

# The Big Drop in Sex Crimes

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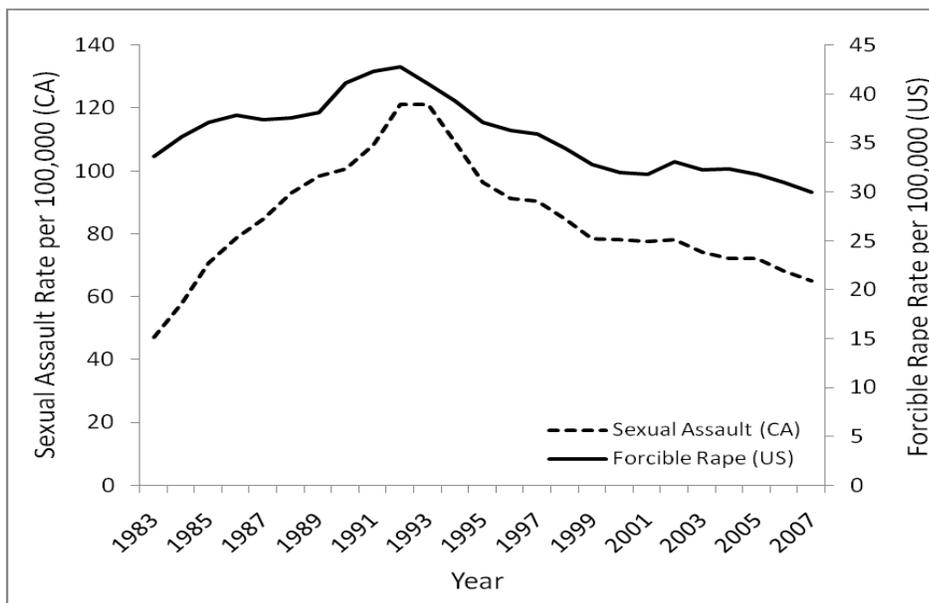


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## Introduction

In the early 1990s, rates of sexual crimes began to decrease substantially in both the United States and Canada. From 1991 to 2001, sexual assault rates decreased 25 percent in Canada, and 28 percent in the United States (see Figure 1). In the United States, during the period 1990 through 2004, rates of sexual abuse of children declined 49 percent, and teenage sexual assaults decreased by 67 percent (Finkelhor & Jones, 2006). What explains this notable drop in sex-related crimes over the 1990s? In this article, we describe the results of a recent study that re-frames this question more broadly, and provides some potential explanations for this decline.

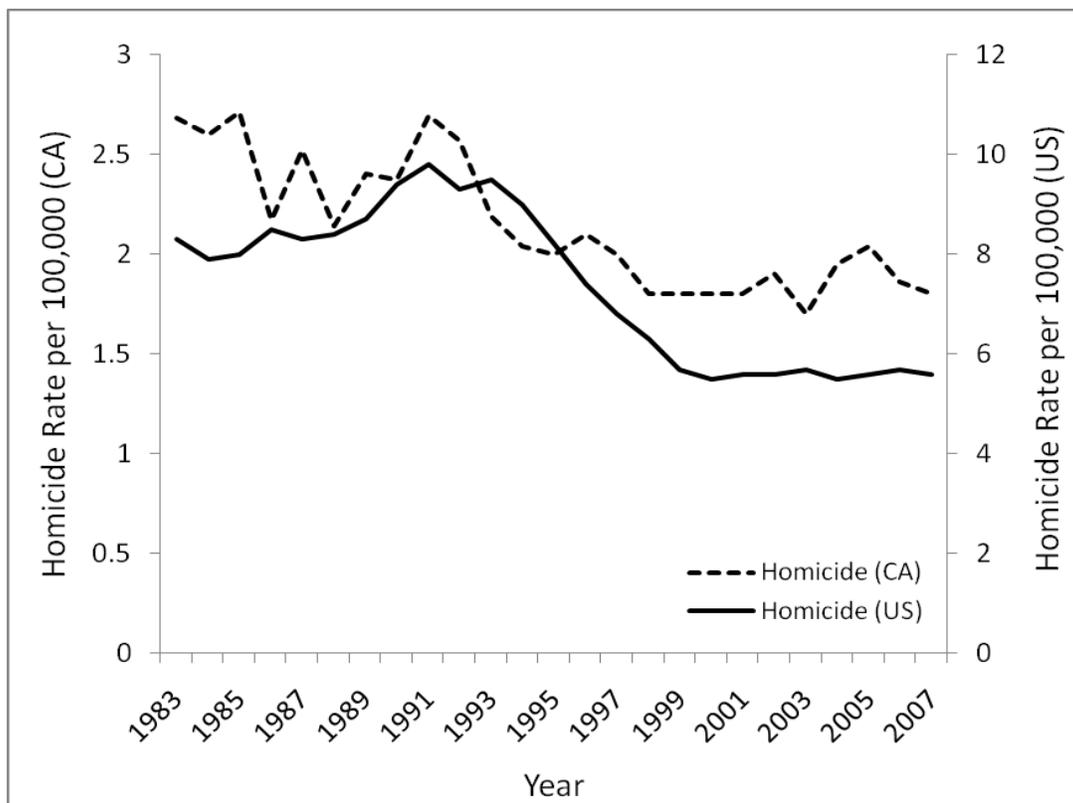
**Figure 1. Sex crime rates in the United States and Canada.**



### The Crime Drop

Homicide is the best measure for investigating general variation in crime rates because it is less subject to reporting or recording bias compared to other crimes. Although the United States and Canada have very different homicide rates, both countries experienced similar declines in homicide in the 1990s (USA: 43 percent; Canada: 33 percent; see Figure 2). Other violent crimes and property crimes also declined during the 1990s. Data from the Federal Bureau of Investigation's Uniform Crime Reports suggests that arrest rates for total, violent, and property crimes declined for all age groups, ranging from 20 percent (age 65+), to 57 percent (age 20-24). Geographically, both metropolitan and rural areas of the United States and Canada experienced declines in crime. In fact, the decline in crime was not specific to any particular type of crime, methodology of crime reports, demographic characteristics, or geographical areas, suggesting that the decline in sexual crime observed in the 1990s is part of a much larger, more general phenomenon (Fox, 2005; Levitt, 2004; Ouimet, 2002, 2004).

Figure 2. Homicide rates in the United States and Canada.



Since the crime drop phenomenon has come to the forefront of criminologists' attention, various explanations have been developed and tested (e.g., Blumstein & Wallman, 2005; Levitt, 2004). These explanations include demographic effects (aging population, increased access to abortion in the 1970s, increased use of incarceration), public policy shifts (increased number of police officers, innovative policing strategies, gun control), and socioeconomic factors (strong economy, decrease in the illegal drug trade). Many of these explanations are able to explain some portion of the decline in crime in the 1990s, but none are completely satisfactory in explaining the widespread and robust drop in crime in both the United States and Canada (Zimring, 2006). These explanations also largely ignore a

very important aspect of the decline in the 1990s that has not been addressed until recently—the decline in general risky behavior.

### ***Who Commits Crime?***

Most data suggest that criminal offenders do not specialize in particular types of crime. Rapists, for example, do not engage solely in sexual crimes but, rather, engage in a broad range of criminal, antisocial, and risky behavior (reviewed in Lalumière, Harris, Quinsey, & Rice, 2005); although, specialization is underestimated in rap sheet data. In fact, most evidence suggests that, on average, criminals are generalists, engaging in not only crime, but risky and antisocial behavior more broadly. Several theories specify a strong link between general risky behavior and crime (e.g., Daly & Wilson, 2001; Gottfredson & Hirschi, 1990; Jessor, 1991). Studies of individuals who engage in criminal behavior have revealed that they tend to score high on such personality traits as poor self-control, impulsivity, and thrill seeking—traits that have also been significantly associated with a general propensity to take risks. Several studies have also documented the co-occurrence of criminal and other risky behaviors within individuals (Caspi et al., 1997; Grasmick, Tittle, Bursik Jr., & Arneklev, 1993; Jones & Quisenberry, 2004; Junger & Tremblay, 1999; Lalumière & Quinsey, 1996). Together, these findings support the notion of a general construct of deviance or problem behavior encompassing both criminal and risky behavior, an idea that has been delineated in several theories of criminal and risk behavior (e.g., Gottfredson and Hirschi's General Theory of Crime and Jessor's Problem-Behavior Theory).

Because criminal behavior appears to be part of a broader tendency to engage in risk-taking behavior, it is possible that previous explanations for the crime drop have been too narrow in focus. These explanations have focused solely on crime declines (sometimes, even on crime-specific declines, like theft), when the appropriate target of explanation may actually be a much more general phenomenon. If crime and risky behavior are linked at the individual level, as they appear to be, then risky behavior should follow a similar temporal pattern to crime rates at the national level. In particular, the drop in crime in the 1990s should not be observed for just crime but, rather, for the broad constellation of problem behavior of which crime is a part. Furthermore, rates of crime and risky behavior should exhibit statistical covariation not only in the 1990s, but over longer periods of time as well.

### ***The Crime (and Risk) Drop***

We tested these predictions in a recent study published in *Social Science and Medicine* (Mishra & Lalumière, 2009). We collected 65 indicators of risky behavior in various domains, including violence, accidents and behaviors related to accidents, sexual behaviors, substance use, and school dropout. We broadly defined risky behavior as “impulsive, reckless behavior that maximizes short-term gains (e.g., sexual gratification, emotional arousal, relief of negative feelings) with potential for immediate or future costs (e.g., car accident, unwanted pregnancy)” (Mishra & Lalumière, 2009, p. 40). The 65 indicators of risky behavior (or outcomes of risky behavior) we were able to obtain were comprised of national-level rates of behavior collected by various agencies in the United States and Canada, and reflect trends for both the general population, and teenagers specifically (because they are a particularly risk-prone group).

In the domain of sexual behavior, an examination of rates of sexual risk taking in the 1990s in both Canada and the United States reveal a drop that parallels that of sexual crime rates. Risky sexual behaviors in teenagers such as sex with multiple partners, not using condoms, and teenage pregnancies (an outcome of risky sexual behavior) have decreased 24, 22 and 27 percent respectively in the United States from 1991 to 2001. In Canada, teenage pregnancies have decreased 20 percent in the same time period. Even some (but certainly not all) sexually transmitted diseases have decreased in prevalence

over the same time period (e.g., syphilis is down 78 percent in the U.S. and 31 percent in Canada). Overall, 17 of 21 sexual risk indicators showed a decline in the 1990s (see Table 1).

**Table 1. Changes in risky sexual behaviors, 1991-2001.  
(Data from Mishra & Lalumière, 2009)**

Indicator	% Decline
Ever had sex (T)	-16
Had first sex before 13 (T)	-55
Sex with 4+ partners (T)	-24
Currently sexually active (T)	-12
No condom use (T)	-22
No birth control pill use (T)	+3
Teen pregnancies (T)	-27
Teen pregnancies (T) (CA)	-20
Live teen births (T)	-27
Live teen births (T) (CA)	-38
Induced abortions	-19
Induced abortions (CA)	+6
Teen induced abortions (T)	-44
Teen induced abortions (T) (CA)	0
AIDS	-43
Syphilis	-78
Syphilis (CA)	-31
Gonorrhea	-48
Gonorrhea (CA)	-51
Chlamydia	+52
Chlamydia (CA)	-2

**Notes:** Data for teenagers are noted with (T); data for Canada are noted with (CA).

When we investigated risky behavior more generally, it was clear that not only sexual risk-taking decreased in the 1990s, but other types of risk-taking as well. We found that 49 of 65 risk indicators exhibited declines in the 1990s: Risky behavior in the domains of violence (6 of 7 indicators declined), accidents and behaviors related to accidents (9 of 9 indicators declined), and school dropout (2 of 2 indicators declined) all showed drops in the period from 1991 to 2001, ranging from 2% to 78%. An exception to this general pattern was substance use; only 15 of 26 indicators declined. Excluding substance use, 34 of 39 indicators of risky behavior showed declines through the 1990s (a discussion of why substance use is an exception is beyond the scope of this article).

To investigate whether the decline in risky behavior over the 1990s was an isolated trend, and whether risky behavior and criminal behavior co-vary together over longer periods of time, we correlated the homicide rate for a given country with each of the indicators of risky behavior for the same country. Homicide was chosen because it is the most reliable indicator of variation in crime rates over time and place. We found that most indicators of risky behavior (with the exception of substance use indicators) were significantly associated with homicide rates not only during the period of parallel decline in the 1990s, but also for longer periods of time, some extending up to 56 years in length (determined by the longest time series of data we could obtain). Together, our results indicate that the

crime drop of the 1990s was not an isolated phenomenon, but was part of a much more general phenomenon encompassing most risky behavior in various domains.

### ***What Caused the Crime and Risk Drop?***

Although we set out to explain the decline in sex crimes from 1991 to 2001, it is clear that the proper target of explanation is not sex crime, or even crime in general, but risky behavior specifically. Consequently, explanations for the crime drop in the 1990s must also necessarily explain why risky behavior declined more generally during the same period. Explanations must also be able to address the remarkable generality in the decline in crime for all age groups and geographic areas studied thus far. Of the explanations listed earlier, only some are able to address the general decline in risky behavior.

Population demographic changes, such as an aging population, the legalization of abortion in the 1970s (which would lead to fewer “at-risk” individuals 20 years later), and increased incarceration, are able to explain part of the general decline in risky behavior. Most criminal offenders tend to engage in significant amounts of risk-accepting behavior. If the number of offenders in the general population decreases, then fewer risky behaviors would be observed at the population level (which combines all age groups in overall statistics). That all age groups showed a decline in criminal behavior, however, cannot be accounted for by most explanations based on population demographic changes. Also, the declines in crime and risky behavior in Canada paralleled those observed in the United States—a fact that is also incompatible with some explanations involving population demographic changes; for example, Canada did not experience an increase in number of incarcerated offenders during the crime drop (Zimring, 2006).

Most of the other explanations for the decline in crime in the 1990s are unable to explain declines in risky behavior. Public policy shifts and innovative policing strategies, such as an increased number of police officers, are unlikely to have affected risky behaviors in general. For example, it is hard to imagine how an increase in number of police officers on the streets could affect teenagers’ choices to use condoms, or to drop out of school. Socioeconomic factors that were specific to certain times and places are also unlikely candidates to explain the general drop in risky behavior in the 1990s. The receding of the crack cocaine trade, for example, likely played an important role in declining crime rates in some urban centers in the United States, but crack cocaine was never a serious problem in Canada and, thus, cannot explain much of the decline (Zimring, 2006).

Although economic explanations have characteristics that make them appealing candidate explanations for the widespread decline in risky behavior—economic conditions affect almost everyone in a population, for example—they have been largely ineffective in explaining variation in crime rates (reviewed in Levitt, 2004). Most economic explanations focus on absolute indicators (e.g., GDP per capita, unemployment rate, median income). It is possible that more relative economic indicators, such as income inequality, may provide better economic explanations for variation in risky behavior and crime. Income inequality is a very strong predictor of homicide rates and early parturition, for example (Wilson & Daly, 1997), lending some support to this notion. High income inequality may affect risky behavior by inspiring people to discount the future.

Some researchers have described crime and risky behavior as analogous outcomes of steep discounting of the future. Discounting the future refers to the tendency to prefer immediate rewards over larger, more distal rewards. It is possible that the perception of the quality or length of one’s future affects decisions to engage in risky behavior, and such decisions may in fact be “rational” in certain circumstances (e.g., Daly & Wilson, 2001; Mishra & Lalumière, 2008). If someone has nothing to lose, it may not be surprising to see that person engage in risky or criminal behavior that may result in the acquisition of resources, status, or sexual opportunities. Cues of limited local life expectancy or large income inequality may make risky behavior an attractive option to those in such nothing-to-lose

conditions, making risk-taking a “rational” choice in some circumstances. In a classic study, Wilson and Daly (1997) found that lower life expectancy was associated with significantly higher homicide rates in Chicago neighborhoods, lending support to this notion. The drop in crime may, therefore, be attributed to lesser discounting of the future or a more positive view of future prospects in the 1990s. If the future looks positive, long, and full of opportunities, risky behaviors become less attractive options (Mishra & Lalumière, 2008).

If crime and risky behavior are influenced by perceptions of the future, and less positive future prospects are associated with increased crime and risk-taking (e.g., high competition, income inequality, short life expectancy—Wilson & Daly, 1997), then the period of decline in risky behavior should have been preceded and accompanied by cues signaling better future prospects. We have collected some preliminary data suggesting that this might indeed be the case. If people are more oriented toward the future, they should be more interested in personal health and longevity. Since the early 1990s, teenagers have been living healthier lives by exercising more, and eating more fruits and vegetables (contrary to frequent media reports). The prevalence of diagnostic tests for long-term chronic diseases, such as diabetes and cancer (indicating that people are investing in their long-term future), has also increased during that time span, in spite of a drop in the incidence of many diseases. Depression rates, which likely reflect pessimism about future prospects, decreased by over 25 percent in Canada since the early 1990s (Patten, 2002).

Above, we discussed how local life expectancy has been associated with homicide rates. Local life expectancy has also been significantly associated with the timing of reproductive decisions among women. Wilson and Daly (1997) found that disproportionately high birth rates were observed among younger mothers in Chicago neighborhoods that had the lowest life expectancies (and the reverse in neighborhoods with higher life expectancies). If people have a short time horizon, it makes adaptive sense to reproduce while there still is an opportunity to do so. After all, one cannot reproduce if one is dead. Thus, if people’s time horizons were on average perceived as being longer during the period of the crime and risk drop, then reproductive decisions likely changed during the same time period.

We already demonstrated in our analyses that teen pregnancies and live births have declined substantially in both the United States and Canada since 1991 (Mishra & Lalumière, 2009). Other reproductive and parenting behaviors have also changed remarkably during the period of the crime drop. Since the early 1990s, women have waited longer to have children. Being able to delay having children is an option only available to those that believe they will have adequate resources to raise a child in the future, suggesting a perception of good future prospects. Decreases in birth rates have been observed for mothers of all ages, except for those aged 30 to 44—women whose reproductive future is short (data from the U.S. National Center for Health Statistics). Even divorce rates have decreased since the early 1990s, suggesting that people may be investing more in long-term relationships (something that would likely not be observed if people had a shorter or more negative view of their future).

### ***Conclusions***

The decline in sexual crimes has continued to this day, although less dramatically. In the United States, forcible rape declined 28% from 1991 to 2001, and 6% from 2001 to 2007. In Canada, sexual assault rates have declined 25% from 1991 to 2001, and 17% from 2001 to 2007. Indicators of risky sexual behavior have followed similar patterns, either exhibiting further declines since the 1990s, or staying stable at a historically low rate.

Our demonstration of the generality of the crime and risk drop offers the opportunity to derive novel hypotheses about the causes of the decline and about explanations for variation in crime rates in general. Several indicators associated with longer time horizons and better future prospects have exhibited expected changes during the period of the crime drop suggesting that, as of the early 1990s,

people may have developed a more optimistic interest in long-term, future-oriented behaviors rather than behaviors reflecting short-term, immediate rewards focused on the present. Further research is necessary to address the causes of the decline in crime and risky behavior of all forms. The current economic crisis, although unfortunate, may offer an opportunity to test these new ideas. We suggest that a consideration of crime and risky behavior as analogous outcomes of similar causal processes can lead to the derivation of novel, testable hypotheses about the decline of crime in the early 1990s, in addition to general variation in crime rates over time.

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