
Guns and Sublethal Violence: A Comparative Study of At-Risk Youth in Two Canadian Cities

International Criminal Justice Review
000(00) 1-25

© 2011 Georgia State University

Reprints and permission:

sagepub.com/journalsPermissions.nav

DOI: 10.1177/1057567711428963

<http://icj.sagepub.com>



Jennifer E. Butters¹, James Sheptycki²,
Serge Brochu³, and Patricia G. Erickson¹

Abstract

This study is the first in Canada to examine gun usage and harm to others, with original interview data, and aims to identify the correlates of sublethal violence among at-risk youth in Toronto and Montreal. Toronto youth showed 50% higher levels of this violence than Montreal youth. Despite having a common profile of conduct disorder and prior delinquency, Toronto youth were more involved in drug selling and the crack trade, and Montreal youth more likely involved in gang fighting. Ready access to firearms was reported in both locales but faster in Toronto. Logistic regression analysis for predicting using a gun to threaten or try to harm others found that drug selling was only significant in Toronto, while involvement in the crack trade and gang fighting was significant in both cities. Being able to obtain a gun in <3 hours was also significantly associated with this violence outcome in both sites. Actually harming someone with a weapon showed fewer common factors, with only gang fighting being significant in both cities. The importance of examining local patterns of youth violence, and the need for more research to assess the meanings youth impart to guns, is emphasized.

Keywords

at-risk youth, violence, weapons, guns, drugs, gangs

Introduction: The Legal Context for Youth Crime and Violence in Canada

Historically, Canada has taken a predominantly rehabilitative approach to its delinquents, considering them troublesome youth in need of care and protection, principles nested in the Juvenile Delinquents Act (JDA) of 1908 (Hogeveen, 2001). “Delinquents” became “young offenders” in 1984 with the passage of a new law, The Young Offenders Act (YOA), replacing the former child

¹ Department of Social and Epidemiological Research, Centre for Addiction and Mental Health, Toronto, ON, Canada

² Department of Social Science, York University, Toronto, ON, Canada,

³ International Center for Comparative Criminology, Université de Montréal, Canada

Corresponding Author:

James Sheptycki, York University, Room 034 McLaughlin College, 4700 Keele St. Toronto, ON M3 J 1P3, Canada

Email: jshep@yorku.ca

welfare philosophy with an emphasis on the protection of the public and the accountability of youthful law breakers (Bala, 1997). Over the following 15 years, agitation for a “get tough” approach to youth crime led to a series of amendments increasing sentences and facilitating transfers to adult court (Hogeveen & Smandych, 2001). The public sentiment supporting this shift was largely driven by fears of the most serious youth criminality, like murder, and the perceived leniency of the judicial response (Sprott, 1996). Rates of custodial sentences climbed (Ulzen & Hamilton, 1998), leading to the passage in 2001 of new legislation which aimed to reserve incarceration for the most serious, violent, and repeat offenders while providing more community-based supervision for the majority of those charged. When the Youth Criminal Justice Act (YCJA) came into force in 2003, deviant youth in conflict with the law became “young criminals,” moving them closer to the notion of adult criminals with responsibility for their crimes (Hogeveen & Smandych, 2001). Nevertheless, an early assessment concluded that the Youth Criminal Justice System in Canada appears to have established a balance between the protection of the community, making offenders accountable, protecting their rights, and managing less serious offenders with community-based dispositions (Bala, Carrington, & Roberts, 2009).

And what of the focus of the public and political concern, that is the presumed proliferation of violent young offenders/criminals? During the period between the YOA and the YCJA (1984–2001), changes in reporting practices and inconsistent provincial records made it difficult to assess overall trends in violent crime (Carrington, 1995; Corrado & Markwart, 1995). The most reliable indicator, the youth homicide rate (murders committed by those under the age of 18 years), remained quite constant (Doob & Sprott, 1998), reflecting about 10% of total homicides, while other forms of less serious violent crimes by juveniles seemed to rise from 1986 to 1992 and then level off into the mid-1990s (Harrison, Erickson, Adlaf, & Freeman, 2001; Sprott & Doob, 2008). However, in 1997 to 2006, the violent crime rate by youth rose by 12% (Taylor-Butts & Bressan, 2008). National data also indicated that most youthful offenses continued to be for nonviolent crimes and that those constituting the “violence” category were predominantly minor assault; only 5% of offenses in 2006 involved a weapon (Schissel, 1993; Taylor-Butts & Bressan, 2008). While in the past, violent crimes made up only about a quarter of all cases heard at youth court, increasingly after the passage of the YCJA, less serious cases have been diverted into the community, meaning that the more serious cases are being heard in court (Schissel, 1993; Taylor-Butts & Bressan, 2008).

It has been argued that the toughening of youth criminal justice policies in Canada is an overreaction, fuelled by media accounts of rare but shocking examples of youth violence, and reflects a moral panic about the growing threat posed by young criminals (Schissel, 2001; Tanner, 2010). Fear of gun violence is particularly apt to fuel this sense of public insecurity (Cook, Cukier, & Krause, 2009). In general, the literature does indicate that weapon possession is associated with increasing the risk of committing acts of violence (Fagan & Wilkinson, 1998; Wilkinson, 2001) and weapon type is an important determinant of outcome severity, with guns associated with the most lethal results (Leonard, 1994; Wells & Horney, 2002). However, in Canada, almost no research has been done linking youth violence specifically to firearms. Other than the observation that Canada did *not* experience the three-fold increase in youth homicides attributed to handgun use that was documented in the United States from 1985 to 1993 (Blumstein, 1995, 2002; Doob & Sprott, 1998; Webster, Gainer, & Champion, 1993), knowledge about gun violence trends is incomplete and inconclusive. Next we shall examine briefly the general trends around firearms possession, controls, and association with crime in Canada.

The use of firearms to commit crimes poses a particular challenge to social order at an international level (Small Arms Survey, 2010), being termed a global gun epidemic (Cukier & Sidel, 2005; Edwards & Sheptycki, 2009). International comparisons consistently show that the U.S. youth homicide rates are 5 to 6 times greater than those of other Western nations, and about three fourth involve guns (Pritchard & Evans, 2001). In Canada, despite a fairly high rate of gun ownership, about one quarter of the population, reflecting about 7 million firearms (less than the United States, but higher than most Western European countries), guns have been more often presented as a public health

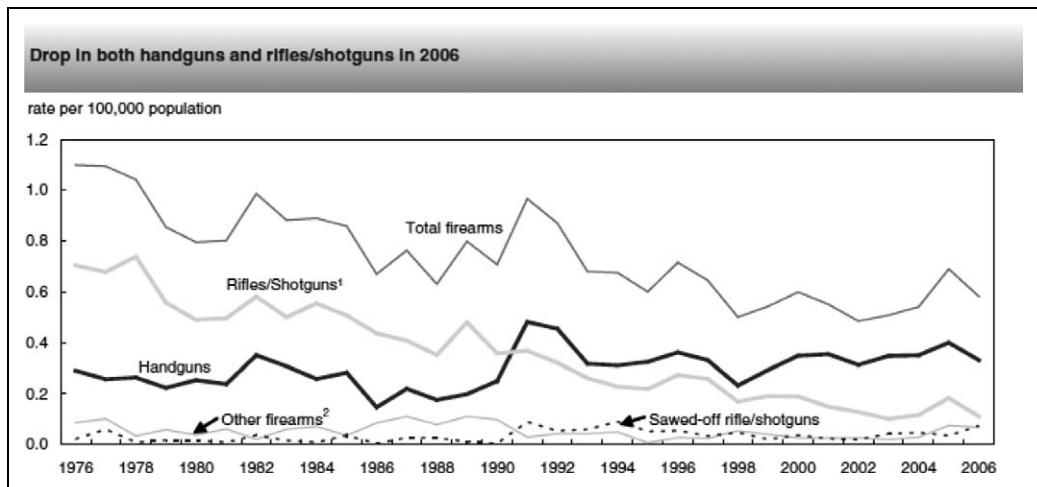


Figure 1. Types of firearms used in homicides in Canada, 1976–2006.

Source: Li, 2007

issue for accidents and suicide, rather than for murder and other violent crime (Canadian Paediatric Society, 2005; Gabor, Roberts, Stein, Di Giulio, 2001; Leonard, 1994). Gun ownership has been in decline and tends to be higher in the Western provinces and Quebec (23%) and lowest in Ontario (15%; Boyd, 2003; Coalition for Gun Control, 2001). Canada's relatively strict federal gun control laws have been credited with preventing or at least containing various types of firearms deaths, including those among youth (Bridges, 2004; Cukier, 1998; Pan et al., 2007). Guns are not legally available to those under 18 (with some exception for Aboriginal youth needing them for subsistence hunting), automatic weapons were prohibited in 1977, handguns have been banned since 1994, criteria for firearms acquisition certificates were expanded in 1991, and permissible firearms (rifles, shotguns) for hunting and sports must be licensed and registered (Bottomley, 2004; Bridges, 2004).¹ In general, over a period of more than two decades, murders committed with rifles and shotguns declined, but from about 1991 handguns surpassed long guns in homicide statistics prevalence (see Figure 1). Thus, while in 2006 the gun homicide rate in Canada was about the same as it had been 20 years previously, with about 30% killed by a firearm, a greater proportion of these were perpetrated with handguns (Li, 2007). Gun use in relation to robbery declined sharply from a peak of 36 per 100,000 in 1981 to 11 per 100,000 in 2007 (Li, 2007; see Figure 2). Moreover, in 2004, 69% of violent incidents recorded by police did not involve weapons at all, and only a minority of those involved guns, with knives and other weapons being much more common (Gannon & Mihorean, 2005). Specifically looking at youth violence, knives have outstripped guns as a choice of weapons (CCJS, 2001; Fitzgerald, 2003; Taylor-Butts & Bressan, 2008). Nevertheless, concern about gun crime has continued to garner public and media attention throughout the 2000s (Sheptycki, 2009). Much of this concern focuses on the “guns, gangs, and drug connections,” despite the dearth of Canadian research in this area (Hemmati, 2006; Wortley & Tanner, 2004). The next section will examine the broader criminological literature and highlight these connections in order to contextualize the presentation of the comparative data on Toronto and Montreal.

Overview of Present Study

The purpose of this article is to add new knowledge about youth, violence, and gun involvement in Canada. In doing so, we examine the predictive power of demographic variables and various risk

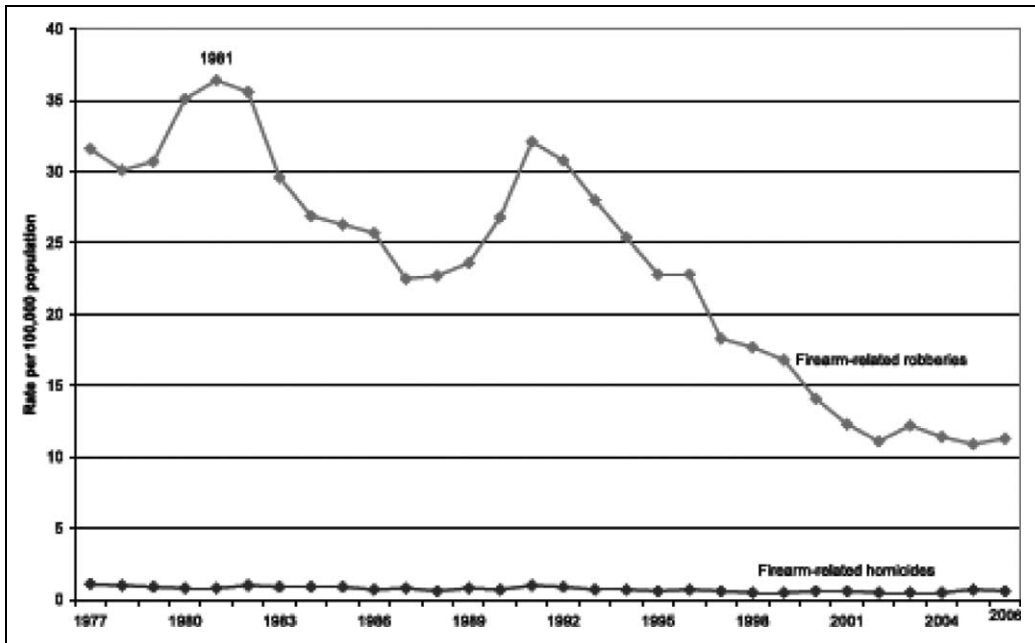


Figure 2. Rates of firearms usage in homicide and robbery, Canada, 1977–2006.

Source: Dauvergne and de Socio, 2008

factors among youth 14–17 years of age on the likelihood of two weapon-related outcomes: threatening or trying to hurt someone with a gun, plus hurting someone with a weapon. In addition, this article presents data on youth's access to firearms, specifically how long it would take to get one if they wanted and where they would get one, questions never asked before in Canadian surveys, to our knowledge, though often a subject of considerable study in the United States (Ash, Kellerman, Fuqua-Whitley, & Johnson, 1996; Lizotte, Krohn, Howell, Tobin, & Howard, 2000; Smith, 1996; Webster et al., 2002). Thus this article provides a window on the firearms situation among at-risk youth at a critical early stage of these emerging developments.

The Social Context: Guns, Gangs, and Youth Violence

While youth violence is a feature and concern of all societies (Dunkel & Drenhahn, 2003), in no country has the study of guns as integral to criminal violence been so prominent a part of the research agenda as in the United States (Blumstein, 1995; Lizotte et al., 2000; Sheley & Wright, 1995). In that country, two consistent aspects that emerge as correlates of an involvement with weapons are criminal gang membership and illicit drug distribution activities (Huff, 2002; Klein & Maxson, 1989, 2006). When drug selling networks are part of the gang activity, this systemic aspect of the illicit market is more likely to engage guns over other choices of weapons (Goldstein, 1985; Hagedorn, 1994; Koo, Chitwood, & Jesus-Sanchez, 2008). In U.S. studies, while most teens in school are not identifiable as part of a crime-involved gang, those who are have been found to be much more likely to carry and use weapons to threaten or hurt others (Cook & Ludwig, 2004; Molnar, Miller, Azrael, & Buka, 2004). Similarly, when delinquent, inner-city or other high-risk youth are surveyed, a pattern linking gang members with firearms and drug dealing is observed (e.g., Ash et al., 1996; Callahan, Rivara, & Farrow, 1993; Smith, 1996; Lizotte & Sheppard, 2001). The emergent crack market

in the mid-1980s is believed to have been a particularly lethal expression of youth gang violence involving guns (Blumstein, 2002).

To a lesser extent, the more limited research in other countries portrays a similar picture linking gangs with drugs, violence, and weapons but not necessarily firearms. Most students are not members of criminal gangs. School data from Perth Australia indicated that gang members were three times as likely to be involved in drug selling and four times as likely to carry weapons as their non-gang counterparts (White & Mason, 2006). Wortley and Tanner (2004), in a representative Toronto-based study of high school students, found that current criminal gang members also showed much higher rates of these activities (nearly 70% had sold drugs and had carried a weapon). While neither of these studies asked specifically about guns, another representative study of students in Montreal and Toronto did, finding a strong correlation among the boys between reported gang fighting and using a gun against others (although the actual numbers were very low, <3%; Erickson & Butters, 2006). Further, among the students surveyed, hurting someone with a weapon was most strongly related to being in gang fights, in both cities, but not to youth carrying a gun themselves or drug selling (Erickson & Butters, 2004, 2006). While hardly conclusive, this suggests that the linkages between guns, drug selling, and gangs, at least among more normative groups of teens in school, may not be as strong or widespread in Canada as in the United States.

Despite some more focused studies of regional gangs in Canada, few large-scale investigations have been undertaken until recently, making it difficult to draw conclusions about the evolution of a “gang problem” in Canada (Hemmati, 2006; Wortley, 2010). Nevertheless, “it is no longer plausible to argue that gangs are a uniquely American phenomenon” (Wortley & Tanner, 2004, p. 60). As European research also expands on gangs, weapons use is being investigated, and preliminary conclusions are that guns are not a major component of street gang violence nor are they evident among youthful drug sellers (Bucerius, 2007; Klein, Weerman, & Thornberry, 2006). However, a comparative international study (Amsterdam, Philadelphia, Toronto, and Montreal) of teen drug sellers in an incarcerated youth population did find that carrying a weapons and related violence were specifically linked to the dealing activities and varied by the drugs sold (Korf, Brochu, Benschop, Harrison, & Erickson, 2008). The same study also reported that while Dutch male delinquents were less likely to carry guns compared to those in Philadelphia (26% vs. 54%), their reported ability to access a gun in <3 hr was about the same (45% vs. 42%), an intriguing finding, given the strict controls on firearms and other weapons in the Netherlands (Erickson, Butters, Korf, Harrison, & Cousineau, 2006b, pp. 138–139).

The study of weapons carrying as an expression of serious delinquency accompanying gang involvement has also received more theoretical attention recently, moving beyond the gang/violence/drugs nexus. Dijkstra et al. (2010) tested longitudinally the competing hypotheses that weapon carrying was a function of peer influence (considering guns a status symbol) versus selection (first getting involved with delinquent peers), which over time led to gun involvement, and concluded a complex process of peer influence in friendship networks, and individual aggressive tendencies led to more weapons engagement over time. The importance of structural inequalities exacerbated by inadequate social welfare, housing, education, and other supports for strong communities, fostering greater marginalization among young males in more disadvantaged social groups, can contribute to gang formation and resultant violence, a pattern well documented in the United States (Cerdá et al., 2010) but more recently seen emerging in Toronto (Thompson & Gartner, 2007; Wortley & Tanner, 2006). Gang membership has been conceived as a key turning point in the life course, one involving changes in emotions and attitudes, not just behavior (Melde & Esbensen, 2011). Further, a concern with adolescent health and injuries from intentional harm has led to more surveys in public health including not only questions about weapons but also guns specifically, and these have also been extended to more countries (Pickett et al., 2005; Sorenson & Vittes, 2004). These examples are provided, rather than an exhaustive review, to illustrate the establishment of

firearms carrying and usage as an important part of research on adolescent violence, health, and social outcomes more broadly. Our article adds data on Canada to this burgeoning literature.

The Urban Context: Profiles of Toronto and Montreal

A key indicator of violence trends is the rate and nature of homicides expressed in both national and local statistics. Gartner (1995) in reviewing Canadian murder trends has cautioned that while the levels and nature of this crime altered little between 1960 and 1990, “more recent data are needed to assess the validity of concerns over . . . the role of drugs or illegal handguns” (p. 212). Our current study provides such data, in relation to nonlethal violence, but first we will consider past trends. Comparing 10 year averages for homicide by firearms in Toronto and Montreal, 1993–2003 showed a higher rate (per 100,000) for Montreal, 0.88, than for Toronto, 0.63 (Canadian Centre for Justice Statistics [CCJS], 2005). This reflects the fact that Montreal, despite a lower population than Toronto, has had a similar number of murders annually, but with more committed by guns in the past than has Toronto (CCJS, 2005). However, tracking by year shows a somewhat different picture, with the proportion of lethal shootings as a percentage of the total homicides climbing in Toronto over the latter part of this 10-year period, but not in Montreal, which even showed a slight decline (see Table 1). Since 2000, half or more of Toronto homicides have been committed with guns, a figure double that of the 1970s and 1980s (Gartner & Thompson, 2004; Toronto Police Service, 2011). This trend has been associated with more killings of young men and more occurrences in public places, but *not* as frequently in the usual context of other crimes like robbery or sexual assault. It has been suggested that gang activity and retaliatory violence have become more prominent motivations, possibly linked with ethnic and minority group disadvantage (Gartner & Thompson, 2004; Wortley & Tanner, 2008). In 2005, 52 (66%) of 78 homicides were committed with a gun, an all time high, but in subsequent years, reverted to slightly over half of the total (Toronto Police Service, 2011).

Official statistics are crucial to describe long-term trends but may not quickly capture new developments or more localized trends. Homicide is a rare event, but recourse to firearms is much less so. By far the greatest frequency of gun-related criminal incidents in Canada have been associated with those in the 17–24 age range, though this is quite typical of violent crime in general which tends to peak in the late teen years (Harrison et al., 2001; Sheptycki, 2009). Moreover, the rate of youth accused of firearm-related violent crime increased every year from 2003 to 2006 (Dauvergne & De Socio, 2008). As noted earlier, while crime data from Canada overall indicate that firearms do not play a major role in most violent crime, or in crimes by juveniles, the situation in some major urban areas has been an anomaly. Shootings in public places, involvement of innocent bystanders, and the increased number of younger male victims have been more recent features of Toronto homicides as the decade of the 2000s progressed (Gartner & Thompson, 2004; Toronto Police Service, 2011). However, officially recorded crime data, for which murder is only one measure, do not capture the extent of much unreported or undetected threats, efforts to harm, and actual harm, of sublethal violence among youth in cities and particular neighborhoods (Thompson, 2009; Wortley & Tanner, 2006).

In this article, we focus on youthful involvement in gun-related behavior in two of Canada’s largest cities, Toronto and Montreal. Despite a concern with youth violence, very little Canadian research has been done that has examined the use of guns to intimidate others or commit crimes. Indeed, the questions about guns specifically have tended to be avoided; instead the more generic category of “weapons” has been addressed (Paglia & Adlaf, 2003; Tanner & Wortley, 2002). A chapter discussing violence by “children” in Canada (referring to those aged 12–18 covered by the YCJA) does not even mention firearms, except as a concern for youth who might witness a shooting (Cabrera, 1995). This has changed as more mainstream media have been covering this

Table 1. Gun-Related Homicides as a Percentage of Total Homicides, Toronto and Montreal, 1993–2003

	Toronto			Montreal		
	Total homicides	Total gun-related homicides	Gun-related homicides as % of total	Total homicides	Total gun-related homicides	Gun-related homicides as % of total
	N	N	%	N	N	%
1993	71	28	39	105	44	42
1994	85	31	36	75	32	43
1995	74	15	20	77	31	40
1996	79	29	37	75	28	37
1997	83	30	36	74	32	43
1998	76	16	21	65	29	45
1999	61	24	39	71	27	38
2000	81	28	35	75	33	44
2001	78	37	47	78	38	49
2002	90	39	43	66	16	24
2003	95	42	44	57	20	35

Note. Adapted from "Methods Used to Commit Homicide," by Canadian Centre for Justice Statistics, 2005, Homicide Survey, Policing Services Program. Ottawa: Statistics Canada.

issue in feature stories and garnering public attention (Dziewanski, 2008; Lorinc, 2008). The current study was influenced by partnering with U.S. colleagues in comparative research, leading us to add several questions on weapons, including firearms, to our investigation of youth violence (Adlaf, Korf, Harrison, & Erickson, 2006; Butters, Harrison, Adlaf, & Erickson, 2009; Erickson, Butters, Cousineau, Harrison, & Korf, 2006a, Erickson, Butters, Korf, et al., 2006b). We shall now briefly review the limited Canadian literature that frames our study and consider some of our preliminary findings on weapons that stimulated a greater attention to firearms.

While it appears that among the population of Canadian adolescents, levels of gun involvement are considerably lower than in the United States, less divergence occurs among more high-risk groups. National youth surveys in the United States have found that nearly 1 in 20 in the 10–14 age range reported carrying a gun in the *month* prior to the survey, while in the older group of age 15–17, one in 10 had recently done so (Centers for Disease Control and Prevention [CDC], 1997, 2007; Cook & Ludwig, 2004). The National Longitudinal Survey of Children and Youth (Canada), which samples 12- to 15-year-olds, found that 3% of boys reported carrying a gun in the past 12 months and virtually no girls (Fitzgerald, 2003). In Ontario, the biannual student surveys initially asked only about any weapon carrying and found a province-wide prevalence of 9.6% (Paglia & Adlaf, 2003), reflecting a decline over the past decade. But when a specific question about guns was asked for the first time in 2005, 2.2% of Ontario students admitted they had carried a handgun in the past 12 months (Centre for Addiction and Mental Health [CAMH], 2006). The only prior study to our knowledge that asked specifically about firearms² was carried out in a Western Canadian city (Calgary, Alberta); when students were questioned about carrying handguns, it was reported that 2.6% had done so (Paetsch & Bertrand, 1999). No prior Canadian studies have examined weapons carrying and gun use among adjudicated delinquents. The present study (Adlaf et al., 2006; Erickson & Butters, 2006) was the first to do so, surveying youth in Toronto and Montreal (in partnership with colleagues in Philadelphia and Amsterdam; Benschop, Harrison, Korf, & Erickson, 2006; Harrison, Erickson, Korf, Brochu, & Benschop, 2007). Among the three groups of 14- to 17-year-old youth surveyed in this multisite study, in Toronto, 56% of detainees, 25% of dropouts but only 2% of high school students acknowledged ever carrying a gun (Erickson & Butters, 2004). Comparing Toronto

and Montreal male students only, the figures for gun carrying were 4.2% in Toronto and 2.8% in Montreal; comparable data for male dropouts were 32.5% in Toronto and 17.6% in Montreal; for male detainees, 60.3% of Toronto and 48.6% of Montreal respondents had carried a gun (Erickson & Butters, 2006). The high rates among male incarcerated youth are comparable to those found in U.S. studies, where ranges from 59% to 84% have been documented (Ash et al., 1996; Callahan et al., 1993; Freed, Webster, Longwell, Carrese, & Wilson, 2001; Sheley & Wright, 1995). However, the prevalence of gun carrying in Toronto exceeds that of Montreal for all three groups of youth surveyed.

Present Study

Using descriptive and analytic data from interviews with two groups of at-risk youth in Toronto and Montreal, the following sections of this article add new knowledge about youth, violence and gun involvement in Canada. We focus on firearms, inquiring about youth's access and asking a question about every threatening or trying to harm someone with a gun, but also include a measure of serious harm to others (i.e., requiring bandages or a visit to a doctor) that involved guns as well as any other weapons, such as knives, clubs, and other blunt objects, as an additional indicator of serious violent crime. Moreover, as is typical when all weapons-related violence by youth is considered, a relatively small portion of injuries are inflicted with firearms (Erickson, Butters, Cousineau, et al., 2006a; Erickson, Butters, Korf, et al., 2006b; Taylor-Butts & Bressan, 2008). These data were gathered with the aim of examining the predictive power of demographic variables and various risk factors on the likelihood of two weapon-related outcomes: threatening or trying to hurt someone with a gun, plus hurting someone with a weapon.

The data were collected in 2001–2002, a significant time in Canadian youth justice, just after the passage but before the implementation of the new Youth Criminal Justice Act in 2003, and the subsequent decline in use of custody dispositions. As well, when we commenced our study, the trends observed later in official crime statistics for Toronto, showing increased shootings and gun homicides among younger age groups (disproportionately young black men) in public places, had not been identified (Ezeonu, 2010; Thompson & Gartner, 2007). Thus, our interviews provide a window on the firearms situation among at-risk youth at a critical early stage of these emerging developments. When we first began to examine our data, while being surprised at the extent of self-reported gun involvement among the Toronto samples, and how much higher it was than in Montreal, we also realized that the lack of prior survey research among Canadian youth specifically on firearms made identifying any trend over time impossible (Erickson & Butters, 2004). We do provide a cross-sectional picture of what we believe is the first documented indication (via direct data collection among youthful samples) of an emergent problem of youth gun-related violence in Toronto (Thompson & Gartner, 2007). This became recognized only later in the decade, while a similar pattern was not observed or documented in Montreal (Brochu, Cousineau, Provost, Erickson, & Fu, 2011; Erickson, Butters, Korf, et al., 2006b).

Method

The following analyses are based on data from a cross-national, multisite project examining the factors linked to violence among youth aged 14–17 years; this article utilized the data collected in the two Canadian sites: the metropolitan census areas of Toronto and Montreal. The study employed standardized methodological procedures by the teams at both sites, including definitions of target populations, instructions for sampling, modes of interview, and standardized questionnaires, professionally translated into French from the English original. Consequently, with adequate statistical

control of background variables, variations in violence found between the two cities should reflect real differences.

Personal interviews were conducted with males and females already participating in delinquent activities such as truancy, or offenses serious enough to result in custody, and thus compose a group of adolescents more likely than students or the overall youth population to be at risk for involvement in weapon-related violence (Kreager, 2007). Identical questionnaires and interview modes were employed for both cities and subsamples. In total, 640 at-risk adolescents, aged 14–17, who resided in the Toronto or Montreal Census Metropolitan Area, were included. All protocols received Research Ethics Board review and approval at the respective universities of Toronto and Montreal and the Centre for Addiction and Mental Health.

Samples

Detainees. The detainee sample ($N = 162$ Toronto and $N = 182$ Montreal) was recruited from secure custody institutions serving the metropolitan areas of each city. There was no preselection based on history of violence and researchers were unaware of the offense/offenses for which they were detained (Adlaf et al., 2006). This sample represents at-risk male and female adolescents incarcerated in each site according to local youth justice system procedures. Quebec has historically maintained a more child welfare approach and institutionalizes fewer young persons than Ontario (Bala, 1997). As well, the introduction of the YCJA in 2001 also reduced the use of custodial sentences, leading to a decline in the number of detained youth eligible for the study, compared to our projections from 1998 to 1999 Ontario data (Sprott & Doob, 2008). The relatively small number of youth sentenced to detention in both provinces meant that we conducted a census of all available and eligible youth during our fieldwork period, until we came close to our target numbers of 200 youth in each province. Each youth was prescreened on the eligibility criteria (age and residence) by institutional staff members before approaching him or her for individual informed consent.

Females were purposefully oversampled in all sites, as males greatly outnumber females in all youth custody institutions. Our target, to achieve a 2:1 M/F ratio, was eventually achieved (Table 2). In Montreal, females in custody under a judicial child welfare protection measure were recruited in order to approach the targeted male–female ratio. These young Quebec women were only included when they also had been arrested for criminal offenses, regardless of whether this was the official or main reason for their custody. In Ontario, only one institution served females sentenced to custody from the Toronto area, and we visited it repeatedly whenever a potential respondent was identified. One-to-one interviews were conducted in private and participants were compensated \$15, generally placed in their institutional account.

Dropouts. A convenience sample of male and female dropouts was drawn from volunteers recruited in the community ($N = 200$ Toronto and $N = 96$ Montreal). While we explored the possibility of a more representative sample, school boards are unwilling to provide any access to lists of students who have not been attending school regularly. Hence, we relied on self-report of school absence combined with locales where dropouts might be found. To be eligible, the respondent had to be between 14 and 17 years of age, reside in the metropolitan areas of each site and have left school for at least 30 consecutive days (other than holidays) during the past 12 months. This group of at-risk youth was located in a wide range of community agencies that provided educational, social, or outreach services for school dropouts, including alternative school programs and community drop-in centers. This sample is not representative of all dropouts, many of whom would be more likely found in the basement of the family home or hanging out at the local shopping mall during school hours. However, we also specifically avoided recruiting “street youth,” a more marginalized group than dropouts involved primarily in truancy or minor delinquency that may have led to them

Table 2. Demographic Profile of Respondents in Toronto and Montreal

Sample Characteristics	Toronto (N = 362), %	Montreal (N = 278), %	χ^2
Sex			
Male	68.5	66.9	
Female	31.5	33.1	ns
Age			
14–15	25.1	27.0	
16–17	74.9	73.0	ns
Race			
White	50.0	73.0	
Black	25.7	11.5	
Asian	4.1	0.0	
Other	20.2	15.5	.000
Neighborhood drug scene			
Witness drug use & selling 50+ times in your neighborhood in the past year	53.6	51.3	ns
Drug selling			
Any drug selling	71.7	61.4	.006
Among sellers—cocaine, crack, or both	29.3	20.9	.016
Lifetime gang fighting			
Participated in a gang fight	47	57.4	.009
Gun acquisition			
Take 3 hr or less to get a gun	40	27	.001
Conduct disorder indicators			
Mean number of pre-13 indicators (0–11)	3.95	3.92	ns
Past year delinquency			
Mean number of delinquent behaviors (0–7)	2.33	2.27	ns
Weapon-related outcomes			
Threat or try to hurt with a gun	60.4	43.2	.000
Hurt with any weapon	45.6	27.0	.000

Note. Values are in percentage unless otherwise specified.

* $p < .05$. ** $p < .01$. *** $p < .001$.

being expelled or suspended from school but still living at home (Kreager, 2007). Agencies were contacted by project staff and permission was requested either to allow researchers to make contact with youth on their premises or to have advertisements posted at their site. Personal interviews were conducted in private and respondents were compensated (\$15) for their time.

Measures. Drawing on previous studies examining youth violence (Cook & Ludwig, 2004; Sheley & Wright, 1995), two dependent variables were measured based on weapon type, intent of using it, and whether they had inflicted harm. Youth were asked, “have you ever threatened or tried to hurt someone with (a) a gun, and (b) “have you ever hurt someone with a weapon (object, knife or gun) so they needed bandages or had to see a doctor”? These questions were part of several subsections in a longer questionnaire so no particular attention was drawn to an interest in weapons. This increased confidence in the validity of responses, with no expectation that youth would feel directed to either under- or overemphasize their involvement. The interpretation of weapon use in this article is not specific to aggression or defense as we did not know the context of the particular event/events. Self-reports of criminal activities, including drug use and gun-related behavior, have generally been found to be valid when proper standards of confidentiality are observed (Harrison, Martin, Enev, & Harrington, 2007; Tanner & Wortley, 2002; Webster et al., 2002).

Three demographic variables, age, sex, and race, plus sample group (detainee/dropout), are included in the analysis. Age was represented by a binary measure (1,0) reflecting older (16–17) versus younger (14–15) age categories and four categories of “race” (White, Black, Asian, and Other) were effect coded to represent group differences from the average.

Groupings of youth who get into trouble with the law are, to a significant extent, neighborhood based (MacDonald & Shildrick, 2007). Dysfunctional urban neighborhoods may play a direct role in the development of antisocial behaviors in youth groups, including young people’s experience with guns and violence (Ingolsby & Shaw, 2002; Molnar et al., 2004; Wikström & Loeber, 2000; Webster et al., 2002; Yonas, O’Campo, Burke, & Gielen, 2007). One indicator of neighborhood dysfunction may be the extent of an observable illicit drug scene within a community. Based on the original categorical questions, individuals who reported witnessing neighborhood drug selling and drug use 50+ times in the past year were scored as living in a neighborhood with an observable illicit drug scene.

Drug selling, particularly crack, has been associated with violence (Erickson, 1996; Loeber & Hay, 1997; Topalli, Wright, & Fornango, 2002). In these analyses, drug selling was assessed by two items: any drug selling (*yes* = 1) and selling cocaine/crack in particular (*yes* = 1). A variable was generated to reflect “any lifetime gang fighting,” since this indicator has been linked to more serious violence (White & Mason, 2006; Wortley & Tanner, 2004). Individuals who reported participating in a gang fight before they were 13 years old, and/or any gang fighting in the past year were scored positively (*yes* = 1). An additional variable was created to assess the ease of gun acquisition (Smith, 1996; Webster et al., 2002). Respondents were asked how long it would take them to get a gun if they wanted one. Youth who perceived they could get a gun in 3 hr or less were given a score of 1 and those who reported 4 hr or more were scored 0.

Indicators of conduct disorder and past 12 months delinquency were also included. Based on *Diagnostic and Statistical Manual of Mental Disorders (DSM)* criteria for conduct disorder, youth were asked whether they had engaged in a series of 11 antisocial or destructive behaviors before the age of 13. Past year delinquency participation was assessed using a 7-item scale including minor acts of property damage, theft, and breaking and entering. Items in this measure have been used in other surveys including the Ontario Student Drug Use Survey (Paglia & Adlaf, 2003). For descriptive analyses, these variables were examined as dichotomies using the average as a cut point. Continuous measures were then employed in the logistic regression to provide detailed information regarding the impact of these variables.

The research objective of these analyses was to assess potential impact of the demographic and risk factors on gun threat and weapon-related harm outcomes among a sample of at-risk youth. It is important to distinguish between intent and actuality as weapon “use” may include threats, attempt to harm, or actually hurting someone. Thus, we report separately our findings on using a gun to threaten or try to harm others and actually harming someone with any weapon. Two logistic regression models were analyzed to investigate these relationships and compare the results in the two cities of Toronto and Montreal. The results are reported in odds ratios (ORs).

Results

Table 2 provides an overview of sample characteristics. The age–sex composition of the sample was not significantly different in the two cities. In both Toronto and Montreal, over two thirds of the participants were male and approximately three quarters were in the older (16–17 years) age category. Differences between the two sites regarding racial background were evident. Although the samples in both cities are predominantly White, the proportion of White respondents was roughly 25% greater in Montreal, and there were twice as many Black youth in the Toronto sample. This is reflective of the samples themselves, and the selection processes of the respective youth justice systems, and is not generally reflective of the overall demographics of the two cities. For example,

whereas the Canadian Census shows Montreal's population as 7.7% listed as being Black, the comparable figure for Toronto is 8.4%. While there were no Asian respondents in Montreal, this group represented 4% of the Toronto at-risk youth, an underrepresentation of their numbers in the overall Toronto youth population (Benschop et al., 2006).

No significant differences were noted between Toronto and Montreal youth in their reporting of living in a neighborhood with an observable illicit drug scene. Residing in this type of environment was reported by 54% of respondents in Toronto and 51% in Montreal. Among Toronto at-risk youth, involvement in drug selling was reported by 72% and 29% indicated selling cocaine and crack, respectively. These proportions were roughly 10% less among Montreal respondents. Although the proportion of Montreal youth who reported ever participating in a gang fight was significantly greater than in Toronto (47% Toronto vs. 57% Montreal), a sizable proportion of at-risk youth in both cities acknowledge this form of violence. A significant difference was also observed regarding the ease of gun acquisition. In Toronto, 40% of the at-risk youth indicated they could get a gun if they wanted one in 3 hr or less; while in Montreal, only 27% felt the same. Further questioning (data not shown) on how they would get one elicited the most common response of buying one from a friend or relative, followed by getting one on the streets, from a drug dealer, or least often stealing or trading for one—sources similarly ranked in both cities.

On average, in both Toronto and Montreal, the respondents reported 4 conduct disorder indicators and participating in 2 types of delinquent behaviors in the last 12 months. Thus, these youth are very similar in their prior delinquent profiles. Finally, the weapon-related outcomes were reported by a significantly greater proportion of Toronto at-risk youth in comparison to their Montreal counterparts. In Toronto, 60% reported they had threatened or tried to hurt someone with a gun in comparison to 43% in Montreal. Hurting someone with an object, knife, or gun was reported by close to half of the at-risk youth in Toronto (46%) and 27% in Montreal. A demographic and risk factor profile of respondents in Toronto and Montreal reporting each of the individual weapon-related outcomes is presented in Table 3.

Among at-risk youth in Toronto who reported threatening or trying to hurt someone with a gun, 65% were from the detainee sample, 84% were male, 70% were between 16 and 17 years of age, half identified themselves as White and 32% as Black. Close to three quarters (72%) of Toronto youth reporting this type of violent behavior indicated living in a neighborhood with a visible drug scene, 94% were involved in the drug market, two thirds (60%) indicated selling crack and/or cocaine, 77% reported lifetime gang fighting, and 63% felt they could get a gun in 3 hr or less if they wanted one. Finally, among those involved in gun-related violence, two thirds reported more than five conduct disorder symptoms and more than three delinquent activities in the past year (63% and 66%, respectively).

At-risk youth in Montreal, who reported threatening or trying to hurt someone with a gun were overwhelmingly from the detainee sample (90%), male (88%), 16–17 years old (81%), and White (64%). Among those engaging in this type of violence, 74% reported a visible drug scene in their neighborhood, 84% reported drug selling while less than half (48%) indicated involvement in the crack/cocaine market. Lifetime gang fighting was reported by 88%, 49% stated they could get a gun in 3 hr or less and over two thirds report more than the average number of conduct disorder symptoms and delinquent activities (68% and 66%, respectively).

The final profile reflects the characteristics of the respondents who reported the most serious form of weapon-related violence: injuring someone with a weapon. Among those reporting this type of behavior in Toronto, 61% were from the detainee sample, 77% were male, 70% in the older age category, 50% self-identified as White, and 29% Black. Further, among these at-risk youth two thirds (64%) cited a visible drug scene in their neighborhood, 84% reported individual involvement in drug selling activities, 45% specifically sell crack and/or cocaine. Finally, among those youth in Toronto who reported hurting someone with a weapon, 69% also indicated any lifetime gang fighting, 52% stated they could get a gun

Table 3. Demographic and Risk Factor Profile Among Respondents Reporting Each Individual Weapon-Related Outcome

	Threat or try to hurt with a gun		Hurt someone with a weapon	
	Toronto (n = 107), %	Montreal (n = 58), %	Toronto (n = 165), %	Montreal (n = 77), %
Demographics				
Sample				
Detainee	65	90	61	84
Dropout	36	10	39	16
Sex				
Male	84	88	77	86
Female	16	12	23	14
Age				
14–15 years	30	19	30	16
16–17 years	70	81	70	84
Race				
White	50	64	50	66
Black	32	14	29	13
Asian	3		3	
Other	16	22	18	21
Neighborhood drug scene				
Witnessing drug use & selling 50+ times	72	74	64	66
Drug selling				
Any drug selling activity	94	84	84	78
Sell either cocaine or crack or both	60	48	45	39
Gang fighting				
Any lifetime gang fighting	77	88	69	87
Gun acquisition				
Can get a gun in three hours or less	63	49	52	43
Conduct disorder indicators				
Report greater than average (5+) number of symptoms	63	68	57	55
Delinquency participation				
Report greater than average (3+) number of delinquent behaviors in past 12 months	66	66	64	68

Note. Percentages have been rounded.

in 3 hr or less, 57% presented for more than five conduct disorder symptoms, and 64% indicated participating in more than three types of delinquent activities over the course of the past year.

As with the previous profile, that of at-risk youth in Montreal, who reported hurting someone with a weapon follows the same pattern of their Toronto counterparts although the proportions are, overall, slightly higher in the Montreal group. Among those youth in Montreal, who engaged in this most extreme form of weapon-related violence, 84% were detainees, 86% male, 84% 16 or 17 years or age, 66% were White, and 13% were Black. Regarding the other risk factors, 66% indicated a visible drug scene in the neighborhood, 78% were involved in drug selling, and 39% sold crack and/or cocaine (fewer youth in Montreal who report hurting someone with a weapon are involved in the drug market in comparison to their Toronto counterparts). Finally, among this group of at-risk youth in Montreal, 87% reported lifetime gang involvement, 43% perceived they could get a gun in 3 hr or less if they wanted one, 55%

reported an over average number of conduct disorder symptoms, and 68% indicated participating in three or more delinquent activities in the past year.

Whereas overall the at-risk group in Toronto was more violent than those in Montreal, some differences emerged between the detainee and dropout samples in the two cities. It is interesting to note that a greater proportion of the detainees in Montreal reported both threats with a gun and use of a weapon to hurt others than the detainees in the Toronto group, whereas, for the dropouts, although the violence rates were lower, a greater proportion of dropouts in the Toronto group reported this violence than did their Montreal counterparts. This suggests much more overlap between the detainee and dropout groups in Toronto, and a more high-risk sample for violence being sentenced to custody in Montreal. Given that the profiles of conduct disorder and prior delinquency were almost the same in both groups, this suggests different risk factors for violence are operating, beyond their history of offending, that may be linked to neighborhood features (i.e., neighborhood level of violence, presence of drug market) and youth justice processing (i.e., there may have been provincial differences in the selection process regarding selecting only the more serious or violent offenders).

Table 4 shows the results of logistic regressions estimating the potential impact of the demographic and risk factors on the two weapon-related outcomes comparing at-risk youth in Toronto and Montreal. The Hosmer-Lemeshow goodness-of-fit test produced nonsignificant findings for each model. This suggests the models have good predictive value and fit.

Several significant relationships between demographic and risk factors and threatening or trying to hurt someone with a gun emerged in both Toronto and Montreal. Although not significant in Toronto, Montreal detainees were almost five times (OR: 4.80; confidence interval CI [1.76, 13.10]) more likely to report this type of weapon-related violence than those in the dropout sample. In Toronto, male at-risk youth were 2.3 times more likely to report this type of violence than their female counterparts; there were no significant gender difference in Montreal. Black youth in Toronto were significantly more likely to report this type of violence than Whites (OR: 2.26; CI [1.19, 4.29]); this was not a significant predictor in Montreal.

Regarding other risk factors, among at-risk youth in Toronto, those who reported any drug selling activity were four and a half times as likely (OR: 4.53; CI [1.63, 12.58]) to indicate they had threatened or tried to hurt someone with a gun in comparison to those who did not sell drugs. Drug selling in general had no significant impact in Montreal. However, in both sites, selling crack and/or cocaine significantly influenced the likelihood of gun-related violence. Involvement in this particular drug market increased the odds of this form of weapon-related violence by 2.34 (CI [1.22, 4.49]) in Toronto and 2.62 (CI [1.15, 6.00]) in Montreal. Also significant among youth in both cities was the impact of gang fighting. Youth in Toronto and Montreal who reported participating in a gang fight were roughly three times more likely than those who had not been involved in a gang fight, to indicate gun-related violence (Toronto OR: 3.23; Montreal OR: 2.93). Moreover, youth in both sites who felt they could acquire a gun in 3 hr or less were twice as likely to have threatened or tried to hurt someone with a gun (OR Toronto: 2.05; OR Montreal: 2.30). Finally, youth in Montreal who reported five or more symptoms of conduct disorder were more than two and half times (OR: 2.57; CI [1.13, 5.84]) more likely to report gun violence than those who reported fewer than the average number of symptoms.

The second model that examined the impact of demographic and risk factors on the likelihood of at-risk youth indicated they had actually hurt someone with an object, knife, or gun. Very few significant factors emerged in each site and only one is shared between the two. In Toronto, Black youth were just under twice as likely (OR: 1.88; CI [1.11, 3.20]) to report this form of weapon-related violence and the likelihood of hurting someone with a weapon increased by 2.30 (CI [1.32, 3.99]) for those who report participating in three or more delinquent activities in the past year. In Montreal, at-risk youth in the detainee sample were 3.3 (CI [1.51, 7.36]) times more likely to report hurting someone with a weapon than those in the dropout sample. Finally, in both Toronto and Montreal, at-risk

Table 4. Logistic Regression Predicting the Likelihood of Each Weapon-Related Outcome Comparing High-Risk Youth in Toronto and Montreal

	Threat or try to hurt with a gun		Hurt someone with a weapon	
	Toronto (n = 355) Odds ratios [CIs]	Montreal (n = 273) Odds ratios [CIs]	Toronto (n = 355) Odds ratios [CIs]	Montreal (n = 272) Odds ratios [CIs]
Detainees	1.16 [0.620, 2.16]	4.80** [1.76, 13.10]	1.63 [0.945, 2.80]	3.33** [1.51, 7.36]
Male	2.30* [1.13, 4.69]	2.49 [0.877, 7.05]	1.21 [0.688, 2.13]	2.28 [0.958, 5.42]
16–17 years	.961 [0.496, 1.86]	.732 [0.279, 1.92]	1.01 [0.562, 1.81]	1.58 [0.677, 3.70]
Black	2.26* (1.20–4.29)	1.32 (0.652–2.49)	1.88* (1.11–3.20)	0.973 [0.512, 1.85]
Asian	0.749 [0.231, 2.43]	NA	0.746 [0.284–1.96]	NA
Other	.615 [0.315, 1.20]	1.28 [0.652, 2.49]	.778 [0.447, 1.35]	1.27 [0.696, 2.31]
Witnessing drug use & selling 50+ times in neighborhood	1.20 [0.636, 2.50]	1.94 [0.883, 4.26]	0.937 [0.547, 1.60]	1.35 [0.693, 2.64]
Any drug selling activity	4.53** [1.63, 12.58]	1.14, [0.400, 3.27]	1.58 [0.804, 3.12]	0.834 [0.345, 2.02]
Sell either cocaine or crack or both	2.34** [1.22, 4.49]	2.62* [1.15, 6.00]	1.34 [0.714, 2.52]	1.57 [0.721, 3.42]
Any lifetime gang fighting	3.23*** [1.74, 6.00]	2.93* [1.12, 7.65]	3.23*** [1.92, 5.44]	4.34*** [1.92, 9.80]
Acquire a gun in 3 hr or less	2.05* [1.13, 3.71]	2.30* [1.06, 4.96]	1.47 [0.869, 2.50]	1.75 [0.881, 3.49]
Report 5+ symptoms of conduct disorder	1.64 [0.887, 3.02]	2.57* [1.13, 5.84]	1.71 [0.988, 2.95]	.728 [0.352, 1.50]
Report 3+ delinquent behaviors in past 12 months	1.68 [0.892, 3.17]	.825 [0.351, 1.94]	2.30** [1.32, 3.99]	2.07 [0.972, 4.40]
χ^2 (Hosmer–Lemeshow)	6.50	17.88	7.71	13.89
–2 Log likelihood	296.02	195.17	382.80	243.34
R ² Cox & Snell	.310	.266	.259	.247
R ² Nagelkerke	.442	.416	.346	.356

Note. The Hosmer–Lemeshow goodness-of-fit test produced nonsignificant findings for each model.
*P<.05. **P<.01. ***P<.001.

youth who participated in a gang fight were significantly more likely to report this most serious form of violence than those who had never engaged in a gang fight. Specifically, in Toronto, the odds of hurting someone with a weapon increased by 3.23 (CI [1.92, 5.44]) and were slightly greater among Montreal youth with an OR of 4.34 (CI [1.92, 9.80]).

Discussion

Although gun-related violence among youth is an issue of substantial concern for criminologists, criminal justice practitioners, and the general public, there is a dearth of Canadian information in this area. The analyses presented here stem from the first detailed investigation in Canada to explore some interrelationships concerning guns and youth violence. By themselves, the findings from the interviews with at-risk youth represent a valuable addition to the literature regarding youth already identified as more likely to be involved in serious violence. While it would not be helpful to exaggerate or overgeneralize the extent of this problem, gun crime nevertheless presents as a serious issue in some Canadian urban communities. Victims of this type of crime in Toronto are young, male, and disproportionately from ethnic minority or other socially marginal groups (Ezeonu, 2010; Thompson & Gartner, 2007). Comparable details have not been examined and reported in Montreal, perhaps because youth gun violence has not taken the same upward trajectory or garnered the same public attention as in Toronto.

These results suggest that some demographic characteristics, often believed to affect violent behavior, may not have significant import for the use of guns and harming others with weapons in these two urban settings. Specifically, although a greater proportion of young males reported engaging in gun-related violence, gender did not appear to overwhelmingly influence the likelihood of such violence. The finding that being Black was associated with two serious forms of weapon-related violence in Toronto needs additional examination. These data seem to be harbingers of the trend described earlier for young black males to be disproportionately offenders and victims of homicide as the 2000s progressed (Thompson & Gartner, 2007). Being young and Black in Toronto may be markers not only of weapon involvement but also for links with other background factors such as poverty, family instability, and poor school performance (Wortley, 2004; Wortley & Tanner, 2006). In actual numbers, violent White youth outnumbered Black youth in this Toronto at-risk sample. However, in Montreal, race was not significant, but the Black population in that city derives from a somewhat different immigrant base than in Toronto and reflects a different culture as well.³ In order to reveal something of the actual social processes taking place, there is an evident need to be able to interpret racial categories relative to the actual neighborhood context in which violent criminality is manifest (Hemmati, 2006; Wortley & Tanner, 2008). Economic, social, and cultural capital of Black minorities in the two cities are subtly different and their integration vis-à-vis the cultural mix as a whole also differ, and this seems to be reflected in the data discussed here; future research will need to examine these difference in greater detail if we are to better understand the ways in which ethnic diversity impinges on the etiology of weapons-related crime. Although a greater proportion of older (16 to 17 years) youth reported participation in gun-related violence, when other factors were controlled, age had no significant impact on the likelihood of participating in this form of violence. This might suggest the need to identify the presence of other shared factors among youth that transcend the impact of age on influencing the likelihood of such violence.

The violent nature of involvement in illicit drug selling, particularly crack/cocaine, is reinforced by these findings. It is not novel to suggest violence prevention initiatives involve ways to keep young people from participating in illicit drug market activities, and our findings echo others (Peskin, Tortorlero, & Addy, 2009; Topalli et al., 2002). These results support prior research connecting guns with other forms of weapons-related violence, drugs, and gang activity (Brochu et al., 2011; Butters et al., 2009; Tanner & Wortley, 2002; White & Mason, 2006). However, these

analyses raise the question as to why drug selling and even involvement in the crack market significantly influences threatening others with a gun, but do not significantly impact the likelihood of actually hurting someone with a weapon? Perhaps this is indicative of how youth perceive the “use” of a gun—as an effective means of threatening others or protecting oneself when doing drug business. The difference noted between Toronto and Montreal regarding the impact of drug market involvement on gun-related violence may reflect the nature of the drug markets themselves, though we cannot address this with our data. While specific involvement in the crack market had a strong impact in both Toronto and Montreal, general drug selling only had a significant influence on Toronto youth with respect to threatening others with a gun. Do youth’s perceptions or actual experiences (whether as victims or as committing violence against others) differ across the cities? These are important questions for subsequent research in the development of our understanding of gun-related violence among adolescents and high-risk groups.

For this group of at-risk youth, in both cities, the likelihood of gun use was pronounced for those with a history of gang fighting. The current analysis reinforces the emerging importance of considering the nature of gang involvement as an essential component in the explanation of weapon-related violent activity in the Canadian context (Butters et al., 2009; Trussler, 2010; Wortley, 2010). The challenge is to develop alternative means for youth to achieve intrinsic and tangible rewards currently provided by the illicit drug trade and criminal gang involvements (Brochu et al., 2011; Erickson, 1996; Wortley & Tanner, 2004).

While these data are not representative of all at-risk youth in other cities or parts of Canada, they do reflect this segment of the 14- to 17-year-old population in two of the largest cities in the country. This analysis would be strengthened by the inclusion of comparative data for youth in the same age group but with a “nondeviant” status with regard to weapons and drug selling. Given the sensitive nature of the behaviors examined, underreporting may have been possible. However, guarantees of confidentiality were provided, and self-reports have been found to be generally valid ways of collecting such data from youth (Harrison, Martin, Enev, & Harrington, 2007). Based on cross-sectional data, we are precluded from offering any conclusions pertaining to causality; nonetheless, important relationships between demographics, risk factors, and weapon-related violence were identified and inform potential avenues for prevention and intervention initiatives.

Conclusion

This article contributes to an emerging picture of gun use and youth violence on the urban Canadian landscape in two major cities that was not documented in any prior systematic research before 2000. Taken together, the interview data presented here pertaining to an at-risk youth sample of age 14–17 in Toronto and Montreal, find that the correlates of gun use are much like the picture already characteristic of the U.S. experience, namely a high degree of gang and drug involvement. What is apparent from these data is that an unexpected number of at-risk youth in Toronto from both detainee and dropout samples, and also a large group among Montreal detainees, were already gun involved in the beginning of the 2000s when the data were collected. This trend may have begun in the prior decade but was only unmasked when official statistics of homicide, reflecting the tip of the iceberg of gun violence, were available for tracking later in this decade (Gartner & Thompson, 2004; Thompson & Gartner, 2007). Since there are no comparable Canadian surveys or in-depth interview data for youthful gun involvement 10, 20, or 30 years ago, we cannot conclude that it has become more prevalent or if the nature of this form of violence is changing (Erickson & Butters, 2004). It is vital to continue to evaluate and track guns and nonlethal violence among youth in Canadian cities in order to know whether the numerous programs introduced in response are having a positive impact (Doob, 2004; Thompson & Gartner, 2007).

Our study of youths' perceptions of gun access cannot speak to the more general issue of availability, other than to indicate that most say they can obtain firearms quite readily, and those who can do so faster are also more likely to report using them to threaten or try to harm others. These findings also reflect similar findings in U.S. research on gun acquisition among delinquent youth (Webster et al., 2002). Studies on the firearms trade rarely gets to the level of tracing the trails from manufacturer to young delinquents (Cook et al., 2009; Wintemute, 2002). Overall gun prevalence in a society does not necessarily dictate their availability to high-risk youth, though it may contribute to overall violent crime trends (Cook & Ludwig, 2004; Cousineau, et al., 2006a; Erickson, Butters, Erickson, Butters, Korf, et al., 2006b; Kleck, 2004). But as Sheptycki (2009) argues, it is not simply availability, but the meaning of "the gun" and the favorable approach to using it for violence that explains the more personal choices in carrying and using them. Toronto and Montreal are subject to the same federal gun control laws, and while household prevalence of firearms is higher in Quebec than Ontario, our data indicated ready access and use of guns in both cities among at-risk youth. The raises the question of why Canada's more restrictive gun laws, compared to the United States, have not been more effective in the prevention or reduction of gun violence among youth.

These analyses also remind us of the importance of early identification of youth experiencing mental health problems and displaying early evidence of aggression, such as symptoms of conduct disorder. This is particularly urgent for those youth no longer embedded in conventional institutions, like school, where early detection may be more likely to occur. Services for young offenders with substance use and/or mental health problems are not uniformly available in Canada (Erickson & Butters, 2005; Gretton & Clift, 2011). Detection and intervention needs to be a part of the youth justice system's various control agencies, both community-based and institutional, where at-risk youth are more likely to be under some form of supervision. The stronger child welfare orientation of Quebec, and its traditionally lower resort to custody dispositions for young offenders, may itself be a contributing factor to the somewhat lower rates overall of gun involvement and weapons harm to others exhibited by its at-risk youth, compared to those in Toronto. When these data were collected prior to the implementation of the YCJS, it was likely that the Quebec system was selecting only the more serious or violent offenders for custody dispositions; however, we do not have additional comparative data on actual charges to pursue this interpretation.

Policies and programs that identify and intervene early in the lives of youth at risk of becoming engaged in gun violence (not just once they have become involved) would likely have a greater impact on reducing the problem. Therefore, reaching at-risk youth before they become high-risk youth, and potentially involved in the youth criminal justice system, is another important avenue for intervention. As such the implementation of school-based services to detect and assist youth identified as displaying aggressive tendencies may provide additional opportunity for prevention. These programs should not necessarily adopt a "zero tolerance" philosophy as these tend to remove the youth from the school, thereby reducing the opportunity for intervention. Adopting a more inclusive framework, not necessarily expelling a student, may be a more effective approach.

Beyond Canada, the importance and recognition of weapons and particularly gun violence among youth as a global issue warrant further attention cross nationally to studies that explore the role of guns in the lives of young people (Small Arms Survey, 2010; Wilkinson & Fagan, 2001). Further research should include more ethnographic and qualitative research in particular of high-risk neighborhoods. Recruitment among youth should focus on the highest risk group, those already in custody, and where possible, those already arrested for gun-related violence. It is vital to understand the appearance of gun-positive attitudes among high-risk youth in urban centers and identify the specific reasons for the attractions of having and using guns in relation to violent events (Felson & Pare, 2010; Wilkinson & Fagan, 2001). Additionally, it is important to learn more about the sources of guns to youth, and how they view their acquisition (Webster et al., 2002). Knowledge about how and why more serious and potentially lethal weapons choices are being made by youth is a necessary

basis, underpinning the urgency to develop adequate preventive measures (Peskin et al., 2009; Thompson & Gartner, 2007). Early intervention to prevent later more serious violence and weapons involvement could target dropouts as well as those delinquents already detained in custodial institutions (Doob, 2004; McCluskey, McCluskey, & Bynum, 2006). The YCJA, with its emphasis on dealing with the most violent young offenders, may facilitate the provision of intensive programs in the institutions serving youth. And since this violence is not evenly distributed in a city but rather concentrated in certain areas, it is also vital to assess neighborhood factors and tailor programs appropriately (Ingolsby & Shaw, 2002; Thompson, 2009; Thompson & Gartner, 2007; Wikström & Loeber, 2000; Yonas et al., 2007). Further research in this area is of vital importance since Canada is at a very early stage of identifying and responding to the problem of youth, guns, and non-lethal violence.

Acknowledgments

Other Members of the Drugs, Alcohol & Violence International (DAVI) team include Edward Adlaf, Annemieke Benschop, Charles Freeman, Deborah Harrington, Lana Harrison (Principal Investigator [PI], Philadelphia component, and NIDA co-PI), Dirk Korf (PI, Amsterdam component), Marie-Marthe Cousineau, George Rots, Rosalyn Sutherland, and Fu Sun. The authors also thank Paul Goldstein for his useful advice as a consultant on DAVI, and Jennifer Lam and Jillian Boyce for their research assistance. The DAVI team gratefully acknowledges the support of our funding agency, the National Institute on Drug Abuse (grant #R01-DA11691-01A1) for the Toronto component of the study, and the Social Sciences and Humanities Research Council of Canada (grant #410-2002-1154) for the Montreal portion. Financial support of salary and infrastructure for scientists at CAMH is provided by the Ministry of Health and Long Term Care, Ontario.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Parts of this article also draw on the findings of an SSHRC Funded International Research Workshop on Guns held at York University in May 2008 (Sheptycki & Edwards, 2009).

Notes

1. In May 2011, a Conservative majority was elected to the Canadian Parliament. A key element of the party platform is a long-standing commitment to eliminating registration of nonrestricted long guns (rifles and shotguns). Most other categories of firearms will likely remain heavily regulated, as they are now.
2. One study conducted in Quebec questioned 21 adult inmates about obtaining firearms (Morselli, 2002).
3. Although it is difficult to say with precision because of the way that official census indicators relating race and ethnicity are compiled in Canada, it is reasonably clear that the preponderance of the Black minority in Toronto emanates from the West Indies (particularly Jamaica and Trinidad and Tobago) and the United States, whereas the preponderance of the Black minority in Montreal emanates from Haiti (and from Francophone countries in Africa). Then too, these minorities experience inculcation into the social order more generally in different ways, not least because in Toronto (often said to be the most multicultural city in the world) the White European majority is officially reckoned to be only 53% of the total and just under half of the city's population are born outside of Canada. Only 16.5% of the population of Greater Montreal are members of a visible minorities (i.e., not ethnically European), of which only 4.7% are Black.

References

- Adlaf, E., Korf, D., Harrison, L., & Erickson, P.G. (2006) Cross national differences in drugs and violence among adolescents. *Journal of Drug Issues*, 36,597-617.

- Ash, P., Kellerman, A. L., Fuqua-Whitley, D., & Johnson, A. (1996). Gun acquisition and use by juvenile offenders. *JAMA*, *275*, 1754-1758.
- Bala, N. (1997). *Young offenders law*. Concord, Ontario: Irwin Law.
- Bala, N., Carrington, P. J., & Roberts, J. V. (2009). Evaluating the youth criminal justice act after five years: A qualified success. *Canadian Journal of Criminology & Criminal Justice*, *51*, 131-168.
- Benschop, A., Harrison, L., Korf, D. J., & Erickson, P. G. (2006). Different concepts of ethnicity in a cross-Atlantic study of violence and drug use among deviant youth. *European Journal of Criminal Policy and Research*, *12*, 61-78.
- Blumstein, A. (1995). Youth violence, guns and the illicit drug industry. *Journal of Criminal Law and Criminology*, *86*, 10-36.
- Blumstein, A. (2002). Youth, guns and violent crime. *The Future of Children*, *12*, 39-53.
- Bottomley, S. A. (2004). Locked and loaded: Gun control policy in Canada. In R. M Campbell, L. A. Pal & M. Howlett (Eds.), *The real worlds of Canadian politics: Cases in process and policy* (4th ed., pp.19-80). Peterborough, ON: Broadview Press.
- Boyd, N. (2003). Gun control: Placing costs in context. *Canadian Journal of Criminology & Criminal Justice*, *45*, 473-478.
- Bridges, P. S. (2004). Gun control law (Bill C-17), suicide and homicide in Canada. *Psychological Reports*, *94*, 819-826.
- Brochu, S., Cousineau, M. M., Provost, C., Erickson, P. G., & Fu, S. (2011). Quand drogues et violence se rencontrent chez les jeunes: Un cocktail explosif? [When drugs and violence occur among young people: Does the cocktail explode?]. *Drogues, Sante, Societe*, *9*, 149-178.
- Bucerius, S. (2007). 'What else should I do?' Cultural influences on the drug trade of migrants in Germany. *Journal of Drug Issues*, *37*, 673-697.
- Butters, J., Harrison, L., Adlaf, E., & Erickson, P. G. (2009). Weapons related violence among students in Philadelphia and Toronto: The gang connection. *Journal of Gang Research*, *16*, 15-34.
- Cabrera, N. J. (1995). Violence by and against children in Canada. In J. I Ross (Ed.), *Violence in Canada: Sociopolitical perspectives* (pp. 126-153). Don Mills: Oxford University Press.
- Callahan, C. M, Rivara, F. P., & Farrow, J. A. (1993). Youth in detention and handguns. *Journal of Adolescent Health*, *14*, 350-355.
- Centre for Addiction and Mental Health. (2006). *Centre for Addiction and Mental Health Populations Studies eBulletin*. One in 50 Ontario high school students reports carrying a gun.7 (Jan/Feb).
- Canadian Centre for Justice Statistics. (2001). *Homicide in Canada. Juristat. Cat. # 85-002-XIE, 21(9)*. Ottawa, ON: Statistics Canada.
- Canadian Centre for Justice Statistics. (2005). *Methods used to commit homicide*. Homicide Survey. Policing Services Program. Ottawa, ON: Statistics Canada.
- Canadian Paediatric Society. (2005). Youth and firearms in Canada. *Paediatric Child Health*, *10*, 473-477.
- Carrington, P. (1995). Has violent youth crime increased? Comment on Corrado and Markwart. *Canadian Journal of Criminology*, *37*, 61-73.
- Centers for Disease Control and Prevention. (1997). Rates of homicide, suicide, and firearm-related death among children—26 industrialized countries. *MMWR*, *46*, 101-105.
- Centers for Disease Control and Prevention. (2007). Youth risk behavioural surveillance—United States. *Morbidity and mortality weekly report*, *57*, SS-S4.
- Cerdá, M., Messner, S. F., Tracy, M., Vlahov, D., Goldmann, E., Tardiff, K. J., & Galea, S. (2010). Investigating the effect of social changes on age-specific gun-related homicide rates in New York City during the 1990's. *American Journal of Public Health*, *100*, 1107-1115.
- Coalition for Gun Control. (2001). Kids and guns. Toronto, OW, Archives. <http://www.guncontrol.ca>
- Cook, P. J., & Ludwig, J. (2004) Does gun prevalence affect teen gun carrying after all? *Criminology*, *42*, 27-54.
- Cook, P. J., Cukier, W., & Krause, K. (2009). The illicit firearms trade in North America. *Criminology and Criminal Justice*, *9*, 1-22.

- Corrado, R., & Markwart, A. (1995). The need to reform the YOA in response to violent young offenders: Confusion, reality or myth? *Canadian Journal of Criminology*, 36, 343-378.
- Cukier, W. (1998). *Firearms regulation: Canada in the international context. Chronic diseases in Canada, April 1998*. Ottawa, ON: Health Canada.
- Cukier, W., & Sidel, V. (2005). *The global gun epidemic: From Saturday night specials to AK-47 s*. Westport, CT: Praeger International.
- Dauvergne, M., & De Socio, L. (2008). Firearms and violent crime. *Canadian Centre for Justice Statistics*, 28, 1-14.
- Dijkstra, J. K., Lindenberg, S., Veenstra, R., Steglich, C., Isaacs, J., Card, N. S., & Hodges, E. V. E. (2010). Influence and selection processes in weapon carrying during adolescence: The roles of status, aggression and vulnerability. *Criminology*, 48, 187-220.
- Doob, A. (2004). Preventing violent offending in youth. In B. Kidd & J. Phillips (Eds.), *Research on community safety* (pp. 81-95). Toronto, ON: Centre of Criminology.
- Doob, A., & Sprott, J. (1998). Is the 'quality' of youth violence becoming more serious? *Canadian Journal of Criminology*, 40, 185-194.
- Dunkel, F., & Drenkhahn, K. (Eds.). (2003). *Youth violence: New patterns and local responses—Experiences in East and West*. Greifswald, Germany: Forum Verlag Godesberg.
- Dziewanski, D. (2008). Young guns: Guns, youth and the mediation of violence. *Briarpatch*, 37, 23-26.
- Edwards, A., & Sheptycki, J. (2009). Third wave criminology: guns, crime and social order. *Criminology and Criminal Justice*, 9, 379-397.
- Erickson, P. G. (1996). Youthful involvement in illicit street drug markets: Avenues for prosperity or roads to crime? In B. Galaway & J. Hudson (Eds.), *Youth in transition: Perspectives on research and policy* (pp 319-327). Toronto, ON: Thompson Publishing.
- Erickson, P. G., & Butters, J. E. (2004). Three groups of Toronto youth: Their experiences of guns, other weapons and violence. In B. Kidd & J. Phillips (Eds.), *Research on community safety* (pp.42-58). Toronto, ON: Centre of Criminology.
- Erickson, P. G., & Butters, J. E. (2005). How does the Canadian juvenile justice system respond to detained youth with substance use associated problems? Gaps, challenges and emerging issues. *Substance Use & Misuse*, 40, 953-973.
- Erickson, P. G., & Butters, J. E. (2006). *Final report: Youth, weapons and violence in Toronto and Montreal*. Ottawa, ON: Public Safety and Emergency Preparedness, Canada.
- Erickson, P. G., Butters, J. E., Cousineau, M. M., Harrison, L., & Korf, D. (2006a). Girls and weapons: An international study of the perpetration of violence. *Journal of Urban Health*, 83,788-801.
- Erickson, P. G., Butters, J. E., Korf, D., Harrison, L., & Cousineau, M. M. (2006b) Weapons and violence among male delinquents: An international comparative study. *International Annals of Criminology*, 44, 125-151.
- Ezeonu, I. (2010) Gun violence in Toronto: Perspectives from the police. *The Howard Journal*, 49, 147-165.
- Fagan, J., & Wilkinson, D. L. (1998). Guns, youth violence, and social identity in inner cities. *Crime and Justice*, 24, 105-188.
- Felson, R. B., & Pare, P. P. (2010). Gun cultures or honor cultures? Explaining regional and race differences in weapon carrying. *Social Forces*, 88, 1357-1378.
- Fitzgerald, R. (2003). *An examination of sex differences in delinquency. Crime and justice research paper series. Cat. # 85-561-MIE*. Ottawa, ON: Statistics Canada.
- Freed, L. H., Webster, D., Longwell, J., Carrese, J., & Wilson, M. H. (2001). Factors preventing gun acquisition and carrying among incarcerated adolescent males. *Archives of Pediatric Adolescent Medicine*, 155, 335-341.
- Gabor, T., Roberts, J., Stein, K., & Di Giulio, L. (2001). Unintentional firearm deaths: Can they be reduced by lowering gun ownership levels? *Canadian Journal of Public Health*, 92, 396-398.

- Gannon, M., & Mihorean, K. (2005). *Criminal victimization in Canada, 2004. Cat. # 85-002-XPE, 25(7)*. Ottawa, ON: Statistics Canada.
- Gartner, R. (1995). Homicide in Canada. In Jeffrey I. Ross (Ed.), *Violence in Canada: Sociopolitical perspectives* (pp. 186-222). Don Mills: Oxford University Press.
- Gartner, R., & Thompson, S. (2004). Trends in homicide in Toronto. In B. Kidd & J. Phillips (Eds.), *Research on community safety* (pp.28-41). Toronto, ON: Centre of Criminology.
- Goldstein, P. (1985). The drugs/violence nexus: A tripartite conceptual framework. *Journal of Drug Issues, 21*, 345-367.
- Gretton, H. M., & Clift, R. J. (2011). The mental health needs of incarcerated youth in British Columbia, Canada. *International Journal of Law and Psychiatry, 34*, 109-115.
- Hagedorn, J. (1994). Neighborhoods, markets and gang drug organization. *Journal of Research in Crime and Delinquency, 31*, 264-294.
- Harrison, L., Erickson, P. G., Adlaf, E., & Freeman, C. (2001). The drugs-violence nexus among American and Canadian youth. *Substance Use & Misuse, 36*, 2065-2086.
- Harrison, L., Erickson, P. G., Korf, D. J., Brochu, S., & Benschop, A. (2007). How much for a dime bag: An exploration of youth drug markets. *Drug and Alcohol Dependence, 90S*, S27-S39.
- Harrison, L., Martin, S., Enev, T., & Harrington, D. (2007). *Comparing drug testing and self-report of drug use among youths and young adults in the general population*. Rockville, MD: DHHS Publication No. SMA 07-4249.
- Hemmati, T. (2006). The nature of Canadian Urban Gangs and their use of firearms: A review of the literature and police survey. Ottawa, ON: Department of Justice Canada.
- Hogeveen, B. (2001). 'Winning deviant youth over by friendly helpfulness': Transformations in the legal governance of deviant children in Canada, 1857-1908. In R. C. Smandych (Ed.), *Youth justice* (pp. 43-64). Toronto, ON: Harcourt.
- Hogeveen, B., & Smandych, R. C. (2001). Origins of the newly proposed Canadian youth criminal justice act: Political discourse and the perceived crisis in youth crime in the 1990's. In R. C. Smandych (Ed.), *Youth justice* (pp. 144-168). Toronto, ON: Harcourt.
- Huff, C. R. (2002). (Ed.). *Gangs in America* (3rd ed.). Thousand Oaks: Sage.
- Ingolsby, E. M., & Shaw, D. S. (2002). Neighborhood contextual factors and early-starting antisocial pathways. *Clinical, Child and Family Psychological Review, 5*, 21-55.
- Kleck, G. (2004). Measures of gun ownership levels for macro-level crime and violence research. *Journal of Research in Crime and Delinquency, 41*, 3-36.
- Klein, M. W., & Maxson, C. L. (1989). Street gang violence. In N. Weiner & M. Wolfgang (Eds.), *Violent crimes, violent criminals*. Thousand Oaks, CA: Sage.
- Klein, M. W., & Maxson, C. L. (2006). *Street gang patterns and policies*. Oxford, UK: Oxford University Press.
- Klein, M. W., Weerman, F. M., & Thornberry, T. P. (2006). Street gang violence in Europe. *European Journal of Criminology, 3*, 413-437.
- Koo, D. J., Chitwood, D. D., & Sanchez, J. (2008). Violent victimization and the routine activities/lifestyle of active drug users. *Journal of Drug Issues, 38*, 1105-1138.
- Korf, D., Brochu, S., Benschop, A., Harrison, L., & Erickson, P.G. (2008). Teen drug sellers—A cross national study of segregated drug markets and related violence. *Contemporary Drug Problems, 35*, 153-176.
- Kreager, D. (2007). When it's good to be 'bad': Violence and adolescent peer acceptance. *Criminology, 45*, 893-923.
- Leonard, K. (1994). Firearm deaths in Canadian adolescents and young adults. *Canadian Journal of Public Health, 85*, 128-131.
- Li, G. (2007). Homicide in Canada, 2006. *Canadian Centre for Justice Statistics, 27*, 1-19.
- Lizotte, A. J., Krohn, M. D., Howell, J. C., Tobin, K., & Howard, G. J. (2000). Factors influencing gun carrying among young urban males over the adolescent life course. *Criminology, 38*, 811-834.

- Lizotte, A. J., & Sheppard, D. (2001). Gun use by male juveniles: Research and prevention. *Office of Juvenile Justice and Delinquency Program, 2001*, 1-12.
- Loeber, R., & Hay D. (1997). 'Key issues in the development of aggression and violence from childhood to early adulthood.' *Annual Review of Psychology, 48*, 371-410.
- Lorinc, J. (2008). Stray bullets. *Toronto Life Magazine, 42*, 46-55.
- MacDonald, R., & Shildrick.T. (2007). Street corner society: Leisure careers, youth subculture and social exclusion. *Leisure Studies, 26*, 339-355.
- McCluskey, C. P., McCluskey, J. D., & Bynum, T. S. (2006). Early onset offending and later violence and gun outcomes in a contemporary youth cohort. *Journal of Criminal Justice, 34*, 531-541.
- Melde, C., & Esbensen, F. A. (2011). Gang membership as a turning point in the life-course. *Criminology, 49*, 513-552.
- Molnar, B. E., Miller, M. J., Azrael, D., & Buka, S. L. (2004). Neighborhood predictors of concealed firearm carrying among children and adolescents. *Archives of Pediatric and Adolescent Medicine, 158*, 657-664.
- Morselli, C. (2002). Relational dynamics of illegal firearms transactions. *Canadian Journal of Criminology and Criminal Justice, 44*, 255-276.
- Paetsch, J. J., & Bertrand, L. D. (1999). Victimization and delinquency among Canadian youth. *Adolescence, 34*, 351-367.
- Paglia, A., & Adlaf, E. (2003). Secular trends in self-reported violent activity among Ontario students, 1983-2001. *Canadian Journal of Public Health, 94*, 212-217.
- Pan, S. Y., Desmeules, M., Morrison, H., Semenciw, R., Ugnat, A. M., Thompson, W., & Mao, Y. (2007). Adolescent injury deaths and hospitalizations in Canada: Magnitude and temporal trends, 1979-2003. *Journal of Adolescent Health, 41*, 84-92.
- Peskin, M. F., Tortolero, S. R., & Addy, R. S. (2009). Weapon carrying prevention: Should adults spend more time with youth? *Youth Violence and Juvenile Justice, 7*, 32-45.
- Pickett, W., Craig, W., Harel, Y., Cunningham, J., Simpson, K., Molcho, M., . . . Currie, C. E; HBSC Violence and Injuries Writing Group. (2005). Cross national study of fighting and weapon carrying as determinants of adolescent injury. *Pediatrics, 116*, 855-863.
- Pritchard, C., & Evans, B. T. (2001). An international comparison of 'youth' (15-24) and 'adult' (25-34) homicide, 1974-94: Highlighting the US anomaly. *Critical Public Health, 11*, 83-93.
- Schissel, B. (1993). *Social dimensions of canadian youth justice*. Toronto, ON: Oxford University Press.
- Schissel, B. (2001). Youth crime, moral panics and the news: The conspiracy against the marginalized in Canada. In R. C. Smandych (Ed.), *Youth justice* (pp.84-103). Toronto, ON; Harcourt.
- Sheley, J. F., & Wright, J. D. (1995). *In the line of fire: Youth, guns, and violence in Urban America*. New York, NY: Aldine de Gruyer.
- Sheptycki, J. (2009). Guns, crime and social order: A Canadian perspective. *Criminology & Criminal Justice, 9*, 307-336.
- Sheptycki, J., & Edwards, A. (2009). Preface: Guns, crime and social order. *Criminology & Criminal Justice, 9*, 259-264.
- Small Arms Survey. (2010). *Yearbook 2010: Gangs, groups and guns*. Geneva, Switzerland: Graduate Institute of International and Development Studies.
- Smith, M. D. (1996). Sources of firearm acquisition among a sample of inner-city youths. *Journal of Criminal Justice, 24*, 361-367.
- Sorenson, S. B., & Vittes, K. A. (2004). Adolescents and firearms: A California statewide survey. *American Journal of Public Health, 94*, 852-858.
- Sprott, J. B. (1996). Understanding public views of youth crime and the youth justice system. *Canadian Journal of Criminology, 38*, 71-80.
- Sprott, J. B., & Doob, A. N. (2008). Youth crime rates and the youth justice system. *Canadian Journal of Criminology and Criminal Justice, 50*, 621-640.

- Tanner, J. (2010). *Teenage troubles: Youth and deviance in Canada* (3rd ed.). Ontario, Canada: Oxford University Press.
- Tanner, J., & Wortley, S. (2002). *The Toronto youth crime and victimization survey: Overview Report*. Toronto: Centre of Criminology, University of Toronto.
- Taylor-Butts, A., & Bressan, A. (2008). Youth crime in Canada, 2006. *Canadian Centre for Justice Statistics*, 28, 1-16.
- Thompson, S. (2009). *The social ecology of lethal violence in Toronto, 1988-2003*. Unpublished doctoral dissertation, Criminology, University of Toronto, Canada.
- Thompson, S., & Gartner, R. (2007). *Urban crime: The case of Toronto, Canada. Enhancing Urban safety and security: Global report on human settlements*. UN Habitat: Earthscan.
- Topalli, V., Wright R., & Fornango R. (2002). Drug dealers, robbery, retaliation: vulnerability, deterrence and the contagion of violence. *The British Journal of Criminology*, 42, 337-351.
- Toronto Police Service. (2011). *Shootings and homicides, year-to-date. TPS crime statistics*. http://www.toronto-police.on.ca/statistics/ytd_stats.php
- Trussler, T. (2010). Explaining the changing nature of homicide clearance in Canada. *International Criminal Justice Review*, 20, 366-383.
- Ulzen, T., & Hamilton, H. (1998). The nature and characteristics of psychiatric comorbidity in incarcerated adolescents. *Canadian Journal of Psychiatry*, 41, 57-63.
- Webster, D. W., Freed, L. H., Frattaroli, S., & Wilson, M. H. (2002). How delinquent youth acquire guns: Initial versus most recent gun acquisitions. *Journal of Urban Health*, 79, 60-69.
- Webster, D. W., Gainer, P., & Champion, H. (1993). Weapons carrying among inner-city junior high school students: Defensive behavior vs. aggressive delinquency. *American Journal of Public Health*, 83, 1604-1608.
- Wells, W., & Horney, J. (2002). Weapon effects and individual intent to do harm: influence on the escalation of violence. *Criminology*, 40, 265-296.
- White, R., & Mason, R. (2006). Youth gangs and youth violence: Charting the key dimensions. *The Australian and New Zealand Journal of Criminology*, 39, 54-70.
- Wikström, P. O., & Loeber, R. (2000). Do disadvantaged neighborhoods cause well-adjusted children to become adolescent delinquents? A study of male juvenile serious offending, individual risk and protective factors, and neighborhood context. *Criminology*, 38, 1109-1142.
- Wilkinson, D. L. (2001). Violent events and social identity: Specifying the relationship between respect and masculinity in inner city youth violence. In D. A Kinney (Ed.), *Sociological studies of children and youth*. Stanford, CT: JAI Press.
- Wilkinson, D. L., & Fagan, J. (2001). What we know about gun use among adolescents. *Clinical Child and Family Psychology Review*, 4, 109-132.
- Wintemute, G. J. (2002). Where the guns come from: The gun industry and gun crime. *The Future of Children*, 12, 54-71.
- Wortley, S. (2004). Hidden intersections: Research on race, crime and criminal justice in Canada. *Canadian Ethnic Studies Journal*, 35, 99-117.
- Wortley, S. (2010). *Identifying street gangs: Definitional dilemmas and their policy implications*. Ottawa, ON: Justice Canada.
- Wortley, S., & Tanner, J. (2004). Social groups or criminal organizations: The extent and nature of youth gang activity in Toronto. In B. Kidd & J. Phillips (Eds.), *Research on community safety* (pp.59-80). Toronto, ON: Centre of Criminology.
- Wortley, S., & Tanner, J. (2006). Immigration, social disadvantage and urban youth gangs. Results of a Toronto-area study. *Canadian Journal of Urban Research*, 15, 1-20.
- Wortley, S., & Tanner, J. (2008). Money, respect and defiance: Explaining ethnic differences in gang activity among Canadian youth. In F. van Gemert, D. Peterson, & I. Lien (Eds.), *Youth gangs, migration and ethnicity* (pp.181-210). London, England: Willan Publishing.

Yonas, M. A., O'Campo, P., Burke, J., & Gielen, A. (2007). Neighborhood-level factors and youth violence: Giving voice to the perceptions of prominent neighbourhood individuals. *Health Education and Behavior*, 34, 669-685.

Bios

Serge Brochu holds a PhD in psychology from the Université de Montréal. He began his professional career as a psychologist at the Correctional Service of Canada and subsequently worked in an addiction rehabilitation centre. In 1986, he joined the faculty of the School of Criminology at the Université de Montréal where he has been a full professor since 1996. His work in criminology has had a broad impact in the fields of basic research (conceptual model of the relationships between drugs and crime), applied research (deviant pathways), operational research (family violence prevention initiatives), and evaluative research (impact of treatment on inmate addicts). He has published over 100 scientific articles, 50 book chapters, and 11 books and has presented his research at more than 150 conferences. His work has been recognized by the Royal Society of Canada.

Jennifer Butters, PhD, is an affiliate scientist with the Centre for Addiction and Mental Health. Her primary research interests focus on the intersection of drug use, violence, and mental health among youth. She is also involved in research that examines automobile use and injury, with a particular emphasis on mental health, substance use, and aggression in the context of driving. She has served as a coinvestigator on several research projects and has spoken at many national and international conferences.

Patricia Erickson, PhD, has been a senior scientist with the Centre for Addiction and Mental Health and before that the Addiction Research Foundation, for 35 years. She is also an adjunct professor of sociology and criminology, and a former director of the Graduate Collaborative Program in Addiction Studies (CoPAS), at the University of Toronto, where she teaches and supervises graduate students. Prior and ongoing research projects have examined the links between drug use and violence in groups of students, at-risk youth, treatment samples, and marginalized women. Drug policy and harm reduction continues to be a focus in these projects.

James Sheptycki, PhD, is a professor of criminology in the Department of Social Science at York University, Toronto, Canada. He has published widely on criminological topics including organized crime, money laundering, transnational policing, and comparative criminology. In 2007, he received Small Workshop Grant from the Social Sciences and Humanities Research Council of Canada (SSHRC No. 646-2007-0083) to hold an international workshop on the topic of Guns, Crime and Social Order. In 2009, he coedited a special issue of the journal *Criminology and Criminal Justice* with Adam Edwards on the theme "Guns, Crime, and Social Order" (vol. 9 No. 3). In 2011, he published a book titled *Transnational Crime and Policing* (Aldershot: Ashgate) and a coauthored book (with Ben Bowling) titled *Global Policing* will be published by Sage in 2012.