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Firearm possession among arrestees in Trinidad and Tobago

William Wells,¹ Charles M Katz,² Jeonglim Kim¹

ABSTRACT

Objectives To describe the sources that active offenders in Trinidad and Tobago use to obtain firearms and report their motivations for obtaining them. To estimate relationships between gang involvement, drug selling, and firearm ownership (or possession).

Setting Port of Spain (Republic of Trinidad and Tobago). **Methods** A cross-sectional research design was used to collect self-report data from 421 recently booked arrestees (within 72 h of their arrest) in the Port of Spain Police District Detention Center. A survey instrument was used to collect data on firearm acquisition, drug use, gang membership and other behaviours. The sample provides insights about guns in the lives of arrestees in Trinidad and Tobago.

Results 15% of respondents reported ever owning (or possessing) a firearm. Among the possessor group, 82% owned a gun primarily for defensive purposes, but approximately half reported using a gun in a crime. Nearly half of gun possessors stored their guns in outside locations. Firearm possession was greater among arrestees involved in gangs and those involved in drug selling.

Conclusions A comprehensive approach of prevention, intervention, and suppression strategies that are intended to prevent gun-related incidents should be focused on gangs, drugs, and guns. Searches for high-risk firearms should focus on public areas where gang members live and socialise. The study shows the value of collecting data from offender-based populations in the region for the purpose of directing violence-prevention strategies.

INTRODUCTION

A common objective of violence-reduction strategies is to keep firearms out of the hands of people considered to be at risk of using them illegally. This is justified by research that shows a close connection between firearm availability and violence.¹⁻⁴ As a consequence, many countries have attempted to limit the criminal use of firearms by placing tight, generalised restrictions on civilian gun ownership. Other nations, such as the USA, use more focused efforts and limit access among prohibited groups, including youths, offenders, and those with mental illnesses.⁵ Despite varying methods of restriction across places, underground markets supply firearms to civilians who may otherwise face a difficult time obtaining them through direct, quick, and legal channels.⁶⁷ These markets exist across the globe to supply firearms to civilians.

Understanding secondary firearm markets and the routes used to obtain firearms can provide valuable information that can be used to reduce illegal access to firearms. Supply-side interventions designed to prevent youths and other at-risk individuals from accessing firearms are more likely to succeed if they are grounded in an understanding of regional and local firearm markets. Research is only beginning to document cross-national differences in firearm violence, ^{8–10} and, with few exceptions, ¹¹ academic-centred understanding of firearm markets is grounded in evidence from the USA.^{12–14} Despite growing evidence about illegal firearm markets, very little is known about them, and researchers have called for cross-national research to better comprehend how local context might influence underground markets.²

This type of research is much needed in the Caribbean, a region that is experiencing uniquely high rates of violence, including firearm homicides,^{15–18} and, more specifically, in Trinidad and Tobago where a homicide epidemic continues to unfold.¹⁹ The current analysis seeks to shed light on secondary firearm markets in Trinidad and Tobago by examining survey data gathered from a sample of arrestees. More specifically, the study estimates the prevalence of gun ownership among recent arrestees and describes their motivations for owning firearms. The analysis also estimates correlations between policy-relevant variables, such as gang involvement, criminal victimisation, and gun ownership.

METHODS

Setting

The Republic of Trinidad and Tobago is a twoisland nation located 7 miles off the northeastern coast of Venezuela between the Caribbean Sea and the North Atlantic Ocean. The nation comprises ~1.26 million people, of which 40% are East Indian, 37.5% African, and 20.5% Afro-Indian. Trinidad and Tobago obtained its independence from Great Britain in 1962; however, it remains a member of the Commonwealth of Nations and it continues to be highly influenced by British culture and law. Trinidad and Tobago has transformed into one of the wealthiest, most industrialised Caribbean countries over the past 30 years. It has the highest per capita gross national income and has the second fastest growing economy among all Caribbean, Central American, and South American countries.²⁰

Between 2001 and 2008, Trinidad and Tobago experienced a 357.6% increase in homicides, from 151 in 2001 to 540 in 2008. Most of the increase has been attributed to firearms-related violence²¹ and gang warfare.²² In 2005, the firearm homicide rate was 21.9 per 100 000 population, which stood in contrast with the rate of 3.8 in the USA.²³ While

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civilian gun ownership is not banned entirely in Trinidad and Tobago, ownership is tightly regulated. Civilians must obtain a firearm owner's licence in order to own and possess a firearm. To apply for a licence, a citizen must be 25 years old and obtain a provisional licence that allows them to learn from an authorised firearm instructor for 2 months. At the end of the training period, the citizen can apply for a full licence and must establish that they have a need to own a firearm. Each application is reviewed by the Trinidad and Tobago Police Service (TTPS) Firearm Section and the agency's Police Commissioner. In June 2008, the Firearm Section estimated that there were ~10550 firearm licence holders and ~18 active legal firearm dealers. Obtaining reasonable estimates of the number of legally owned guns in Trinidad and Tobago is difficult because of a lack of quality, computerised data.

Selection and description of participants

This study uses data collected through interviews with a sample of arrestees. Interviews were conducted within 72 h of the participant being booked, and took place between December 2005 and April 2006. A total of 612 arrestees were booked at the catchment facility over the study period, but 79 were not approached because, for example, they were unavailable to be interviewed (ie, released, transferred to a medical unit, or taken to court; n=20), they were ineligible for the study (ie, immigrant; n=12), or because they were deemed dangerous (n=9). Consequently, we approached 533 (87%) of the arrestees who were processed though the detention facility during the study period.

Of the 533 recently booked arrestees who were asked to participate in the study, 421 (78.9%) agreed. Trained local staff conducted voluntary, anonymous interviews with men and women within the largest detention facility in the nation. Before the first interview, the 10 interviewers received 24 h of structured training from the second author, who had previously been funded by the National Institute of Justice to conduct similar research as part of a nationwide project in the USA surveying recently booked arrestees, called the Arrestee Drug Abuse Monitoring programme. Approximately 55% of the respondents were interviewed within 48 h of their arrest, and 90% of respondents were interviewed within 72 h of their arrest.

The Port of Spain detention facility was chosen as the catchment facility because it processes more than one-third of all arrestees in Trinidad and Tobago. People arrested in three of the nations eight police divisions (ie, Port of Spain, Northeastern, and Western) are booked through the Port of Spain booking facility. Arrestees who were cited on the street and released or released for other reasons were not included in the sample. Interviewers were generally present at the booking facility between 06:00 and 14:00 to ensure that potential participants were approached immediately after arrest but before they were taken to court for further processing and possible release. Interviews, which on average took 20 min to complete, were conducted in empty jail cells. Respondents were provided with a candy bar for participating in the project. Only the interviewer was present during consent procedures and during the interview.

A structured survey instrument was used to generate selfreport data on a variety of sociodemographic and behaviour variables. Before beginning the interview, respondents were read an informed consent script in which verbal consent was required before data collection began. Respondents reported their age, race/ethnicity, and educational background and then answered a series of questions about their participation in crime, including their arrest histories and involvement with drugs, guns, and gangs.

It is important to note that these data do not necessarily represent the views or behaviours of the larger set of active offenders because arrestees are a selected subset. The sample is different because they have been apprehended, arrested, and booked into detention. Thus the study does not generate results that can be easily generalised to a larger group of active offenders in the Port of Spain area. Despite this limitation, the study provides empirical evidence from one sample of offenders who are familiar with local gun markets.

In addition to describing the prevalence of gun possession and other gun-related behaviours, the analysis examines three variables that may be linked to an increased chance of gun possession. These variables include being involved in gangs, selling drugs, and experiencing a violent victimisation. Respondents were defined as gang-involved if they reported any one of three criteria: being an active gang member, being a former gang member, or having friends who are gang members. Respondents were defined as drug sellers if they reported ever selling marijuana, cocaine, heroin, amphetamines, or other drugs. A respondent was defined as experiencing a violent crime if they reported being robbed, assaulted, or attacked (with or without any weapon), threatened with a gun or some other weapon, or shot or shot at during the preceding 12 months.

Table 1 provides descriptive information about the 421 arrestees who participated in the study. Nearly a third (30.6%, n=129) were arrested for a violence offence, including assault, murder, robbery, and kidnapping. Fourteen per cent (n=59)were arrested for drug trafficking or possession, and 11% (n=47) were arrested for larceny or fraud. Forty-four per cent (n=186) were arrested for some other offence, including sleeping on the street (n=30), for questioning about an unspecified offence (n=22), or with an arrest warrant for an unspecified offence (n=20). The sample was predominantly male (91.9%) and African (69.4%). The mean age of respondents was 28.1, and most reported having completed a secondary level education (52.0%). Approximately 14% of arrestees were gang-involved, and almost one in five respondents reported selling drugs (19.9%). Nearly 60% reported being the victim of a violent crime within the preceding 12 months.

RESULTS

Fifteen per cent of the sample (n=64) reported ever possessing a gun (table 1). Table 2 presents findings on sources of gun acquisition, methods used to obtain guns, reasons for possessing or wanting to possess a gun, and gun storage practices. Among gun possessors, 17.2% reported being in possession of a gun when they were arrested, and 51.6% reported ever using a gun to commit a crime. Of those who had owned or possessed a gun, 82.3% stated that it was needed for protection and self-defence. When arrestees were not carrying their firearms, they tended to hide them outside somewhere (47.2%). Smaller proportions of arrestees reported keeping them in their houses or apartments (28.3%) and having a friend or family member hold them (13.2%). Nearly all (93.7%) gun owners/possessors had owned/ possessed a handgun at some point.

Among those who had possessed a handgun, about half obtained their most recent handgun from an illegal gun dealer (51%). Other common sources included friends (31.4%) and drug dealers (5.9%). About 10% of respondents stated that they obtained their handgun from 'another source,' such as stealing it or finding it. Purchasing the gun (61.5%), receiving the gun as a gift (13.5%), and borrowing the gun (11.5%) were the most

Table 1	Sample	demographic	and	background	characteristics
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Variable	N	%	Total
Sex			421
Male	387	91.9	
Female	34	8.1	
Ethnicity			421
African	292	69.4	
East Indian	34	8.1	
Mixed	94	22.3	
Other	1	0.2	
Education			420
None	4	1.0	
Primary	82	19.5	
Junior secondary	63	15.0	
Secondary	219	52.0	
Technical/vocational	39	9.3	
Tertiary/university	13	3.1	
Arrest offence			421
Violent	129	30.6	
Drugs	59	14.0	
Property	47	11.2	
Other	186	44.2	
Age mean=28.12; SD=10.49			421
Gun ownership or possession			420
Owned or possessed	64	15.2	
Never owned or possessed	356	84.8	
Gang involved			412
Involved	58	14.1	
Non-involved	354	85.9	
Ever sold drugs			412
Sold	82	19.9	
Never sold	330	80.1	
12 month victimisation			421
Victimised	249	59.1	
Not victimised	172	40.9	

common methods used to obtain the handgun. First hand theft was a relatively uncommon method of acquiring a handgun.

Non-gun possessors were asked about their desire to possess a gun and how they might obtain one (table 3). Eighteen per cent reported they might want to own or possess a gun. As with the possessor group, the perceived need for protection was the primary reason for future possession (84.6%), followed by hunting or target shooting (8%). Few other reasons were reported for wanting a gun. More than one-third (38.5%) of those who had never possessed a gun stated that, if they wanted one, they would obtain a gun from a legal gun dealer, 35.4% said that they would get it from an illegal gun dealer, and 6.2% said they would get it from a drug dealer. Fewer than one in five (18.5%) said that, if they wanted a gun, they would obtain it from 'another' source. A similar trend in responses was reported when these arrestees were asked how they would obtain a gun if they wanted to shoot someone.

Bivariate analyses (table 4) revealed important correlates of gun possession. More men reported possessing a gun (n=63, 16.3%) than women (n=1, 2.9%), and fewer Afro-Trinidadians reported possessing a gun than other ethnic groups (13.4% vs 19.5%). These relationships were not statistically significant. There were no meaningful differences between arrestees who owned/possessed and those who did not in terms of age, arrest offence, or education level. Three bivariate relationships were statistically significant. Gang-involved arrestees were more likely to report possessing a gun than those not involved with a gang (52.6% vs 9.3%), drug sellers were more likely to have possessed

Variable	Ν	%	Total
When arrested, were you in possession of	of a gun?		64
Yes	11	17.2	
No	53	82.8	
Ever used a gun to commit a crime?			64
Yes	33	51.6	
No	31	48.4	
Primary reason for possessing a gun?			62
Protection or self-defence	51	82.3	
Use in criminal activity	4	6.5	
Other	7	11.3	
Storage practices when not carrying?			53
Hide it outside somewhere	25	47.2	
In your house/apartment, etc	15	28.3	
Friend or family hold it for you	7	13.2	
Pay someone to hold it for you	2	3.8	
Other	4	7.5	
Ever owned or possessed a handgun?			64
Yes	60	93.7	
No	4	6.3	
If ever had a handgun, the source?			51
lllegal gun dealer	26	51.0	
Friend	16	31.4	
Drug dealer	3	5.9	
Gun shop (legal)	1	2.0	
Other	5	9.8	
If ever had a handgun, method of obtaining	ng the handgun	1?	52
Bought it	32	61.5	
It was a gift/inheritance	7	13.5	
Borrowed it	6	11.5	
Stole it	2	3.8	
Rented it/traded something for it	2	3.8	
Other	3	5.8	

a gun than non-sellers (39.5% vs 9.4%), and arrestees who had been victimised were more likely to have possessed a gun (20.2% vs 8.1%).

Table 4 also presents the results of a multivariate logistic regression model that was used to isolate unique relationships between covariates and gun ownership/possession. Results show that gang involvement and drug selling remain significant. The strongest association was for gang involvement (OR=6.25), with the odds of gun ownership/possession being substantially greater if the respondent was involved in a gang. Similarly, respondents who had ever sold drugs were almost four times more likely to report owning or possessing a gun (OR=3.86) than those who had not reported selling drugs.

DISCUSSION

Obtaining detailed and useful information on local gun markets can be challenging. One way to gain such information is through interviews with offenders who possess, carry, and use firearms. These data can reveal important dimensions of the local problem that can be used to design intervention strategies. An advantage of the data source is it overcomes limitations of using general population samples. Studies relying on general population samples often encounter the problem of not capturing sufficient data from those who possess a gun (ie, low base rate). In addition, studies using samples of incarcerated people are limited by individual's recollections (ie, memory) and can be affected by the temporal period in which the individual was incarcerated (ie, gun markets may change).²⁴ To address these potential

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Table 3	Desire to possess a firearm and anticipated method of	
acquisitio	n among non-gun owners/possessors	

Variable	Ν	%	Total
Do you think you might ever want to ow	n or possess a	gun?	354
Yes	65	18.4	
No	289	81.6	
If yes, the main reason for wanting a gu	n?		65
Hunting or target shooting	5	7.7	
Job requirement (police/military)	2	3.1	
Protection or self-defence	55	84.6	
Use in criminal activity	1	1.5	
Other	2	3.1	
If yes, how would you obtain it?			65
Gun shop (legal)	25	38.5	
Drug dealer	4	6.2	
Illegal gun dealer	23	35.4	
Other	12	18.5	
Missing	1	1.5	
If you wanted a gun to shoot somebody, likely get it?	where would y	ou most	62
Gun shop (legal)	26	41.9	
Drug dealer	4	6.5	
lllegal gun dealer	24	38.7	
Other	8	12.9	

methodological problems, we rely on data collected from recently booked arrestees. These people have an increased likelihood of possessing a firearm, thus addressing the issue of base rate, and possess timely information on firearm markets.²⁵ For this reason, some argue that recently booked arrestees make the ideal group from which to collect information on gun-acquisition patterns.²⁶ To our knowledge, this is the first study to use a sample of arrestees to describe patterns of firearm ownership, methods and sources of acquisition, and relationships between firearm possession and problematic behaviours in the Caribbean. Although our analysis does not fully describe the operation of illegal gun markets, it contributes to the limited knowledge about local gun problems in Trinidad and Tobago.¹⁹

Just over 15% of arrestees reported owning a gun, a rate that is lower than that found in more developed countries such as Great Britain and the USA.^{26 25} In England and Wales, interviews with adult arrestees between 1999 and 2002 indicated that 20% had ever possessed an illegal gun.²⁶ One study of arrestees in 11 large US cities reported that 37% had ever owned a gun,²⁵ and, in St Louis, 65% of adult arrestees reported lifetime gun ownership.²⁴

As reported in previous research, we found that the perceived need for protection is an important reason for gun possession, while approximately half of the gun possessors reported using a firearm to commit a crime.⁶ ⁷ ²⁵ This pattern might be explained by the risky lifestyles of arrestees and the close connection between offending and increased chances of criminal victimisation.^{27 28} Illegal gun dealers were a common source of guns. Our findings suggest that intervention specialists should target illegal dealers if they are to have an impact on gun markets that serve people who engage in intentional violence and injury. Empirical data have yet to reveal how guns are making their way to Trinidad and Tobago. Firearm trace data are generally unavailable and unreliable,²⁹ and existing accounts are based on impressions rather than compelling evidence.³⁰ In addition, we believe that little is known about the methods and sources that illegal dealers use to obtain their firearms once they have entered the country. As a consequence, additional research on these questions is necessary to further develop prevention and intervention efforts to curtail illegal gun use in the region.

 Table 4
 Relationships between gun ownership/possession and predictor variables

	Percentage who owned/ possessed	Percentage who did not own/ possess			
Variable			Logistic regression†		
			OR	95% CI	
				Lower limit	Upper limit
Ethnicity			0.66	0.35	1.27
Afro-Trinidadian	13.4	86.6			
Others	19.5	80.5			
Sex			3.63	0.47	28.26
Male	16.3	83.7			
Female	2.9	97.1			
Education			1.24	0.63	2.46
No secondary education	12.1	87.9			
Secondary education	17.0	83.0			
Arrest offence					
Non-violent	14.4	85.6	1.01	0.51	2.00
Violent	17.2	82.8			
Gang involved			6.25	*3.06	12.78
Yes	52.6*	47.4			
No	9.3	90.7			
Sold drugs			3.86	*2.00	7.44
Yes	39.5*	60.5			
No	9.4	90.6			
Victimised			1.25	0.61	2.57
Yes	20.2*	79.8			
No	8.1	91.9			
Age			1.00	0.97	1.04
Mean age of owners/ possessors	27.4				
Mean age of non-owners/ possessors	28.3				

 \uparrow Model $\chi^2 = 74.03$, p<0.05, N=402.

Gun possessors often store their firearms in outside locations when they are not carrying them. Discussions with Trinidad and Tobago police officers have revealed that guns stored outside are routinely hidden in bushes, holes in trees, and buried in the ground. Considering that many gun possessors reported having them for protection, it is possible that guns are stored where people can obtain them quickly, but do not keep them in areas where police can easily uncover them. Intervention specialists should consider adopting alternative strategies for searching locations where active offenders are known to live and socialise. This work might benefit from the use of new and innovative methods and technologies.

Similar to results from the USA,²⁵ gang affiliation and drug selling are important predictors of gun possession. The effects of these variables are independent of age, ethnicity, education, and gender. Researchers involved in the Boston Gun Project identified an important implication of finding close relationships between gang involvement, drug selling, and gun possession.³¹ They contend that broad-based approaches to reducing gun availability and increasing the costs of obtaining guns will probably not have an important effect on serious, criminally involved populations. This is because these people have access to illegal gun markets, possess sufficient financial resources, and have strong incentives to possess, carry, and use guns.

Gang involvement was found to significantly raise the chances of gun possession, which is not surprising given the importance of gun use in gang conflicts in Trinidad.²² A series of comprehensive interventions aimed at reducing gang conflict may have an effect on firearm-related homicides, as was found in Chicago.³² The Chicago CeaseFire programme targeted at-risk individuals, including gang members, shooters, and victims of firearm violence, for a range of services, including assistance with leaving gangs, obtaining a general education degree (GED), and changing views on the use of violence. Critical to Chicago CeaseFire was the use of outreach workers with personal experience with gangs and who remained 'connected to the streets.'³² These outreach workers were able to contact and intervene in the lives of people who were most at risk of firearms-related violence.

Numerous efforts are ongoing in Trinidad and Tobago to address firearms-related and gang-related violence. Broad reforms have been underway since 2005 to improve police operations and to build the capacity of the TTPS to effectively prevent and respond to crime problems. As part of these reforms, the TTPS established a Crime and Problem Analysis Branch (CAPA) that has the capacity to improve the understanding of crime and violence and to aid in the design of interventions. Specified CAPA analysts serve as a hub for data and intelligence on firearm-related problems, and use this information to aid in the formation of interventions. In late 2009, CAPA expanded its ability to trace guns used in crimes by entering into a partnership with USA Bureau of Alcohol, Tobacco, Firearms, and Explosives and by computerising information on legally owned firearms. In early 2010, TTPS officers were identifying a set of problematic, high-violence locations and designing comprehensive, multi-unit interventions to prevent and reduce shootings in these areas.

Recent homicide trends in Trinidad and Tobago offer a clear view of the significant problems that gang conflicts and illegal firearm use can bring.³³ It also shows the challenge presented to policy makers and practitioners in a developing nation. Diagnostic research such as the study described here can aid local and regional efforts to better understand gun markets and contribute to generalised understanding of gun-related problems. To understand local gun markets, it is necessary to complement official data with information from active offenders, including, but not limited to, gang members, drug sellers, and gun

What is already known on this subject

- Rates of homicide in Trinidad and Tobago are high and continue to grow.
- The use of firearms is an important contributor to the homicide epidemic.
- Research has not documented the nature of gun possession, including correlates, sources, and motivations.

What this study adds

- Evidence is derived from a unique sample of active offenders.
- Information about the sources that gun possessors in Trinidad and Tobago use to obtain guns, their motivations for possessing, and correlates of possession.
- Results show a strong connection between gun possession, gang involvement, and drug selling.

possessors. Collaborations between researchers and practitioners have the potential to generate interventions that are grounded in evidence about the nuances of a problem, but also in the local norms that must guide the development of responses.

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Competing interests None.

 ${\ensuremath{\textit{Ethics}}}$ approval This study was conducted with the approval of the Arizona State University, IRB Protocol 0702001609.

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