

# The Crime Drop and the General Social Survey

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La plupart des indicateurs, dont les Programmes de déclaration uniforme de la criminalité et l'Enquête internationale sur les victimes de la criminalité, suggèrent que l'on peut observer une spectaculaire « baisse de la criminalité » au Canada, semblable à celle qui s'est produite dans les pays avancés. Pourtant, l'Enquête sociale générale (ESG), qui devrait être l'instrument de mesure le plus précis et complet en cette matière, suggère plutôt que la criminalité a été stable ou a augmenté ; ce sont ces conclusions que nous analysons dans cet article. Nous avançons ainsi l'hypothèse que les tendances décrites par l'ESG sont trompeuses, mais qu'il faudrait de nouvelles études pour expliquer ce phénomène. Nous discutons des implications que peuvent avoir ces résultats en matière de politiques publiques, et nous suggérons des pistes de recherches pour l'avenir.

**Mots clés :** Enquête sociale générale, Programmes de déclaration uniforme de la criminalité, Enquête internationale sur les victimes de la criminalité, victimisation criminelle au Canada, baisse de la criminalité

Most indicators including Uniform Crime Reports and the International Crime Victims Survey suggest that Canada has experienced a dramatic “crime drop” similar to other advanced countries. Yet Canada’s General Social Survey (GSS), which ought to be the most methodologically sophisticated measure, suggests crime in this country has been stable or increasing. This study reviews the evidence. It concludes with the hypothesis that the GSS trends are misleading but that further research is needed to identify an explanation for this anomaly. Potential research and policy implications are discussed.

**Keywords:** General Social Survey, Uniform Crime Reports, International Crime Victims Survey, criminal victimization in Canada, crime decline, crime drop

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## INTRODUCTION

The major decline in crime in many industrialized nations over the past two decades, known as the “crime drop,” is well documented. Much research focuses on the United States where it was first heralded (Blumstein and Rosenfeld 1998; LaFree 1999; Marowitz 2000; Karmen 2000; Blumstein and

Wallman 2006; Donohue and Levitt 2001; Levitt 2004; Langan and Durose 2004; Finkelhor and Jones 2006; Skogan 2007; Zimring 2007; Lauritsen et al. 2008; National Research Council 2008; and Ellen and O’Regan 2010). With some variation in the timing and trajectory, similar declines have been experienced across most of Europe and elsewhere including Australia, New Zealand, Japan, and others

(Tonry 2005; Tonry and Farrington 2005; Walker, Kershaw, and Nicholas 2006; van Dijk 2006, 2008; van Dijk et al. 2007; van Dijk, van Kesteren, and Smit 2008; van Dijk, Tseloni, and Farrell 2012; Rosenfeld 2009; Rosenfeld and Messner 2009; Flatley et al. 2010; Tseloni et al. 2010; Tilley, Tseloni, and Farrell 2011; Farrell, Tseloni, and Tilley 2011; Farrell et al. 2011; Chaplin, Flatley, and Smith 2011).

The crime drop in Canada has been the subject of various studies (Kennedy and Veitch 1997; Boyd 1999; Tremblay 2000; Dawson 2001; Ouimet 1999, 2002; Sprott and Cesaroni 2002; Pottie Bunge, Johnson, and Baldé 2005; Silver 2006; Zimring 2006, 2007; Mishra and Lalumiere 2009; Brennan and Dauvergne 2011). These studies tend to use police data from Canada's Uniform Crime Reports (UCR). However, despite an emerging consensus among independent academics, the existence of a crime drop in Canada is disputed.

### **The Dispute and the Public Policy Context**

One government minister recently claimed that "crime isn't going down" (CBC News 2010). That statement related to government efforts to justify the omnibus crime control bill that passed as Bill C-10 on 12 March 2012 (CBC News 2012). The bill includes measures to introduce harsher sentencing and the "largest expansion of prison building since the 1930s," costing billions of dollars (Blaze Carson 2011; CBC News 2010; Bronskill 2011). Conceivably, if crime in Canada were understood to have been falling, there might be implications for this public policy area.

The government claim that crime has not declined is undergirded by evidence from the General Social Survey (GSS) run by Statistics Canada. The connection is evident in a parliamentary Hillnote on the GSS that appeared while the omnibus crime control bill was under discussion, reporting that "victimization rates remained stable from 2004" (Casavant 2010). Shortly afterwards, two established academics publicly contradicted the GSS,

stating that crime was going down (Greenspan and Doob 2011). Perhaps tellingly, it had long been apparent that even within Statistics Canada there was disagreement on the issue. In particular, the Statistics Canada publication by Pottie Bunge, Johnson, and Baldé (2005) sought to identify causes of the crime drop, thereby contradicting the GSS, and most UCR-based publications implicitly reported the crime drop as fact.

Hence, while there is significant direct and indirect evidence suggesting Canada is experiencing a crime drop similar to that elsewhere, the exception to this pattern is the GSS, which finds it is not. Yet the GSS is based on the methodologically preferable victim survey approach and so ought to be the most reliable indicator. The present study addresses this paradox by reviewing the evidence. Potentially quite a lot is at stake including major areas of public policy as well as the reputation of one or more of the nation's key crime indicators.

Here is how this study is structured. The second section focuses on the GSS, its origins, and methodology, and presents the GSS-based crime trends. The third section is the engine room of the study and details the evidence for a Canadian crime drop. Discussion and then conclusions follow.

### THE GENERAL SOCIAL SURVEY

The General Social Survey has two principal objectives: first, to gather data on social trends in order to monitor changes in Canadian society over time, and second, to provide information on specific issues of current or emerging interest.

Ivan P. Fellagi, Chief Statistician of Canada,  
preface to Sacco and Johnson's *Patterns of  
Criminal Victimization in Canada* (1990)

The General Social Survey is Canada's flagship social survey. It provides benchmarks in areas including health, use of time by citizens,

victimization, education, work and retirement, family, social support and aging, access to and use of information technology, and social engagement (Statistics Canada 2009). It has been conducted annually since 1985 using a stratified random sample to generate a nationally representative telephone survey of non-institutionalized adults aged 15 and over. Statistics Canada and independent research have based hundreds of analytic reports on the survey, and these have made major contributions to public policy debates.

The victimization survey component of the GSS has been completed five times to date, in 1988, 1993, 1999, 2004, and 2009. The main findings are related in a series of reports (Statistics Canada 1988, 1990; Sacco and Johnson 1990; Gartner and Doob 1994; Mihorean et al. 2001; Gannon and Mihorean 2005; Perreault and Brennan 2010). Each dataset is in the public domain accompanied by a technical report and data user's guide (Statistics Canada 1988, 2000, 2005, 2011).

The GSS mirrors much of the precedent and good practice of other large-scale crime victim surveys including those of the United States (the National Crime Victimization Survey, or NCVS), and England and Wales (the British Crime Survey, or BCS). Among such surveys, the International Crime Victims Survey (ICVS) is the only cross-national methodologically standardized general victim survey. The ICVS has been conducted five times, covering victimization in 1989, 1992, 1996, 2000, and 2004, with Canada participating each time (van Dijk, Mayhew, and Killias 1990; van Dijk and Mayhew 1992; Mayhew and van Dijk 1997; van Dijk, van Kesteren, and Smit 2008; van Kesteren, Mayhew, and Nieuwbeerta 2000).<sup>1</sup> The ICVS uses a different questionnaire and sampling frame from the GSS. Hence the two surveys are distinct entities, but both can be considered national victim surveys, though the much smaller sample sizes, and hence larger error factors, of the ICVS mean it would normally be considered second best. Despite this, Statistics Canada has published ICVS analyses and

findings relating to Canada (Besserer 2000; Sauvé and Hung 2008).

The blueprint for national victim surveys is the National Crime Survey (NCS) of the United States, which began its estimates of US annual crime rates in 1973. A revised design was introduced in 1993, and it was renamed the NCVS (Skogan 1990; Biderman and Lynch 1991; Perkins et al. 1996; Groves and Cork 2008).

The early years of victim survey work produced a vastly informative array of studies examining methodological strengths and weaknesses. These studies included edited collections by Lehnen and Skogan (1981), reviews by Skogan (1981) and Gottfredson (1986), and the classic books by Hindelang, Gottfredson, and Garafolo (1978) and Sparks, Genn, and Dodd (1977), and an emphasis on methodological transparency in the early publications of the British Crime Survey (e.g., Hough and Mayhew 1983, 1985). Victim surveys have known limitations such as the underrepresentation of young people and the absence of institutionalized persons from the sample, and the possibility of refusal and recall problems with respondents. Such sources of bias are well documented and, to the extent that they remain constant over time, should not detract from trend analysis based on repeated survey cycles.

Suffice to say that the Canadian GSS is in good methodological company. Its international siblings provide an informal buttress to general critics. Many of its findings with respect to variation in risk correspond broadly with those of surveys elsewhere. By now the GSS is a mature and established component of Canada's national socio-economic research repertoire, and its victimization component is a key barometer of the nation's well-being.

### **The 1997 Review Comparing the UCR and GSS**

When the second GSS victimization survey was completed in 1993, its findings differed significantly from the police UCR trends. This discrepancy became

a matter of public debate in 1994 and led to a review by Statistics Canada. The resulting report began by suggesting the media discussion was “highlighting the level of public confusion over crime statistics. Contributing to this state of confusion was the simultaneous release of two different sets of crime statistics: Uniform Crime Reporting Survey (UCR) data and General Social Survey (GSS) data ... It was reported that, while victimization rates (based on the GSS) had not changed substantially over a five-year period, police-report (UCR-based) crime rates had increased. This apparent discrepancy led the media to question which, if either, set of crime statistics was correct, and to challenge the credibility and motives behind each survey” (Ogrodnik and Trainor 1997, 1).

Note in passing that the UCR trend at that time was upward whereas it has subsequently been downwards, while the GSS trend was stable. The 1997 study adjusted both datasets for comparison on a level playing field. Specifically:

- Crimes mentioned by GSS respondents that were not reported to the police were excluded from GSS counts.
- UCR data for the Yukon and Northwest Territories were excluded from the UCR counts.
- Police reports of “unfounded” incidents were included in the UCR counts
- UCR-based rates of offences reported to police were converted to conform to GSS rates for both persons and households. (Ogrodnik and Trainor 1997, 7)

The study’s main empirical findings are shown in [Table 1](#), though in the original report this information was dispersed across an appendix. We have converted the data to show the percentage of UCR crime found by the GSS. So, for example, the second numeric row shows that the GSS revealed 300 percent or three times the UCR robberies in 1988, and

TABLE 1

Summary of [Ogrodnik and Trainor \(1997\)](#) Findings for Crime Rate Comparisons after Adjusting GSS and UCR Data

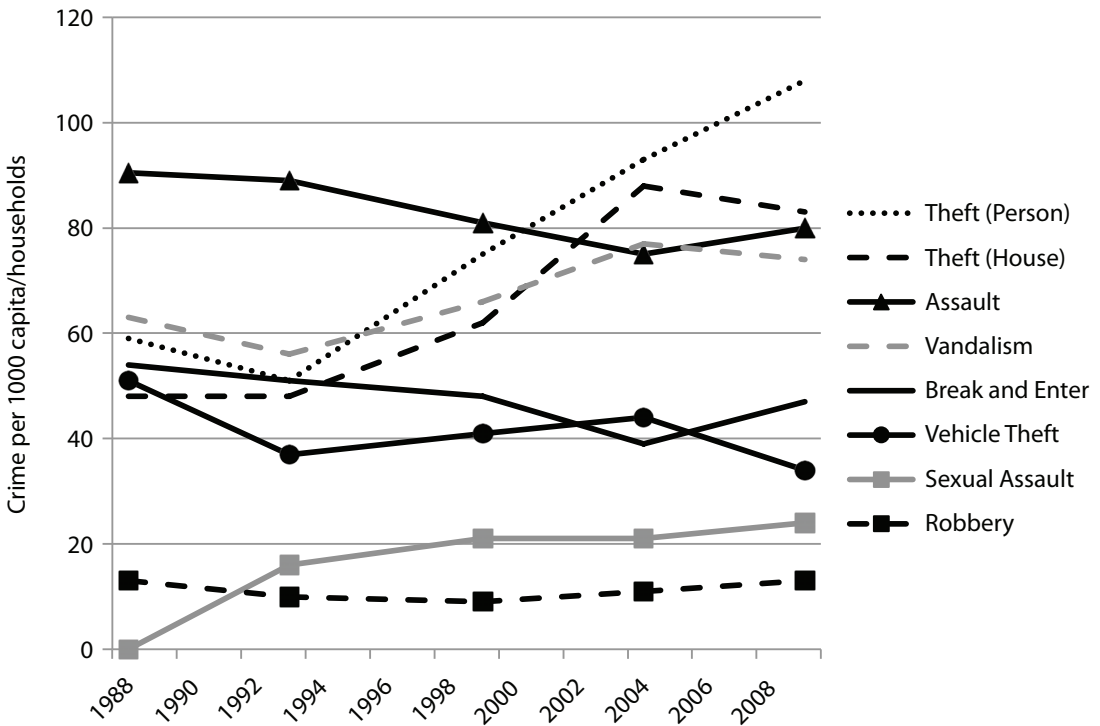
| <i>Crime Type</i>   | <i>GSS Relative to UCR<br/>1988</i> | <i>GSS Relative to UCR<br/>1993</i> |
|---------------------|-------------------------------------|-------------------------------------|
| Sexual assault      | n/a                                 | 180%                                |
| Robbery             | 300%                                | 270%                                |
| Assault             | 230%                                | 180%                                |
| Break and enter     | 130%                                | 120%                                |
| Motor vehicle theft | 67%                                 | 71%                                 |

270 percent in 1993. The GSS estimates are always higher except for vehicle theft. The discrepancies retain their rankings over time but are smaller in magnitude, for each crime type. The report’s concluding paragraph emphasizes the value of having both sources of crime data: “Joint publication of victimization and police-reported crime data with a clear statement of their appropriate uses contributes towards informing the public about the full nature and extent of crime. Data from GSS victimization surveys can be used to contextualize information from the UCR. Alternatively, the two data sources can be used to test alternative hypotheses related to criminal activity. Neither administrative statistics nor victimization surveys alone can provide comprehensive information about crime. Each is useful for addressing specific issues” (Ogrodnik and Trainor 1997, 8). This conclusion warrants scrutiny. In essence, we suggest, it implies that the study was unable to reconcile the two sources.

### **GSS Crime Trends**

The GSS asks respondents about victimization experiences in relation to eight crime types. [Figure 1](#) shows trends in crime incidence (crimes per capita for personal crime, or per household for household crimes) for those crimes across all GSS cycles. To ensure independence from the present authors, the

FIGURE 1  
General Social Survey: Canada Crime Incidence Rates, 1988–2009



GSS rates were taken from published reports of Statistics Canada. Different publications carried rates for different years, but they overlapped and largely corresponded, so a data set across the five cycles could be constructed. We made some adjustments to the personal crime rates to reflect definitional changes and the inclusion of a module on spousal assault in 1999 (see appendix A). Our adjustments were conservative and minor insofar as they relate only to the first two cycles for personal crime, and because we always chose the higher available value, making any crime drop more apparent, not less. But even if personal crime in 1988 and 1993 were excluded, our main conclusions would be unaltered.

The rates in Figure 1 are listed in Table 2 for transparency, with two extra columns showing percent change for 1993–2009 and 2004–2009 respectively. The 1993–2009 comparison is the closest approximation to the duration of the long-term crime drop. Rates increased markedly for five of the eight crime types between 1993 and 2009: personal theft more than doubled, theft from households increased by almost three-quarters, sexual assault increased by half, robbery and vandalism by a third. Auto theft and break and enter both declined by 8 percent, assaults by 10 percent. Thus, according to this indicator, Canada has experienced mainly quite dramatic increases in crime in the past two decades.

TABLE 2  
General Social Survey Crime Incidence Rates (per 1,000 Capita or Household) by Year

|                 | Year |      |      |      |      | Percent Change<br>1993–2009 | Percent Change<br>2004–2009 |
|-----------------|------|------|------|------|------|-----------------------------|-----------------------------|
|                 | 1988 | 1993 | 1999 | 2004 | 2009 |                             |                             |
| Break and enter | 54   | 51   | 48   | 39   | 47   | -7.8                        | 20.5                        |
| Robbery         | 13   | 10   | 9    | 11   | 13   | 30.0                        | 18.2                        |
| Theft (person)  | 59   | 51   | 75   | 93   | 108  | 111.8                       | 16.1                        |
| Sexual assault  | n/a  | 16   | 21   | 21   | 24   | 50.0                        | 14.3                        |
| Assault         | 90   | 89   | 81   | 75   | 80   | -10.1                       | 6.7                         |
| Vandalism       | 63   | 56   | 66   | 77   | 74   | 32.1                        | -3.9                        |
| Theft (house)   | 48   | 48   | 62   | 88   | 83   | 72.9                        | -5.7                        |
| Vehicle theft   | 51   | 37   | 41   | 44   | 34   | -8.1                        | -22.7                       |

The 2004–2009 comparison column in [Table 2](#) suggests five of the eight crime types have increased, with over a 20 percent increase in burglary, increases in the teens of percent for robbery, theft, and sexual assault, and a smaller increase in assault. In comparison, the size of the decreases in household theft and vandalism are more minor. The decrease in auto theft of 22.7 percent looks large at first blush but is far smaller than the decreases suggested by the other sources described below. Comparing 2004 to 2009 GSS rates, Statistics Canada concluded: “Overall rates of self-reported violent victimization remained stable between 2004 and 2009, as did the rates of sexual assault, physical assault and robbery.” Moreover, “Overall rates of self-reported household victimization also remained stable between 2004 and 2009. However, motor vehicle thefts declined 23% while break-ins increased, up 21%” ([Perreault and Brennan 2010](#), 5).

These are the conclusions that appear to have underpinned the crime policy decisions of the government, some of which were alluded to earlier.

#### EVIDENCE FOR A CRIME DROP

This section is in seven parts. First, a brief description of how UCR and survey data in the United

States both show a crime drop is followed by, second, a comparison of UCR trends for Canada and the United States. Third, Canada’s UCR trends are compared directly to those from the GSS. Fourth, rates of reporting to the police are examined. Fifth, homicide trends are briefly examined because of their reliability. The sixth part includes evidence from the Canadian component of the International Crime Victims Survey, and the seventh some insightful auto theft insurance information from British Columbia.

#### The United States and Its Two National Sources

There are parallels between the [Ogrodnik and Trainor \(1997\)](#) review examined earlier and methodological work in the United States to compare its UCR and victimization survey data ([Biderman and Lynch 1991](#); [Lynch and Addington 2007](#); [Groves and Cork 2008](#)). The NCVS differs from the Canadian GSS in several respects, particularly as a dedicated victim survey conducted on an ongoing basis, which facilitates year-to-year comparison. While the discrepancy between the two US sources has not been entirely reconciled either, more important in the present context is that they are in broad agreement about the enormous and unprecedented crime drop from the early 1990s onwards (see, for example,

Figures 6a and 6b in Farrell et al. 2011 for long-term trends for each source). The NCVS finds that vehicle theft plummeted in the early 1990s, followed closely by violent crime, while burglary and theft have been falling far longer. The UCR shows that homicide and other violent crime also followed the lead of vehicle theft and fell dramatically in the early 1990s.

The US and Canadian UCR trends are remarkably similar, as described next. However, the main point here is that despite some differences, the two US sources largely correspond with respect to the big picture and the existence of a crime drop, as they ought to in Canada but do not.

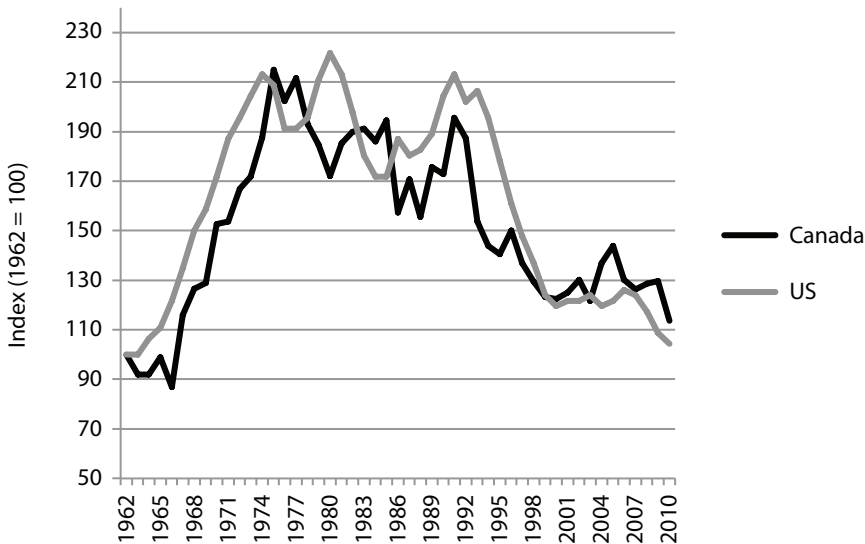
**UCR Trends in Canada and the United States**

This section examines Canadian UCR data and also compares them to those from the United States. The

comparison adds value by showing how the trends are similar, while most of the difference is readily understood. Gannon (2001, 1) notes that “despite differences in rates, trends in crime between the two countries have been quite similar over the past twenty years.” Ouimet (1999) suggests that the difference in rates, rather than trends, tends to be due to regional variation and particularly large urban areas with high crime rates in the United States.

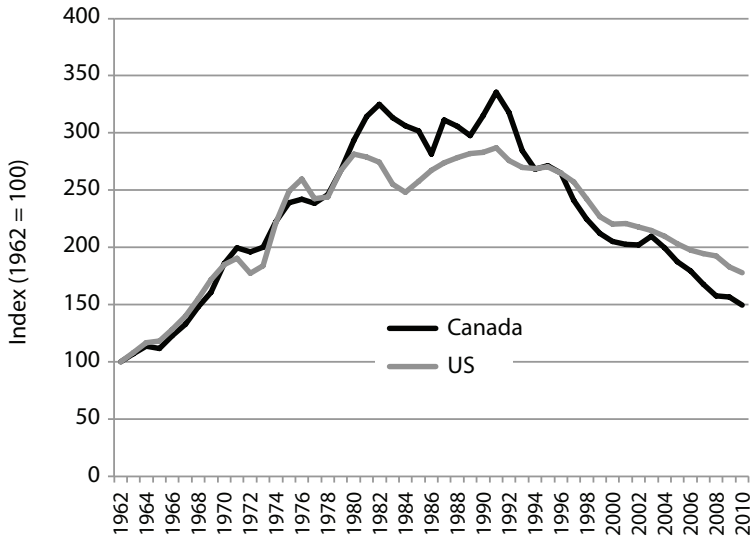
Canada has collated national UCR data since 1962 (Dauvergne and Turner 2010). There have been methodological and definitional adjustments, due, for example, to changes in legislation and categorization of crime types, but these are largely known and can be taken into account. Figures 2 through 8 show UCR incidence rates for Canada and the United States, indexed to 100 in 1962 to facilitate trend comparison, for homicide, theft, burglary, robbery, sexual assault (which is compared to rape

FIGURE 2  
Homicide Rates in Canada and United States, 1962–2010



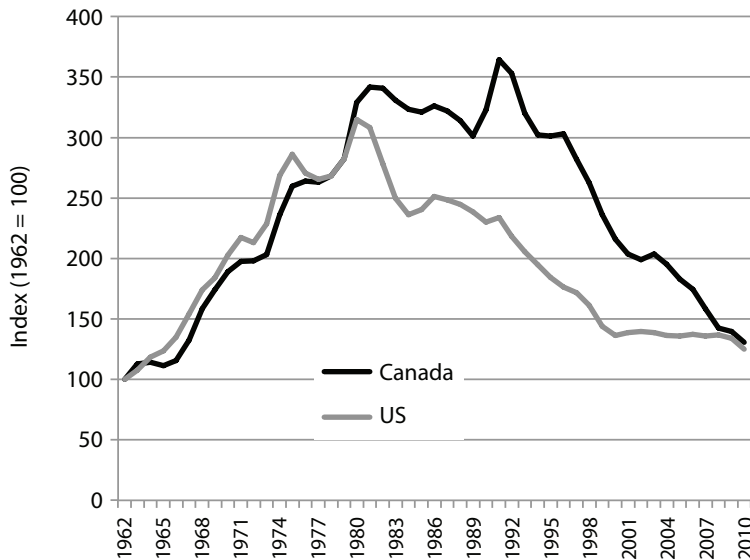
Source: Authors' compilations.

FIGURE 3  
Recorded Theft Rates in Canada and United States, 1962–2010



Source: Authors' compilations.

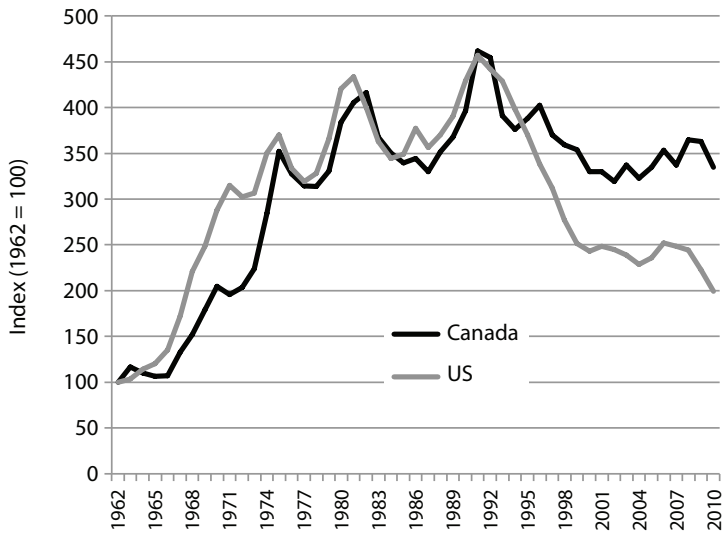
FIGURE 4  
Recorded Burglary Rates in Canada and United States, 1962–2010



Source: Authors' compilations.

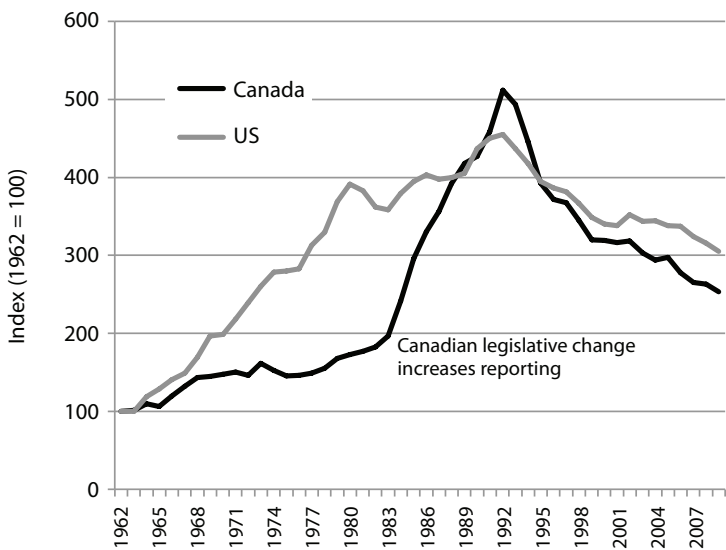


FIGURE 5  
Recorded Robbery Rates in Canada and United States, 1962–2010



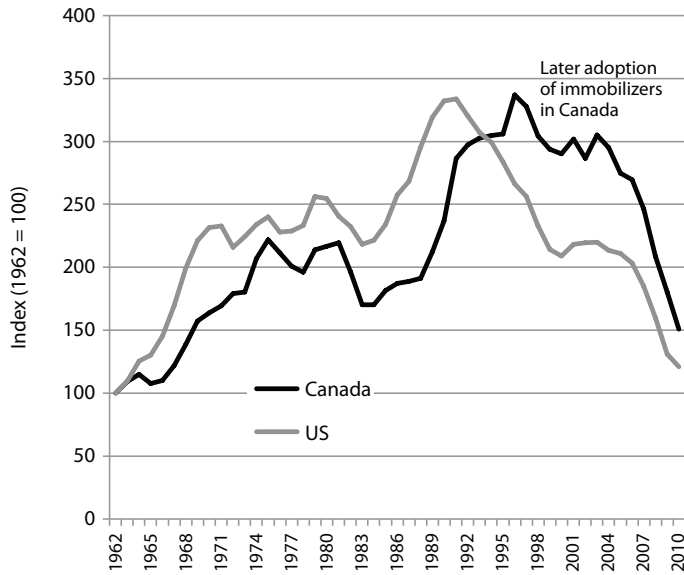
Source: Authors' compilations.

FIGURE 6  
Recorded Sexual Assault Rates in Canada and Rape Rates in United States, 1962–2009



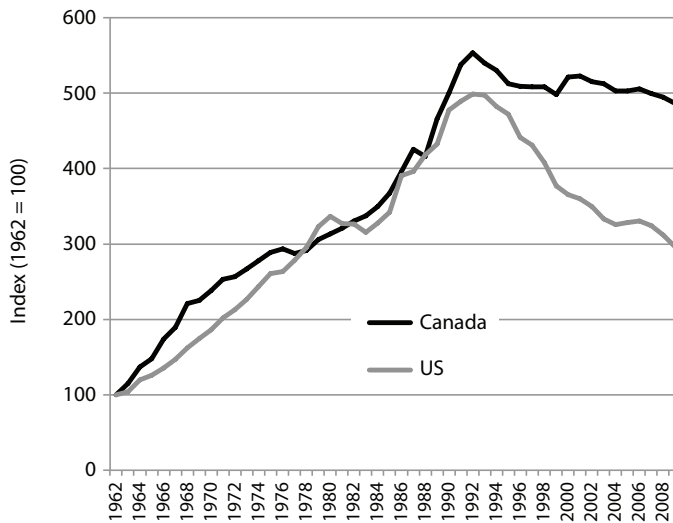
Source: Authors' compilations.

FIGURE 7  
Recorded Vehicle Theft Rates in Canada and United States, 1962–2010



Source: Authors' compilations.

FIGURE 8  
Recorded Assault Rates in Canada and United States, 1962–2008



Source: Authors' compilations.

for the United States), vehicle theft, and assault. For the most part the similarity is clear and compelling. Moreover, when trends differ significantly, there is usually a fairly straightforward explanation relating to change in data definition or policy, and we have included a couple of notes to that effect on the relevant figures.

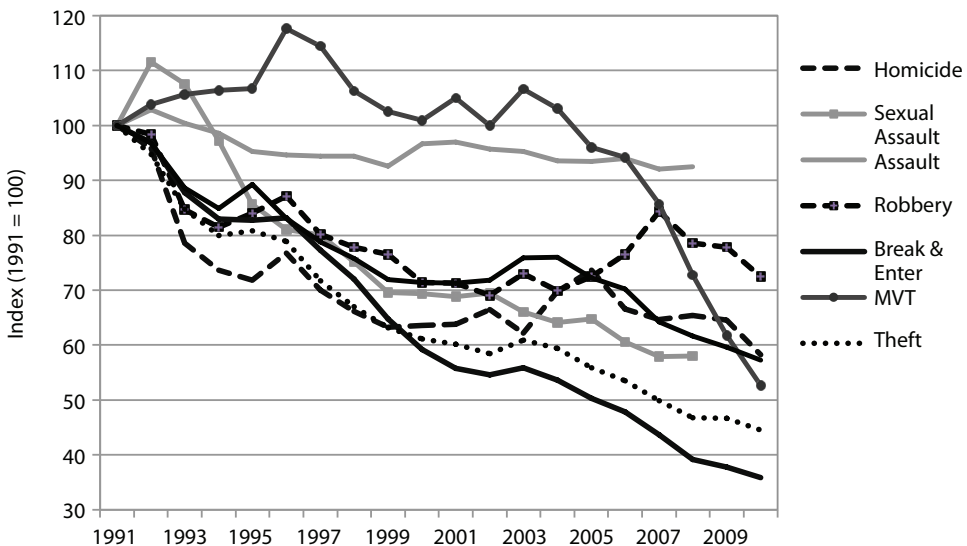
Looking now only at the period since 1991, Table 3 shows the reduction in crime in Canada and the United States. Relative to 1991, Canada's UCR crime drop was greater for theft, burglary, and sexual assault (though the use of recorded rape in the United States makes that comparison more difficult). The crime drop was greater in the United States for homicide, robbery, assault, and vehicle theft, though the reduction in vehicle theft in Canada was closing the gap fast by 2010.

TABLE 3  
Comparing the Crime Drop in Canada and United States, UCR Data

|                | Percent Change 1991–2010 |               |
|----------------|--------------------------|---------------|
|                | Canada                   | United States |
| Homicide       | -42                      | -51           |
| Theft          | -55                      | -38           |
| Burglary       | -64                      | -47           |
| Robbery        | -28                      | -57           |
| Sexual assault | -45                      | -32           |
| Vehicle theft  | -47                      | -64           |
| Assault        | -10                      | -39           |

Note: Assault and sexual assault data for Canada ran to 2009. Sexual assault for United States here refers to rape (see text for discussion).

FIGURE 9  
Canadian UCR Crime Incidence Rates, 1991–2010



## Comparison of Canada's UCR and GSS

### Trends

Table 4 compares the respective changes in Canada's UCR and GSS rates for the periods 1993–2009 and 2004–2009. These years correspond with the GSS cycles so that the two sources can be most directly compared. The definitions of crime types being compared is imperfect, and the GSS does not measure homicide, while the UCR does not count vandalism separately or distinguish between personal and household theft. However, the differences are so large that they are unambiguous. All seven UCR crimes fall for 1993–1999 compared to three of eight for the GSS. The magnitude of the UCR crime drops is far greater, at over 40 percent in four of the seven crime types for 1993–2009.

The period 2004–09 is arguably that most relevant to the claim of Statistics Canada, and hence the present government, that crime has not declined. Here we might reasonably expect the differences to be smaller if the two data sets diverge gradually over time. Even here, six of seven UCR crimes decline compared to three of eight GSS crimes. In terms of magnitude, UCR break-and-enter declined 30

percent, whereas GSS break-and-enter increased 20 percent—a 50 percent swing (and our further examination of the UCR data suggests the decline was even greater in residential break-and-enter, which better corresponds with the GSS definition). The GSS shows a drop in car theft but only half that identified by the UCR, the latter's figures supported by insurance data. The findings from the two sources, even for the shorter, more recent time frame and the volume crimes, are not even close.

### Homicide

A brief discussion of homicide is useful for two reasons. First, homicide data in Canada is reliable because almost all homicide comes to the attention of police.<sup>2</sup> There were 554 homicides in Canada in 2010 (Brennan and Dauvergne 2011), the per capita rate having fallen 42 percent since 1991. Second, there is a remarkable similarity between homicide trends in Canada and the United States over the past five decades (Figure 2). The rate is far higher in the United States but the trends are closely correlated ( $r=0.852$ ,  $p<0.0001$ , two-tailed test,  $n=49$  years). Both rates likely reflect improvements in health care that have reduced mortality rates over time. The

TABLE 4  
Comparison of Canada's UCR and GSS for 1993–1999 and 2004–2009

|                 | Percent Change<br>1993–2009 |       | Percent Change<br>2004–2009 |       |
|-----------------|-----------------------------|-------|-----------------------------|-------|
|                 | UCR                         | GSS   | UCR                         | GSS   |
| Break and enter | -57.0                       | -7.8  | -29.5                       | 20.5  |
| Sexual assault  | -46.0                       | 50.0  | -9.4                        | 14.3  |
| Theft (person)  | -45.0                       | 111.8 | -21.5                       | 16.1  |
| Vehicle theft   | -41.5                       | -8.1  | -40.1                       | -22.7 |
| Homicide        | -17.9                       |       | -7.5                        |       |
| Robbery         | -8.1                        | 30.0  | 11.4                        | 18.2  |
| Assault         | -7.9                        | -10.1 | -1.1                        | 6.7   |
| Theft (house)   |                             | 72.9  |                             | -5.7  |
| Vandalism       |                             | 32.1  |                             | -3.9  |

figures also seem to suggest that, while homicide in the two countries differs greatly in magnitude, the trends may have something in common in terms of what causes variation in them over time.

In short, however, the main point here is that homicide in Canada has fallen over 40 percent. This dramatic decline is, we suggest, an uncontested fact. With that established precedent, perhaps similar trends in other crimes seem less unusual.

### Reporting to Police

The rate of reporting to police is important because it has been cited as the key mediating variable in the relationship between Canadian UCR and GSS findings. The issue seems critical in the policy debate because the “Conservative government has suggested that figures showing a declining crime rate

are not accurate because fewer people are reporting crimes committed against them” (CBC News 2010).

Both the ICVS and the GSS measure the rate of crime reported to the police. The respective rates are shown in Figures 10 and 11 for roughly corresponding crime type categories. It is reasonable to assume that if differences in the crime type definitions remain fairly consistent, then the impact upon trends will be less than that upon rates. The comparison excludes some additional crime types captured by the ICVS. Sexual incidents against women are included for the ICVS, but GSS rates for sexual assaults were only available for 1999 (8 percent reported) and are not shown. Our ICVS “assaults” category is denoted as “assaults and threats” in the main ICVS report used here, of van Dijk et al. (2007). Both surveys tend to include attempted

FIGURE 10  
International Crime Victims Survey: Rates of Reporting to Police in Canada, 1989–2004

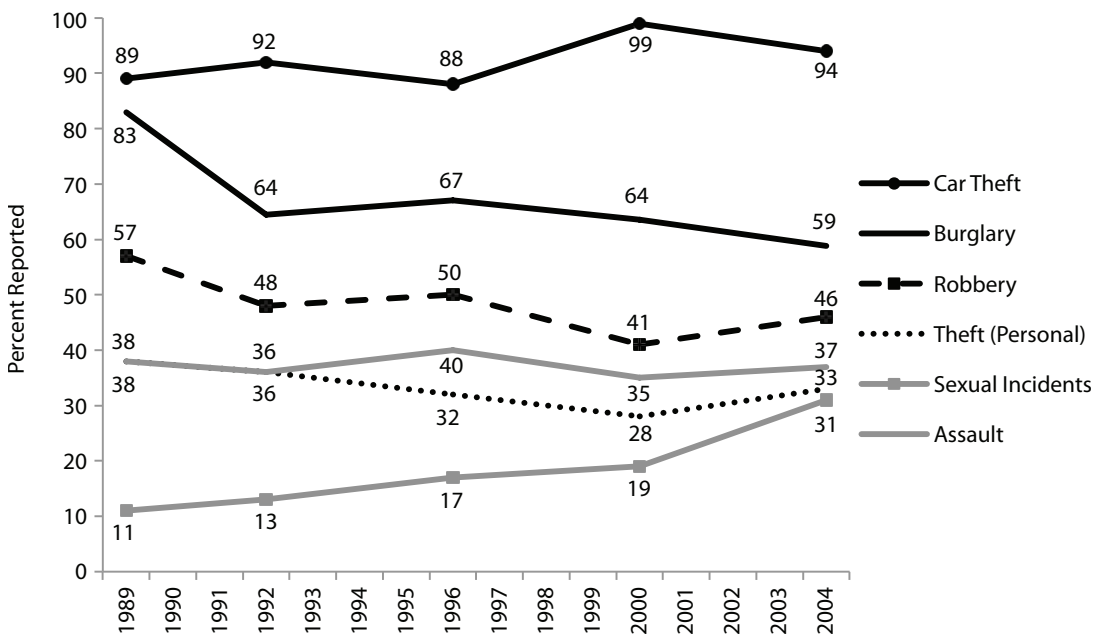
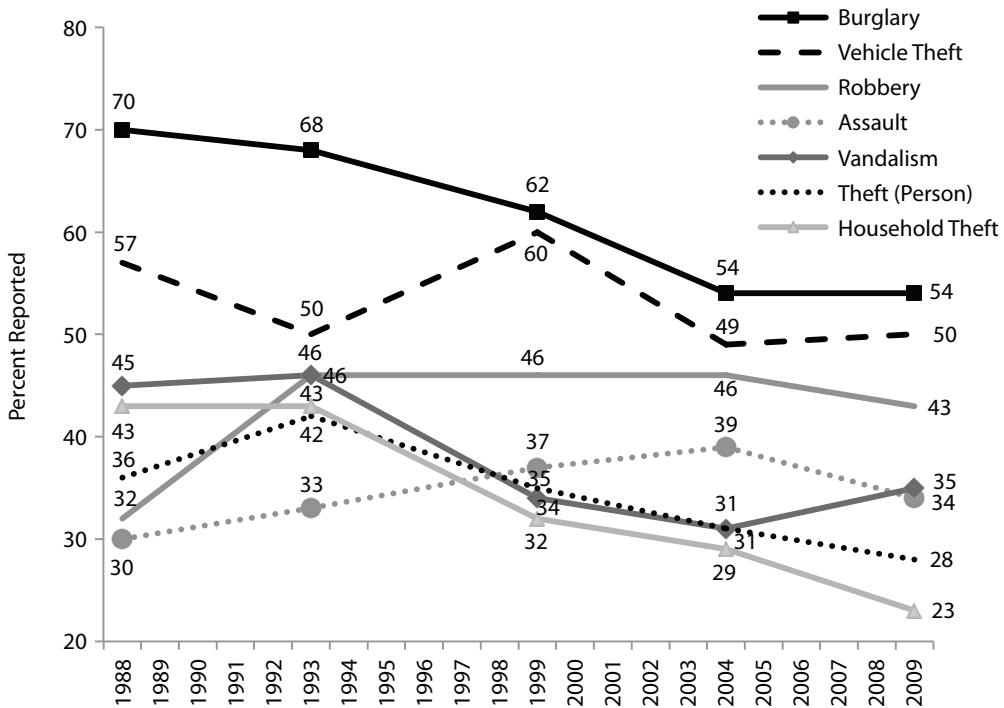


FIGURE 11  
General Social Survey: Rates of Reporting to Police in Canada, 1988–2009



crimes in their definitions. In the ICVS publication of [van Dijk et al. \(2007\)](#), burglary and attempted burglary are listed separately but are combined here to form a category corresponding more closely with that of the GSS. To do that, we weighted the reporting rate of each according to the respective incidence rate of burglary or attempts. Generally the incidence rate of burglary was higher than that of attempted burglary, so burglary usually carries a greater weight in the combined rate.<sup>3</sup>

ICVS data were available up to the 2004 cycle. In 2004, however, the overall rates for each crime type are quite similar for the two surveys, except for vehicle theft where the ICVS rate is much higher.

This discrepancy likely reflects the fact that vehicle theft in the GSS includes theft of parts, and the ICVS does not.<sup>4</sup>

The trends differ between the two sources. The ICVS finds reporting was fairly stable or increasing, whereas the GSS finds it was decreasing. We know of no direct means of determining which statement is the more accurate. However, there may be some insight from the fact that US reporting rates identified by the NCVS increased slightly between 1992 and 2000 ([Hart and Rennison 2003](#)) and remained stable over the next decade ([Truman 2011](#)). That is, the US trends are more in line with the ICVS than the GSS findings for Canada.

Most critical in the present context, however, is that even if the GSS reporting rates are taken at face value, they can only account for part of the decline in UCR crimes. Table 5 shows Canadian UCR crime incidence rates for 1991 and 2010 derived by inflating UCR data for the underreporting identified by the GSS. The GSS reporting estimates for 1993 and 2009 were used for the adjustment, as those are the years most closely corresponding to those of the UCR crime drop. For the five crime types in Table 5 for which the adjustment could be made, burglary and vehicle theft fell by just over and just under half, respectively; that of theft fell by a third,<sup>5</sup> robbery by 23 percent, and assault by 12 percent. Thus we conclude that it is not entirely necessary to determine whether the ICVS or the GSS reporting rates are the more accurate because the answer could only affect the extent of the crime drop, not its existence. In short, even when using the most conservative interpretation of GSS-based reporting rates, a significant crime drop remains.

TABLE 5  
Canadian UCR Crime Incidence Rates Adjusted for GSS Reporting Rate

|          | Incidence Rate |        | Percent Net Change |
|----------|----------------|--------|--------------------|
|          | 1991           | 2010   |                    |
| Robbery  | 267.5          | 207.3  | -22.5              |
| Assault  | 2504.2         | 2197.1 | -12.3              |
| Burglary | 2367.1         | 1068.9 | -54.8              |
| Vehicle  | 1031.9         | 543.5  | -47.3              |
| Theft    | 8658.6         | 5779.2 | -33.3              |

**Trends Based on the Canadian ICVS**

Trends in crime incidence rates identified by the Canadian ICVS are shown in Table 6 while Figure 12 show the trends for 1992 to 2004 only, indexed to 100 in 1992 to best correspond with the start of the crime drop. There is variation in some specifics, but the general picture from the ICVS is that a significant drop

in crime occurred for most crime types in a fashion similar to that exhibited in the UCR data. The additional ICVS category of “9 crime types” is shown here (from van Dijk et al. 2007, 237), which is the only available aggregate category similar to the UCR’s “all crime.”

TABLE 6  
Canadian Crime Incidence Rates from the International Crime Victims Survey

|                    | Incidence Rate per 1,000 |      |      |      |      |
|--------------------|--------------------------|------|------|------|------|
|                    | 1989                     | 1992 | 1996 | 2000 | 2004 |
| Nine crime types   | 365                      | 440  | 399  | 367  | 284  |
| Car theft          | 9                        | 14   | 16   | 14   | 8    |
| Burglary           | 36                       | 42   | 40   | 29   | 26   |
| Robbery            | 15                       | 16   | 18   | 12   | 8    |
| Theft (personal)   | 69                       | 69   | 73   | 63   | 53   |
| Sexual assault     | 69                       | 71   | 48   | 51   | 47   |
| Assault and threat | 65                       | 73   | 71   | 85   | 48   |

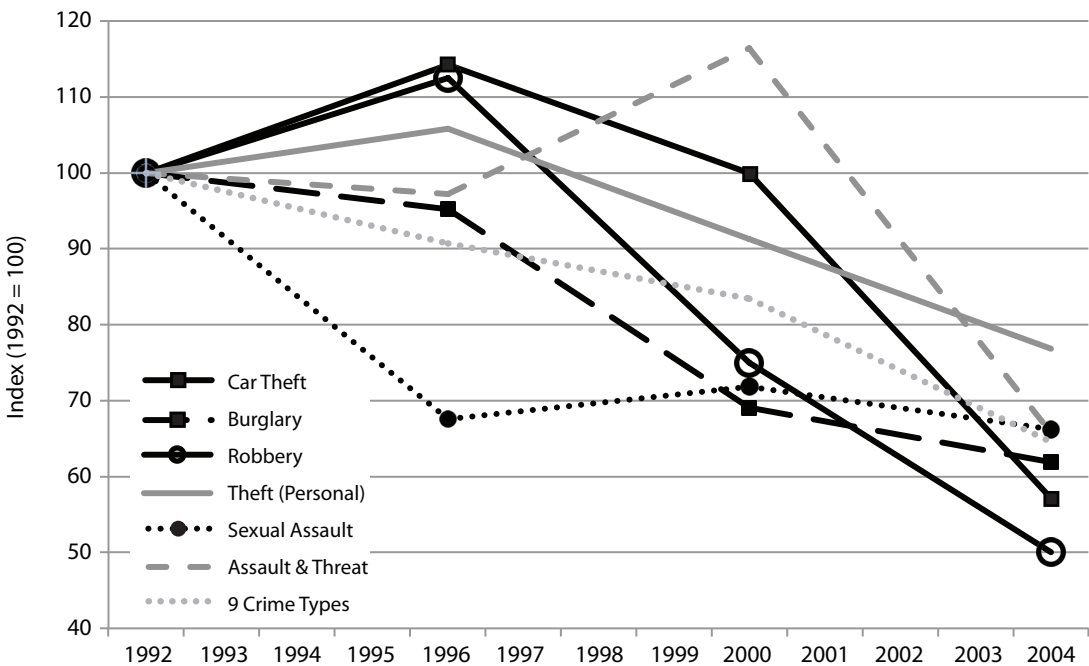
**Auto Theft Trends Based on Insurance Claims**

After homicide, official car theft data are generally accepted as the next most reliable, because they are usually reported for insurance purposes. Although only a partial indicator for a single crime type and province, the type of data collated by the Insurance Company of British Columbia (ICBC), a monopoly provider in that province, is informative. ICBC reports that

- Theft-of-vehicle claims declined 65 percent from 2003 to 2010.
- Theft-of-vehicle claims declined 22 percent from 2009 to 2010
- Vehicle break-in claims declined 61 percent from 2003 to 2010
- Vehicle break-in claims declined 15 percent from 2009 to 2010. (ICBC 2011a)

FIGURE 12

International Crime Victims Survey: Crime Incidence Rates in Canada, 1992–2004 (Index 1992=100)



In contrast, the vehicle population and the number of driver licences increased over the same periods (ICBC 2011b). ICBC further claim that “older vehicles often don’t have an effective anti-theft device and are easy to steal. That’s why the average age of a stolen vehicle in B.C. is about 11 years old” (ICBC 2011a). This statement is consistent with studies in the United Kingdom and Australia finding that anti-theft devices induced the decline in auto theft and caused an aging of stolen vehicles (Brown and Thomas 2003; Brown 2004; Kriven and Ziersch 2007; Farrell, Tseloni, and Tilley 2011).

## DISCUSSION

Canada’s prolonged and dramatic decline in homicide is, we suggest, a matter of fact. Provincial data

on auto theft from the Insurance Company of British Columbia is also a reliable indicator and strongly indicates a two-thirds decline in auto theft, in line with the UCR but not the GSS. Two of the three national sources indicate that Canada experienced a significant decline in many crime types over the past two decades.

The UCR trends for Canada and the United States correspond uncannily well. Moreover, the US crime drop is also identified by that country’s national victimization survey. It is reasonable to suggest that the US data provide indirect support for the Canadian UCR trends. More generally, evidence from other countries including the United Kingdom and most other European countries, Australia, and elsewhere indirectly supports a conclusion that crime in Canada has fallen. The likelihood that it



is a coincidence that crime drops elsewhere broadly correspond with most Canadian data sources seems to us to be vanishingly small.

### **Further Research Needed on the GSS**

#### **Methodology**

The main weakness of the present study is the lack of direct evidence and explanation relating to why the GSS might be misleading. Those issues should be the subject of future research. It is, however, appropriate to speculate on why the GSS might be misleading. We anticipate that the answer to the problem lies in the survey methodology. The most likely contenders are the sampling and weighting procedures. Young people, especially young males, are especially likely to be excluded from surveys. The solution most often used by survey takers, including Statistics Canada, is to use sample weights to adjust for this exclusion, which can exacerbate rather than solve the problem if young respondents are atypical yet their responses are given disproportionate weight.<sup>6</sup> However, since such issues are common to victim surveys other than the GSS, this explanation only seems likely if GSS practices are systematically different. Although also outside the scope of the present study, future research might examine how the profile of crimes reported to the GSS and the UCR have changed over time. Location or relationship categories of victims and offenders of violent crimes, as well as location or dollar value associated with property crimes, could play a role.

Other possibilities warranting examination in further research are any amendments to the survey format and its administration over time. Response and refusal rates should also be considered where factors such as immigration may be important if household contacts result in refusals, either because residents are not proficient in English or French or because disclosing personal information over the telephone is a foreign concept. Lack of landlines in households with cell phones only is also a growing problem. However, such issues seem to us to be weaker contenders, because for the most part they would have similar effects upon surveys elsewhere

but have not done so. More importantly, while GSS response rates have declined rapidly in recent years ([Statistics Canada 2009](#)), that decline occurred too recently to explain the absence of the crime drop in the GSS in the 1990s.

The extent of the difference between GSS and other evidence, however, suggests to us that there may be some more fundamental issue relating to the representativeness of the sample. If that is the case, then it is possible that the cause may remain hidden, particularly if further research does not gain the backing of those sections of Statistics Canada that disagree, which is possible if reputations are on the line.

#### **Public Policy Implications**

If a Canadian crime drop is taken to have occurred, there are potentially significant public policy implications. As [Zimring \(2006, 2007\)](#) and others have noted, Canada's low imprisonment rates and those in much of Europe contrast with those of the United States. This disparity suggests that imprisonment did not drive the US crime drop. That inference in turn suggests that harsher sentencing and increased imprisonment in Canada could be inefficient. It further suggests the crime drop was not due to other factors that differ significantly between Canada and the United States, including gun control, the death penalty, the availability of abortion, policing numbers and strategies, and declining crack drug markets. In each instance, the Canadian policy or context differs markedly from that of the United States, as does that of some or many European countries.

There is *prima facie* evidence suggesting Canada's more recent steep decline in auto theft, relative to declines in the United States, the UK, and Australia, is attributable to the later spread here of more and better vehicle security ([Farrell et al. 2011](#); [Fujita and Maxfield 2012](#)). Auto theft in Canada started to fall before national legislation in 2007, likely reflecting earlier adoption encouraged in key cities such as Winnipeg ([Williams 2001a, b](#); [Wallace 2002](#); [Linden and Munn-Venn 2008](#); [ICBC](#)

2011a, b; Manitoba Public Insurance n.d.; Tilley et al. 2009). The role of changes in security and routine activities in Canada warrants further study, as does the possibility that police and government might incentivize secure designs as the default for urban planning and architecture, product design, and place management. Here there may be potentially important implications for the National Crime Prevention Strategy developed by Public Safety Canada.

## CONCLUSION

The present authors are fairly representative of academic researchers insofar as our default tendency is to support victim survey research over other sources of information on the same topic. Together we have analyzed victim surveys fairly extensively and published a range of studies relating to methodology, substantive findings, and implications for policy. It was not without some trepidation that we have written a study critical of the GSS. However, as difficult as the position is to take, it would be remiss to continue to accept the GSS findings at face value in light of what we interpret as rather overwhelming evidence. That evidence suggests two concluding hypotheses:

1. Canada has experienced major and unprecedented drops in crime akin to those in many other industrialized countries; and
2. The crime trends produced by the GSS are misleading.

These conclusions are based on evidence from diverse sources and analytic angles. Hence while we frame them as hypotheses, we suggest that the burden of proof is now on others to falsify them.

It seems reasonable to anticipate that if the GSS-based crime trends are misleading, then the explanation lies somewhere in the survey's methodology. The sampling and weighting procedures are likely candidates for further investigation. We

optimistically hope that if a source of error is more closely defined, appropriate adjustment might be made to the GSS data sets such that revised crime trends can be produced. Further, even if the trends are misleading, it is conceivable that existing cross-sectional analyses are still informative.

This study has potentially significant public policy implications. Recent government policy seems to be largely based on an understanding that crime in Canada has been stable or increasing. The present analysis may require some reassessment of that position, particularly in relation to the omnibus crime control bill that has been "vigorously defended" in Parliament by government ministers (Jones 2012). In addition, recent research suggesting that improved security is responsible for the widespread drops in crime implies that security and designing out crime, and promoting corporate social responsibility for crime among manufacturers and others, should be considered for a major role in national and provincial crime prevention policies.

## NOTES

We thank the anonymous reviewers and editorial team of this journal for constructive criticism and comments.

<sup>1</sup> Normal practice for the GSS and ICVS is to name the cycle by referring to the year in which the survey was conducted, so that, for example, the 1988 GSS refers to victimization in 1987 and the 1989 ICVS refers to victimization in 1988; this practice is adhered to in the present study.

<sup>2</sup> Cross-national comparison of homicides rates can still be tricky – see LaFree (1998) – but within Canada in recent times, homicide rates are generally accepted as reliable.

<sup>3</sup> For example, in 1993, 82 percent of burglary and 44 percent of attempted burglary were reported (van Dijk et al. 2007, 263), with corresponding incidence rates of 4.2 and 3.6 per 100 households for a combined incidence rate of 7.8 (van Dijk et al. 2007, 249), so the combined reporting rate of 64 percent shown in Table 3 was derived as the sum of (82 x 4.2/7.8) and (44 x 3.6/7.8).

<sup>4</sup>We thank one of the anonymous reviewers for this as well as a series of other excellent clarifications.

<sup>5</sup>UCR thefts were compared to the GSS category of theft of personal property rather than household property.

<sup>6</sup>We are grateful to some insightful anonymous reviewer comments on this and related issues.

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