laws for the implementation of the Marco alert system for missing children. In Barbados child abuse can be categorized as a misdemeanour or major offence depending on the case. Interestingly, only The Bahamas has recently established an obligation to report child abuse. Jamaica and Barbados recently enacted new legislation on child pornography.

13.2 Programmes and Interventions to Reduce Violence and Crime

Legislative efforts in the region have been coupled with government and NGO-run initiatives and programmes targeting the prevention and suppression of crime and violence. This section reviews the evidence on some programmes from other countries and regions around the world,¹² and compares them with some of the programmes that have been implemented in the Caribbean. We have organized this comparison by eight different problem areas identified in this report: (1) violence in the home, (2) youth violence, (3) gangs, guns, and drugs, (4) situational/neighbourhood, (5) criminal justice system, (6) police, (7) prison, and (8) the private sector. We do not mean to suggest that all the evidence-based programmes examined are universally applicable and portable to any country context. Not all positively evaluated programmes have been evaluated in a wide range of settings including developing countries of different types. Virtually none have been tested and robustly evaluated in the Caribbean. However, as a starting point, it is worth examining what has been effective in other regions. If a certain programme hasn't been effective somewhere else, we would think twice

¹¹ See Appendix 13.1 for further details on specific legislation on child abuse.

¹² A thorough review was made of evidence from the following sources: Crimesolutions.gov, Blue Prints Programs for Positive Youth Development (<http://www.blueprintsprograms.com/>), systematic reviews undertaken by the Campbell Collaboration, research on violence prevention by the World Health Organization, and previous IDB reviews (including Jaitman and Guerrero Compeán 2015, and Pousadela 2014).

about replicating it in the Caribbean. Conversely, if a programme demonstrates efficacy elsewhere, we should have clear reasons for *not* piloting it in the region. This is not meant to be an exhaustive framework, but rather an initial review of effective, promising, and ineffective initiatives of which Caribbean policymakers should be aware.

We categorize programmes into three categories: **effective (green)**, **promising (yellow)**, and those that are either **ineffective or have no evidence (red)**. **Effective programmes** have the highest-quality evidence (generally a meta-evaluation of experimental or quasi-experimental designs in multiple sites) with a statistically significant average effect size favouring the practice. **Promising programmes** have moderate-quality evidence with a statistically significant average effect size favouring the practice (these may use less rigorous quasi-experimental designs or may have only been tested in one location). The last group—**ineffective or no-evidence programmes**—are programmes that have received negative evaluations, either because they have had little impact, their design lacks evaluation components, or they actually triggered the opposite effect of what they intended.

Each section also includes a table with projects implemented in the Caribbean. Appendixes 13.2–13.4 expand on the relevant publications on international programmes mentioned in the chapter.

13.2.1 Family Violence and Violence against Women

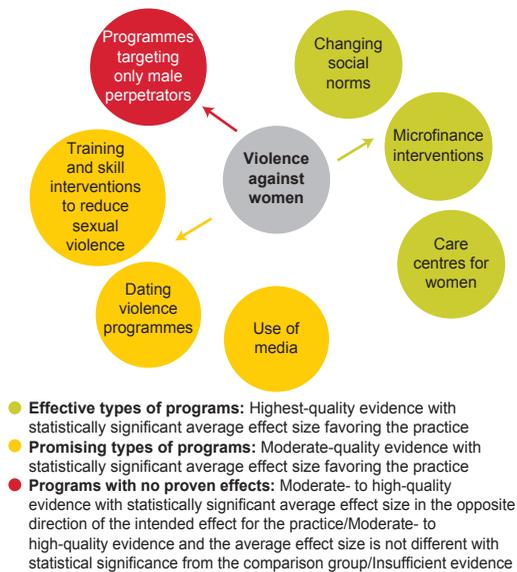
The relationship between violence against women and cultural and social beliefs is intricate, particularly because certain cultural and social norms, including the traditional belief that men have a right to control or discipline women, are often at the base of different types of violence. Many promising programmes designed to prevent violence against women are thus centred around the promotion of gender equality. Interventions aimed at changing social norms, such as the Mentors in Violence Prevention Program, through which students participate in role-playing exercises, have been rated as positive initiatives to identify sexist attitudes and prevent violence (Ward 1999). The use of media, although less studied, is becoming a popular alternative for increasing knowledge, challenging attitudes, and modifying behaviours regarding violence against women and gender equality (Goldstein et al. 2005).¹³

Figure 13.1 categorizes the effectiveness of programmes to reduce violence in the home, while Table 13.3 provides examples of programmes implemented in the Caribbean.

Community programmes, including microfinance interventions, are used to increase women's economic and social power, which has been related to a reduction of violence.

¹³ The Soul City programme in South Africa, which consisted of a series of radio and television episodes, managed to trigger modest changes in knowledge and attitudes towards intimate partner violence.

Figure 13.1: Categorization of Programmes to Reduce Violence in the Home



Source: Prepared by the authors.

Note: Programmes are described by colour: **effective (green)**, **promising (yellow)**, **ineffective or have no evidence (red)**.

These interventions are particularly successful when implemented together with educational sessions and skill-building workshops to change social norms. A good illustration is South Africa's *Intervention with Microfinance for AIDS and Gender Equity (IMAGE)*. A study of the programme confirmed that acts of violence by participants' intimate partners decreased by half after just two years of the programme (Pronyk et al. 2006).

Improving the crime control system of each country through such actions as creating care centres for women is crucial to reduce the likelihood of domestic violence and is a definite need for victims (Waller 2014). These measures include shelters for battered women dedicated to providing health care, psychological support, counseling, and/or social support.

In the United States, the presence of *Sexual Assault Nurse Examiners (SANE)* in each state has been fundamental in responding to victims' needs (Campbell et al. 2014). Even though most Caribbean countries have created special governmental units and/or programmes in charge of preventing and alleviating violence in recent years, there are still very few shelters dedicated to women or children. Those that exist have very limited resources or are often nongovernmental institutions.¹⁴

School-based interventions, including safe dating programmes, have had positive results in combatting violence against women in certain contexts. *Safe Dates* in the United States (Foshee et al. 2005) and the *Youth Relationship Project* (Sherin et al. 1998) in Canada, for example, showed changes in attitudes and reductions in rape and sexual violence among youth. These types of programmes often include training and life-skill interventions aimed at reducing sexual violence. While it has become very popular to target both men and women, or to create programmes that only target

¹⁴ The following agencies are in charge of violence in the home in the respective police forces/units: In The Bahamas, the inter-agency Gender-Based Violence Task Force at the Royal Bahamas Police Force; in Barbados, the Family Conflict Intervention Unit of the Royal Barbados Police Force; and in Jamaica, the Centre for Investigation of Sexual Offences and Child Abuse of the Jamaica Constabulary Force.

Table 13.3: Examples of Programmes to Prevent Violence against Women Implemented in the Caribbean

The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Government-Run Programmes				
<ul style="list-style-type: none"> • Suspected Child Abuse and Neglect (SCAN) (Ministry of Health) 	<ul style="list-style-type: none"> • Partnership for Peace (Ministry of Social Care, Constituency Empowerment, and Community Development) 	<ul style="list-style-type: none"> • Overcomers in Action (Ministry of Justice/ Victim Support Unit - VSU) 	—	<ul style="list-style-type: none"> • Break the Silence (Ministry of Gender, Youth and Child Development, UNICEF, and the Institute of Gender and Development Studies) • Defining Masculine Excellence Programme (Ministry of Gender, Youth and Child Development)
NGO-Run Programmes				
<ul style="list-style-type: none"> • Victim Support Centre (The Bahamas Crisis Centre) • Champions of Change (The Caribbean Male Action Network - CARIMAN/ UN Women) 	<ul style="list-style-type: none"> • Shelter for Battered Women (The Business and Professional Women's Club of Barbados) 	<ul style="list-style-type: none"> • Women's Crisis Centre (Women Inc. Women's Crisis Centre) • Building for Gender Justice Project (SISTREN Theatre Collective) 	<ul style="list-style-type: none"> • Capacity Strengthening of Female (Micro)-Entrepreneurs Programme (NGO Caribbean Development Foundation) 	<ul style="list-style-type: none"> • Our Story: Women, Peace and Security in Trinidad and Tobago (Women's Institute for Alternative Development - WINAD) • Break the Silence (Ministry of Gender, Youth and Child Development, UNICEF, and the Institute of Gender and Development Studies)

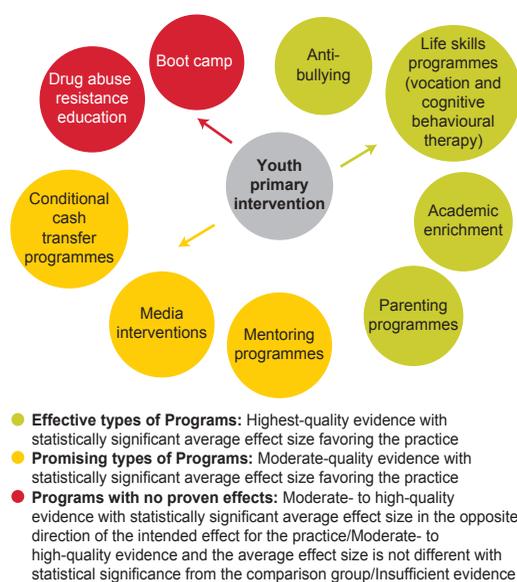
Source: Prepared by the authors.

men, there is little evidence that these types of initiatives actually reduce violence against women at all (Ellsberg et al. 2014).

13.2.2 Youth Violence

Evidence suggests that developing life skills in young people reduces their chances of being aggressive, namely by improving their social and emotional competency while teaching them to deal constructively with conflict. These approaches have proven to be most effective when combined with academic/preschool enrichment programmes, social development programmes, or cognitive behavioural therapy, along with some sort of vocational training component.

Figure 13.2: Categorization of Programmes to Reduce Youth Violence



Source: Prepared by the authors.

Note: Programmes are described by colour: **effective (green)**, **promising (yellow)**, **ineffective or have no evidence (red)**.

Figure 13.2 categorizes the effectiveness of programmes to reduce youth violence, while Table 13.4 provides examples of programmes implemented in the Caribbean.

In the United States, the *High-Scope Perry Preschool Enrichment Study* has shown positive results when targeted at deprived populations (Schweinhart et al. 2005).¹⁵ Other academic enrichment programmes, such as the *Quantum Opportunities Program (QOP)*, have enhanced children's academic performance and school involvement, which is particularly important given that low academic achievement is a recurrent risk factor for youth according to some of the most rigorous longitudinal studies. Reaching Individuals through Skills and Education

(RISE) in Jamaica is an example of an after-school programme that was found to have positive effects on reducing dropout rates and maintaining a job, but had no impact on substance abuse or gang behaviour (Box 13.1) (Soares and Sviatschi 2013).

Social development programmes and cognitive behavioural therapy that encourage social skills, such as the *Big Brother/Big Sister Program*, have also had a positive impact on antisocial behaviour over time (Tierney et al. 2000).¹⁶ In the case of Jamaica, an evaluation of the *YMCA Youth Development Programme*, which aimed to strengthen soft skills in young people and teach them to cope with difficult situations, showed a reduction in aggressive behaviours (Guerra et al. 2010). In fact, a recent analysis of international programmes and practices finds that cognitive behavioural therapy can deter crime, assist victims, and prevent recidivism (Feucht and Holt 2016).

¹⁵ Preschool enrichment programmes prepare children with academic and social skills from an early stage, focusing on areas such as language development, self-esteem, problem-solving, empathy, literacy, and numeracy skills (WHO 2010).

¹⁶ *Promoting Alternative Thinking Strategies (PATHS)*, which targeted readiness and self-control, feelings and relationships, and interpersonal, cognitive problem-solving skills, also showed positive effects on violence prevention. Another positive example is the *Behavioral Monitoring and Reinforcement Program*, a school-based intervention that was first implemented in the United States and designed to change the negative school behaviour of middle-school adolescents. For more programmes see Appendix 13.1.

Box 13.1. Reaching Individuals through Skills and Education (RISE) in Jamaica

What? RISE is a youth development programme established in three Kingston communities in 2003.

How? After-school assistance for at-risk students.

Objective: Promote education and prevent dropping out, gang recruitment, drug use, and other risky behaviours.

Size: In 2012, 3,583 young adolescents and 2,708 youth were part of the programme.

Evaluation: 665 adolescents surveyed to measure risks such as substance abuse, gang behaviour, educational attainment, labour outcomes, and beliefs.

Some results:

- A 16 percent decrease in school dropouts among participants, compared to the control group.
- A 10 percent higher likelihood among participants to be working, compared to the control group.
- The programme had no positive effects on beliefs.
- The programme had no effect on gang behaviour and substance abuse.

Source: Soares and Sviatschi (2013).

Parenting programmes, which are usually administered by nurses, social workers, and other specialized professionals, are another interesting source of violence prevention for children and adolescents, particularly when targeting child maltreatment or aggressive behaviour in children (Haggerty, McGlynn-Wright, and Klima 2013). The *Positive Parenting Program* (“Triple P”) is a popular programme that exhibits favourable results at an international level for child maltreatment both in and outside the home (Prinz et al. 2009). While The Bahamas, Jamaica, and Trinidad and Tobago have already created parenting programmes, their impact has not been studied.

School violence is no small problem for youth. Interventions in this area have been targeted towards bullies, victims, peers, teachers, or the school in general. The first large-scale anti-bullying programme was implemented nationally in Norway in 1983, and subsequent versions were evaluated by Olweus (Farrington and Ttofi 2009). That initiative continues to be relevant among anti-bullying programmes, and has been implemented in various countries, including Canada, England, Malaysia, and the United States.

Finally, while an array of other youth programmes—including military style boot camps and drug resistance classes taught by police—have gained popularity both

Table 13.4: Examples of Youth Programmes Implemented in the Caribbean

The Bahamas	Barbados	Jamaica	Trinidad and Tobago
Government-Run Programmes			
<ul style="list-style-type: none"> National Parenting Programme (Ministry of Social Services and Community Development) 	<ul style="list-style-type: none"> Barbados Youth Service (Ministry of Culture, Sports and Youth) Endless Possibilities (Ministry of Culture, Sports and Youth) Juvenile Liaison Scheme (RBPF) 	<ul style="list-style-type: none"> Health and Family Life Education Programme (Ministry of Education) Safe Schools Programme (Ministries of National Security, Health, Education, and Youth; and several NGOs) The Parents' Place (Ministry of Justice/ Victim Support Unit - VSU) Special Intervention Project for Schools (Ministry of Justice/ Victim Support Unit - VSU) 	<ul style="list-style-type: none"> National Parenting Programme (Ministry of Gender, Youth and Child Development) The Gatekeeper Programme (Ministry of Gender, Youth and Child Development and the Toco Foundation) Youth Micro-Entrepreneurship Programme (Youth Business Trinidad and Tobago) National Mentorship Programme (Ministry of Gender, Youth and Child Development)
NGO-Run Programmes			
<ul style="list-style-type: none"> Hope Centre Mentoring and Basketball (Youth Against Violence) 	<ul style="list-style-type: none"> Schools Positive Behavioural Management Programme (UNICEF) 	<ul style="list-style-type: none"> Youth Development Programme Behavior Modification Project (YMCA) 	<ul style="list-style-type: none"> The Gatekeeper Programme (Ministry of Gender, Youth and Child Development and the Toco Foundation)

Source: Prepared by the authors.

globally and in the region, the international evidence shows that they do not tend to make much of a difference.¹⁷ Although little research has been done on media interventions, some programmes have presented promising results, such as the *Play Nicely Program*, which consisted of a video programme for parents (Sanders, Montgomery, and Brechman-Toussaint 2000). Evidence on mentoring has been mixed; only some studies find that it fosters self-control and resilience among youth (Chandler, Levitt, and List 2011; Cohen and Piquero 2010; Klevens et al. 2009; Taft et al. 2011). Programmes targeting fatherhood have not been well studied, but could potentially reduce child physical discipline and promote fathers' involvement with their children (see the Early Head Start Program evaluation by Fergusson, Horwood, and Ritter 2005). Finally, conditional cash transfer programmes may also be promising in increasing household income

¹⁷ For a study on drug resistance, see D'Amico et al. (2012); for a study on boot camps, see Wilson, MacKenzie, and Ngo Mitchell (2003).

and mitigating the impact of income shocks, which may ultimately contribute to a reduction of crime and violence by young people (Camacho and Mejía 2013). However, the ultimate success of these programmes will depend on the specific conditions of each country and how well tailored the programmes are to local risk and protective factors.

13.2.3 Gangs, Guns, and Drugs

As we have seen, gangs, guns, and drug violence are three intimately linked issues. Addressing them is often associated with the prevention of other types of violence, particularly youth violence. There is not much evidence associating a reduction of gun ownership with a reduction in violence. However, there is research showing that controlling access to firearms through legislation can help reduce levels of violent crime (Kapusta et al. 2007; Rosengart et al. 2005).

Gun violence and gang violence reduction programmes often also target other specific types of violence or risk factors, such as drugs or street violence. *Operation Ceasefire* from Boston and *Cure Violence* (Braga et al. 2001; Skogan et al. 2008) are good illustrations of initiatives targeting both gangs and gun violence that include smarter policing and social outreach services. The evaluation of *Operation Ceasefire*, a randomized controlled experimental approach,¹⁸ found reductions of 63 percent in the number of monthly youth homicides in Boston, 32 percent in city-wide shots-fired calls, and 25 percent in the number of city-wide all-age gun assault incidents.¹⁹

A small body of research evidence on *Cure Violence* in multiple contexts has been generally positive yet inconclusive (Butts et al. 2015). Some communities have experienced reductions in violence while others experienced either no change or even increases in violence. Unfortunately, the research has not yet been able to identify the conditions under which the programme is most likely to succeed. One strong possibility is that depth of implementation may be associated with the degree of effectiveness, thus reinforcing the need for detailed measures of implementation depth across communities ((Whitehill, Webster, and Varnick 2013). *Cure Violence* is currently being implemented in 16 urban communities in the Port of Spain metropolitan area (*Project REASON*) and a similar project has been implemented in Jamaica (*Peace Management Initiative*), but the results are still unclear due to the lack of evaluation or the programmes' recent implementation.

¹⁸ The impact analysis in Boston associated with *Operation Ceasefire* followed a basic one-group time series design. It also used a non-randomized quasi-experiment to compare youth homicide trends in Boston to youth homicide trends in other large U.S. cities.

¹⁹ To determine if *Operation Ceasefire* was associated with this decline, the study team conducted a rigorous evaluation of the intervention's effects on youth violence in the city using carefully constructed, generalized linear models that controlled for trends and seasonal variations.

Two strategies have been successfully evaluated for reducing gun crime and violence. The first is uniformed police patrols in gun crime hot spots looking for illegally carried guns (McGarrell, Chermak, and Weiss 1999; Sherman 2000; Sherman and Rogan 1995; Villaveces et al. 2000). The second is background checks for gun owners (Manson, Guillard, and Lauver 1999; McDowall, Loftin, and Wiersema 1995; Wright, Wintemute, and Rivara 1999). While gun bans show some promise at reducing gun violence (Loftin et al. 1991; McDowall, Loftin, and Wiersema 1996), no thorough field studies have been performed to prove their success. While gun buyback programmes, on their own, have shown no reduction in gun crime in several studies (Callaghan, Rivara, and Koepsell 1995; Rosenfeld 1995), such programmes can represent a way for civilians to legally and safely get rid of guns they no longer want, have inherited from family, or want to dispose of for other reasons. Other initiatives such as destroying/reducing stockpiles of unused weapons (i.e., those confiscated by police) and better controls against diversion from State stockpiles (police and army) can also be important.

In terms of drug violence, international research suggests that drug courts and correctional rehabilitation treatment are good alternatives (Rempel et al. 2003; Rossman et al. 2011). The first creates a type of sentence for those guilty of minor offences and a potentially good method to reduce recidivism, treat a drug addiction, and/or reduce criminal acts (see the sections on criminal justice systems and prisons). In the Caribbean, there are several government and NGO-run projects that focus on inmate drug rehabilitation—*Inmate Drug Rehabilitation Counselling* in Barbados, *Program for Drug and Violence Prevention, Treatment and Rehabilitation* in The Bahamas, the *Back2Life Rehabilitation Project* in Jamaica, and the *Program for Drug and Violence Prevention, Treatment and Rehabilitation* in Trinidad and Tobago (Table 13.5). However, more research is needed to understand the capacity and impact of these programmes.

13.2.4 Situational/Neighbourhood

Situational crime prevention entails changing the landscape and design of urban areas with the aim of making it more difficult, more risky, or less rewarding to commit a crime (for example, by improving street-lighting, installing closed-circuit television cameras, using alley gating, target hardening, etc.).²⁰ Despite the widespread popularity of these strategies among policymakers, there is limited evidence that they are actually effective. A growing body of literature shows, however, that implementing urban renewal and neighbourhood improvement programmes can reduce crime and violence. Owens and Freedman (2011) showed that building affordable housing in

²⁰ For an overview of situational crime prevention evaluations see Pousadela (2014).

Table 13.5: Examples of Programmes on Gangs, Guns, and Drugs Implemented in the Caribbean

	The Bahamas	Barbados	Jamaica	Trinidad and Tobago
Government-Run Programmes				
Gangs	<ul style="list-style-type: none"> Operation Ceasefire (Ministry of National Security) 	—	<ul style="list-style-type: none"> Peace Management Initiative – PMI (Ministry of National Security) 	<ul style="list-style-type: none"> Criminal Gang and Intelligence Unit (Trinidad and Tobago Police Service) Project REASON – Cure Violence adaptation (Citizen Security Programme)
Guns	<ul style="list-style-type: none"> Firearms Marking and Destruction (Ministry of National Security) Operation Ceasefire (Ministry of National Security) 	—	<ul style="list-style-type: none"> Firearm Marking and Stockpile Management (Jamaica Constabulary Force – JCF) 	<ul style="list-style-type: none"> Counter Trafficking Unit (CTU), Trinidad and Tobago Police Service
Drugs	—	<ul style="list-style-type: none"> Inmate Drug Rehabilitation Counselling (Reintegration Unit of the Barbados Prison Service) 	<ul style="list-style-type: none"> Caribbean Basin Security Initiative – CBSI (Government of Jamaica/ United States) 	<ul style="list-style-type: none"> Program for Drug and Violence Prevention, Treatment, and Rehabilitation (PROCCER)
NGO-Run Programmes				
Gangs	<ul style="list-style-type: none"> Hope Center Mentoring and Basketball (Youth Against Violence) 	<ul style="list-style-type: none"> Justice Improvement Programme (Pinelands Creative Workshop) 	—	—
Guns	—	—	—	<ul style="list-style-type: none"> Arms Trade Treaty (Women’s Institute for Alternative Development – WINAD)
Drugs	<ul style="list-style-type: none"> Program for Drug and Violence Prevention, Treatment, and Rehabilitation (PROCCER); Inter-American Drug Abuse Control Commission – CICAD 	<ul style="list-style-type: none"> Program for Drug and Violence Prevention, Treatment, and Rehabilitation – PROCCER; Inter-American Drug Abuse Control Commission – CICAD 	<ul style="list-style-type: none"> Back2Life Rehabilitation Project (Rotary Club) Resistance Education Against Drugs (R.E.A.D.) (National Council on Drug Abuse) 	—

Source: Prepared by the authors.

low-income communities reduced robberies and assaults by 3 percent and aggravated assaults by 3 percent for each new unit located in a poor neighbourhood.

International literature indicates that increasing communities' cohesiveness also increases what Waller (2014) refers to as a "sense of belonging," which in turn contributes to neighbours' feelings of ownership of their community. This has also been studied by Felston Earls (Hurley 2004) in Chicago in a project for which he proved that ownership was associated with lower crime rates in certain neighbourhoods. The *Neighborhood Watch Program* in Seattle in the 1970s demonstrated a 50 percent reduction in burglaries after implementation (Waller 1982). However, subsequent implementations in other cities/countries have not all been that successful, mostly because they did not follow the exact model (Waller 2014). The Bahamas, Barbados, and Jamaica have also implemented such programmes, again with no evaluation, which impedes any assessment of their success.

Very few situational prevention programmes have been evaluated under controlled, experimental conditions, and those that have been examined have shown mixed results. Welsh and Farrington (2008b) found that closed circuit television (CCTV) had a modest, though significant, impact on crime. A systematic review of studies on street lighting also found that improved street lighting had a significant effect on crime, but unfortunately these results only reflected effectiveness in the United States and the United Kingdom (Welsh and Farrington 2008a).²¹ The Caribbean is already moving towards using CCTV and augmenting street lighting (Table 13.6).

13.2.5 Criminal Justice System

There are not many evaluations on the effectiveness of courts to stop crime. However, many studies have looked into factors that directly shape or affect the criminal justice system, such as the creation of specialized courts, including community courts, drug courts, and mental health courts. Community courts are a relatively new creation focused on neighbourhoods that look to reduce harm to future victims. Even though their benefits are still incipient, the specific example of the *Midtown Community Court* in New York, one of the first community courts ever created in the United States, confirmed an initial reduction of re-offending over time (Henry and Kralstein 2011). Drug courts are among the most successful and studied specialized courts and have been useful in encouraging treatment programmes for offenders and preventing their re-involvement with drugs (Mitchell et al. 2012). Evaluations of mental health courts are still very tentative, but they too seem

²¹ The study analysed 13 improved street lighting evaluations carried out in the United States and the United Kingdom. The study found that crimes increased by 27 percent in control areas compared with experimental areas, or, conversely, crimes decreased by 21 percent in experimental areas compared with control areas (a weighted mean of 1.27; 95 percent confidence interval 1.09-1.47, $p = .0008$).

Table 13.6: Examples of Situational Programmes Implemented in the Caribbean

The Bahamas	Barbados	Jamaica	Trinidad and Tobago
Government-Run Programmes			
<ul style="list-style-type: none"> Urban Renewal 2.0 (Ministry of Public Works/Royal Bahamas Police Force) Closed Circuit Television Project (Royal Bahamas Police Force) 	<ul style="list-style-type: none"> Neighbourhood Watch (Royal Barbados Police Force) Operation Safe Homes (Royal Barbados Police Force) 	<ul style="list-style-type: none"> Kingston Urban Renewal Closed-Circuit Television Project (Ministry of National Security/Jamaica Constabulary Force) Community Renewal Programme (Prevention) (Ministry of National Security/Planning Institute of Jamaica) Neighbourhood Watch (Jamaica Constabulary Force) 	<ul style="list-style-type: none"> The Gatekeeper Programme (Ministry of Gender, Youth and Child Development and the Toco Foundation)
NGO-Run Programmes			
<ul style="list-style-type: none"> Bahamas Against Crime Civil Society Movement (Bahamas Against Crime) 	—	<ul style="list-style-type: none"> Jamaica Violence Prevention, Peace and Sustainable Development Programme (multi-agency) 	<ul style="list-style-type: none"> The Gatekeeper Programme (Ministry of Gender, Youth and Child Development and the Toco Foundation)

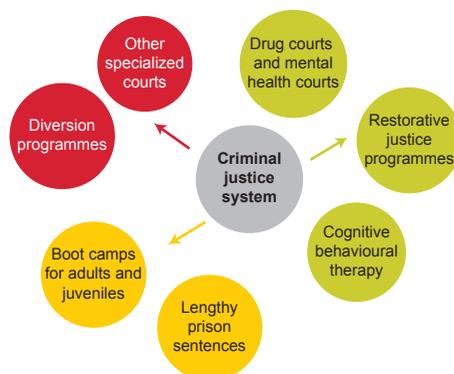
Source: Prepared by the authors.

to indicate a potential for reducing re-offending, particularly when offenders also receive services from community treatment centres (Sarteschi, Vaughn, and Kim 2011).

Figure 13.3 categorizes the effectiveness of programmes to support criminal justice systems, while Table 13.7 provides examples of programmes implemented in the Caribbean.

The creation of specialized courts is part of a popular alternative to solve crime problems with the use of diversion methods to avoid getting non-violent offenders involved with the court system. Other such strategies include the use of formal and informal cautioning by the police, such as one-day fines or

Figure 13.3: Categorization of Programmes to Support Criminal Justice Systems



- **Effective types of Programs:** Highest-quality evidence with statistically significant average effect size favoring the practice
- **Promising types of Programs:** Moderate-quality evidence with statistically significant average effect size favoring the practice
- **Programs with no proven effects:** Moderate- to high-quality evidence with statistically significant average effect size in the opposite direction of the intended effect for the practice/Moderate- to high-quality evidence and the average effect size is not different with statistical significance from the comparison group/Insufficient evidence

Source: Prepared by the authors.

Note: Programmes are described by colour: **effective (green), promising (yellow), ineffective or have no evidence (red).**

detentions—although these have not yet been evaluated—or the use of restorative justice programmes. The latter help victims work through their feelings and reach a solution, together with offenders, outside of the courts. An international review of the research on restorative justice programmes (Sherman and Strang 2007) found that victims were more satisfied, taxpayers saved money, and re-offending rates for some offences were lower than for those who were incarcerated. A 2008 study by the British government (Shapland et al. 2008) found that restorative justice reduced reconviction by an average of 27 percent. Both Jamaica and Trinidad and Tobago have begun studying the wider application of restorative justice programmes in recent years. It will be important to monitor the implementation and results of these programmes.

Several hundred studies over the last three decades have looked at what works best to reduce an inmate's likelihood of re-offending. Two meta-analyses examined a variety of the most popular approaches to reducing re-offending (cognitive-behavioural therapy, social-skills training, academic training, vocational training, etc.).²² Both found cognitive-behavioural therapy, which targets thought processes and aims to change decision-making related to crime, to be the most successful of correctional approaches. Lipsey and Howell (2012) highlight two clear approaches to rehabilitating offenders: the first aims at personal development through skills, relationships, and growth (cognitive-behavioural therapy, social skills, academic skills, and vocational). The second approach includes focusing on deterrence through discipline (i.e., boot camp), fear of consequences (i.e., *Scared Straight*), and surveillance (i.e., intensive probation, electronic monitoring). The interventions using the first approach were found to be successful, while those using the second approach were not. A promising programme applying cognitive behavioural therapy in the Caribbean is the *Thinking and Living Skills Programme* of Barbados, but no monitoring of it has been carried out.

The use of electronic methods, including tagging of offenders, is also an incipient field that presents some promise in preventing relapse into criminal behaviour (Marklund and Holmberg 2009). The Bahamas is already exploring this method through the electronic monitoring of persons on bail, while other Caribbean countries including Jamaica and Trinidad and Tobago are also exploring the possibility of such measures. It will be important to monitor the implementation and effects of such initiatives.

Finally the literature on fear, shock, incarceration, punishment, or military discipline identifies no appreciable impact on recidivism. For instance, the *Scared Straight* intervention, which aims at deterring youth from crime and violence by scaring them away from prison life, showed no effect on reducing recidivism (Petrosino, Turpin-Petrosino, and Buehler 2003).

²² Mackenzie (2006) examines 25 independent studies since 1970 and Lipsey and Howell (2012) examine 548 independent studies.

Table 13.7: Examples of Programmes for the Criminal Justice System Implemented in the Caribbean

The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Government-Run Programmes				
<ul style="list-style-type: none"> • Remand Court (Ministry of National Security) • Electronic monitoring of persons on bail (Ministry of National Security) • Swift Justice Initiative (SJI) (Office of the Attorney General) 	<ul style="list-style-type: none"> • The Juvenile Liaison Scheme (Royal Barbados Police Force) • Thinking and Living Skills Programme (Reintegration Unit of the Barbados Prison Service) 	<ul style="list-style-type: none"> • Diversion Programme (Ministry of Education) • Peace Management Initiative (Ministry of National Security) • Justice, Security, Accountability and Transparency Project (Ministry of Justice/ Ministry of National Security) 	<ul style="list-style-type: none"> • Women's Parliament Forum (VPF) 	<ul style="list-style-type: none"> • Citizen Security Programme (CSP) (Ministry of National Security)

Source: Prepared by the authors.

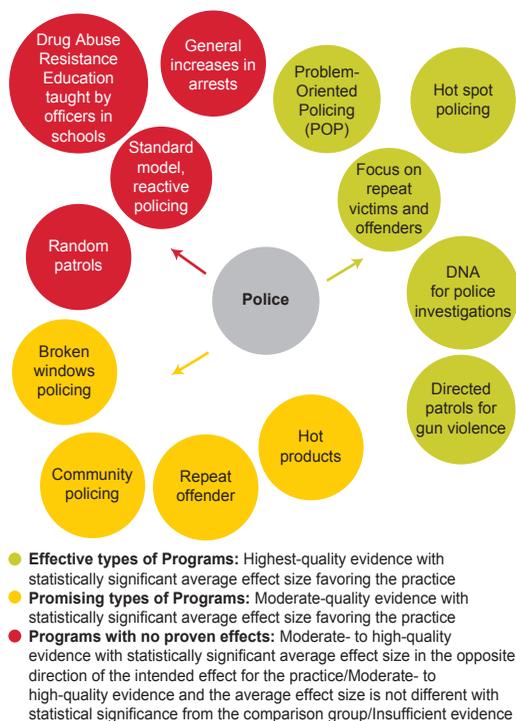
13.2.6 Police

Common knowledge tells us that a police presence can deter crime and disorder through various mechanisms, but there are many misconceptions about what actually works and what doesn't. A one-year study conducted in Kansas City, for example, showed that random preventive patrols had no real impact on the frequency of crime (Kelling et al. 1974). Small prevention sections in police departments that have unclear crime prevention programmes are also highly unsuccessful in lowering crime and violence rates. For example, *Drug Abuse Resistance Education* (DARE), developed by the Los Angeles Police Department, showed no beneficial impact on drug use (Telep and Weisburd 2012).

Figure 13.4 categorizes the effectiveness of programmes to support the police, while Table 13.8 provides examples of programmes implemented in the Caribbean.

Hot spot policing, on the other hand, has been quite effective as a law enforcement strategy to reduce crime and violence. In fact, two decades' worth of studies have revealed that hot spot policing has been associated with a reduction of crime. A Campbell systematic review by Braga et al. (2012) found that although not every hot spot study has shown statistically significant findings, the vast majority have (20 of 25 tests from 19 experimental or quasi-experimental evaluations reported noteworthy crime or disorder

Figure 13.4: Categorization of Programmes to Support the Police



Source: Prepared by the authors.

Note: Programmes are described by colour: **effective (green), promising (yellow), ineffective or have no evidence (red)**.

several new initiatives in this direction, including the implementation of Geographic Information System (GIS) geo-coding of police data, weekly crime strategy (COMSTAT) meetings, and hot spot policing.

Although focusing on repeat victimization requires considerable cooperation between the police and other government agencies, important improvements can also be achieved by focusing on the victims, particularly when implementing problem-oriented policing (Waller 2014).

There is a wide array of other promising programmes whose effectiveness has not yet been fully proven, but that have yielded positive results in certain contexts. Community policing programmes, for instance, have been effective in certain contexts, including door-to-door visits by the police, neighbourhood watch programmes, and local community participation (Bennett, Holloway, and Farrington 2008; Evans and Owens 2007; García, Mejía, and Ortega 2013; Sherman et al. 1997). Drug awareness programmes, community meetings, storefront offices, and newsletters have not yielded positive results (Santos 2014; Telep and Weisburd 2012; Weisburd and Eck 2004).

reductions). This suggests that when police focus on crime hot spots, they can have a significant beneficial impact on crime in these areas. This strategy is already being implemented in Trinidad and Tobago and includes a systematic monitoring/testing of implementation and results. Problem-oriented policing entails proactively identifying problems within the community and developing thoughtful, tailored responses to address underlying causes of the problems to develop meaningful and effective solutions (Goldstein 1990). Boston's *Operation Ceasefire* is a successful example of focused-deterrence, problem-oriented policing that has brought about statistically significant reductions in crime (Braga et al. 2001).

Crime analysis and crime mapping are becoming integral parts of some of the most promising policing strategies. Trinidad and Tobago has adopted

Table 13.8: Examples of Police Programmes Implemented in the Caribbean

The Bahamas	Barbados	Jamaica	Trinidad and Tobago
Government-Run Programmes			
<ul style="list-style-type: none"> • CompStat (Royal Bahamas Police Force) • Hot spot policing (Royal Bahamas Police Force) 	<ul style="list-style-type: none"> • Community Policing (Royal Barbados Police Force) • Neighbourhood Watch (Royal Barbados Police Force) 	<ul style="list-style-type: none"> • Jamaica Community Empowerment and Transformation Project (COMET I, II) (Ministry of National Security/Jamaica Constabulary Force) • Citizen Security and Justice Programme II, III (Ministry of National Security/Ministry of Justice) • Jamaica Constabulary Force Accountability Programme (Ministry of Justice) 	<ul style="list-style-type: none"> • Citizen Security Programme • Increased police presence (Trinidad and Tobago Police Service - TTPS) • Criminal Gang and Intelligence Unit (TTPS) • Hot spot policing (TTPS) • COMSTATT meetings at the national, divisional, and local levels (TTPS) • Hemostatic Bandage Initiative (TTPS) • Body-work camera pilot (TTPS) • Military-Led Academic Training Programme (Ministry of National Security/Trinidad and Tobago Defence Force) • Caribbean Basin Security Initiative (U.S. government)

Source: Prepared by the authors.

13.2.7 Prisons

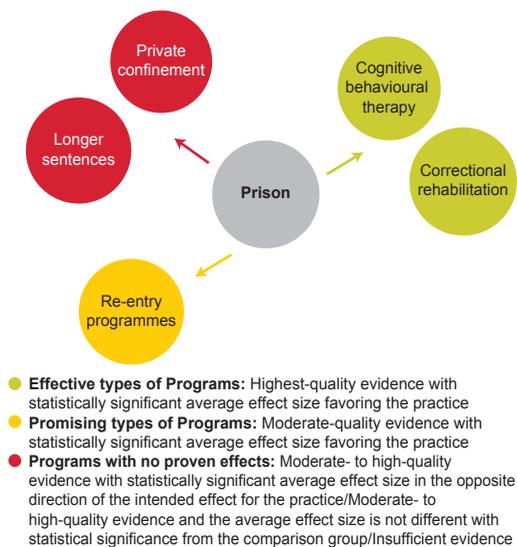
There is forceful proof showing that correctional rehabilitation treatments can provide inmate well-being and stability in a prison environment and deter recidivism. Two meta-analyses examine a variety of the most popular approaches to reducing re-offending (cognitive-behavioural therapy, social-skills training, academic training, vocational training, etc.).²³ Both found cognitive-behavioural therapy—which targets thought processes and aims to change decision-making related to crime—to be the most successful of correctional approaches (Lipsey and Howell 2012; MacKenzie 2006).

Figure 13.5 categorizes the effectiveness of programmes for prison systems, while Table 13.9 provides examples of programmes implemented in the Caribbean.

There are few robust studies on re-entry programmes, although some, such as the *Post-Release Employment Project* in the United States, indicate positive effects on recidivism (Saylor and Gaes 1997). Halfway houses that have social, health, mentoring, and counselling services have also been shown to reduce recidivism (Saylor and Gaes 1997). Barbados, Jamaica, and Trinidad and Tobago have all created

²³ MacKenzie (2006) examines 25 independent studies since 1970 and Lipsey and Howell (2012) examine 548 independent studies.

Figure 13.5: Categorization of Programmes for Prison Systems



Source: Prepared by the authors.

Note: Programmes are described by colour: **effective (green), promising (yellow), ineffective or have no evidence (red).**

different rehabilitation treatments implemented at correctional facilities or after release. However, the lack of evaluation impedes any assessment of their effectiveness.

13.2.8 How Can the Private Sector Contribute?

The private sector is often impacted by crime and violence, but it has also recently become a new agent in the fight against these problems. Although not much evidence exists, interest in public-private partnerships (PPPs) in the area of crime and violence prevention is growing. This type of cooperation may take several forms, including joint responses to crimes in progress between police

and the private sector; joint gathering of crime intelligence, joint planning and policing of special events, and sharing of expert knowledge and training. Involvement can be

Table 13.9: Examples of Prison and Rehabilitation Programmes Implemented in the Caribbean

The Bahamas	Barbados	Jamaica	Trinidad and Tobago
Government-Run Programmes			
<ul style="list-style-type: none"> Juvenile Aftercare (Ministry of Social Services and Community Development) 	<ul style="list-style-type: none"> Thinking and Living Skills Programme (Reintegration Unit of the Barbados Prison Service) Offender Psychological Counselling (Her Majesty's Prison) 	<ul style="list-style-type: none"> Jamaica Reducing Re-Offending Action Plan (Ministry of National Security/ Department of Correctional Services) 	<ul style="list-style-type: none"> Rehabilitation Programmes (Trinidad and Tobago Prison Service) Thinking for a Change Programme (Ministry of the People and Social Development)
NGO-Run Programmes			
<ul style="list-style-type: none"> Project Re-Entry Bahamas (National L.E.A.D. Institute) Prison Fellowship (Prison Fellowship) 	—	<ul style="list-style-type: none"> Female Prisoner Welfare Project (Hibiscus) 	—

Source: Prepared by the authors.

direct, indirect, or mixed, and at either the national level—like the *National Platform for Crime Control* in the Netherlands or the *Business Network on Crime Prevention* in Canada—or at the community level—such as Target’s *Safe City Program* (La Vigne, Owens, and Hetrick 2009) and Business Improvement Districts (BIDs) (Brooks 2008; Cook and MacDonald 2011; Hoyt 2005). Chapter 10 explores PPPs in more detail.

The *Crime Stop Partnership* in Jamaica is one example of cooperation between the media, private sector, police, and community that was established to counter crime. The programme awarded persons providing anonymous information leading to the arrest of criminals and the recovery of stolen property, illegal firearms, and illegal narcotics (Goldberg, Kim, and Ariano 2014).²⁴

13.3 Conclusions

A number of legislative initiatives on crime and violence have been undertaken by the countries in the Caribbean in the past few years. Some positive trends are noticeable in the region, especially the inclusion of new types of evidence and the ratification of important international agreements. Several foundational laws have also been approved throughout the region. They have helped to better define certain types of crimes and violent behaviours, and provided tools and protection for victims, including children and juveniles, within the justice system. Unfortunately, the region is still in need of better legal definitions of crime with more targeted categories, especially with respect to domestic violence, sexual harassment, and child abuse.

Although recent signs of a paradigm shift are beginning to be noticeable in the Caribbean, there has been a marked tendency to adopt “tougher” judicial measures, including stricter and longer sentences that might prove too costly for the countries and that have overall negative effects on the levels of crime and violence in the region. Some of these laws, such as the denial of bail, are especially contentious for their rights-abrogating effects. Overall, more and continuous work is needed to prepare and effectively implement laws that increase the prosecution capabilities of the system, while targeting and (most importantly) preventing prevalent crimes in the region. The effective implementation of laws also depends on the complementary policies and programmes that accompany them.

In this sense, there have been recent investments in crime and violence prevention in the Caribbean. However, the limited budget allocated to programmes against crime and violence in comparison to more traditional and reactive law enforcement exposes the continual favouring of policies and programmes that aim to counter crime with

²⁴ From 1989 to 2009, information from the partnership led to 1,942 arrests, recovered about \$2 million in property, and destroyed narcotics worth \$5 million. See Goldberg, Kim, and Ariano (2014, 61).

more repression, rather than with preventive initiatives. More worrisome is the fact that very rarely do programmes contain evaluation and monitoring components. This makes it impossible to assess the successful or failed implementation of any initiative. This chapter has provided an initial framework of what has worked in other contexts and can potentially be implemented in the Caribbean.

Appendix 13.1. Legislation and Amendments on Crime and Violence by Country

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Procedural law	<p>Bail Act Amendments, 2011:</p> <ul style="list-style-type: none"> • Stricter requirements for bail <p>Penal Code Amendments, 2011:</p> <ul style="list-style-type: none"> • Increased sentencing power for magistrates • Increased penalties including death penalty • Minors can be convicted up until 20 years of imprisonment <p>Evidence Act, 2011 (2013, 2014):</p> <ul style="list-style-type: none"> • Possibility to use video as evidence in certain cases • Possibility to use previous convictions as evidence • Give evidence by way of live television • Possibility to use data from electronic device <p>Court of Appeals Amendment, 2011:</p> <ul style="list-style-type: none"> • Possibility for prosecution to appeal a ruling to uphold a “no case submission” or to withdraw the case from jury <p>Proceeds of Crime (Amendment):</p> <ul style="list-style-type: none"> • Inclusion of the possibility to seize personal property by police officers 	<p>Mutual Assistance in Criminal Matters Act Cap. 140A:</p> <ul style="list-style-type: none"> • Makes provisions to facilitate mutual assistance in criminal matters within the Commonwealth <p>Prisons Act Cap. 168, 2014:</p> <ul style="list-style-type: none"> • Abolition of the use of corporal punishment in prisons • Conditional release of prisoners <p>Penal System Reform Act Cap. 139, 2010:</p> <ul style="list-style-type: none"> • Possibility to award compensation for personal injury, loss or damage <p>Evidence Act, Cap. 121, 2014:</p> <ul style="list-style-type: none"> • Confessions or admissions are sound recorded • Visual identification evidence adduced by the prosecutor is only admissible in very specific cases <p>Criminal Appeal Act Cap. 113A:</p> <ul style="list-style-type: none"> • Possibility to detain a person in a mental hospital when applicable • Abolishment of certain rights of appeal 	<p>Offences against the Person (Amendment) Act, 2010:</p> <ul style="list-style-type: none"> • Increased sentence for shooting with intent 		<p>Miscellaneous Provisions (Kidnapping and Bail) Act, 2011:</p> <ul style="list-style-type: none"> • Increased penalties for kidnapping <p>Bail (Amendment) Bill, 2013:</p> <ul style="list-style-type: none"> • Increases the difficulty of receiving bail for repeat offenders for specific offences <p>Amendment of the Administration of Justice-Deoxyribonucleic Acid Act No. 5 of 2012 (DNA Act):</p> <ul style="list-style-type: none"> • Legal framework within which forensic DNA evidence can be used in the investigation and prosecution of criminal matters

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Procedural law <i>(continued)</i>	<p>Juries (Amendment):</p> <ul style="list-style-type: none"> • Qualifications for jury service • Regulation on jury lists • Regulation on applications to remove name from approved list • Regulation of methodology to draw jurors • Regulation on the service of summons • Regulation on repeal and replacement of jurors <p>Bail (Amendment):</p> <ul style="list-style-type: none"> • Gives the burden of proof to applicant for bail 	<p>Precious Metals and Second Hand Metals Act, 2013:</p> <ul style="list-style-type: none"> • Measures to control the trade of precious metals and second-hand metals <p>Offences against the Person (Amendment Bill), 2014:</p> <ul style="list-style-type: none"> • Abolish the mandatory imposition of the penalty of death for the offence of murder and make it optional <p>Penal System Reform (Amendment) Bill, 2014:</p> <ul style="list-style-type: none"> • Guidelines for mitigating a sentence • Sentencing guidelines 			
Justice system legislation	<p>2009 Police Act:</p> <ul style="list-style-type: none"> • Adds a maximum of 10 years for police commissioner tenure • Possibility of imprisonment for police officers who use unnecessary violence <p>Justice Protection Act (Amendment), 2014:</p> <ul style="list-style-type: none"> • Regulates against obstruction of justice <p>Prevention of Bribery Act (Amendment), 2014:</p> <ul style="list-style-type: none"> • Bribes to foreign/local public officials 				<p>Legal Aid and Advice (Amendment) Act, 2012:</p> <ul style="list-style-type: none"> • Creation of panel of attorneys-at-law who provide legal representation for minors and persons detained on suspicion of capital offence

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Justice system legislation <i>(continued)</i>	<p>Correctional Services Act, 2014:</p> <ul style="list-style-type: none"> • Regulation of legal custody of person • Regulation of administration and functions of correctional facilities and holding facilities • Establishment of Correctional Services Review Board • Regulation of employment and earning of inmates • Regulation of removal and discharge of inmates on license • Release of inmates on license • Regulation of offences committed by inmates 				
Gang legislation	<p>Penal Code Amendment, 2014:</p> <ul style="list-style-type: none"> • Definition of gang • Participation in unlawful gang is an offence <p>Justice Protection Act (Amendment), 2014:</p> <ul style="list-style-type: none"> • Anti-gang offences 		<p>The Criminal Justice (Suppression of Criminal Organizations) Act, 2014:</p> <ul style="list-style-type: none"> • Offence of being part of criminal organization and collaborating with criminal organizations • Criminalizes a broad range of behaviour linked to gangs, including gang membership, facilitating gang-related criminal activities, advising gangs, and recruiting for gangs 		<p>Anti-Gang Act, 2011:</p> <ul style="list-style-type: none"> • Creation of gang-related offences

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country (continued)

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Organized crime legislation	<p>Penal Code Amendment, 2014:</p> <ul style="list-style-type: none"> • Definition of organized crime group • Participation in organized crime is an offence <p>Anti-Terrorism Act (Amendment):</p> <ul style="list-style-type: none"> • Regulates terrorist entities 	<p>Transnational Organized Crime (Prevention and Control) Act, 2011:</p> <ul style="list-style-type: none"> • Forced labour, exploitation or the prostitution of persons or any sexual exploitation is an offence 	<p>Proceeds of Crime (Amendment) Act, 2013:</p> <ul style="list-style-type: none"> • Possibility to trace tax payments • Imposition of limit on cash transactions with financial institutions • Oversight regime for designated non-financial businesses and professions <p>Trafficking in Persons (Prevention, Suppression and Punishment) (Amendment) Act, 2013:</p> <ul style="list-style-type: none"> • Increased sentences for trafficking of persons • Aggravating factors for trafficking of persons • Possibility to request the payment of restitution 		<p>Trafficking in Persons Act, 2011:</p> <ul style="list-style-type: none"> • Aims to prescribe measures to fight and control trafficking in persons including children <p>Miscellaneous Provisions (Proceeds of Crime, Anti-Terrorism, Financial Intelligence Unit of Trinidad and Tobago) Act, 2014:</p> <ul style="list-style-type: none"> • Includes money laundering as offence • Requirement for financial institutions to investigate suspicious transactions

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Organized crime legislation <i>(continued)</i>			<p>Law Reform (Fraudulent Transactions) (Special Provisions) Act, 2014:</p> <ul style="list-style-type: none"> Several fraudulent transactions are established as offences including obtaining property by false pretence or using an access device to transfer or transport money <p>Criminal Justice (Suppression of Criminal Organizations) Act, 2014:</p> <ul style="list-style-type: none"> Addresses criminal organizations and criminalizes conduct related to criminal activity 		
Drug legislation	<p>Dangerous Drugs Act Amendment, 2011:</p> <ul style="list-style-type: none"> Increased sentences for possession with intent to supply and for supplying drugs to minors 	<p>Drug Abuse (Prevention and Control) Cap. 13, 1991</p>	<p>Dangerous Drugs Act, 1996</p>		<p>Dangerous Drugs Act, 1991</p>

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Firearm legislation	<p>Firearms Act Amendments, 2011 and 2014:</p> <ul style="list-style-type: none"> • Increased sentences • Inclusion of definitions of ammunition, illicit trafficking and illicit manufacturing • Exporting or transfer of firearms without license prohibited 	<p>Firearms Cap. 179, 2003</p>	<p>Firearms Act Amendment, 2010:</p> <ul style="list-style-type: none"> • Increased sentences (mandatory 15 year minimum) for importing, exporting, transshipment without a license, manufacturing/dealing/purchasing/selling prohibited weapons without permit, use of a firearm in commission of a felony 		<p>Firearms (Amendment) Act, 2011:</p> <ul style="list-style-type: none"> • Increased penalties
Domestic violence	<p>The 2007 Domestic Violence (Protection Orders) Act:</p> <ul style="list-style-type: none"> • Broader definition of domestic violence (including physical, sexual, emotional or psychological, and financial abuse) • Includes in the definition relationships other than marriage • Allows for protection orders to be issued by the court to protect a victim from the perpetrator 	<p>Domestic Violence (Protection Orders), Act, 1992</p>	<p>Domestic Violence (Amendment) Act, 2004:</p> <ul style="list-style-type: none"> • Possibility to grant protection orders 	<p>Act Combating Domestic Violence, 2009</p>	<p>Domestic Violence Act, 1999</p>

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Sexual violence	<p>Sexual Offences Act Amendments, 2011:</p> <ul style="list-style-type: none"> Increased penalty for rape <p>Sexual Offences Act Amendments, 2014:</p> <ul style="list-style-type: none"> Creation of sex offender registry <p>The 1991 Sexual Offences and Domestic Violence Act, Amended 2008:</p> <ul style="list-style-type: none"> Increased penalty for serious sexual offences Inclusion of crimes of voyeurism and electronic persecution 	<p>Sexual Offences Act, 2002</p>	<p>Sexual Offences Act, 2009:</p> <ul style="list-style-type: none"> Replacement of category of “carnal abuse” with new gender-neutral category “sex with persons under 16” Increased penalties for perpetrators of sexual violence against children <p>Sexual Offences (Registration of Sex Offenders) Regulations, 2012:</p> <ul style="list-style-type: none"> Establishment of sexual offences registry 		<p>Sexual Offences Act, 1986 Amended 2000:</p> <ul style="list-style-type: none"> Increase penalties for sexual offences
Child abuse	<p>Marco’s Law, 2013 and 2014:</p> <ul style="list-style-type: none"> Implementation of alert for missing children Inclusion of sexual offenders registry Rules to the Marco alert system for missing children <p>The 2007 Child Protection Act:</p> <ul style="list-style-type: none"> Increased penalties for child abuse Obligation to report child abuse Supervision orders are issued first before children are sent to detention centres Change to age of child to 18, detention age also 18 	<p>Prevention of Cruelty to Children Act, 1985</p>	<p>Child Care and Protection Act, 2004:</p> <ul style="list-style-type: none"> Establishment of child registry Provisions on child cruelty, trafficking Establishment of provisions for care and protection of children <p>Child Pornography (Prevention) Act, 2009:</p> <ul style="list-style-type: none"> Increased penalties for perpetrators of sexual violence against children 		<p>Children Act, 2012:</p> <ul style="list-style-type: none"> Regulation of abuse of children through prostitution and other sexual offences, employment of young persons, and offences relating to dangerous drugs, tobacco, and alcohol Juvenile Court when charges against children

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Appendix 13.1. Legislation and Amendments on Crime and Violence by Country *(continued)*

	The Bahamas	Barbados	Jamaica	Suriname	Trinidad and Tobago
Other legislation					<p>Private Security Industry, Bill, 2014:</p> <ul style="list-style-type: none"> • Issue, revoke, suspend, cancel, and differentiate private security licenses • Establish training and practical standards for the certification of security officers • Establish public register of holders' licenses

Appendix 13.2. Effective Programmes by Topic

Effective Programmes: Highest-quality evidence (meta-evaluation or random controlled trial) with statistically significant average effect size favouring the practice, generally in more than one location.

Subject	Evidence-Based Programmes
Violence against women	<ul style="list-style-type: none"> • Advocacy interventions for women who experience intimate partner violence (Ramsay et al. 2009) • Changing social norms: <ul style="list-style-type: none"> - Mentors in Violence Prevention (Ward 1999) • Microfinance: <ul style="list-style-type: none"> - South Africa's Intervention with Microfinance for AIDS and Gender Equity (IMAGE) (Pronyk et al. 2006) • Centres for women: <ul style="list-style-type: none"> - Violence prevention and care centres for women (Kiely et al. 2010) - Shelters for battered women (Ellesberg et al. 2014) - Sexual Assault Nurse Examiners (SANE) (Campbell et al. 2014) • Media interventions: <ul style="list-style-type: none"> - Soul City South Africa (Goldstein et al. 2005) - Fourth R (Wolf et al. 2009)
Youth primary prevention	<ul style="list-style-type: none"> • Mentoring: <ul style="list-style-type: none"> - Big Brother/Big Sister Program (Tierney, Baldwin Grossman, and Resch 2000) • Skill training: <ul style="list-style-type: none"> - Vocational training for youth (JOBSTART - Cave et al. 1993) - Life skills training (Lose and Beelman 2006) • Programmes for child abuse: <ul style="list-style-type: none"> - Family therapeutic interventions against child abuse (Curtis, Ronan, and Borduin 2004) • Aggression Replacement Training (ART) (Gundersen and Svartdal 2006) • Cognitive-behavioural therapy (CBT) programmes: <ul style="list-style-type: none"> - Becoming a Man (BAM) Intervention Program (Heller et al. 2015) • Adolescent community reinforcement approach (Godley et al. 2006; Slesnick et al. 2007) • More quality education (Cullen, Jacob, and Levitt 2006; Deming 2011; Lochner and Moretti 2004) • Parenting programmes: <ul style="list-style-type: none"> - Positive Parenting Program - Nurse Family Partnership (Prinz et al. 2009) - Parent and child programmes (Early Head Start - Sure Start - Fergusson, Horwood, and Ritter 2005) - Functional Family Training (Mihalic et al. 2004) • Social support (Parents Anonymous - Circle of Friends - Budde and Schene 2004)

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Appendix 13.2. Effective Programmes by Topic (continued)

Effective Programmes: Highest-quality evidence (meta-evaluation or random controlled trial) with statistically significant average effect size favouring the practice, generally in more than one location.

Subject	Evidence-Based Programmes
Youth primary prevention <i>(continued)</i>	<ul style="list-style-type: none"> • Preschool enrichment programmes: <ul style="list-style-type: none"> - HighScope Perry Preschool Study (Schweinhart et al. 2005) - Chicago Child-Parent Center study (Reynolds, Ou, and Topitzes 2004) • Social development programmes: <ul style="list-style-type: none"> - Promoting Alternative Thinking Strategies (PATHS) Conduct Problems Prevention Research Group • Nurse Family Partnership (2012) • Stop Now and Plan (SNAP) (Augimeri et al. 2007)
Youth secondary prevention	<ul style="list-style-type: none"> • Functional Family Therapy (FFT) (Gordon et al. 1988; Sexton and Turner 2010; Celinska, Furrer, and Cheng 2013) • Reduced Probation Caseload Size program in Iowa and Oklahoma (Jalbert et al. 2011) • Youth Build USA Offender Project (Lurigio et al. 2000) • Adolescent Diversion Project (Michigan State University) (Davidson et al. 1987; Smith et al. 2004) <ul style="list-style-type: none"> - Becoming a Man Intervention Program (Heller et al. 2015)
Gangs	<ul style="list-style-type: none"> • Boston's Operation Ceasefire (Braga et al. 2001) • Operation Cul-de-sac (James Lasley) • Operation Peacekeeper (Ralph Womack)
Guns	<ul style="list-style-type: none"> • Boston's Operation Ceasefire (Braga et al. 2001) • Cure Violence (Skogan et al. 2008) • Implementation of laws targeting firearms (purchase, access and use) (Rosenfeld 1995) • Uniformed gun patrols (Sherman 2000) • Criminal history checks (Sherman 2000)
Drugs	<ul style="list-style-type: none"> • Drug courts - Bronx (NY) Treatment Court (Rempel et al. 2003) • High Point Drug Market Intervention (Corsaro et al. 2012)
Situational/ neighbourhood	<ul style="list-style-type: none"> • Safer Commune Program Chile (Ruprah 2008) • Safer Cities (Paul Ekblom)

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Appendix 13.2. Effective Programmes by Topic *(continued)*
Effective Programmes: Highest-quality evidence (meta-evaluation or random controlled trial) with statistically significant average effect size favouring the practice, generally in more than one location.

Subject	Evidence-Based Programmes
Criminal justice system	<ul style="list-style-type: none"> • Youth programmes: <ul style="list-style-type: none"> - Adolescent Diversion Project (States of Michigan and New York) - Diversion programmes for juvenile offenders (Schwalbe et al. 2012) • Specialized courts: <ul style="list-style-type: none"> - Drug courts (Mitchell et al. 2012) - Mental health courts - Community courts (Midtown Community Court) • DNA testing (Roman et al. 2008) • Restorative justice programmes (Sherman and Strang 2007; Shapland et al. 2008) • California's Proposition 36 (Evaluation of the Substance Abuse and Crime Prevention Act, 2007)
Police	<ul style="list-style-type: none"> • Problem-oriented policing (POP) (Braga and Bond 2008; Weisburd et al. 2008; Braga et al. 2001) • Hot Spot Policing (Braga, Papachristos, and Hureau 2012; Mitchell et al. 2012; Sherman and Weisburd 1995) • Jersey City Drug Market Analysis Experiment (David Weisburd)
Prison	<ul style="list-style-type: none"> • Correctional rehabilitation (Lipsey and Cullen 2007)

Appendix 13.3. Promising Programmes by Topic

Promising Programmes: Moderate-quality evidence with statistically significant effect size favouring the practice.

Subject	Evidence-Based Programmes
Violence against women	<ul style="list-style-type: none"> • Interventions for domestic violence offenders (Duluth Model): <ul style="list-style-type: none"> - Training and life skill interventions to reduce sexual violence (Bandiera et al. 2012; Sarnquist et al. 2014) • Initiatives to address dating violence: <ul style="list-style-type: none"> - Safe Dates program – United States (Foshee et al. 2005) - Youth Relationship Project in Ontario (Sherin et al. 1998)
Youth primary prevention	<ul style="list-style-type: none"> • Mentoring, skills and job related programmes—YouthBuild USA Offender Project (Cohen and Piquero 2010; Klevens et al. 2009; Taft et al. 2011; Chandler, Levitt, and List 2011) • Skill programmes and job-related interventions (Schochet, Burghardt, and McConnell 2008) • Conditional cash transfer programmes: <ul style="list-style-type: none"> - Familias en Acción (Camacho and Mejia 2013) • Academic enrichment programmes: <ul style="list-style-type: none"> - Los Angeles' BEST program (Goldschmidt, Huang, and Chinen 2007) - Quantum Opportunities Program (QOP) (Hahn, Leavitt, and Aaron 1994) • Media interventions (TV series "Families" – Sanders, Montgomery, and Brechman-Toussaint 2000; and Play Nicely)
Gangs	<ul style="list-style-type: none"> • GREAT – Gang Resistance Education and Training
Guns	<ul style="list-style-type: none"> • Gun ban • Firearm legislation (Rosengart et al. 2005; Kapusta et al. 2007)
Drugs	<ul style="list-style-type: none"> • Adult treatment drug courts (multi-site) (Urban Institute; Rossman et al. 2011)
Situational/Neighbourhood	<ul style="list-style-type: none"> • Neighbourhood watch (Bennett, Holloway, and Farrington 2008) • Community policing: <ul style="list-style-type: none"> - São Paulo community policing (Frühling et al. 2004) • Public space surveillance, security guards, safety housing certification, residential alarms (Jaitman and Guerrero Compeán 2015) • Urban renewal and neighbourhood improvement programmes (Kling, Ludwig, and Katz 2005; Owens and Freedman 2011) • Social integration of informal urban neighbourhoods (Cerdá et al. 2012) • Closed circuit television surveillance (Welsh and Farrington 2008b) • Improved street lighting (Welsh and Farrington 2008a)

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Appendix 13.3. Promising Programmes by Topic *(continued)*

Promising Programmes: Moderate-quality evidence with statistically significant effect size favouring the practice.

Subject	Evidence-Based Programmes
Criminal justice system	<ul style="list-style-type: none"> • Local laws (Biderman, DeMello, and Schneider 2009; Gronqvist and Niknami 2014; Heaton 2012) • Low fines in Maricopa County, Arizona (Turner and Petersilia 1996) • Diversion programmes: <ul style="list-style-type: none"> - Petrosino, Turpin-Petrosino, and Guckenburg (2010) • Specialized courts: <ul style="list-style-type: none"> - Mental health courts (Sarteschi, Vaughn, and Kim 2011) - Community courts (Henry and Kralstein 2011) • Electronic monitoring in Buenos Aires Province (Di Tella and Schargrodsky 2013) • Community service work (Wermink et al. 2010) • Halfway houses - Boston re-entry initiative (Saylor and Gaes 1997) • Relocation to different city of offenders (Kirk 2009)
Police	<ul style="list-style-type: none"> • Community policing • National Plan for Community Policing Areas of Colombia (Garcia, Mejia, and Ortega 2013) • Community-Oriented Policing Services (COPS) (Evans and Owens 2007) - local effects • More police (Levitt 1997) • Program of Integration and Management in Public Safety, Brazil (Soares and Viveiros 2010) • Information technologies on police organization and productivity (Garicano and Heaton 2010) • Door-to-door visits by police (Sherman et al. 1997; Weisburd and Eck 2004) • Stop and frisk (Sherman 1998) • Repeat offenders (Arizona - Abrahamse et al. 1991) • Focusing on repeat offenders (Waller 2014) • Focusing on repeat victimization (Waller 2014) • "Hot products" (Braga 2007)
Prison	<ul style="list-style-type: none"> • Longer sentences <ul style="list-style-type: none"> - Proposition 8 (Bell, Jaitman, and Machin 2014; Drago, Galbiati, and Vertova 2009; Kessler and Levitt 1999; Philippe 2013; Lee and McCrary 2009) • California's three-strikes legislation (Helland and Tabarrok 2007; Iyengar 2008) • Cognitive-behavioural therapy (Lipsey and Howell 2012)
Private sector	<ul style="list-style-type: none"> • Business Improvement Districts (BIDs) (Hoyt 2005) • Target's Safe City Program (La Vigne, Owens, and Hetrick 2009)

Appendix 13.4. Programmes with No Evidence or Proven Ineffective

Programmes with no evidence or proven ineffective: Moderate- to high-quality evidence with statistically significant average effect size in the opposite direction of the intended effect for the practice. Moderate- to high-quality evidence and the average effect size is not is not different with statistical significance from the comparison group.

Subject	Evidence-Based Programmes
Violence against women	<ul style="list-style-type: none"> Programmes that target male perpetrators or consist of school-based group training sessions (Ellsberg et al. 2014)
Youth primary prevention	<ul style="list-style-type: none"> Drug Abuse Resistance Education (DARE) (Clayton, Cattarello, and Johnstone 1996; Ennett et al. 1994) CHOICE (D'Amico et al. 2012)
Youth secondary prevention	<ul style="list-style-type: none"> Serious and Violent Offender Re-entry Initiative (SVORI) (Lattimore and Visser 2009) Juvenile drug courts (Blair, Sullivan, Latessa, and Sullivan 2015) Youth diversion programmes (Wilson and Hoge 2013)
Gangs	<ul style="list-style-type: none"> Gang Reduction Program (Richmond, VA) (Cahill et al. 2008; Hayeslip and Cahill 2009)
Guns	<ul style="list-style-type: none"> Gun buyback programmes (Ronconi, Lenis, and Schargrodsky 2011)
Drugs	<ul style="list-style-type: none"> Pennsylvania Department of Corrections (PADOC) Therapeutic Community (Welsh and Zajac 2013)
Criminal justice system	<ul style="list-style-type: none"> New York Integrated Domestic Violence Courts (Katz and Rempel 2011) Pennsylvania Department of Corrections (PADOC) Therapeutic Community (Welsh and Zajac 2013) Boot camps for adults and juveniles (Wilson, MacKenzie, and Ngo Mitchell 2008) Increases in lengthy prison sentences (Travis and Western 2014)
Police	<ul style="list-style-type: none"> Random patrol and unfocused enforcement (Sherman and Eck 2002) Neighbourhood Watch, Child Print (Bennett, Holloway, and Farrington 2008) DARE Drug Prevention Program (Clayton, Cattarello, and Johnstone 1996; Ennett et al. 1994)
Prison	<ul style="list-style-type: none"> Private prison confinement (Minnesota) (Duwe and Clark 2013)

Conclusions and Recommendations

Heather Sutton

This final chapter presents the conclusions of this report followed by recommendations rooted in the analysis of the data and the review of successful international initiatives in the previous chapter. While each individual chapter includes specific policy implications, the final recommendations are collected and synthesized here. We first make four overarching recommendations to be incorporated within national strategies to reduce and prevent violence. The recommendations are that (1) there be a balance between prevention and control, (2) specific target populations be prioritized, (3) interventions be evidence-based and evaluated, and (4) interventions incorporate macro-level monitoring of key indicators of the criminal justice system (police, courts, and prisons). This is followed by detailed, topic-specific recommendations that might be incorporated into national strategies based on a country's crime profile. These detailed recommendations are grouped by the thematic areas addressed in this publication: (1) violence against women and children, (2) youth violence and delinquency, (3) neighbourhoods, (4) gangs, (5) guns, (6) the private sector, and (7) the police and criminal justice system.

Some recommendations are not new. In fact, the United Nations Development Programme's *2012 Caribbean Human Development Report* on citizen security highlights some similar themes (UNDP 2012). Some recommendations may already be embodied in current ongoing projects in some countries. Where this is the case, we include them to emphasize that they require continued support, fine-tuning, and resources. Other recommendations are new and further supported by more recent evidence from the international community.

We hope that governments will find these recommendations useful in forming policy agendas, that practitioners and civil society will use them in designing programmes and advocacy platforms, and that researchers will follow up where this report leaves off.

14.1 Conclusions

This publication fills an important gap in helping understand the crime problem in the Caribbean by analysing data from victimization surveys of individuals and businesses in 2014/2015. Most existing studies on crime and violence in the region have relied upon police data. However, we find that only 53 percent of crimes measured in the Caribbean Crime Victimization Survey (CCVS) were reported to the police. This highlights the fact that police data can show an incomplete view of the problem. Precisely the crimes that are most prevalent in the Caribbean (assaults and threats) were the least likely to be reported, and women, youth, and single individuals were all less likely to report violent crimes.

On average, 15 percent of individuals in Caribbean capital city metropolitan areas were victims of one of five types of crime in a 12-month period—vehicle theft, theft, robbery, burglary, or assaults and threats. Among the cities, New Providence (The Bahamas) and Kingston (Jamaica) stand out with the highest levels of assaults and threats. In New Providence and in Port of Spain (Trinidad and Tobago), the level of robbery is also comparatively high. Levels of crime are the lowest in Paramaribo (Suriname) and Bridgetown (Barbados).

Despite inter-regional variation, the defining characteristic of crime in the Caribbean is the uniquely high level of violent crime, including homicides and assaults and threats, often with the use of firearms. This type of crime is higher in the Caribbean than in any other region registered in the International Crime Victimization Survey (ICVS) database. Moreover, Caribbean residents are living a collective trauma from years of violence. Nearly one in three reported having lost someone close to violence and/or having witnessed a violent attack ending in injury or death in his/her lifetime.

Among the five crimes measured, individuals are at highest risk of being victimized by assault or threat within their own neighbourhood and by someone they know. This risk is most elevated among young, low-income males. Youth (18–24) and young adults (25–30) are over-represented among victims and perpetrators of violent crime when compared to their proportion of the population overall. However, women and children are more likely to be victimized by family or intimate partner violence, which is not well captured in police statistics or crime victimization surveys. The relatively high tolerance for violence against women and physical discipline of children found in the Caribbean is likely predictive of high levels of actual violence in the home. Experiencing violence

at an early age has been established in international literature as a strong risk factor linked to later perpetration of violence and delinquency.

Those victimized by violent crime in the Caribbean, whether directly or indirectly, live in neighbourhoods with higher physical disorder (graffiti, trash, abandoned buildings) and lower social cohesion (trust among neighbours) compared to non-victims. Similarly, living in a neighbourhood with a gang presence is associated with higher odds of victimization. Guns are used in the overwhelming majority of homicides and are used twice as often in assaults and robberies in the Caribbean than the international average. Individuals in households with guns are more likely to have witnessed a shooting or violent attack and to have lost someone close to violence. Interestingly, individuals who have been victims of one of the five crimes do not have significantly lower trust in the police. The key factors influencing trust in the police are perceptions of police competence in fighting crime, the estimated time it would take for police to arrive if called, perceptions of police harassment, and having paid a bribe to the police. This suggests that improving trust and community police relations should be possible despite high crime levels, and that such an improvement depends more upon perceptions of police efficiency and professionalism than personal victimization.

Finally, the cost of crime for the region is high. Applying the accounting method, we estimate that crime costs the region 3 percent of GDP, with Barbados being the country least affected and The Bahamas the most. To put the cost into context, 3 percent of GDP is about on par with the average for Latin America and the Caribbean and is roughly equal to the income of the poorest 30 percent of the population in the region. In other words, if crime were to be extinguished completely we could double the income of the poorest 30 percent of individuals.

Crime takes a toll on the private sector, where 23 percent of firms have experienced losses as a result of crime and nearly 70 percent spend money on private security measures. Although a large amount of firms spend on private security, this spending is not associated with a reduction in being victimized by crime.

Finally, increased homicide rates over time are correlated with lower economic growth and lower tourism arrivals, and being a victim of violence or witnessing violence is associated with lower life satisfaction and higher intentions to emigrate.

14.1.1 Existing Efforts versus Evidence of What Works

For too long, public policy officials and legislators, backed by public opinion in the Caribbean and elsewhere, have adhered to inefficient policies and practices to improve public safety and reduce crime. Although there are recent signs of an incipient paradigm shift in the Caribbean (UNDP 2012), security policies are still predominantly

reactive and rely heavily on law enforcement and tough deterrence. While there have been some recent investments in prevention, the limited budget allocated to these programmes in comparison to more traditional and reactive law enforcement exposes the continual favouring of policies that aim to counter crime with more repression, stiffer sentences, and more incarceration. Numerous studies have shown that this model is not effective. State investments in harsher penal laws, new prison construction, and the non-strategic expansion of police forces have had limited impact on reducing violence and have failed to discourage new crimes from occurring. Although it may seem politically popular to be tough on crime, one of the biggest problems of this reactive approach is that it does not place value on understanding and taking appropriate steps to tackle the underlying causes of crime and violence.

This problem is compounded by the fact that the existing, and potentially promising, prevention-focused initiatives in the Caribbean have generally not been rigorously evaluated to determine their impact. In fact, prevention programmes typically lack the resources and planning necessary to effectively monitor and evaluate their success.

14.2 Broad Recommendations

In light of these findings, national strategies for violence prevention and reduction should be developed (or reassessed where they already exist) to be comprehensive and actionable, risk-focused, and evidence-based. Each strategy should address four overarching recommendations.

Balance Prevention and Control

A one-size-fits-all approach to crime is doomed to failure. While there are some perpetrators who cannot be safely integrated into society, and some crimes that are rightfully responded to with detention, suppression must be applied thoughtfully and strategically to avoid making matters worse. An impoverished child jailed for years, with and especially without a trial, with violent adults for a more minor infraction (such as stealing food) is at high risk for serious victimization while detained and re-entering society as a greater threat than when he was imprisoned. This is not a worthwhile expense for taxpayers or a humane approach to treating youth who have likely been exposed to severe trauma by the time of a first offence. A balanced approach is required that includes both smart prevention and smart crime control. “Smart” means that both types of initiatives must be targeted, evidence-based, and effectively monitored and evaluated. The media in particular have an important role to play in changing public dialogue to focus more on prevention than suppression.

Currently, prevention programmes tend to be understaffed and under-resourced,¹ while law enforcement has expanded to levels above the international average and among the highest in the Americas (an average of 560 officers per 100,000 population in the Caribbean, versus 360 officers internationally). Law enforcement continues to dominate national budgets for public safety. Therefore, achieving a balance in the Caribbean effectively means politically, administratively, and financially bolstering prevention programmes and recognizing them as a proven means to effectively reduce violence.

Target Interventions to Key Individuals and/or Geographical Areas

Crime is not random and it is not everywhere: a small number of high-risk individuals perpetrate the overwhelming majority of crimes in concentrated geographic areas. We have shown in this publication, as have other authors, that there are specific risk and protective factors that make some individuals more likely to become offenders. With good data on these factors, we can identify high-risk individuals before they perpetrate a crime and offer them resources and interventions that can reduce their risk of offending. Prevention and crime control strategies alike should be targeted to specific populations. Scarce resources should be invested where they stand to make the most difference.

This may not always be politically easy. Would-be beneficiaries who do not meet criteria for inclusion in certain programmes may be unsatisfied. Taxpayers in low-crime areas may demand more protection. It's not always well understood that by targeting areas or individuals most at risk, there is a bigger benefit for society overall—including lower-crime areas. Explaining this, and sticking to a truly targeted strategy, requires skilled communication and leadership.

Employ Evidence-Based and Tested Interventions

Even more than elsewhere, too little research has been conducted in the Caribbean using rigorous evaluation methods. The reasons for this are many, including data limitations, potential lack of familiarity with experimental or quasi-experimental design in policy evaluations, the costs involved in conducting experimental studies, the preference for punitive rather than preventive measures, and the political and cultural sensitivities surrounding the topic.

Many of the evidence-based interventions examined in the previous chapter have not been tested in the Caribbean context. Still, we recommend that the international evidence be taken into consideration by encouraging research on the

¹ See the Inter-American Development Bank's Technical Note Series on Crime and Violence in the Caribbean, which covers an inventory of programmes and interventions in four countries (Jamaica, Bahamas, Barbados, and Trinidad and Tobago).

validity and adaptation challenges of these interventions for the Caribbean. Equally, there are many promising and uniquely Caribbean initiatives under way that need further evaluation. However, in order to improve the evidence base the following will be necessary:

- *Improved data collection, data sharing, and transparency.* Improving data is not only a matter of investing in technology. It also requires ensuring that those who record the data (i.e., police, courts, prisons, hospitals, schools, nonprofits) understand and value its importance. It requires openness to data sharing between agencies, researchers, and the public. In many ways this is more a matter of changing the institutional and political culture around data than it is a matter of the actual hardware or data collection systems. Data sharing should be rewarded with public praise for confronting difficult problems. It is important for institutions not to be attacked if and when they reveal that, for instance, homicide rates are increasing. The media should pressure institutions for signs of collaboration and minimize finger-pointing when it does occur.
- *Funding evaluation and the continual testing of interventions.* The most robust tests of the effectiveness of prevention interventions (i.e., experimental evaluations) can be costly. However, not knowing what works and continuing to let crime increase can be more costly (see Chapters 10–12). The only way to determine the effectiveness of crime prevention is to put it to the test in real-world conditions. The best definition of a test is a comparison of crime outcomes (across similar units and conditions) with and without the intervention. The units can be offenders, victims, places, or days of the week. The practice tested can be compared with another practice or with doing nothing. The use of a control group in an experiment is for the comparison of outcomes. To say that an impact evaluation shows that a practice works requires a comparison, by definition. Some see having a control group as denial of resources to those in need. But if we do not have evidence a programme is beneficial, we do clients a disservice by foisting programmes on them that offer no restitution. There is a moral imperative in a resource-scarce environment to have an evidence base for programmes and services offered. Interventions can be piloted and evaluated in a small population before investing resources in a large-scale intervention. This requires a willingness to accept that evaluations might find some programmes did *not* work. This should not be viewed as wasted programmatic resources; rather, it should be viewed as warding off large-scale waste and giving innovative programmes a chance where others have failed.
- *Mechanisms for marrying evidence with policy.* This concern focuses on the effectiveness of the feedback mechanisms between research and policy, and vice versa.

Too often, both in and outside the Caribbean, policymakers fail to make decisions based on the strongest evidence. This can be for many reasons, but perhaps the first solution is to address the lack of sustained interaction between policymakers and researchers. Governments should seek to sponsor presentations of research findings to policymakers and continuous dialogues with researchers. Researchers need to work closely with local practitioners to ascertain the feasibility of implementing an intervention that was successful in one country in another one. Research findings need to be communicated more widely to the public, outside of academic circles. Civil society organizations must have a voice in determining the most promising policies and programmes for their communities.

Monitor Key Indicators of the Criminal Justice System as a Whole

In order to have an improved understanding of the functioning of the criminal justice system as a whole (from police to the courts and prisons), Ministries of National Security and related agencies should develop a dashboard of key metrics to be frequently monitored (monthly, bi-monthly). These metrics should include indicators that give policymakers the big picture of how the system is functioning overall. In other words, they should tell policymakers who is being arrested (or not) and for what types of crime (violent, property, drug offences); the percentage of arrests that were made on the spot or involved investigation; the percentage of arrests that resulted in court cases, and whether those cases had enough evidence to go to trial; the amount of cases that resulted in mistrial, conviction, or not guilty verdicts; and a breakdown of the prison population by type of crime and pre-trial versus convicted detainees, numbers of prisoners involved in rehabilitation programmes, numbers of prisoners released, and recidivism rates. Such a monitoring system would allow policymakers to understand where the system is breaking down, who is being arrested and incarcerated, and why.

The indicators/metrics used should be a product of discussion and acceptance by the heads of the key agencies involved (police, courts, and prisons).² Indicators should be clearly defined and key agencies should feed in the required information at specified time intervals. The regular review of such metrics should include academia and civil society, as well as these agencies. Ministries will need to designate a particular unit to be responsible, upon receipt of sufficient resources, for maintaining and updating the indicator dashboard. There are a number of software platforms that allow for this type of feed-in and monitoring by multiple agencies.

² Some key indicators could follow those developed by the United Nations Office on Drugs and Crime to create the international criminal justice statistics (UNODC 2003).

14.3 Detailed Recommendations by Topic

Framed by these key recommendations above, national strategies can then focus on incorporating the detailed recommendations by topic that are most relevant to their country context (i.e., gangs and guns may be more relevant in some countries than others, etc.).

Violence against Women and Children

- *Adapt legislation:* Numerous changes still need to be made to update national legislation in many countries, particularly those that have not criminalized marital rape, for example. Definitions of “domestic violence” should be re-evaluated and expanded to incorporate a wide and inclusive scope of types of abuse and categories of victims.
- *Promote national studies:* More robust nationally representative studies are needed to understand the prevalence and severity of violence against women and children on a national scale. In addition to understanding the scope of the problem and the risk and protective factors, studies should also examine coping mechanisms used by victims, as well as obstacles to accessing support services and justice.
- *Include a line item in national budgets specifically for victim support services and prevention of violence against women and children:* Support services and prevention initiatives for these types of violence are highly under-resourced in Caribbean countries. Providing shelter and economic, emotional, and legal support for women and children in abusive relationships or households should be considered a priority and obligation of governments. Prioritizing these services requires steady and consistent dedication of adequate resources.
- *Focus on changing societal acceptance of violence against women and children:* Small group/community participatory workshops, interventions in schools, and larger-scale educational entertainment campaigns (using various media sources) have shown promising results for changing attitudes about violence against women and children (for details see Chapters 4 and 13).
- *Implement and evaluate parenting programmes and family visits from nurses and social workers trained in identifying signs of abuse and connecting people to support services:* Providing early intervention for families at risk via home visits and parenting programmes can reduce childhood exposure to violence and may also reduce future perpetration of violence.

Youth Victimization and Delinquency

- *Provide individuals identified as most at risk, and their families, with access to best practices for reducing victimization and delinquency while strengthening protective factors.* Longitudinal studies have shown that a small group of children born each year

will account for a disproportionate amount of criminal offences in the future.³ This small sub-group can become chronic re-offenders responsible for a large portion of crimes. Youth are also disproportionately victimized by violent crimes such as assault and threat of assault. Fortunately, many of the programmes have already been evaluated worldwide and the body of evidence is surprisingly accessible for non-experts.⁴ In order to implement this recommendation the following steps are necessary:

- *Develop and implement risk-assessment tools:* These tools should be developed and used in all youth interventions to help target the communities and individual youths that need them most.⁵ Certain negative life experiences (risk factors) predispose some people to offend and be victimized, while other experiences (protective factors) are associated with reduced offending and victimization. Geographic Information System coding of crime data can also be used to determine geographically which communities have the highest rates of violent crime. Using this information, risk-assessment tools should be used to determine which individuals are at highest risk, and which programmes they could benefit from. Prevention programmes should use these tools to target young, socially disadvantaged males in high-risk communities within urban areas that are at greatest risk.
- *Avoid what doesn't work:* An array of youth programmes—including military-style boot camps, “scared straight” tactics, and drug resistance classes taught by police—have gained popularity, but the international evidence shows that they do not make a positive impact on youth offending. On the other hand, a number of programmes targeting risk and protective factors at the individual and family levels have had more success internationally. Scarce resources should be diverted away from programmes that have not worked in other contexts.
- *Strengthen family counselling/parenting programmes, especially in areas with high levels of violence:* Violence is often learned at home, so there are significant potential benefits to improving parenting practices in the Caribbean. At the international level, there are several parenting programmes that have proved educational, such as the Positive Parenting Program (“Triple P”), which has been successful across cultures, socio-economic groups, and various family structures.⁶ There are already government-run national parenting programmes in a number

³ One such study finds that 5-10 percent of children will account for 50-70 percent of all crime (Farrington 2010).

⁴ Several websites and interactive tools have been developed to facilitate searches for evidence-based programmes. For examples, see www.crimesolutions.gov, www.blueprintsprograms.com, www.who.int, and www.campbellcollaboration.org.

⁵ There are a number of risk-assessment instruments that have been developed internationally for youth programmes (i.e., YSET, HCR-20, and others) and can be studied and adapted to the local context.

⁶ The body of evidence of this programme is the most extensive of any parenting programme and is comprised of more than 250 published papers, including eight meta-analyses, 68 randomized clinical trials, 51 effectiveness and service-based evaluations, and 13 single-case studies.

of Caribbean countries (including The Bahamas, Jamaica, and Trinidad and Tobago). However, they are generally under-resourced and it is unclear to what extent they incorporate evidence-based and data-driven approaches, or how successful they have been. Efforts and resources should be focused on evaluating such interventions so that they may be redesigned, strengthened, or scaled up.

- *Improve the evidence base for skills/job training, combined with cognitive behavioural therapy (CBT) approaches:* While many Caribbean countries have some form of job/vocational training programmes for youth, the evidence of their impact on preventing or reducing offending is weak. The international literature has specifically shown that job programmes that incorporate elements of CBT tend to be more effective, but no such studies were found in the Caribbean. In addition to job training, these approaches target risk factors of impulsivity, anger, low empathy, and low self-control. They have been found to produce significantly positive results in terms of problem behaviours and later propensity to offend. While job training for young people is certainly important in its own right, existing programmes in the Caribbean may or may not be helping to reduce violence and crime. The evidence base for this type of programme in the Caribbean needs to be strengthened by investing in more robust monitoring and evaluation.

Stronger Neighbourhoods

- *Use Geographic Information Systems (GIS) for mapping of crime and community assets:* Geospatial technologies such as GIS and Global Positioning Systems (GPS) can be used in mapping crime, improving policing (e.g., determining if the police are where they are needed most), mapping physical disorder, and tracking social infrastructure data (assets). Asset mapping can include positive assets (schools, churches, parks, etc.) and negative assets (vacant lots, gang borders, abandoned buildings, etc.). These maps can be used by law enforcement and by the communities themselves. For example, the Ministry of Health in Jamaica and the Jamaican Social Investment Fund have completed a comprehensive mapping of the assets of many Jamaican communities (Lyew-Ayee and Greene 2013). Such information can be used by law enforcement for intelligence in its operations and to identify areas of disorder that may attract crime. The latter can inform community policing and urban renewal strategies. Community action committees can be given the chance to validate and use such maps to increase prevention initiatives.
- *Identify areas with a surplus or deficit of social cohesion:* In addition to mapping crime and physical assets, continued research can help to identify “strongholds” and “sinkholes” of important socio-cultural traits such as social cohesion and informal social control within neighbourhoods. Community-level strategies can be designed to “build up” existing strongholds and/or “fill in” the sinkholes (Uchida et al. 2014).

- *Increase residents' willingness to do something about community problems, increase the sense of trust and shared community ownership, reduce incivilities, and increase satisfaction with local public service and reduce fear:* Beck, Ohmer, and Warner (2012) offer several practical examples of how social work practices can be used to build community cohesion, including through components of restorative justice that work by involving communities in the justice process.
- *Reduce physical disorder:* Problem-solving interventions to reduce physical disorder in specific locations can increase community cohesion and reduce fear. These initiatives can include towing broken-down cars, community beautification and mobilization, and community and problem-oriented policing. On the other hand, aggressive approaches by law enforcement to maintaining order, such as “zero tolerance” policing, do not seem to be effective and can distance police from the community.

Gangs

- *Continue to better understand the scope and nature of the problem:* More effort needs to be invested not only in strengthening gang-related data collection and analysis by police units, but also in research to identify specific risk and protective factors that influence gang entry and exit in each country. Because the nature of gang violence and gang affiliation in each country is unique, solutions should pay close attention to the local dynamics of gangs. Harriott and Katz (2015) have initiated an important examination of risk and resilience factors for joining gangs in the region. Using this research as a basis, more can be done to understand the differences between countries and the pathways to joining gangs, and to test the conclusions in different countries. Not only national research but also cross-country comparative work is necessary to understand gangs in the region. More studies are necessary to understand the relationship between communities' characteristics and gang formation. Similarly, research on gang adaptations to police intervention and prevention strategies would be useful.
- *Prevent gang membership:* Many of the recommendations above regarding reducing violence in the home, reducing risk and increasing protective factors for youth, and strengthening communities may go a long way to preventing youth from joining gangs. However, it is important to also understand specific drivers in the Caribbean that are correlated with joining a gang (such as a sense of identity and belonging and for protection). Prevention initiatives should be developed or adapted to address these specific risk and protective factors.
- *Intervene to reduce gang violence and help members exit gangs:* Gangs are responsible for a large amount of violence, particularly lethal violence (homicide), in some Caribbean countries. The use of street outreach workers and counselling to

help individuals exit gangs has shown promise in reducing gang violence in some contexts. Additionally, mediators (sometimes called “violence interrupters”) can be helpful in de-escalating potentially explosive conflicts between gangs. Similar approaches are being used in several Caribbean countries, including Jamaica (Peace Management Initiative), Trinidad and Tobago (Project REASON), and The Bahamas (Operation Ceasefire). An important next step is evaluating these programmes to understand their effectiveness and fine-tune them. Finally, even though there has been no impact evaluation of faith-based interventions, there are also potential benefits of including the faith community in the response against gangs. (See Harriott and Katz 2015 for an example of a faith-based intervention in the community of Gonzales in Trinidad and Tobago.)

- *Suppress gang violence and crime:* If the rule of law and formal social control mechanisms break down, gangs or organized crime can fill the void and become more entrenched. In addition to prevention and intervention, suppression is also necessary in some contexts. Gang members who engage in illegal activities should be arrested and convicted. Caribbean countries should cautiously investigate the potential of targeted operations or of increasing specialized police forces in gang neighbourhoods. However, when such operations are unstructured reactions with no longer-term plan, they are likely to backfire. Therefore, saturation operations by law enforcement should be followed up with intensive investment in community social development and a continued community policing presence. Similar international initiatives have had mixed results. However, important lessons learned include that when social investment in the community is delayed or fails to occur, community resentment and mistrust builds. Power vacuums that are left may be filled again by other gangs or gang members. The use of lethal violence involving police forces is also a central concern. There is a clear need to invest in police training and to develop operational and analytical capacity on gang violence to better shape suppression interventions. Removing access to illegal weapons has also been proven to reduce the increasing rate of gang violence. Operation Ceasefire, which was implemented in Boston, is an example of a collaborative and comprehensive strategy to address escalating gang activity and the use of guns (Braga et al. 2001).

Guns

Attention should be placed on the factors that make violence more lethal. This is particularly true for the Caribbean, where firearms are the main weapons used in homicides and are used twice as often in assaults and threats as the international average.

- *Stem the illegal flow of firearms to and from the region:* Border controls, firearm tracing, and regional and bilateral cooperation should be explored to reduce the

flow of illegal weapons within the region. The United Nations International Small Arms Control Standards (ISACS) offer detailed recommendations in this regard.⁷

- *Assess gaps in legislation:* Firearm legislation should be examined (see Appendix 8.4) and reviewed to ensure that restrictions on owning and carrying adequately protect the public. Licensing and registration of legal firearms and related protocols should be transparent and robust. The ISACS also offer detailed recommendations in this regard.⁸
- *Directed police patrols to reduce gun violence:* Multiple quasi-experimental studies suggest that intensive patrols in high-gun-crime areas can lead to reductions in gun carrying and gun-related violence. These strategies represent a kind of “hot spot” approach that involves “assigning additional officers to high-crime areas at high-risk times and allowing them to focus on *proactive* investigation and enforcement (e.g., intensified traffic enforcement and field interrogations of suspicious persons) rather than answer calls for service” (Koper and Mayo-Wilson 2012, 14).
- *Reduce diversion of firearms from State stockpiles:* Stockpile management procedures for police and defence forces should be investigated to determine if they adequately impede guns from being stolen or diverted to the illegal market. Again, multiple suggestions for ensuring good stockpile management procedures can be found in the ISACS.⁹ This should include the frequent destruction of seized or surplus firearms.
- *Gun buybacks and public gun destruction:* While gun buybacks have shown no statistical evidence of reducing gun violence, they can be combined with the public destruction of weapons and have a symbolic value in mobilizing the population against gun violence (which could have a positive effect on community cohesion).

Private Sector Involvement

Policymakers can take actions to encourage private sector involvement in reducing crime, and businesses can take the initiative themselves in crime prevention public-private partnerships (PPPs) in the following ways:

- *Indirect involvement:* Firms can donate resources (money, space, equipment, or services) for projects executed by the public sector, by nongovernmental organizations, or by a group of firms.
- *Direct involvement:* Firms can directly manage activities, such as job or training courses, help to evaluate projects, and/or participate in public policy and community

⁷ See the Operational Support section at <http://www.smallarmsstandards.org/isacs/>.

⁸ See the Legislative and Regulatory section at <http://www.smallarmsstandards.org/isacs/>.

⁹ Ibid.

meetings on crime and violence prevention. The job and training courses are sometimes offered to prisoners, former prisoners, and high-risk youth.

- *Mixed involvement:* Firms can both donate resources and actively participate in projects (ICPC, World Bank, and the Sou da Paz Institute 2011).

Police and Criminal Justice System

The dashboard of key criminal justice system indicators mentioned in the broad recommendations would be a major contribution to dissecting how the criminal justice system functions as a whole in each country. In addition, we present the following recommendations for each area involved:

- *Smart, accountable policing:* Compared to the rest of the world, the Caribbean has some of the largest police-to-population ratios. The largest portion of national budgets that are dedicated to crime and violence is spent on law enforcement. In fact, Caribbean governments spend even more of their budgets on police than Central American countries with similar or higher crime rates. Investment in law enforcement is essential, but Caribbean governments should focus on re-orienting and re-tooling police forces to be less reactive and more proactive and accountable. In Chapter 9, we saw that citizens' trust in the police was more influenced by whether they thought the police were doing a good job controlling crime than by other factors. Therefore, increasing police efficiency is likely to also increase trust.

Crime is not spread evenly across all places, people, or times, and police efforts should be directed to where crime is concentrated. Evidence shows that standard model policing (random police patrols, increasing the number of officers, and general reactive strategies) have no effect on crime.¹⁰ Problem-oriented policing, on the other hand, entails proactively identifying problems within the community and developing thoughtful, tailored responses to address underlying causes of the problems and devise meaningful and effective solutions (Goldstein 1990). Although more rigorous research needs to be conducted on problem-oriented policing, the international evidence so far shows that it is the most promising of the police strategies.¹¹ Focused policing efforts on hot spots,¹² repeat offenders (focused deterrence strategies), and directed patrols for gun violence are proactive ways of preventing future crime.

¹⁰ See Pousadela (2014), Sherman et al. (1997), Skogan and Frydl (2004), Telep and Weisburd (2012), and Weisburd and Eck (2004).

¹¹ See Skogan and Frydl (2004), Weisburd and Eck (2004), and Weisburd et al. (2008).

¹² See Braga, Papachristos, and Hureau (2012), Telep and Weisburd (2012), and Weisburd and Eck (2004).

Quality crime data (with GIS coordinates) and effective crime analysis are requirements for hot spot policing. Hot spots should also be analysed over the long term, including understanding possible migration of crime to other areas (displacement). Effective hot spot policing requires what Sherman (2013) describes as the “Triple T” approach: *Targeting* the right places, *Testing* if interventions are reducing crime, and *Tracking* whether officers are actually patrolling where they should be. Furthermore, Sherman et al. (2014) present valuable lessons from the Hot Spot Patrol Strategy in Trinidad and Tobago regarding scaling up from specific hot spot locations to a district-wide focus, and feeding back to the constables on the effects in regular district-level crime strategy “COP-stat” meetings.

Finally, for these focused initiatives to be successful, they must also be a part of a wider internal culture and structural shift that values professionalism, accountability, and transparency. The communities that law enforcement serves should be valued as co-producers of security. Caribbean countries need to examine ways of promoting this type of internal culture through training, internal and external oversight, leadership, and incentives.

- *Alternatives to incarceration that reduce re-offending:* Much of the literature suggests it is best to avoid getting non-violent offenders involved with the court system to begin with. Diverting minor crimes away from the courts and corrections system and towards alternative sentences or treatment programmes (drug, alcohol, trauma, or mental health) can save resources and reduce re-offending. Restorative justice programmes aim to help victims work through their feelings and reach a solution, together with offenders, outside of the courts. An international review of the research on these programmes (Sherman and Strang 2007) found that victims were more satisfied, taxpayers saved money, and re-offending rates for some offences were lower than for those who were incarcerated. These programmes can also expand access to justice by bypassing some of the cost and logistical obstacles to the courts. Both Jamaica and Trinidad and Tobago have begun studying the wider application of restorative justice programmes in recent years. It will be important to follow the development of these programmes and their impact.
- *Smarter, stronger courts:* Courts in many Caribbean countries are under-resourced and have low management capacity in the face of increasing criminal caseloads. This can result in large backlogs and long bouts of pre-trial detention. The UNDP’s *2012 Caribbean Human Development Report* makes an important recommendation in this regard that has yet to be fully implemented in most Caribbean countries: to develop and implement a judicial management system and strategy that seeks to minimize delays through (1) improved witness management, (2) better case preparation, and (3) reduced double booking by lawyers (UNDP 2012).

In addition, Caribbean countries should study the possibility of implementing problem-solving courts that aim to prevent re-offending while meeting the needs of victims and society. Two types of problem-solving courts that have strong evidence to support them are drug courts¹³ and mental health courts.¹⁴

- *Smarter corrections and rehabilitation:* Several hundred studies over the last three decades have looked at what works best to reduce an inmate's likelihood of re-offending after release. As shown in the previous chapter, the strongest evidence is for cognitive-behavioural therapy (CBT), which targets thought processes and aims to change decision-making related to crime. Approaches that focus on personal development through skills, relationships, and growth (CBT, social skills, academic skills, and vocational skills) are more effective than those that focus on deterrence through discipline (i.e., boot camp), fear of consequences (i.e., "Scared Straight"), and surveillance (i.e., intensive probation, electronic monitoring). In addition, isolated life skills and work programmes that are not combined with cognitive and relationship skills have not been shown to achieve significant reductions in re-offending.

14.4 Final Remarks

The recommendations in this chapter are many and cover a wide scope, but complex problems require multi-faceted and complex solutions. Violence in the Caribbean is a problem, and problems require focused attention by multiple stakeholders and resources. The size of the violence problem in the Caribbean merits an equally robust response, and from other sectors beyond criminal justice. These measures will require financial and political support in the face of restricted budgets. However, in many cases we do not have a clear picture of how existing budgets are actually contributing to violence reduction. By focusing on initiatives that are evidence-based, targeted, and evaluated, governments can more easily determine what is working and where scarce resources should continue to be allocated. The recommendations are also far more likely to be implemented if they are taken up and advocated by the international community in its interactions with the region. While the challenge is great, the Caribbean is capable of restoring paradise by combatting violence intelligently and strategically.

¹³ A recent systematic review of the evidence identified 154 independent, eligible evaluations, including 92 evaluations of adult drug courts, 34 evaluations of juvenile drug courts, and 28 evaluations of drunk-driving courts. The findings most strongly support the effectiveness of adult drug courts, consistently finding reductions that generally persist for at least three years (Mitchell et al. 2012).

¹⁴ For an overview of the evidence, see "Specialized and Problem Solving Courts" on the National Institute of Justice website at www.crimesolutions.gov.



References

- Abrahamse, A., P. Ebener, P. Greenwood, N. Fitzgerald, and T. Kosin. 1991. An Experimental Evaluation of the Phoenix Repeat Offender Program. *Justice Quarterly* 8(2): 141-68.
- Abramsky, T., K. Devries, L. Kiss, J. Nakuti, N. Kyegombe, E. Starmann, B. Cundill, L. Francisco, D. Kaye, T. Musuya, L. Michau, and C. Watts. 2014. Findings from the SASA! Study: A Cluster Randomized Controlled Trial to Assess the Impact of a Community Mobilization Intervention to Prevent Violence against Women and Reduce HIV Risk in Kampala, Uganda. *BMC Medicine* 12(122).
- Abramsky, T., C.H. Watts, C. Garcia-Moreno, K. Devries, L. Kiss, M. Ellsberg, H. Jansen, and L. Heise. 2011. What Factors Are Associated with Recent Intimate Partner Violence? Findings from the WHO Multi-country Study on Women's Health and Domestic Violence. *Biomed Central Public Health* 11(109): 1-17.
- Adler, F., G. Mueller, and W. Laufer. 1998. *Criminology*. New York: McGraw-Hill.
- Agozino, B., B. Bowling, E. Ward, and G. St. Bernard. 2009. Guns, Crime and Social Order in the West Indies. *Criminology and Criminal Justice* 9: 287-305.
- Ahern J., M. Cerda, S.A. Lippman, K.J. Tardiff, D. Vlahov, and S. Galea. 2013. Navigating Non-positivity in Neighbourhood Studies: An Analysis of Collective Efficacy and Violence. *Journal of Epidemiology and Community Health* 67(2): 159-65.
- Alleyne, D., and I. Boxill. 2003. The Impact of Crime on Tourist Arrivals in Jamaica. *International Journal of Tourism Research* 5(5): 381-91.
- Alvazzi del Frate, A. 1998. Victims of Crime in the Developing Countries. United Nations International Crime and Justice Research Institute Publication No. 57. Rome. Available at: http://www.unicri.it/services/library_documentation/publications/icvs/publications/n57.htm.
- Alvazzi del Frate, A., U. Zvekic, and J.M. van Dijk, editors. 1993. Understanding Crime, Experiences of Crime and Crime Control, Acts of the International Conference. United Nations International Crime and Justice Research Institute Publication No. 491993. Rome.

- American Psychological Association. 1996. *Violence and the Family: Report of the American Psychological Association Presidential Task Force on Violence and the Family*. American Psychological Association, Washington, DC.
- Americas Watch. 1986. *Human Rights in Jamaica*. Americas Watch Committee, New York.
- Amin, M. 2009. *Who Suffers More From Crime?* World Bank (November). Washington, DC.
- Amin, M. 2014. *Avoiding Crime in Latin America and the Caribbean*. World Bank Group Latin America and the Caribbean Series Note 7. World Bank, Washington, DC.
- Amnesty International. 2000. *Killings and Violence by Police: How Many More Victims?* London, Amnesty International. Available at: <http://www.amnesty-caribbean.org/Jamaica/AMR3800101/KillingsandViolencebyPolice.pdf>.
- Amnesty International. 2011. *Jamaica: A Long Road to Justice? Human Rights Violations under the State of Emergency*. Available at: <http://www.amnesty.org/en/documents/AMR38/002/2011/en/>.
- Anderson, D.M. 2009. *The Effects of Poverty on the Susceptibility to Crime in South Africa*. SSRN Scholarly Paper No. 1289648. Social Science Research Network. Available at: <http://papers.ssrn.com/abstract=1289648>.
- Anyanwu, E. 2011. *Exploring Domestic Violence against Women in Trinidad and Tobago: Analysis of the Barriers That May Hinder Abused Women from Seeking Help*. Master of Science Thesis, Criminology Unit, University of the West Indies, St. Augustine, Trinidad.
- Ariel, B., C. Weinborn, and L.W. Sherman. 2016. "Soft" Policing at Hot Spots—Do Police Community Support Officers Work? A Randomized Controlled Trial. *Journal of Experimental Criminology* 12(3): 277–317.
- Augimeri, L., D. Farrington, C. Koegl, and D.M. Day. 2007. The SNAP Under 12 Outreach Project: Effects of a Community-Based Program for Children with Conduct Problems. *Journal of Child and Family Studies* 16: 799–807.
- Azpuru, D. 2014. *Beyond the Blame Game: Visualizing the Complexity of the Border*. *Americas Quarterly* (August 6). Available at: <http://www.americasquarterly.org/content/beyond-blame-game-visualizing-complexity-border-crisis>.
- Bailey, C. 2016. *Crime and Violence in Barbados*. IDB Technical Note Series on Crime and Violence in the Caribbean. Inter-American Development Bank, Washington, DC. Available at: <https://publications.iadb.org/handle/11319/7774>.
- Bandiera, O., N. Buehren, R. Burgess, M. Goldstein, S. Gulesci, I. Rasul, and M. Sulaiman. 2012. *Empowering Adolescent Girls: Evidence from a Randomized Control Trial in Uganda*. World Bank, Washington, DC.
- Barbados Nation. 2015. *Another Bid to Cut Backlog*. *Daily Nation*, 26 August.

- Barnes, G.M., A.S. Reifman, M.P. Farrell, and B.A. Dintcheff. 2000. The Effects of Parenting on the Development of Adolescent Alcohol Misuse: A Six-Wave Latent Growth Model. *Journal of Marriage and Family* 62(1): 175–86.
- Bartelet, R. 2004. Self-Reported Juvenile Delinquency in England and Wales, The Netherlands and Spain. European Institute for Crime Prevention and Control (HEUNI), Helsinki.
- Beato, P., and M.V. Andrade. 2004. Crime, Oportunidade e Vitimização. *Revista Brasileira De Ciências Sociais* 19: 73–90.
- Beck, E., M. Ohmer, and B. Warner. 2012. Strategies for Preventing Neighborhood Violence: Toward Bringing Collective Efficacy into Social Work Practice. *Journal of Community Practice* 20: 225–40.
- Bell, B., L. Jaitman, and S. Machin. 2014. Crime Deterrence: Evidence from the London 2011 Riots. *Economic Journal* 124(576): 480–506.
- Bennett, T., K. Holloway, and D. Farrington. 2008. The Effectiveness of Neighborhood Watch. *Campbell Systematic Reviews* 18. Available at <http://campbellcollaboration.org/lib/project/50/>.
- Bergman, M. 2006. Crime and Citizen Security in Latin America: The Challenges for New Scholarship. *Latin American Research Review* 41: 213–27.
- Biderman, C.J., J.M.P. De Mello, and A. Schneider. 2009. Dry Laws and Homicides: Evidence from the São Paulo Metropolitan Area. *Economic Journal* 120(543): 157–82.
- Black, L. 2014. Jamaica Teen Gangs. In *Teen Gangs: A Global View*, edited by M. Duffy and E. Gillig. Westport, CT: Greenwood Press.
- Blair, L., C. Sullivan, E. Latessa, and C.J. Sullivan. 2015. Juvenile Drug Courts: A Process, Outcome, and Impact Evaluation. U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention. *Juvenile Justice Bulletin* (May).
- Blum, R., and M. Ireland. 2004. Reducing Risk, Increasing Protective Factors: Findings from the Caribbean Youth Health Survey. *Journal of Adolescent Health* 35(6): 493–500.
- Bott, S., A. Guedes, M. Goodwin, and J.A. Mendoza. 2012. Violence against Women in Latin America and the Caribbean: A Comparative Analysis of Population-Based Data from 12 Countries. Pan American Health Organization, Washington, DC. Available at: www.paho.org/violence.
- Box, S., C. Hale, and G. Andrews. 1988. Explaining Fear of Crime. *British Journal of Criminology* 28: 340–56.
- Braga, A., 2007. The Effects of Hot Spots Policing on Crime. *Campbell Systematic Review* 8. Available at: https://campbellcollaboration.org/media/k2/attachments/Braga_Hot_Spots_Policing_Review.pdf.

- Braga, A., and B.J. Bond. 2008. Policing Crime and Disorder Hot Spots: A Randomized Controlled Trial. *Criminology* 46(3): 577-607.
- Braga, A., D.M. Kennedy, E.J. Waring, and A.M. Piehl. 2001. Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinquency* 38(3): 195-225.
- Braga, A., A. Papachristos, and D. Hureau. 2012. Hot Spots Policing Effects on Crime. *Campbell Systematic Reviews* 8.
- Braga, A., A. Papachristos, and D. Hureau. 2014. The Effects of Hot Spots Policing on Crime: An Updated Systematic Review and Meta-Analysis. *Justice Quarterly* 31(4).
- Braga, A., B.C. Welsh, and C. Schnell. 2015. Can Policing Disorder Reduce Crime? A Systematic Review and Meta-Analysis. *Journal of Research in Crime and Delinquency* 52: 567-88.
- Brennen, S., M. Carroll, W. Fielding, and M. Thompson. 2010. A Preliminary Investigation of the Prevalence of Corporal Punishment of Children and Selected Co-occurring Behaviours in Households on New Providence, The Bahamas. *The International Journal of Bahamian Studies* 16: 1-18.
- Brooks, L. 2008. Volunteering to Be Taxed: Business Improvement Districts and the Extra-governmental Provision of Public Safety. *Journal of Public Economics* 92(1-2): 388-406.
- Budde, S., and P. Schene. 2004. Informal Social Support Interventions and Their Role in Violence Prevention: An Agenda for Future Evaluation. *Journal of Interpersonal Violence* 19: 341-55.
- Bussmann, K.D., C. Erthal, and A. Schroth. 2011. Effects of Banning Corporal Punishment in Europe: A Five Nation Comparison. In *Global Pathways to Abolishing Physical Punishment: Realizing Children's Rights*, edited by J. Durrant and A.B. Smith. New York: Routledge.
- Butts, J.A., C.A. Gouvis Roman, L. Bostwick, and J.R. Porter. 2015. Cure Violence: A Public Health Model to Reduce Gun Violence. *Annual Review of Public Health* 36: 39-53.
- Cahill, M., M. Coggeshall, D. Hayeslip, A. Wolff, E. Lagerson, M. Scott, E. Davies, K. Roland, and S. Decker. 2008. Community Collaboratives Addressing Youth Gangs: Interim Findings from the Gang Reduction Program. Urban Institute Justice Policy Center, Washington, D.C.
- Callaghan, C., F. Rivara, and T. Koepsell. 1995. Money for Guns: Evaluation of the Seattle Gun Buy-Back Program. In *Under Fire: Gun Buy-Backs, Exchanges, and Amnesty Programs*, edited by M. Plotkin. Washington, DC: Police Executive Research Forum.
- Camacho, A., and D. Mejía. 2013. Las externalidades de los programas de transferencias condicionadas sobre el crimen. El caso de Familias en Acción en Bogotá. IDB Working Paper No. 406. Inter-American Development Bank, Washington, DC.

- Campbell, E. 2014. Medium-Risk Prisoners to Be Transferred. *Jamaica Gleaner*, November 27. Available at: <http://m.jamaica-gleaner.com/gleaner/20141127/news/news2.php>.
- Campbell, R., D. Bybee, S.M. Townsend, J. Shaw, N. Karim, and J. Markowitz. 2014. The Impact of Sexual Assault Nurse Examiner Programs on Criminal Justice Case Outcomes: A Multisite Replication Study. *Violence against Women* 20(5): 607-25.
- Capaldi, D., and S. Clark. 1998. Prospective Family Predictors of Aggression Toward Female Partners for At-Risk Young Men. *Developmental Psychology* 34(6): 1175-188.
- Capaldi, D., K.C. Pears, G.R. Patterson, and L.D. Owen. 2003. Continuity of Parenting Practices across Generations in an At-Risk Sample: A Prospective Comparison of Direct and Mediated Associations. *Journal of Abnormal Child Psychology* 33(2): 127-42.
- Capobianco, L. 2005. Sharpening the Lens: Private Sector Involvement in Crime Prevention, ICPC Background Paper. International Centre for the Prevention of Crime. Available at: <http://www.ocpa-oh.org/Private%20Security/Private%20Sector%20Involvement%20in%20Crime%20Prevention.pdf>.
- Carvalho, J.R., and S.C. Lator. 2008. Repeat Property Criminal Victimization and Income Inequality in Brazil. *Revista Economia* 9: 87-110.
- Cave, G., H. Bos, F. Doolittle, and C. Toussaint. 1993. JOBSTART: Final Report on a Program for School Dropouts. Manpower Demonstration Research Corporation, New York.
- Celinska, K., S. Furrer, and C.-C. Cheng. 2013. An Outcome-Based Evaluation of Functional Family Therapy for Youth with Behavioral Problems. U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention. *Journal of Juvenile Justice* 2(2): 23-36.
- Cerdá, M., J. Morenoff, L.F. Duque, and S.L. Buka. 2008. The Limits of Collective Efficacy: Investigating the Influence of Neighborhood Context on Levels of Violence. Paper presented at the American Sociological Association Annual Meeting, Boston (December 1). Available at: http://citation.allacademic.com/meta/p241636_index.html.
- Cerdá, M., J.D. Morenoff, B.B. Hansen, K.J. Tessari Hicks, L.F. Duque, A. Restrepo, and A.V. Diez-Roux. 2012. Reducing Violence by Transforming Neighborhoods: A Natural Experiment in Medellín, Colombia. *American Journal of Epidemiology* 175(10): 1045-053.
- Cerqueira, D. 2014. Causas e consequências do crime no Brasil. Banco Nacional de Desenvolvimento Econômico e Social. Available at: <https://web.bndes.gov.br/bib/jspui/handle/1408/1922>.
- Chandler, D., S.D. Levitt, and J.A. List. 2011. Predicting and Preventing Shootings among At-Risk Youth. *American Economic Review* 101(3): 288-92.
- Clayton, R.R., A.M. Cattarello, and B.M. Johnstone. 1996. The Effectiveness of Drug Abuse Resistance Education (Project DARE): 5-Year Follow-Up Results. *Preventive Medicine* 25: 307-18.

- Cohen, L.E., and D. Cantor. 1981. Residential Burglary in the United States: Life-style and Demographic Factors Associated with the Probability of Victimization. *Journal of Research in Crime and Delinquency* 18(1): 113-27.
- Cohen, L.E., and M. Felson. 1979. Social Change and Crime Rate Trends: A Routine Activity Approach. *American Sociological Review* 44: 588-608.
- Cohen, M.A. and A.R. Piquero. 2010. An Outcome Evaluation of the YouthBuild USA Offender Project. *Youth Violence and Juvenile Justice* 8(4): 373-85.
- Cole, J., and A. Gramajo. 2009. Homicide Rates in a Cross-Section of Countries: Evidence and Interpretations. *Population and Development Review* 35: 749-76.
- Cook, P., and J. MacDonald. 2011. Public Safety Through Private Action: An Economic Assessment of BIDs. *The Economic Journal* 121(552): 445-62.
- Copeland, W.E., D. Wolke, A. Angold, and E.J. Costello. 2013. Adult Psychiatric Outcomes of Bullying and Being Bullied by Peers in Childhood and Adolescence. *JAMA Psychiatry* 70(4): 419-26.
- Córdova, A. 2009. Methodological Note: Measuring Relative Wealth Using Household Asset Indicators. Latin American Public Opinion Project Insights Series No. 6.
- Corsaro, N., E.D. Hunt, N.K. Hipple, and E.F. McGarrell. 2012. The Impact of Drug Market Pulling Levers Policing on Neighborhood Violence: An Evaluation of the High Point Drug Market Intervention. *Criminology and Public Policy* 11(2):167-99.
- Crowe, T.D. 1991. *Crime Prevention Through Environmental Design: Applications of Architectural Design and Space Management Concepts*. Boston: National Crime Prevention Institute, Butterworth-Heinemann.
- Cuesta, J.A., E. Alda, and J. Lamas. 2007. *Social Capital, Violence and Public Intervention: The Case of Cali*. Washington, DC: Inter-American Development Bank.
- Cullen, J.B., B.A. Jacob, and S.D. Levitt. 2006. The Effect of School Choice on Participants: Evidence from Randomized Lotteries. *Econometrica* 74(5): 1191-230.
- Cumberbatch, S. 2013. Move to Ease Court Backlog. *Barbados Today*, March 11. Available at: <http://www.barbadostoday.bb/2013/03/11/move-to-ease-court-backlog/>.
- Curtis, N.M., K.R. Ronan, and C.M. Borduin. 2004. Multisystemic Treatment: A Meta-analysis of Outcome Studies. *Journal of Family Psychology* 18(3): 411-19.
- D'Amico, E. J., J.S. Tucker, J.N.V. Miles, A.J. Zhou, R.A. Shih, and H.D. Green. 2012. Preventing Alcohol Use with a Voluntary After-School Program for Middle School Students: Results from a Cluster Randomized Controlled Trial of CHOICE. *Prevention Science* 13: 415-25.
- Davidson, W.S., R. Redner, C.H. Blakely, J.G. Ernschoff, and C.M. Mitchell. 1987. Diversion of Juvenile Offenders: An Experimental Comparison. *Journal of Consulting and Clinical Psychology* 55(1): 68-75.
- De Albuquerque, K., and J. McElroy. 1999. Tourism and Crime in the Caribbean. *Annals of Tourism Research* 26: 968-84.

- Deaton, A. 1997. *The Analysis of Household Surveys: A Micro-econometric Approach to Development Policy*. Baltimore: Johns Hopkins University Press for the World Bank.
- Deming, D. 2011. Better Schools, Less Crime? *Quarterly Journal of Economics* 126(4): 2063-115.
- Department of Education of The Bahamas. 2012. Safe Schools Protocol: Manual for Public Schools. Fourth Revision (December). Available at: <http://www.bahamaseducation.com/PDF/Publications/ManualforStudents.pdf>.
- Diop, N.J., M.M. Faye, A. Moreau, J. Cabral, and H. Benga. 2004. The TOSTAN Program: Evaluation of a Community-Based Education Program in Senegal. Washington, DC: Population Council.
- Dishion, T.J., and R. J. McMahon. 1998. Parental Monitoring and the Prevention of Child and Adolescent Problem Behavior: A Conceptual and Empirical Formulation. *Clinical Child Family Psychology Review* 1(1): 61-75.
- Di Tella, R., and E. Schargrodsy. 2013. Criminal Recidivism after Prison and Electronic Monitoring. *Journal of Political Economy* 121(1): 28-73.
- Doeksen, H. 1997. Reducing Crime and the Fear of Crime by Reclaiming New Zealand's Suburban Street. *Landscape and Urban Planning* 39(2-3): 243-52.
- Dolan, P., G. Loomes, T. Peasgood, and A. Tsuchiya. 2005. Estimating the Intangible Victim Costs of Violent Crime. *British Journal of Criminology* 45(6): 958-76.
- Drago, F., R. Galbiati, and P. Vertova. 2009. The Deterrent Effects of Prison: Evidence from a Natural Experiment. *Journal of Political Economy* 117(2): 257-80.
- Duba, J., and M. Jencius. 2004. The Bahamas. In *Teen Gangs: A Global View*, edited by M. Duffy and E. Gillig. Westport, CT: Greenwood Press.
- Duffy, M., and E. Gillig, editors. 2004. *Teen Gangs: A Global View*. Westport, CT: Greenwood Press.
- Duke, N.N., S.L. Pettingell, B.J. McMorris, and I.W. Borowsky. 2010. Adolescent Violence Perpetration: Associations with Multiple Types of Adverse Childhood Experiences. *Pediatrics* 125(4): e778-e786.
- Durrant, R., C. Cadenhead, R. Pendergrast, G. Slavens, and C. Linder. 1994. Factors Associated with the Use of Violence among Urban Black Adolescents. *American Journal of Public Health* 84: 612-17.
- Duwe, G., and V. Clark. 2013. The Effects of Private Prison Confinement on Offender Recidivism: Evidence from Minnesota. *Criminal Justice Review* 38(3): 375-94.
- Ehrensaft, M.K., P. Cohen, J. Brown, E. Smailes, H. Chen, and J.G. Johnson. 2003. Intergenerational Transmission of Partner Violence: A 20-Year Prospective Study. *Journal of Consulting and Clinical Psychology* 71(4): 741-53.
- Ellsberg, M., J.D. Arango, M. Morton, F. Gennari, S. Kiplesund, M. Contreras, and C. Watts. 2014. Prevention of Violence against Women and Girls: What Does the Evidence Say? *The Lancet* 385: 1555-566.

- Ennett, S.T., D.P. Rosenbaum, R.L. Flewelling, G.S. Bieler, C.L. Ringwalt, and S.L. Bailey. 1994. Long-Term Evaluation of Drug Abuse Resistance Education. *Addictive Behaviors* 19: 113–25.
- Ernst & Young. 2004. Fraud, the Unmanaged Risk. 8th Global Survey. Ernst & Young Global Investigations and Dispute Advisory Services.
- Eshel, N., B. Daelmans, M. Cabral de Mello, and J. Martines. 2006. Responsive Parenting: Interventions and Outcomes. *Bulletin of the World Health Organization* 84(12): 991–98.
- Evans, W.N., and E.G. Owens. 2007. COPS and Crime. *Journal of Public Economics* 91(1): 181–201.
- Farrington, D.P. 2010. Criminal Careers. In *The Cambridge Handbook of Forensic Psychology*, edited by J.M. Brown and E.A. Campbell. New York: Cambridge University Press.
- Farrington, D.P., and R. Loeber. 1999. Transatlantic Replicability of Risk Factors in the Development of Delinquency. In *Historical and Geographical Influences on Psychopathology*, edited by P. Cohen, C. Slomkowsky, and L.N. Robins. Mahwah, NJ: Lawrence Erlbaum Associates.
- Farrington, D.P., and M. Ttofi. 2009. School-Based Programs to Reduce Bullying and Victimization. *Campbell Systematic Reviews* 6.
- Farrington, D.P., and B. Welsh. 2007. Save Children from a Life of Crime. *Criminology and Public Policy* 6: 871–76.
- Felson, M., and R.V. Clarke. 1998. *Opportunity Makes the Thief: Practical Theory for Crime Prevention*. London: Policing and Reducing Crime Unit, Home Office Research, Development and Statistics Directorate.
- Fergusson, D.M., L.J. Horwood, and E.M. Ridder. 2005. Randomized Trial of the Early Start Program of Home Visitation. *Pediatrics* 116: e803–e809.
- Feucht, T., and T. Holt. 2016. Does Cognitive Behavioral Therapy Work in Criminal Justice? A New Analysis from crimesolutions.gov. *National Institute of Justice Journal* 27.
- Fielding, W.J. 2012. Violence in the Life of an Inmate Prior to Conviction and Its Association with Crimes against Persons. Paper presented at the Criminology Colloquium, College of The Bahamas, September.
- Finkelhor, D., and R. Ormrod. 1999. Reporting Crimes Against Juveniles. U.S. Department of Justice Office of Juvenile Justice and Delinquency Prevention. *Juvenile Justice Bulletin* (November).
- Fisher, B.S., L.E. Daigle, F.T. Cullen, and M.G. Turner. 2003. Reporting Sexual Victimization to the Police and Others: Results from a National-Level Study of College Women. *Criminal Justice and Behavior* 30(1): 6–38.

- Fletcher, A.C., L. Darling, N.E. Steinberg, and S.M. Dornbusch. 1995. The Company They Keep: Relation of Adolescents' Adjustment and Behavior to Their Friends' Perceptions of Authoritative Parenting in the Social Network. *Developmental Psychology* 31(2): 300-10.
- Flood-Page, C., S. Campbell, V. Harrington, and J. Miller. 2000. Youth Crime: Findings from 1998/99 Youth Lifestyles Survey. Home Office Research Study 209. Home Office Research, Development and Statistics Directorate Crime and Criminal Justice Unit, London.
- Foshee, V.A., K.E. Bauman, S.T. Ennett, C. Suchindran, T. Benefield, and G.F. Linder. 2005. Assessing the Effects of the Dating Violence Prevention Program "Safe Dates" Using Random Coefficient Regression Modeling. *Prevention Science* 6: 245-57.
- Frühling, H., M. Chinchilla, M.V. Llorente, P. de Mesquita Neto, and C.C. Beato. 2004. *Calles más seguras: Estudios de policía comunitaria en América Latina*. Washington, DC: Inter-American Development Bank.
- Fulu, E., X. Warner, S. Miedema, R. Jewkes, T. Roselli, and J. Lange. 2013. Why Do Some Men Use Violence Against Women and How Can We Prevent It? Quantitative Findings from the United Nations Multi-country Study on Men and Violence in Asia and the Pacific. United Nations Development Programme, United Nations Population Fund, UN Women, and United Nations Volunteers, Bangkok. Available at: www.partners4prevention.org/resource/why-do-some-men-use-violence-against-women-and-how-can-we-prevent-it-quantitative-findings.
- Galiani, S., L. Jaitman, and F. Weinschelbaum. Forthcoming. *Crime and Durable Goods*. Inter-American Development Bank..
- García, J., D. Mejía, and D. Ortega. 2013. Police Reform, Training and Crime: Experimental Evidence from Colombia's Plan Cuadrantes. CAF Document. Available at: www.caf.com/media/4243/police_reform_training_crime_experimental_evidence_colombia.pdf.
- García-Moreno, C., H. Jansen, M. Ellsberg, L. Heise, and C.H. Watts. 2005. WHO Multi-country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses. World Health Organization, Geneva. Available at: http://www.who.int/gender/violence/who_multicountry_study/en/.
- Garicano, L., and P. Heaton. 2010. Information Technology, Organization, and Productivity in the Public Sector: Evidence from Police Departments. *Journal of Labor Economics* 28(1): 167-201.
- Garofalo, J. 1981. The Fear of Crime: Causes and Consequences. *The Journal of Criminal Law and Criminology* 72(2): 839-57.
- Gendreau, P., C. Goggin, and F. Cullen. 1999. The Effects of Prison Sentences on Recidivism. Public Works and Government Services Canada, Ottawa.

- Geneva Declaration Secretariat. 2015. *Global Burden of Armed Violence 2015: Every Body Counts*.
- Gilbert, R., A. Kemp, J. Thoburn, P. Sidebotham, L. Radford, D. Glaser, and H.L. MacMillan. 2009. Recognising and Responding to Child Maltreatment. *Lancet* 373: 167–80.
- Gilgen, E., K. Aguirre, and M. Nowak. 2012. A Fatal Relationship: Guns and Deaths in Latin America and the Caribbean. In *Small Arms Survey 2012*. Oxford, UK: Oxford University Press.
- Godley, M.D., S.H. Godley, M.L. Dennis, R.R. Funk, and L.L. Passeti. 2006. The Effect of Assertive Continuing Care on Continuing Care Linkage, Adherence, and Abstinence Following Residential Treatment for Adolescents with Substance Use Disorders. *Addiction* 102(1): 81–93.
- Goldberg, M., K.W. Kim, and M. Ariano. 2014. *How Firms Cope with Violence: Experiences from around the World*. Washington, DC: World Bank.
- Goldschmidt, P., D. Huang, and M. Chinen. 2007. The Long-Term Effects of After-School Programming on Educational Adjustment and Juvenile Crime: A Study of the LA's BEST After-school Program. UCLA/CRESST, Los Angeles. Available at: http://www.lasbest.org/resourcecenter/LASBEST_DOJ_Study_Brief.pdf.
- Goldstein, H. 1990. *Problem-Oriented Policing*. Philadelphia: McGraw-Hill.
- Goldstein, S., G. Japhet, S. Usdin, and E. Scheepers. 2005. Achieving Social Change on Gender-Based Violence: A Report on the Impact Evaluation of Soul City's Fourth Series. *Social Science and Medicine* 61(11).
- Gordon, D.A., J. Arbutnot, K.E. Gustafson, and P. McGreen. 1988. Home-Based Behavioral-Systems Family Therapy with Disadvantaged Juvenile Delinquents. *American Journal of Family Therapy* 16(3): 243–55.
- Graham, J., and B. Bowling. 1995. *Young People and Crime*. United Kingdom Home Office, Research and Statistics Department.
- Grönqvist, H., and S. Niknami. 2014. Alcohol Availability and Crime: Lessons from Liberalized Week-End Sales Restrictions. *Journal of Urban Economics* 81: 77–84.
- Guerra, N.G., K.R. Williams, J.M. Meeks-Gardner, and I. Walker. 2001. The Kingston YMCA Positive Youth Development Programme: An Effective Anti-violence Intervention for Inner-City Youth in Jamaica. In *Beyond Suppression: International Perspectives on Youth Violence Prevention*, edited by J. Hoffman, L. Knox, and R. McMahon. Kingston, Jamaica: Guilford Press.
- Gundersen, K.K., and F. Svartdal. 2006. Aggression Replacement Training in Norway: Outcome Evaluation of 11 Norwegian Student Projects. *Scandinavian Journal of Education Research* 50(1): 63–81.
- Haggerty, K.P., A. McGlynn-Wright, and T. Klima. 2013. Promising Parenting Programs for Reducing Adolescent Problem Behaviors. *Journal of Children's Services* 8(4).

- Hahn, A., T. Leavitt, and O. Aaron. 1994. Evaluation of the Quantum Opportunities Program: Did the Program Work? A Report on the Post-secondary Outcomes and Cost-Effectiveness of the QOP Program (1989-1993). Heller Graduate School, Center for Human Resources, Brandeis University, Waltham, MA.
- Hanna, C.A. 2011. Reducing Murders in The Bahamas: A Strategic Plan Based on Empirical Research. Royal Bahamas Police Force, Nassau. Available at: http://www.bahamaslocal.com/files/Reducing_Murders_in_The_Bahamas.pdf.
- Harriott, A. 2002. Crime Trends in the Caribbean and Responses. Unpublished report submitted to the United Nations Office on Drugs and Crime.
- Harriott, A. 2008. Bending the Trend Line: The Challenge of Controlling Violence in Jamaica and the High Violence Societies of the Caribbean. Professorial Inaugural Lecture (July), University of the West Indies, Kingston, Jamaica.
- Harriott, A. 2011. The Emergence and Evolution of Organized Crime in Jamaica. University of the West Indies, Kingston, Jamaica. Unpublished.
- Harriott, A., and M. Jones. 2016. Crime and Violence in Jamaica. IDB Series on Crime and Violence in the Caribbean. Inter-American Development Bank, Washington, DC.
- Harriott, A., and C.M. Katz. 2015. *Gangs in the Caribbean: Responses of State and Society*. Kingston, Jamaica: University of the West Indies Press.
- Hayeslip, D., and M. Cahill. 2009. Community Collaboratives Addressing Youth Gangs: Final Evaluation Findings from the Gang Reduction Program. Urban Institute Justice Policy Center, Washington, DC.
- Heaton, P. 2012. Sunday Liquor Laws and Crime. *Journal of Public Economics* 96(1-2): 42-52.
- Heise, L. 2011. What Works to Prevent Partner Violence: An Evidence Overview. Policy Division of the UK Department for International Development. Available at: <http://strive.lshtm.ac.uk/resources/what-works-prevent-partner-violence-evidence-overview>.
- Heise, L., J. Pitanguay, and A. Germain. 1994. Violence against Women: The Hidden Health Burden. World Bank Discussion Paper 255. World Bank, Washington, DC.
- Helfer, M.E., R.S. Kempe, and R.D. Krugman, editors. 1997. *The Battered Child*. Chicago: University of Chicago Press.
- Helland, E., and A. Tabarrok. 2007. Does Three Strikes Deter? A Nonparametric Estimation. *Journal of Human Resources* 42(2): 309-30.
- Heller, S., A. Shah, J. Guryan, J. Ludwig, S. Mullainatha, and H. Pollack. 2015. *Thinking, Fast and Slow? Some Field Experiments to Reduce Crime and Dropout in Chicago*. Cambridge, MA: National Bureau of Economic Research.
- Henry, K., and D. Kralstein. 2011. *Community Courts: The Research Literature*. New York: Center for Court Innovation. Available at: <http://www.courtinnovation.org/sites/default/files/documents/Community%20Courts%20Research%20Lit.pdf>.

- Henry, L., M. Dawkins, and C. Gibson. 2012. Race, Ethnicity, Crime and Criminal Justice in Jamaica. In *Race, Ethnicity, Crime and Criminal Justice in the Americas*, edited by A. Kalunta-Crumpton. New York: Palgrave Macmillan.
- Hepburn, L.M., and D. Hemenway. 2004. Firearm Availability and Homicide: A Review of the Literature. *Aggression and Violent Behavior* 9(4): 417-40.
- Herrenkohl, T.I., C. Sousa, E.A. Tajima, R.C. Herrenkohl, and C.A. Moylan. 2008. Intersection of Child Abuse and Children's Exposure to Domestic Violence. *Trauma, Violence & Abuse* 9: 84-99.
- Higginson, A., K. Benier, Y. Shenderovich, L. Bedford, L. Mazerolle, and J. Murray. 2014. Protocol: Predictors of Youth Gang Membership in Low- and Middle-Income Countries: A Systematic Review. *Campbell Systematic Review*.
- Hindelang, M. 1976. *Criminal Victimization in Eight American Cities: A Descriptive Analysis of Common Theft and Assault*. Cambridge, MA: Ballinger.
- Hindelang, M., M.R. Gottfredson, and J. Garofalo. 1978. *Victims of Personal Crime: An Empirical Foundation for a Theory of Personal Victimization*. Cambridge, MA: Ballinger.
- Hinton, N., D. Montalvo, A. Maldonado, M. Moseley, and D. Zizumbo-Colunga. 2014. Crime and Violence across the Americas. In *The Political Culture of Democracy in the Americas, 2014: Democratic Governance across 10 Years of the AmericasBarometer*, edited by E.J. Zechmeister. Nashville: Vanderbilt University.
- Hiskey, J., M. Malone, and D. Orcé. 2014. Violence and Migration in Central America. AmericasBarometer Insights 101. Available at: <http://www.vanderbilt.edu/lapop/insights/IO901en.pdf>.
- Hoyt, L.M. 2005. Do Business Improvement District Organizations Make a Difference? Crime in and around Commercial Areas in Philadelphia. *Journal of Planning Education and Research* 25: 185-99.
- Hurley, D. 2004. Felton Earls: On Crime as Science (A Neighbor at a Time), *The New York Times*. January 6. Available at: http://www.nytimes.com/2004/01/06/science/scientist-at-work-felton-earls-on-crime-as-science-a-neighbor-at-a-time.html?_r=0.
- International Centre for the Prevention of Crime (ICPC), World Bank, and Sou da Paz Institute. 2011. Public-Private Partnerships and Community Safety: Guide to Action.
- Iyengar, R. 2008. I Would Rather Be Hanged for a Sheep than a Lamb: The Unintended Consequences of California's Three Strikes Law. NBER Working Paper No. 13784. National Bureau of Economic Research, Cambridge, MA.
- Jacobs, J. 1961. *The Life and Death of Great American Cities*. New York: Vintage Books.
- Jain, S., S.L. Buka, S.V. Subramanian, and B. Mulnar. 2010. Neighborhood Predictors of Dating Violence Victimization and Perpetration in Young Adulthood: A Multilevel Study. *American Journal of Public Health* 100: 1737-744.

- Jaitman, L., editor. 2015. *The Welfare Costs of Crime and Violence in Latin America and the Caribbean*. Washington, DC: Inter-American Development Bank. Available at: <https://publications.iadb.org/handle/11319/7246>.
- Jaitman, L., and N. Ajzenman. 2016. Crime Concentration and Hot Spot Dynamics in Latin America. IDB Working Paper No. IDB-WP-699. Inter-American Development Bank, Washington, DC.
- Jaitman, L., and R. Guerrero Compeán. 2015. *Closing Knowledge Gaps: Toward Evidence-Based Crime Prevention Policies in Latin America and the Caribbean*. Washington, DC: Inter-American Development Bank.
- Jaitman, L., and I. Torre. 2016. How Large Are the Costs of Crime in Latin America and the Caribbean? A Systematic Estimation of 15 Countries. Inter-American Development Bank, Washington, DC.
- Jalbert, S.K., W. Rhodes, M. Kane, E. Clawson, B. Bogue, C. Flygare, R. Kling, and M. Guevara. 2011. A Multisite Evaluation of Reduced Probation Caseload Size in an Evidence-Based Practice Setting. U.S. Department of Justice, National Institute of Justice, Washington, D.C. Available at: <https://www.ncjrs.gov/pdffiles1/nij/grants/234596.pdf>.
- Jamaica Observer*. 2010. Holness Wants Parents to Abandon Violent Disciplinary Practices. May 21. Available at: http://www.jamaicaobserver.com/news/Holness-wants-parents-to-abandon-violent-disciplinary-practices_7633618.
- Jewkes, R. 2012. Rape Perpetration 2012: A Review. Sexual Violence Research Initiative, Pretoria, South Africa.
- Johnson, D., and T. Rinhart Kochel. 2012. Race, Ethnicity and Criminal Justice in Trinidad and Tobago. In *Race, Ethnicity, Crime and Criminal Justice in the Americas*, edited by A. Kalunta-Crumpton. New York: Palgrave Macmillan.
- Johnson, J. 2015. Jamaica Is Not Ready for Anti-beating Law, Says Education Minister. *Jamaica Gleaner*, February 11. Available at: <http://jamaica-gleaner.com/latest/article.php?id=58289>.
- Jordan, M. 1986. *Physical Violence Against Women in Barbados 1977-1985*. Bridgetown: Bureau of Women's Affairs.
- Juan, E.J., H. Terraza, M. Soulier Faure, B. Deregibus, I. Ramírez, A. Schwint, and G. Moscoso. 2016. Voces emergentes: Percepciones sobre la calidad de vida urbana en América Latina y el Caribe. Available at: <https://publications.iadb.org/handle/11319/7672?locale-attribute=es#sthash.awwrWpcx.dpuf>.
- Justus, M., and A. Kassouf. 2007. Uma investigação dos determinantes socioeconômicos da depressão mental no Brasil com ênfase nos efeitos da educação. *Economia Aplicada* 11(1): 5-26.
- Kalunta-Crumpton, A., editor. 2012. *Race, Ethnicity, Crime and Criminal Justice in the Americas*. New York: Palgrave Macmillan.

- Kane, G.A., V.A. Wood, and J. Barlow. 2007. Parenting Programmes: A Systematic Review and Synthesis of Qualitative Research. *Child Care, Health and Development* 33(6): 784-93.
- Kapusta, N.D., E. Etzersdorfer, C. Krall, and G. Sonneck. 2007. Firearm Legislation Reform in the European Union: The Impact on Firearm Availability, Firearm Suicide and Homicide Rates in Austria. *British Journal of Psychiatry* 191(3): 253-57.
- Katz, C.M., and A.M. Fox. 2010. Risk and Protective Factors Associated with Gang Involved Youth in Trinidad and Tobago. *Pan-American Journal of Public Health* 27(3): 187-202.
- Katz C.M., and A.M. Fox. 2013. Differences in Delinquency, Victimization, and Risk and Protective Factors for Gang and Non-gang Youth from Trinidad and Tobago and the United States.
- Katz, S., and M. Rempel. 2011. The Impact of Integrated Domestic Violence Courts on Case Outcomes: Results for Nine New York State Courts. Center for Court Innovation, New York. Available at: http://www.courtinnovation.org/sites/default/files/documents/Nine_IDV.pdf.
- Kelling, G., T. Pate, D. Dieckman, and C.E. Brown. 1974. The Kansas City Preventive Patrol Experiment: A Summary Report. Police Foundation, Washington, DC.
- Kelling, G., and J.Q. Wilson. 1982. Broken Windows: The Police and Neighborhood Safety. *Atlantic Monthly* 249(3): 29-38. Available at: http://www.theatlantic.com/magazine/archive/1982/03/broken-windows/4465/?single_page=true.
- Kessler, D., and S.D. Levitt. 1999. Using Sentence Enhancements to Distinguish between Deterrence and Incapacitation. *Journal of Law and Economics* 52: 343-63.
- Kiely, M., A.A. El-Mohandes, M.N. El-Khorazaty, S.M. Blake, and M.G. Gantz. 2010. An Integrated Intervention to Reduce Intimate Partner Violence in Pregnancy: A Randomized Controlled Trial. *Obstetrics and Gynecology* 115: 273-83.
- Kilias, M. 1993. International Correlations between Gun Ownership and Rates of Homicide and Suicide. *Canadian Medical Association Journal* 148(5): 1721-725.
- Kim, J., G. Ferrari, T. Abramsky, C. Watts, J. Hargreaves, L. Morison, G. Phetla, J. Porter, and P. Pronyk. 2009. Assessing the Incremental Effects of Combining Economic and Health Interventions: The IMAGE Study in South Africa. *Bulletin of the World Health Organization* 87: 824-32.
- King, J.W. 2003. Perceptions of Crime and Safety among Tourists Visiting the Caribbean. In *Understanding Crime in Jamaica: New Challenges for Public Policy*, edited by A. Harriott. University of West Indies Press.
- Kirk, D.S. 2009. A Natural Experiment on Residential Change and Recidivism: Lessons from Hurricane Katrina. *American Sociological Review* 74(3): 484-505.
- Kishor, S., and K. Johnson. 2004. Profiling Domestic Violence: A Multi-country Study. ORC Macro. Available at: <http://dhsprogram.com/pubs/pdf/od31/od31.pdf>.

- Kleck, G.D. 1991. *Point Blank: Guns and Violence in America*. New York: Aldine de Gruyter.
- Klein, M. 1995. *The American Street Gang*. New York: Oxford University Press.
- Klein, M., and C. Maxson. 2006. *Street Gang Patterns and Policies*. New York: Oxford University Press.
- Klevens, J., J.W. Martínez, B. Lea, C. Rojas, A. Duque, and R. Tovar. 2009. Evaluation of Two Interventions to Reduce Aggressive and Antisocial Behavior in First and Second Graders in a Resource-Poor Setting. *International Journal of Educational Research* 48(5): 307-19.
- Kling, J.R., J. Ludwig, and L.F. Katz. 2005. Neighborhood Effects on Crime for Female and Male Youth: Evidence from a Randomized Housing Voucher Experiment. *Quarterly Journal of Economics* 120(1): 87-130.
- Knerr, W., F. Gardner, and L. Cluver. 2011. Parenting and the Prevention of Child Maltreatment in Low and Middle Income Countries: A Systematic Review of Interventions and a Discussion of Prevention of the Risks of Future Violence Behavior among Boys. Sexual Violence Research Initiative, Pretoria, South Africa.
- Koper, C.S., and E. Mayo-Wilson. 2012. Police Strategies to Reduce Illegal Possession and Carrying of Firearms: Effects on Gun Crime. *Campbell Systematic Reviews* 11.
- Krug, E., L. Dahlberg, J. Mercy, A. Zwi, and R. Lozano. 2002. *World Report on Violence and Health*. Geneva: WHO. Available at: http://www.who.int/violence_injury_prevention/violence/world_report/en/.
- Lall, V. 2007. Bullying, Victimization and Delinquency in Primary Schools in Trinidad and Tobago: Some Preliminary Results. *Caribbean Journal of Criminology and Social Psychology* 12(1-2): 155-76.
- Lattimore, P.K., and C.A. Visher. 2009. The Multisite Evaluation of SVORI: Summary and Synthesis. RTI International, Research Triangle Park, NC. Available at: <https://www.ncjrs.gov/pdffiles1/nij/grants/230421.pdf>.
- La Vigne, N.G., C. Owens, and S.S. Hetrick. 2009. Evaluation of Target's Safe City Initiative: Implementing Public-Private Partnerships to Address Crime in Retail Settings. U.S. Department of Justice, Washington, DC. Available at: <https://www.ncjrs.gov/pdffiles1/nij/grants/237917.pdf>.
- Lee, D.S., and J. McCrary. 2009. The Deterrence Effect of Prison: Dynamic Theory and Evidence. Industrial Relations Section Working Paper 550. Princeton University.
- Leslie, D. 2010. Confronting the Don: The Political Economy of Gang Violence in Jamaica. Small Arms Survey Graduate Institute of International and Development Studies Occasional Paper. Geneva.
- Letourneau, E., J.S. Levenson, D. Bandyopadhyay, D. Sinha, and K.S. Armstrong. 2010. Evaluating the Effectiveness of Sex Offender Registration and Notification

- Policies for Reducing Sexual Violence against Women. Research Report submitted to the U.S. Department of Justice.
- Levitt, S. 1997. Using Electoral Cycles in Police Hiring to Estimate the Effect of Police on Crime. *The American Economic Review* 87(3): 270–90.
- Lilley, D. 2015. The Weed and Seed Program: A Nationwide Analysis of Crime Outcomes. *Criminal Justice Policy Review* 26: 423–47.
- Lipsey, M.W., and F.T. Cullen. 2007. The Effectiveness of Correctional Rehabilitation: A Review of Systematic Reviews. *Annual Review of Law and Social Science* 3: 297–320.
- Lipsey, M.W., and J. Howell. 2012. Research-Based Guidelines for Juvenile Justice Programs. *Justice Research and Policy* 4.
- Lizotte, A. J. 1985. The Uniqueness of Rape: Reporting Assaultive Violence to the Police. *Crime and Delinquency* 31: 169–90.
- Lochner, L., and E. Moretti. 2004. The Effect of Education on Crime: Evidence from Prison Inmates, Arrests and Self-Reports. *American Economic Review* 94(1): 155–89.
- Loftin, C., D. McDowall, B. Wiersema, and T. Cottey. 1991. Effects of Restrictive Licensing of Handguns on Homicide and Suicide in the District of Columbia. *New England Journal of Medicine* 325(23): 1615–620.
- Logan, J.E., R.T. Leeb, and L.E. Barker. 2009. Gender-Specific Mental and Behavioral Outcomes among Physically Abused High-Risk Seventh-Grade Youths. *Public Health Reports* 124(2): 234–45.
- Losel, F., and A. Beelman. 2006. Child Social Skills Training. In *Preventing Crime: What Works for Children, Offenders, Victims and Places*, edited by B. Welsh and D. Farrington. New York: Springer.
- Lot, J. 1998. *More Guns, Less Crime: Understanding Crime and Gun Control Laws*. Chicago: University of Chicago Press.
- Lurigio, A., G. Bensinger, S.R.Thompson, K. Elling, D. Poucis, J. Selvaggio, and M. Spooner. 2000. A Process and Outcome Evaluation of Project BUILD: Years 5 and 6. Loyola University, Chicago. Unpublished.
- Lyew-Ayee, P.L., and L.G. Greene. 2013. Geospatial Technologies and Crime: The Jamaican Experience. Small Arms Survey Issue Brief No. 3.
- MacKenzie, D. 2006. *What Works in Corrections: Reducing the Criminal Activities of Offenders and Delinquents*. New York: Cambridge University Press.
- Magaloni, B., E. Franco, and V. Melo. 2015. Killing in the Slums: An Impact Evaluation of Police Reform in Rio de Janeiro. Working Paper No. 556. Stanford Center for International Development.
- Magdol, L., T.E. Moffitt, A. Caspi, and P.A. Silva. 1998. Developmental Antecedents of Partner Abuse: A Prospective Longitudinal Study. *Journal of Abnormal Psychology* 107(3): 375–89.

- Maguire, E. 2012. Exploring Family Risk and Protective Factors for Adolescent Problem Behaviors in the Caribbean. *Maternal and Child Health Journal* 17(8):1488–498. Available at: <http://rd.springer.com/article/10.1007%2Fs10995-012-1156-y#page-1>.
- Maguire, E., W. Wells, and C. Katz. 2011. Measuring Community Risk and Protective Factors for Adolescent Problem Behaviors: Evidence from a Developing Nation. *Journal of Research in Crime and Delinquency* 8(4): 594–620.
- Maharaj, R., P. Nunes, and S. Renwick. 2009. Health Risk Behaviors among Adolescents in the English-Speaking Caribbean: A Review. *Child and Adolescent Psychiatry and Mental Health* 3(10).
- Maldonado, A., and M. Rodriguez. 2014. Safety and Security as Influences on Everyday Life. In *The Political Culture of Democracy in the Americas*, edited by E. Zechmeier. Washington, DC: U.S. Agency for International Development.
- Manson, D.A., D.K. Guillard, and G. Lauer. 1999. Presale Gun Checks: The Brady Interim Period, 1994–98. Washington, DC.
- Marklund, F., and S. Holmberg. 2009. Effects of Early Release from Prison Using Electronic Tagging in Sweden. *Journal of Experimental Criminology* 5: 41–61.
- Marshall-Harris, F. 2011. District “A” Juvenile Court: Report on the Factors and Trends in Juvenile Justice in Barbados. UNICEF Caribbean Area Office.
- Maxson, C.L., M.L. Whitlock, and M.W. Klein. 1998. Vulnerability to Street Gang Membership: Implications for Practice. *Social Service Review* 3: 70–91.
- Maxwell, C.D., J.H. Garner, and W.G. Skogan. 2011. Collective Efficacy and Criminal Behavior in Chicago, 1995–2004. Joint Center for Justice Studies.
- Mazerolle, L., R. Wickes, and J. McBroom. 2010. Community Variations in Violence: The Role of Social Ties and Collective Efficacy in Comparative Context. *Journal of Research on Crime and Delinquency* 47: 3–30.
- McCord, J. 1979. Some Child-Rearing Antecedents of Criminal Behaviour in Adult Men. *Journal of Personality and Social Psychology* 37: 1477–486.
- McDowall, D., C. Loftin, and B. Wiersema. 1995. Easing Concealed Firearms Laws: Effects on Homicides in Three States. *Journal of Criminal Law and Criminology* 86: 193–206.
- McDowall, D., C. Loftin, and B. Wiersema. 1996. Using Quasi-Experiments to Evaluate Firearm Laws: Comment on Britt et al.’s Reassessment of the D.C. Gun Law. *Law & Society Review* 30(2): 381–91.
- McGarrell, E., S. Chermak, and A. Weiss. 1999. *Targeting Firearms Violence through Directed Police Patrol*. Indianapolis: Hudson Institute.
- Meares, T.L. 2015. Broken Windows, Neighborhoods, and the Legitimacy of Law Enforcement or Why I Fell in and out of Love with Zimbardo. *Journal of Research in Crime and Delinquency* 52: 609–25.

- Meeks, J. 2009. Caribbean Children's Involvement in Gangs. Paper presented at the Teleconference on Research Activities, University of West Indies Open Campus, Kingston, Jamaica.
- Meeks Gardner, J. 2003. Perceptions and Experience of Violence among Secondary School Students in Urban Jamaica. *Pan-American Journal of Public Health* 14(2): 97-103.
- Mihalic, S., A. Fagan, K. Irwin, D. Ballard, and D. Elliot. 2004. *Blueprints for Violence Prevention*. Washington, DC: U.S. Department of Justice.
- Mikton, C., and A. Butchart. 2009. Child Maltreatment Prevention: A Systematic Review of Reviews. *Bulletin of the World Health Organization* 87: 353-73.
- Millie, A., and V. Herrington. 2005. Bridging the Gap: Understanding Reassurance Policing. *The Howard Journal of Crime and Justice* 44(1): 41-56.
- Minnis, J., E. Symonette, M. Stevenson, Y. Pintard Newry, and T. Gibson. 2011. Profile of the Sentenced Inmates at Her Majesty's Prison Fox Hill, Nassau, The Bahamas. Presentation at the College of The Bahamas Violence Symposium.
- Mitchell, O., D. Wilson, A. Eggers, and D. MacKenzie. 2012. Drug Courts' Effects on Criminal Offending for Juveniles and Adults. *Campbell Systematic Reviews* 4.
- Molnar, B.E., M.J. Miller, D. Azrael, and S.L. Buka. 2004. Neighborhood Predictors of Concealed Firearm Carrying among Children and Adolescents: Results from the Project on Human Development in Chicago Neighborhoods. *Pediatric and Adolescent Medicine* 158: 657-64.
- Morris, P. 2010. An Analysis of Homicide in Urban Jamaica. Rutgers University Doctoral Dissertation.
- Moser, C., and J. Holland. 1997. Urban Poverty and Violence in Jamaica. Latin American and Caribbean Studies: Viewpoints. World Bank, Washington, DC.
- Nasar, J.L. 1993. "Hot Spots" of Fear and Crime: A Multi-method Investigation. *Journal of Environmental Psychology* 13(3): 187-206.
- National Anti Drug Secretariat and Ministry of National Security. 2012. Bahamas Secondary School Drug Prevalence Survey 2011. Unpublished.
- Nunziata, L. 2014. Immigration and Crime: New Empirical Evidence from European Victimization Data. IZA Discussion Paper No. 8632. Institute of Study of Labor, Bonn.
- Nuttall, C., D. Eversley, I. Rudder, and J. Ramsay. 2003. The Barbados Crime Survey 2002: Views and Beliefs about Crime and Criminal Justice. Barbados Attorney General and Statistical Department. Available at: http://s3.amazonaws.com/zanran_storage/www.barbados.gov.bb/ContentPages/17699060.pdf.
- O'Connell, J., M. Perkins, and J. Zepp. 2004. Weed and Seed Crime Pattern Data Analysis. Prepared by Justice Research and Statistics Association for the Office of Weed and Seed Community Capability Development Office, Office of Justice Programs, U.S. Department of Justice, Washington, DC.

- Ohene, S., M. Ireland, and R. Blum. 2005. Clustering of Risk Behaviors among Caribbean Youth. *Maternal and Child Health Journal* 9(1): 97-100.
- Olavarría-Gambi, M., and C. Allende-González. 2014. Crime in Neighborhoods: Evidence from Santiago, Chile. *Crime Prevention and Community Safety* 16(3): 205-26.
- Oosterbaan, S., and J. van Wijk. 2015. Pacifying and Integrating the Favelas of Rio de Janeiro: An Evaluation of the Impact of the UPP Program on Favela Residents. *International Journal of Comparative and Applied Criminal Justice* 39(3): 179-98.
- Organization of American States (OAS). 2010. Inputs for the Development of a Regional Strategy to Promote Inter-American Cooperation in Dealing with Criminal Gangs (Bahamas). Document CSH/GT/PD - 28/10. OAS, Washington, DC.
- Owens, E., and M. Freedman. 2011. Low-Income Housing and Crime. *Journal of Urban Economics* 70(2-3): 115-31.
- Painter, K. 1996. The Influence of Street Lighting Improvements on Crime, Fear and Pedestrian Street Use, after Dark. *Landscape and Urban Planning* 35(2-3): 193-201.
- Petrosino, A., C. Turpin-Petrosino, and J. Buehler. 2003. Scared Straight and Other Juvenile Awareness Programs for Preventing Juvenile Delinquency: A Systematic Review of the Randomized Experimental Evidence. *Annals of the American Academy of Political and Social Science* 589(1): 41-62.
- Petrosino, A., C. Turpin-Petrosino, and S. Guckenburg. 2010. The Impact of Juvenile Court Processing and Further System Penetration on Subsequent Delinquency. *Campbell Systematic Reviews* 6. Available at: <http://www.campbellcollaboration.org/lib/project/81/>.
- Petrunik, M.G. 2002. Managing Unacceptable Risk: Sex Offenders, Community Response, and Social Policy in the United States and Canada. *International Journal of Offender Therapy and Comparative Criminology* 46(4): 483-511.
- Philippe, A. 2013. The Deterrent Effect of an Increase in Sentence Time: Evidence from French Peines Planchers. Université de Paris 1 Panthéon-Sorbonne/CREST. Unpublished.
- Planning Institute of Jamaica (PIOJ). 2012. Vision 2030 MTF 2-Year Progress Report (2009-2011). Available at: http://www.vision2030.gov.jm/Portals/0/Progress_Reports/MTF%202-Year%20Progress%20Report%20%28February%202012%29.pdf.
- Planning Institute of Jamaica (PIOJ). 2013. Vision 2030 Jamaica Medium-Term Socio-Economic Framework (MTF) 2012-2015: Towards Inclusive Growth and Sustainable Development. Available at: <http://www.vision2030.gov.jm/Portals/0/MTF/Vision%202030%20Jamaica%20MTF%202012-2015%20.pdf>.
- Plumridge, S.J., and W.J. Fielding. 2009. Domestic Violence in College Student Households, New Providence, The Bahamas. *College of The Bahamas Research Journal* 15: 45-54. Available at: <http://journals.sfu.ca/cob/index.php/files/issue/view/23>.

- Post, L.A., J. Klevens, C.D. Maxwell, G.A. Shelley, and E. Ingram. 2010. An Examination of Whether Coordinated Community Responses Affect Intimate Partner Violence. *Journal of Interpersonal Violence* 25(1): 75–93.
- Pousadela, I.M. 2014. What Works in the Criminal Justice System (and What Doesn't): A 2000–11 Update on Policing, Courts, and Corrections. IDB Policy Brief 227. Inter-American Development Bank, Washington, DC. Available at: <https://publications.iadb.org/handle/11319/6544#sthash.1YTUUuG9.dpuf>.
- Prinz, R.J., M.R. Sanders, D.J. Whitaker, and J.R. Lutzker. 2009. Population-Based Prevention of Child Maltreatment: The US Triple P System Population Trial. *Prevention Science* 10(1).
- Pronyk, P., J.R. Hargreaves, J.C. Kim, L.A. Morison, G. Phetla, C. Watts, J. Busza, and J.D.H. Porter. 2006. Effect of a Structural Intervention for the Prevention of Intimate Partner Violence and HIV in Rural South Africa: Results of a Cluster Randomized Trial. *The Lancet* 368: 1973–983.
- Pyrooz, D., A.M. Fox, C.M. Katz, and S.H. Decker. 2011. Gang Organization, Offending, and Victimization: A Cross-National Analysis. In *Youth Gangs in International Perspective Results from the Eurogang Program of Research*, edited by F.A. Esbensen and C. Maxson. Springer.
- Ramsay, J., Y. Carter, L. Davidson, D. Dunne, S. Eldridge, G. Feder, K. Hegarty, C. Rivas, and A. Taft. 2009. Advocacy Interventions to Reduce or Eliminate Violence and Promote the Physical and Psychosocial Well-Being of Women Who Experience Intimate Partner Abuse. *Campbell Systematic Reviews* 5.
- Rawlins, J. 2000. Domestic Violence in Trinidad: A Family and Public Health Problem. *Caribbean Journal of Criminology and Social Psychology* 5(1-2): 165–80.
- Reisig, M.D., and J.M. Cancino. 2004. Incivilities in Nonmetropolitan Communities: The Effects of Structural Constraints, Social Conditions, and Crime. *Journal of Criminal Justice* 32: 15–29.
- Rempel, M., D. Fox Kralstein, A. Cissner, R. Cohen, M. Labriola, D. Farole, A. Bader, and M. Magnani. 2003. The New York State Adult Drug Court Evaluation: Policies, Participants, and Impacts. Center for Court Innovations, New York. Available at: <http://www.courts.state.ny.us/whatsnew/pdf/NYSAdultDrugCourtEvaluation.pdf>.
- Reynolds, A.J., S.R. Ou, and J.W. Topitzes. 2004. Paths of Effects of Early Childhood Intervention on Educational Attainment and Delinquency: A Confirmatory Analysis of the Chicago Child-Parent Centers. *Child Development* 75: 1299–328.
- Roman, J., S. Reid, J. Reid, A. Chalfin, W. Adams, and C. Knight. 2008. The DNA Field Experiment: Cost-Effectiveness Analysis of the Use of DNA in the Investigation of High-Volume Crimes. Washington, DC: Urban Institute, Justice Policy Center.

- Ronconi, L., D. Lenis, and E. Schargrotsky. 2011. Evaluación del Programa de Entrega Voluntaria de Armas de Fuego en Argentina. *Perspectivas sobre el Desarrollo* 9(1): 14–36.
- Rosenfeld, R. 1995. Gun Buybacks: Crime Control or Community Mobilization. In *Under Fire: Gun Buy-Backs, Exchanges, and Amnesty Programs*, edited by M. Plotkin. Washington, DC: Police Executive Research Forum.
- Rosengart, M., P. Cummings, A. Nathens, P. Heagerty, R. Maier, and F. Rivara. 2005. An Evaluation of State Firearm Regulations and Homicide and Suicide Death Rates. *Injury Prevention* 11: 77–83
- Ross, C.E., and J. Mirowsky. 2000. Disorder and Decay: The Concept and Measurement of Perceived Neighborhood Disorder. *Urban Affairs Review* 34(3): 412–33.
- Rossman, S.B., M. Rempel, J.K. Roman, J.M. Zweig, C.H. Lindquist, M. Green, P. Mitchell Downey, J. Yahner, A. Singh Bhati, and D.J. Farole, Jr. 2011. The Multi-site Adult Drug Court Evaluation: The Impact of Drug Courts. Final Report: Volume 4. Urban Institute, Washington, DC. Available at: <https://www.ncjrs.gov/pdffiles1/nij/grants/237112.pdf>.
- Ruback, B.R., M.S. Greenberg, and D.R. Westcott. 1984. Social Influence and Crime-Victim Decision Making. *Journal of Social Issues* 40: 51–76.
- Ruprah, I. 2008. An Impact Evaluation of a Neighbourhood Crime Prevention Program: Does Safer Commune Make Chileans Safer? Inter-American Development Bank, Washington, DC.
- Ruprah, I., and R. Sierra. 2014. *Mothers Are Right: Eat Your Vegetables and Keep Away from the Girls (Boys): Bullying Victimization Profile in the Caribbean*. Washington, DC: Inter-American Development Bank.
- Ruprah, I., and R. Sierra. 2016. *Engine of Growth? The Caribbean Private Sector Needs More Than an Oil Change*. Washington, DC: Inter-American Development Bank.
- Ruprah, I., R. Sierra, and H. Sutton. 2016. *Sex, Violence, and Drugs among Latin American and Caribbean Adolescents: Do Engaged Parents Make a Difference?* Washington, DC: Inter-American Development Bank.
- Samms-Vaughn, M.E., M.A. Jackson, and D.E. Ashley. 2004. Urban Jamaican Children's Exposure to Community Violence. *West Indian Medical Journal* 54(1): 14–21.
- Sampson, R.J. 2004. Neighborhood and Community: Collective Efficacy and Community Safety. *New Economy* 11: 106–13.
- Sampson, R.J., S.W. Raudenbush, and F. Earls. 1997. Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science* 277: 918–24.
- Sampson, R.J., and P.O. Wikstrom. 2007. The Social Order of Violence in Chicago and Stockholm Neighborhoods: A Comparative Inquiry. In *Order, Conflict, and Violence*, edited by I. Shapiro, S. Kalyvas, and T. Masoud. New York: Cambridge University Press.

- Samuels, R., and B. Judd. 2002. Public Housing Estate Renewal: Interventions and the Epidemiology of Victimization. Presentation at the Housing, Crime and Strong Communities Conference, Melbourne, Australian Institute of Criminology and Australian Housing and Urban Research Institute.
- Sanders, M.R., D.T. Montgomery, and M.L. Brechman-Toussaint. 2000. The Mass Media and the Prevention of Child Behavior Problems: The Evaluation of a Television Series to Promote Positive Outcomes for Parents and Their Children. *Journal of Child Psychology and Psychiatry* 41: 939–48.
- Santaella-Tenorio, J., M. Cerdá, A. Villaveces, and S. Galea. 2016. What Do We Know about the Association between Firearm Legislation and Firearm-Related Injuries? *Epidemiologic Reviews* 38.
- Santos, R.B. 2014. The Effectiveness of Crime Analysis for Crime Reduction: Cure or Diagnosis? *Journal of Contemporary Criminal Justice* 30(2): 147–68.
- Sarnquist, C., B. Omondi, J. Sinclair, C. Gitau, L. Paiva, M. Mulinge, D.N. Cornfield, and Y. Maldonado. 2014. Rape Prevention through Empowerment of Adolescent Girls. *Pediatrics* 133.
- Sarteschi, C., M. Vaughn, and K. Kim. 2011. Assessing the Effectiveness of Mental Health Courts: A Quantitative Review. *Journal of Criminal Justice* 39(12).
- Saylor, W.G., and G.G. Gaes. 1997. Training Inmates through Industrial Work Participation and Vocational and Apprenticeship Instruction. *Corrections Management Quarterly* 1(2): 32–43.
- Schochet, P.Z., J. Burghardt, and S. McConnell. 2008. Does Job Corps Work? Impact Findings from the National Job Corps Study. *American Economic Review* 98(5): 1864–886.
- Schwalbe, C.S., R.E. Gearing, M.J. MacKenzie, K.B. Brewer, and R.W. Ibrahim. 2012. A Meta-analysis of Experimental Studies of Diversion Programs for Juvenile Offenders. *Clinical Psychology Review* 32: 26–33.
- Schwartz, D., and L. Proctor. 2000. Community Violence Exposure and Children's Social Adjustment in the School Peer Group: The Mediating Role of Emotion Regulation and Social Cognition. *Journal of Consulting and Clinical Psychology* 68: 670–82.
- Schweinhart, L.J., J. Montie, Z. Xiang, W.S. Barnett, C.R. Belfield, and M. Nores. 2005. *Lifetime Effects: The HighScope Perry Preschool Study through Age 40*. Monographs of the HighScope Educational Research Foundation, No. 14. Ypsilanti, MI: HighScope Press.
- Seepersad, R. 2013. Drug Use and Criminal Behaviour among the Prison Population in Trinidad and Tobago. Organization of American States, Washington, DC.
- Seepersad, R. 2016. Crime and Violence in Barbados. IDB Series on Crime and Violence in the Caribbean. Inter-American Development Bank, Washington, DC.

- Serrbanescu, F., A. Ruiz, and D. Suchdev. 2010. Reproductive Health Survey Jamaica: 2008 Final Report. National Family Planning Board, Kingston, Jamaica.
- Sexton, T.L., and C.W. Turner. 2010. The Effectiveness of Functional Family Therapy for Youth with Behavioral Problems in a Community Practice Setting. *Journal of Family Psychology* 24(3): 339–48.
- Shapland, J., A. Atkinson, H. Atkinson, J. Dignan, L. Edwards, J. Hibbert, M. Howes, J. Johnstone, G. Robinson, and A. Sorsby. 2008. Does Restorative Justice Affect Reconviction? The Fourth Report from the Evaluation of Three Scheme. Ministry of Justice Research Series Working Paper. London.
- Shapland, J., and J. Vagg. 1988. *Policing by the Public*. New York: Routledge.
- Sherin, K.M., J.M. Sinacre, X.Q. Li, R.E. Zitter, and A. Shakil. 1998. HITS: A Short Domestic Violence Screening Tool for Use in a Family Practice Setting. *Family Medicine* 30: 508–12.
- Sherman, L.W. 1998. *Evidence-Based Policing*. Washington, DC: Police Foundation.
- Sherman, L.W. 2000. Gun Carrying and Homicide Prevention. *Journal of the American Medical Association* 283: 1193–195.
- Sherman, L.W. 2013. The Rise of Evidence-Based Policing: Targeting, Testing, and Tracking. *Crime and Justice* 42(1): 377–451.
- Sherman, L.W., and J.E. Eck. 2002. Policing for Crime Prevention. In *Evidence-Based Crime Prevention*, edited by L.W. Sherman. New York: Routledge.
- Sherman, L.W., D. Gottfredson, D. MacKenzie, P. Reuter, and S. Bushway. 1997. Preventing Crime: What Works, What Doesn't, What's Promising. A Report to the Attorney General of the United States. U.S. Department of Justice, Office of Justice Programs, Washington, DC.
- Sherman, L.W., and D. Rogan. 1995. Effects of Gun Seizures on Gun Violence: Hot Spots Patrol in Kansas City. *Justice Quarterly* 12: 673–93.
- Sherman, L.W., and H. Strang. 2006. Restorative Justice to Reduce Victimization. In *Preventing Crime*, edited by B.C. Welsh and D.P. Farrington. New York: Springer.
- Sherman, L.W., and H. Strang. 2007. *Restorative Justice: The Evidence*. London: The Smith Institute.
- Sherman, L.W., and D. Weisburd. 1995. General Deterrent Effects of Police Patrol in Crime “Hot Spots”: A Randomized, Controlled Trial. *Justice Quarterly* 12(4): 625–48.
- Sherman, L.W., S. Williams, B. Ariel, L. Strang, N. Wain, M. Slothower, and A. Norton. 2014. An Integrated Theory of Hot Spots Patrol Strategy: Implementing Prevention by Scaling Up and Feeding Back. *Journal of Contemporary Criminal Justice* 30 (May): 95–122.
- Skogan, W. 1984. Reporting Crimes to the Police: The Status of World Research. *Journal of Research in Crime and Delinquency* 21: 113–37.

- Skogan, W. 1990. *Disorder and Decline: Crime and the Spiral of Decay in American Cities*. New York: Free Press.
- Skogan, W. 2015. Disorder and Decline: The State of Research. *Journal of Research in Crime and Delinquency* 52(4): 464–85.
- Skogan, W., and K. Frydl, editors. 2004. *Fairness and Effectiveness in Policing: The Evidence*. Committee to Review Research on Police Policy and Practices. Committee on Law and Justice, Division of Behavioral and Social Sciences and Education. The National Academies Press, Washington, DC.
- Skogan, W., S.M. Hartnett, N. Bump, and J. Dubois. 2008. *Evaluation of CeaseFire—Chicago*. National Institute of Justice, Office of Justice Programs, U.S. Department of Justice, Washington, DC. Available at: <https://www.ncjrs.gov/pdffiles1/nij/grants/227181.pdf>.
- Slesnick, N., J.L. Prestopnik, R.J. Meyers, and M. Glassman. 2007. Treatment Outcome for Street-Living, Homeless Youth. *Addictive Behaviors* 32: 1237–251.
- Small Arms Survey. 2004. *Small Arms Survey 2004: Rights at Risk*. Oxford, UK: Oxford University Press. Available at: <http://www.smallarmssurvey.org/publications/by-type/yearbook/small-arms-survey-2004.html>.
- Small Arms Survey. 2010. *Small Arms Survey 2010: Gangs, Groups, and Guns*. Oxford, UK: Oxford University Press. Available at: <http://www.smallarmssurvey.org/?id=286>.
- Smith, C.A., and S.B. Stern. 1997. Delinquency and Anti-social Behavior: A Review of Family Processes and Intervention Research. *Social Service Review* 71: 382–420.
- Smith, D.E., and G. Mosby. 2003. Jamaican Child-Rearing Practices: The Role of Corporal Punishment. *Adolescence* 38 (150): 369–81.
- Smith, E.P., A.M. Wolf, D.M. Cantillon, O. Thomas, and W.S. Davison. 2004. The Adolescent Diversion Project: 25 Years of Research on an Ecological Model of Intervention. *Prevention and Intervention in the Community* 27(2): 29–47.
- Smith, L., and G. Hill. 1994. Victimization and Fear of Crime. *Criminal Justice and Behavior* 18(2): 217–39.
- Soares, R. 2015. A Conceptual Framework for Interpreting the Welfare Costs of Crime. In *The Welfare Costs of Crime and Violence in Latin America and the Caribbean*, edited by L. Jaitman. Washington, DC: Inter-American Development Bank.
- Soares, R., and I. Viveiros. 2010. Organization and Information in the Fight against Crime: An Evaluation of the Integration of Police Forces in the State of Minas Gerais, Brazil. IZA Discussion Paper No. 5270. Institute for the Study of Labor, Bonn.
- Soares, Y., and M.M. Sviatschi. 2013. Assessing the Impact of Eliminating an After-School Program. Paper for The Fifth Bolivian Conference on Development Economics, Institute for Advanced Development Studies (INESAD), Santa Cruz de la

- Sierra, 14-15 November. Available at: <http://www.inesad.edu.bo/bcde2013/papers/BCDE2013-37.pdf>.
- Soyibo, K. 2000. Domestic and School Violence among High School Students in Jamaica. *West Indian Medical Journal* 49(3): 232-36.
- Spelman, W. 2004. Optimal Targeting of Incivility-Reduction Strategies. *Journal of Quantitative Criminology* 20(1): 63-88.
- Spergel, I.A. 1986. The Violent Gang Problem in Chicago: A Local Community Approach. *Social Services Review* 60(1): 94-131.
- Sutton, H. 2016. Crime and Violence in The Bahamas. IDB Series on Crime and Violence in the Caribbean. Inter-American Development Bank, Washington, DC.
- Swinford, S., A. Demaris, S.A. Cernovicch, and P.C. Giordono. 2000. Harsh Physical Discipline in Childhood and Violence in Later Romantic Involvements: The Mediating Role of Problem Behaviors. *Journal of Marriage and the Family* 62(2): 508-19.
- Taft, A.J., R. Small, K.L. Hegarty, L.F. Watson, L. Gold, and J.A. Lumley. 2011. Mothers' Advocates In the Community (MOSAIC)—Non-professional Mentor Support to Reduce Intimate Partner Violence and Depression in Mothers: A Cluster Randomised Trial in Primary Care. *BMC Public Health* 11(178).
- Taylor, B., C.S. Koper, and D.J. Woods. 2011. A Randomized Controlled Trial of Different Policing Strategies at Hot Spots of Violent Crime. *Journal of Experimental Criminology* 7(2): 149-81.
- Telep, C., and D. Weisburd. 2012. What Is Known about the Effectiveness of Police Practices in Reducing Crime and Disorder? *Police Quarterly* 15(331).
- Thornberry, T.P. 1996. Crime Policy in America Today. *Criminal Law Bulletin* 32: 470-73.
- Tierney, J.P., J. Baldwin Grossman, and N.L. Resch. 2000. Making a Difference: An Impact Study of Big Brothers/Big Sisters. Public/Private Ventures, Philadelphia. Available at: http://ppv.issueab.org/resource/making_a_difference_an_impact_study_of_big_brothers_big_sisters_re_issue_of_1995_study.
- Tjaden, P., and N. Thoennes. 2000. Extent, Nature, and Consequences of Intimate Partner Violence: Finding from the National Violence against Women Survey. National Institute of Justice, Washington, DC.
- Townsend, D. 2009. No Other Life: Gangs, Guns, and Governance in Trinidad and Tobago. Graduate Institute of International and Development Studies Working Paper 8.
- Travis, J., and B. Western. 2014. *The Growth of Incarceration in the United States, Exploring Causes and Consequences*. Washington, DC: National Academy Press.
- Truman, J., and L. Langton. 2014. Criminal Victimization 2014. U.S. Department of Justice Bureau of Justice Statistics Document No. NCJ 248973 (September 29). Available at: <http://www.bjs.gov/content/pub/pdf/cv14.pdf>.
- Turner, S., and J. Petersilia. 1996. *Day Fines in Four U.S. Jurisdictions*. Santa Monica, CA: The RAND Corporation.

- Uchida, C.D, M.L. Swatt, S. Salmon, and S. Verano. 2014. Neighborhoods and Crime: Collective Efficacy and Social Cohesion in Miami-Dade County. Research report submitted to the U.S. Department of Justice.
- United Nations. 1993. General Assembly Resolution 48/104 Declaration on the Elimination of Violence against Women 1993.
- United Nations. 2010a. Handbook for Legislation on Violence against Women. The Division for the Advancement of Women in the Department of Economic and Social Affairs of the United Nations Secretariat. Available at: <http://www.un.org/womenwatch/daw/vaw/handbook/Handbook%20for%20legislation%20on%20violence%20against%20women.pdf>.
- United Nations. 2010b. World Population Prospects: The 2015 Revision. Department of Economic and Social Affairs Population Division.
- United Nations. 2013. Guidelines for Producing Statistics on Violence against Women 2013. Department of Economic and Social Affairs.
- United Nations Children's Fund (UNICEF). 2000. Domestic Violence against Women and Girls. UNICEF, Florence, Italy. Available at: <http://www.unicef-irc.org/publications/pdf/digest6e.pdf>.
- United Nations Children's Fund (UNICEF). 2006a. Violence against Children in the Caribbean Region: Regional Assessment. UN Secretary General's Study on Violence against Children. Regional Office for Latin America and the Caribbean. Available at: [http://www.unicef.org/lac/Caribe_web\(1\).pdf](http://www.unicef.org/lac/Caribe_web(1).pdf).
- United Nations Children's Fund (UNICEF). 2006b. *World Report on Violence against Children*. Geneva: UNICEF. Available at: [http://www.unicef.org/lac/full_tex\(3\).pdf](http://www.unicef.org/lac/full_tex(3).pdf).
- United Nations Children's Fund (UNICEF). 2010a. Multiple Indicator Cluster Survey. Suriname: MICS. Available at: http://www.childinfo.org/files/MICS4_Suriname_FinalReport_Eng.pdf.
- United Nations Children's Fund (UNICEF). 2010b. Child Disciplinary Practices at Home, Evidence of Low- and Middle- income Countries. Available at: http://www.unicef.org/protection/Child_Disciplinary_Practices_at_Home.pdf.
- United Nations Development Programme (UNDP). 2012. *Caribbean Human Development Report: Human Development and the Shift to Better Citizen Security*. New York: UNDP. Available at: http://www.undp.org/content/dam/undp/library/corporate/HDR/Latin%20America%20and%20Caribbean%20HDR/C_bean_HDR_Jan25_2012_3MB.pdf.
- United Nations Education, Scientific and Cultural Organization (UNESCO). 2011. *Stopping Violence in Schools: A Guide for Teachers*. Paris: UNESCO.
- United Nations High Commissioner for Refugees (UNHCR). 2003. Sexual and Gender-Based Violence against Refugees, Returnees and Internally Displaced Persons. Available at: http://www.unicef.org/emerg/files/gl_sgbv03.pdf.

- United Nations Office on Drugs and Crime (UNODC). 2003. Manual for the Development of a System of Criminal Justice Statistics. Available at: http://unstats.un.org/unsd/publication/SeriesF/SeriesF_89E.pdf.
- United Nations Office on Drugs and Crime (UNODC). 2013. *Global Study on Homicide. Trends, Context, Data*. Vienna: UNODC.
- United Nations Office on Drugs and Crime (UNODC) and World Bank. 2007. Crime, Violence, and Development: Trends, Costs, and Policy Options in the Caribbean. Report No. 37820. World Bank, Washington DC. Available at: <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0,,contentMDK:21320803-pagePK:146736-piPK:226340-theSitePK:258554,00.html> and <https://www.unodc.org/documents/data-and-analysis/Caribbean-study-en.pdf>.
- UN Women. 2011. Progress of the World's Women: In Pursuit of Justice. Available at: <http://www.unwomen.org/en/digital-library/publications/2011/7/progress-of-the-world-s-women-in-pursuit-of-justice#view>.
- Van Dijk, J.J.M. 1999. The Experience of Crime and Justice. In *Global Report on Crime and Justice*, edited by G. Newman. New York: Oxford University Press.
- Van Dijk, J.J.M. 2008. *The World of Crime: Breaking the Silence on Problems of Security, Justice, and Development across the World*. Thousand Oaks, CA: Sage Publications.
- Van Dijk, J.J.M., and G.J. Terlouw. 1996. An International Perspective of the Business Community as Victims of Fraud and Crime. *Security Journal* 7: 157-67.
- Van Dijk, J.J.M., and J.V. Van Kesteren. 2015. Caribbean Crime in International Perspective: Key Findings of Comparative Victimization Surveys in the Bahamas, Barbados, Jamaica, Suriname and Trinidad and Tobago. Discussion paper prepared for the Inter-American Development Bank. Unpublished.
- Van Dijk, J.J.M., A. Tseloni, and G. Farrell. 2012. *The International Crime Drop*. New Directions in Research. London: Palgrave Macmillan.
- Van Dijk, J.J.M., J.N. Van Kesteren, and P. Smit. 2007. Criminal Victimization in International Perspective: Key Findings from the 2004-2005 ICVS and EU ICS. Ministry of Justice, WODC, The Hague.
- Van Dijk, J.J.M., J.N. Van Kesteren, and P. Smit. 2008. Criminal Victimization in International Perspective, Key Findings from the 2004-2005 ICVS and EU ICS. Boom Juridische Uitgever, The Hague. Available at http://www3.unil.ch/wpmu/icvs/files/2012/11/ICVS2004_051.pdf.
- Van Kesteren, J.V. 2013. Revisiting the Gun Ownership and Violence Link: A Multi-level Analysis of Victimization Survey Data. *The British Journal of Criminology* 54: 53-72.
- Van Kesteren, J.V., P. Mayhew, and P. Nieuwbeerta. 2000. Criminal Victimization in Seventeen Industrialized Countries. WODC.

- Van Kesteren, J.V., J.J.V. Van Dijk, and P. Mayhew. 2013. The International Crime Victims Surveys: A Retrospective. *International Review of Victimology* 20(49).
- Villarreal, A., and B.F.A. Silva. 2006. Social Cohesion, Criminal Victimization and Perceived Risk of Crime in Brazilian Neighborhoods. *Social Forces* 84: 1725-753.
- Villaveces, A., P. Cummings, V. Espitia, T. Koepsell, B. Mcknight, and A.L. Kellerman. 2000. Effect of a Ban on Carrying Firearms on Homicide Rates in Two Colombian Cities. *Journal of the American Medical Association* 283: 1205-209.
- Vriniotus, M. 2015. Victimization Survey 101: So You Want to Do a Victimization Survey. IDB Technical Note TN-866. Inter-American Development Bank, Washington, DC. Available at: https://publications.iadb.org/bitstream/handle/11319/7225/IDB_TN_866_Victimization%20Surveys%20101_final.pdf?sequence=1.
- Vuletin, G. 2008. Measuring the Informal Economy in Latin America and the Caribbean. IMF Working Paper 08/102. International Monetary Fund, Washington, DC.
- Wagman, J.A., R.H. Gray, J. Campbell, M. Thoma, A. Ndyanabo, J. Ssekasanvu, F. Nalugoda, J. Kagaayi, G. Nakigozi, D. Serwadda, and H. Brahmbhatt. 2014. Effectiveness of an Integrated Intimate Partner Violence and HIV Prevention Intervention: A Cluster Randomized Trial in Rakai, Uganda. *Lancet Global Health* 3(1): e23-e33.
- Waller, I. 1982. What Reduces Residential Burglary: Action and Research in Seattle and Toronto. In *The Victim in International Perspective*, edited by Hans Joachim Schneider. New York.
- Waller, I. 2014. *Smarter Crime Control: A Guide to a Safer Future for Citizen Communities and Politicians*. London: Rowman and Littlefield Publishers Inc.
- Ward, K.J. 1999. MVP Evaluation 1999/2000. Center for the Study of Sport in Society, Boston. Available at: <http://www.sportinsociety.org/vpd/mvp.php>.
- Weisburd, D. 2015. The Law of Crime Concentration and the Criminology of Place. *Criminology* 53(2): 133-57.
- Weisburd, D., and A.A. Braga. 2003. Hot Spots Policing. In *Crime Prevention: New Approaches*, edited by H. Kury and J. Obergfell-Fuchs. Mainz, Germany: Weisser Ring.
- Weisburd, D., and J.E. Eck. 2004. What Can Police Do to Reduce Crime, Disorder and Fear? *Annals of the American Academy of Political and Social Science* 593: 42-65.
- Weisburd, D., C.W. Telep, J.C. Hinkle, and J.E. Eck. 2008. The Effects of Problem-Oriented Policing on Crime and Disorder. *Campbell Systematic Reviews* 14.
- Wellford, C.F., J.V. Pepper, and C.V. Petrie. 2004. *Firearms and Violence: A Critical Review*. Washington, DC: The National Academies Press.
- Wells, W., C. Katz, and J. Kim. 2010. Firearm Possession among Arrestees in Trinidad and Tobago. *Injury Prevention* 16(5): 337-42.
- Welsh, B.C., A.A. Braga, and G. Bruinsma. 2015. Reimagining Broken Windows: From Theory to Policy. *Journal of Research in Crime and Delinquency* 52(4): 447-63.

- Welsh, B.C., and D.P. Farrington. 2008a. Effects of Improved Street Lighting on Crime. *Campbell Systematic Reviews* 13. Available at: http://www.campbellcollaboration.org/lib/download/223/Welsh_Streetlight_review+corrected.pdf.
- Welsh, B.C., and D.P. Farrington. 2008b. Effect of Closed Circuit Television Surveillance on Crime. *Campbell Systematic Reviews* 17. Available at: http://www.campbellcollaboration.org/news/_CCTV_modest_impact_on_crime.php.
- Welsh, W.N., and G. Zajac. 2013. A Multisite Evaluation of Prison-Based Drug Treatment: 4-Year Follow-Up Results. *Prison Journal* 93: 251-71.
- Wermink, H., A. Blokland, P. Nieuwbeerta, D. Nagin, and N. Tollenaar. 2010. Comparing the Effects of Community Service and Short-Term Imprisonment on Recidivism: A Matched Samples Approach. *Journal of Experimental Criminology* 6(3): 325-49.
- Whitehill, J.M., D. Webster, and J. Vernick. 2013. Street Conflict Mediation to Prevent Youth Violence: Conflict Characteristics and Outcomes. *Injury Prevention* 19(3): 204-09.
- Whittle, S. 1994. Knowledge about Causes, Effects, Attitudes towards and Experiences with Violent Acts among Students in Secondary Schools, Jamaica. Master's thesis. The University of the West Indies, Kingston, Jamaica.
- Wilkins, N., B. Tsao, M. Hertz, R. Davis, and J. Klevens. 2014. *Connecting the Dots: An Overview of the Links among Multiple Forms of Violence*. First edition. Atlanta: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Wilson, D., D. MacKenzie, and F. Ngo Mitchell. 2003. Effects of Correctional Boot Camps on Offending. *Campbell Systematic Reviews* 1.
- Wilson, H.A., and R.D. Hoge. 2013. The Effect of Youth Diversion Programs on Recidivism: A Meta-analytic Review. *Criminal Justice and Behavior* 40(5): 497-518.
- Wolf, D.A., C.V. Crookes, P. Jaffe, D. Chiodo, R. Hughes, W. Ellis, L. Stitt, and A. Donner. 2009. A Universal School-Based Program to Prevent Adolescent Dating Violence: A Cluster Randomized Trial. *Archives of Pediatric and Adolescent Medicine* 163: 693-99.
- Wolke, D., W. Copeland, A. Angold, and J. Costello. 2013. Impact of Bullying in Childhood on Adult Health, Wealth, Crime, and Social Outcomes. *Psychological Science* 24(10): 1958-970.
- World Bank. 1993. *World Development Report*. Washington, DC: World Bank.
- World Bank. 2014. Voice and Agency, Empowering Women and Girls for Shared Prosperity. Available at: http://www.worldbank.org/content/dam/Worldbank/document/Gender/Voice_and_agency_LOWRES.pdf.
- World Health Organization (WHO). 2002. *World Report on Violence and Health*. Geneva: WHO. Available at: http://apps.who.int/iris/bitstream/10665/42495/1/9241545615_eng.pdf.

- World Health Organization (WHO). 2005. *WHO Multi-country Study on Women's Health and Domestic Violence against Women*. Geneva: WHO. Available at: http://www.who.int/gender/violence/who_multicountry_study/summary_report/summary_report_English2.pdf.
- World Health Organization (WHO). 2006. *Preventing Child Maltreatment: A Guide to Taking Action and Generating Evidence*. Available at: http://apps.who.int/iris/bitstream/10665/43499/1/9241594365_eng.pdf.
- World Health Organization (WHO). 2010. *Violence Prevention: The Evidence*. Geneva: WHO.
- World Health Organization (WHO). 2014. *Global Status Report on Violence Prevention 2014*. Geneva: WHO. Available at: http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/.
- Wortley, S., and R. Seepersad. 2013. *The 2012–13 Jamaican National Crime Victimization Survey Final Report*. Ministry of National Security, Government of Jamaica. Available at: <https://www.mns.gov.jm/sites/default/files/documents/files/JNCVS%20FINAL%20REPORT.pdf>.
- Wright, E.M., A.A. Fagan, and G.M. Pinchevsky. 2013. The Effects of Exposure to Violence and Victimization across Life Domains on Adolescent Substance Use. *Child Abuse & Neglect* 37(11): 899–909.
- Wright, M.A., G.J. Wintemute, and F.A. Rivara. 1999. Effectiveness of Denial of Handgun Purchase to Persons Believed to Be at High Risk for Firearm Violence. *American Journal of Public Health* 89(1): 88–90.
- Wright, V.. 2010. *Deterrence in Criminal Justice: Evaluating Certainty vs. Severity of Punishment*. The Sentencing Project Report, Washington, DC.
- Zatz, M., and H. Smith. 2012. Immigration, Crime, and Victimization: Rhetoric and Reality. *Annual Review of Law and Social Science* 8: 141–59.
- Zawitz, M.W., P.A. Klaus, R. Bachman, L.D. Bastian, M.M. DeBerry, M.R. Rand, and B.M. Taylor. 1993. Highlights from 20 Years of Surveying Crime Victims. The National Crime Victimization Survey, 1973–92. Bureau of Justice Statistics Special Report NCJ-144525. U.S. Government Printing Office, Washington, DC.



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