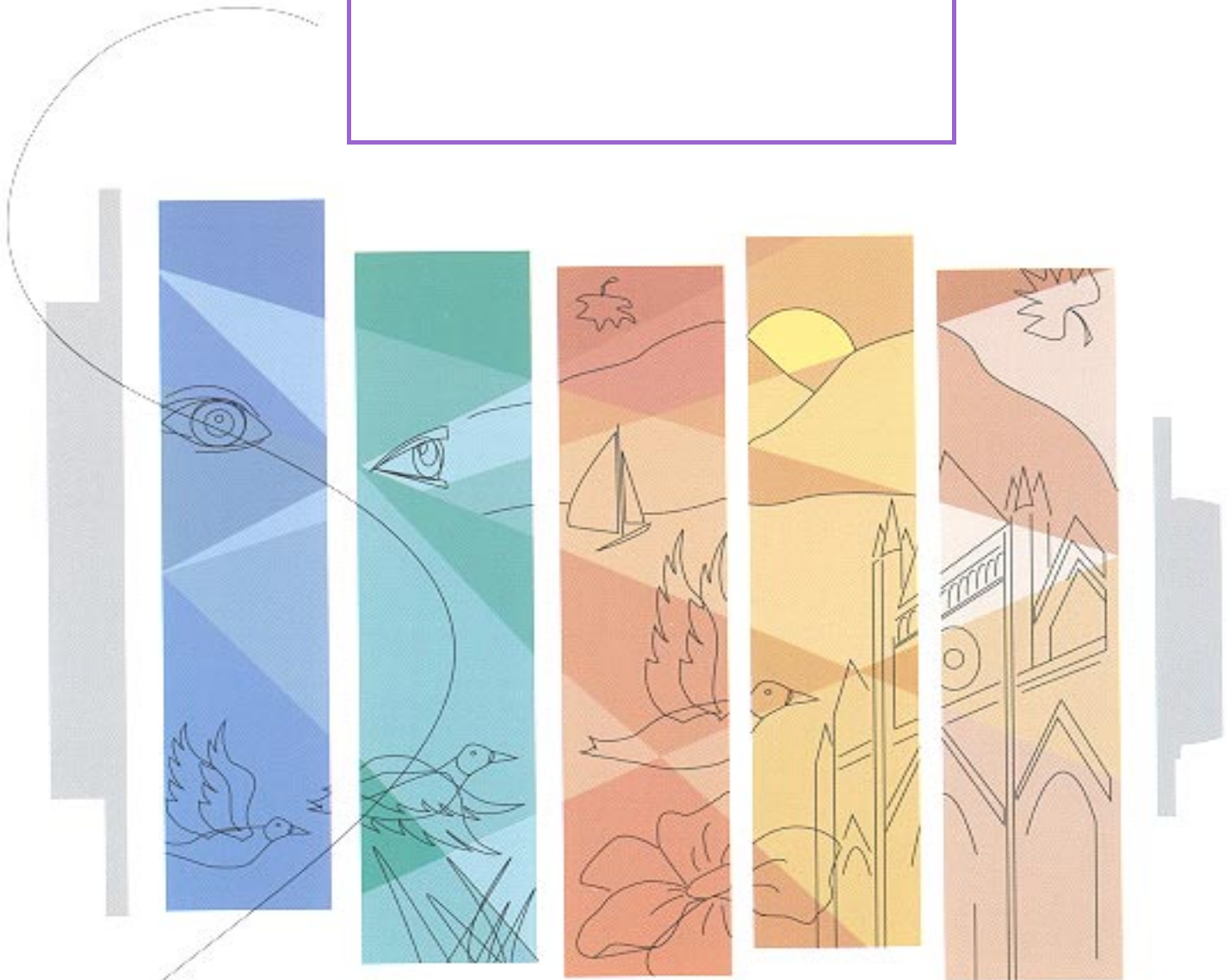




Research Branch  
Direction de la recherche

Corporate Development  
Développement organisationnel

**Factors Related to Recidivism Among Released Federal Sex Offenders**



# **Factors Related To Recidivism Among Released Federal Sex Offenders**

Laurence L. Motiuk

Shelley L. Brown

Research Division  
Correctional Service Canada

Presented at the XXVI International Congress of Psychology  
Montreal, Canada, August 19, 1996

This report is also available in French. Ce rapport est également disponible en français. Veuillez vous adresser au Secteur de recherche et développement, Service Correctionnel du Canada, 340 avenue Laurier ouest, Ottawa (Ontario), K1A 0P9. Should additional copies be required they can be obtained from Correctional Research and Development, Correctional Service of Canada, 340 Laurier Ave., West, Ottawa, Ontario, K1A 0P9.

August 1996  
N°R-49

## Abstract

In our continuing examination of sex offender case histories in federal corrections, a follow-up sample was assembled of 570 sex offenders, 329 who were on 'caseload' (already under community supervision) and 241 who were 'new releases' and subsequently followed-up. The average time served in federal custody until release for 'caseload' and 'new releases' (3.2 and 3.6 years, respectively) did not significantly differ. During the post-release follow-up period (average 3.5 years), about one-third of the sex offenders were convicted of a new criminal offence, nearly one-fifth for a violent crime and less than one in ten for a new sexual offence. It was also found that among newly released sex offenders, rapists had the highest rates of general, violent and sexual recidivism relative to any other group. In contrast, incest offenders demonstrated the lowest rates of general, violent and sexual recidivism relative to pedophiles or rapists, regardless of whether they belonged to caseload or newly released samples. It is notable that the pedophile group on caseload had the highest rate of sexual recidivism relative to incest offenders or rapists. A series of chi-square and stepwise regression analyses identified factors that can be used to predict sex offender recidivism. For general and violent recidivism, important predictors were age at release (younger), juvenile history (training school), unemployed (at time of arrest), unstable living arrangement and substance abuse (alcohol and/or drug). For sexual recidivism, the most salient factors were age at release (younger), previous sex offences (federal sentence) and adult drug abuse. While a large number of significant predictors could be found for general and violent recidivism, the low rate of sexual re-offending limited to our ability to generate many predictors of sexual recidivism.

## **FACTORS RELATED TO RECIDIVISM AMONG RELEASED FEDERAL SEX OFFENDERS**

A Working Group on Sex Offender Treatment Review (Ministry of the Solicitor General, 1989) and the Correctional Service of Canada's (CSC) Task Force on Mental Health (CSC, 1990) recommended that further research be conducted on sex offenders for the purpose of developing and evaluating special treatment programs. Moreover, both reviews underscored the need for a more co-ordinated programming and service strategy. To that end, the Service has begun to implement a national sex offender strategy which sets out governing principles for the provision of sex offender services, guidelines for assessment, treatment and research, and a framework for evaluation and accountability (Williams, 1996).

During the reviews, it was generally recognised that insufficient information existed in automated offender data bases to provide a comprehensive profile of the number, types and characteristics of sex offenders under federal supervision (serving sentences of two years or more). While such information is essential for the ongoing development and subsequent evaluation of sex offender assessment and treatment programs, it is also required to assist in the development of strategies to improve the management of re-offence risk in the sex offender population. Consequently, a broad research strategy was established to ensure that accurate and relevant information would become available on federal sex offenders.

While it is known that offence characteristics become very salient with respect to estimating the risk of sexual re-offending, information on sex offending through automated offender information systems throughout the 1980s and into the early 1990s, offered only criminal code designations and did not clarify the circumstances surrounding the sexual offence (such as type, victims, etc.). Therefore, a nation-wide 'Sex Offender Population Study' was initiated which had two related components: 1) a census identification of all sex offenders under federal supervision; and 2) an extensive case-file review of a large sample of sex offenders from across the country.

The 'Sex Offender Census' was conducted to accurately identify the number, types and characteristics of federally sentenced sex offenders - both in institutions and under community supervision (Porporino & Motiuk, 1991). A standardised census checklist was administered by case management officers who reviewed sex offenders on their current caseloads. The census checklist gathered case-specific information such as: status (current offences or previous history), details of the current sex offence (nature of the offence, number of victims, age and gender of victims, degree of injury, degree of force, presence of alcohol or drugs), past history of sexual offences (patterns, seriousness) and treatment history (dates, type/nature, location, sponsors).

The second component of the 'Sex Offender Population Study' involved a comprehensive case-file review of a large sample of federal sex offenders from across the country (Motiuk & Porporino, 1993). The case-file review portion of the 'Sex Offender Population Study' focused on the collection of detailed information on the personal background of the sex offender population as well as characteristics of the offences they had committed. Based, in part, on this work the Service implemented the Offender Intake Assessment process (in 1994) to produce a comprehensive and integrated evaluation of sex offenders as they enter the federal correctional system.

Some recent research on federal sex offenders in Canada continues to provide impetus for further research and development. Motiuk and Belcourt (1996) reported that, in 1995, there were a total of 3,875 sex offenders under federal jurisdiction in Canada. At the time, this figure represented approximately 20% of the total federal inmate population and 12% of the conditional release population. More importantly, it represented a 50% growth of the incarcerated sex offender population since 1990 (from 1,861 to 2,766). However, as Gordon & Porporino (1991) pointed out, these percentages represent an underestimate of the actual sex offender population under federal supervision. In their study, which relied on available automated data, it was not possible to report on all sex offenders who had previous sex offence convictions (such as those resulting in a provincial sentence), offenders who had committed a sex related offence, or offenders who had previously sexually offended without being convicted.

The 1991 'Sex Offender Census' identified all sex offenders (Porporino & Motiuk, 1991). The census determined that about 85% of the sex offender population were identified by the computer

system. Using a correction factor, Motiuk and Belcourt (1996) estimated that there were actually 4,545 sex offenders under federal jurisdiction at the end-of-year 1995. This adjusted number accounts for about one-fifth of the total federal offender population. Clearly, these numbers raise awareness about three inter-related trends: population growth, increased expenditures and expansion of treatment capacity. Not surprising, the correctional challenge of the 1990s has been to improve the way we reduce and respond to sex offender recidivism.

One way to meet this challenge is to develop new assessment techniques (such as multi-method and multi-predictor assessment) and the use of systematic re-assessment to advance sex offender risk management practices (Leis, Motiuk & Ogloff, 1995). The development of these new assessment techniques for sex offenders will depend largely on relevant risk factors derived from follow-up studies (Hanson & Bussiere, 1996). Motiuk and Brown (1993) followed-up the cases identified in the 1991 'Sex Offender Census' using survival analysis. That investigation found issuing and executing of suspension warrants to sex offenders was strongly associated with past sex offence history and presence of "dynamic" or situational/victimisation factors (such as marital status, substance abuse, sexual preferences). This report is a follow-up of the sex offenders identified in the second component of the 'Sex Offender Population Study', the case-file review.

## METHOD

### Sample

A total of 2,777 federal male sex offenders were targeted as potential candidates for the case-file review. Using systematic random selection, a total of 842 sex offenders (one-third) were identified for a file-review. The overall file-review completion rate was 93.2% and yielded a comprehensive database on 785 sex offenders. Consequently, a follow-up database was developed which consisted of 570 sex offenders assessed during the case file-review who had been in the community for a minimum of one year as of July, 1994. The sample was further divided into two groups, a caseload sample and a newly released sample.

The caseload sample consisted of 329 sex offenders who had been released prior to March, 1991 and had remained 'crime-free' at least until March, 1991. This group was tracked from the time of the case-file review until July, 1994, thereby allowing for a 52 month follow-up period. On average these offenders had already been in the community for 1.5 years ( $SD=2.5$ ) when follow-up data was gathered.

In contrast, the newly released sample consisted of 241 offenders who were incarcerated at the time of the case-file review but were subsequently released after March, 1991 and available for follow-up. Thus, the follow-up period for the newly released group was variable, ranging from 1 to 3.2 years ( $M = 2.4$  yrs,  $SD = .61$ ).

The average time served in federal custody until release for 'caseload' and 'new releases' (3.2 and 3.6 years, respectively) did not significantly differ.

## RESULTS

The results of the sex offender recidivism follow-up are organised into two sections: 'recidivism rates' and 'risk predictors'. Comparative statistics for the 'caseload' and 'new releases' sex offender samples are presented with respect to 'general', 'violent' and 'sexual' conviction. To obtain a better understanding of recidivism rates across sex offender type, the samples are further subdivided into 'incest offender', 'pedophile' or 'rapist'.

### **Recidivism rates**

About one-third of the sex offenders were convicted of a new offence (general), one-fifth were convicted of a violent offence and less than one in 10 were convicted of a new sex offence during the follow-up period (3.5 year average). Although the rates presented in Table 1 appear to be equivalent for both caseload and new release sex offender samples, the follow-up periods are different (4.3 and 2.4 year average, respectively). As expected, the recidivism rates for the newly released sex offender sample is higher relative to their caseload counterparts whose time-at-risk in the community is considerably longer and thereby, excludes cases who failed within the year and half prior to the follow-up.

**Table 1.**  
**Percentage Distribution of Sex Offender Recidivists**  
**by Type of Conviction for**  
**Caseload and New Release Samples**

<b>Sample</b>	<b>General</b>	<b>Violent</b>	<b>Sexual</b>
Caseload (n=329)	33.4 (110)	21.3 (70)	8.2 (27)
New Releases (n=241)	33.6 (81)	17.0 (41)	5.4 (13)
Overall (n=570)	33.5 (191)	19.5 (111)	7.0 (40)



To examine differences in recidivism rates across sex offender type, we separated the offenders into three groups: incest offenders, pedophiles and rapists (see Table 2). This revealed that among newly released sex offenders, rapists had the highest rates of general, violent and sexual recidivism relative to any other group. In contrast, incest offenders demonstrated the lowest rates of general, violent and sexual recidivism relative to pedophiles or rapists, regardless of whether they belonged to the caseload or newly released samples. It is notable that the pedophile group on caseload had the highest rate of sexual recidivism relative to incest offenders or rapists.

**Table 2.**  
**Percentage Distribution of Sex Offender Recidivists**  
**by Type of Conviction for**  
**Incest Offenders, Pedophiles and Rapists**

<b>Sample</b>	<b>General</b>	<b>Violent</b>	<b>Sexual</b>
<b>Caseload</b>			
Incest Offenders (n=46)	8.7 (4)	8.7 (4)	4.4 (2)
Pedophiles (n=114)	27.2 (31)	18.4 (21)	9.7 (11)
Rapists (n=118)	42.4 (50)	21.2 (25)	5.9 (7)
	p < .0001	ns	ns
<b>New Releases</b>			
Incest Offenders (n=36)	16.7 (6)	11.1 (4)	2.8 (1)
Pedophiles (n=83)	27.7 (23)	10.9 (9)	3.6 (3)
Rapists (n=80)	45.0 (36)	25.0 (20)	7.5 (6)
	p < .005	p < .03	ns

## **Risk Predictors**

The case-file review instrument was used to gather comprehensive information on offender demographics and history - criminal, education/employment, marital/family, sexual abuse, mental health, substance abuse, sex offence (victim characteristics, motives) and treatment. In addition, available Statistical Information on Recidivism (SIR) scale (Nuffield, 1982) scores were also obtained for the two follow-up samples. This instrument which consists of 15 risk-related factors (covering conviction history, exposure/response to criminal justice sanctions, etc.) provides an estimate of likelihood to be re-arrested within three years of release.

Phi coefficients (for categorical variables) and Pearson  $r$ 's (for continuous variables) were calculated between the various case characteristics and recidivism measures. A large number of variables were found to be significantly associated with general and violent recidivism among the sex offenders in the caseload sample (see Table 3). It is notable that the SIR was the most robust predictor of general and violent recidivism. Only previous sex offence (federal sentence) was found to be significantly associated with sexual recidivism among sex offenders in the caseload sample.

**Table 3.**  
**Risk Predictors for Sex Offenders-Caseload (Phi or Pearson r)**

<b>Predictor</b>	<b>General</b>	<b>Violent</b>	<b>Sexual</b>
Age at release	-.30	-.22	ns
Juvenile arrests	.31	.23	ns
SIR risk score	-.51	-.31	ns
# custodial admissions - any	.32	.21	ns
# custodial admissions - federal	.21	.23	ns
# custodial admissions - provincial	.32	.15	ns
previous sex offences - any	ns	ns	ns
previous sex offences - federal	.16	.19	.20
previous sex offences - provincial	ns	ns	ns
education level	.29	.19	ns
unemployed at time of offence	.18	.13	ns
single at time of offence	.17	.12	ns
training school (< 16)	.25	.25	ns
any kind of placement (<16)	.12	ns	ns
social isolate	ns	ns	ns
parental criminality	ns	ns	ns
unstable living arrangement	.17	ns	ns
adult alcohol abuse	.17	.13	ns
adult drug abuse	.32	.19	ns
alcohol use at time of offence	.19	.13	ns
drug use at time of offence	.26	.16	ns
psychiatric hospitalisation	.15	.15	ns
force or injury	.19	.14	ns

Similarly, a large number of variables were found to be significantly associated with general and violent recidivism among the sex offenders in the newly released sample (see Table 4). Again, it is noteworthy that the SIR was the most robust predictor of general, violent and sexual recidivism. Aside from age at release (younger) and adult drug abuse, the SIR was found to be the only other factor significantly associated with sexual recidivism among sex offenders in the new release sample.

**Table 4.**  
**Risk Predictors for Sex Offenders - New Releases**  
**(Phi or Pearson r)**

<b>Predictor</b>	<b>General</b>	<b>Violent</b>	<b>Sexual</b>
Age at release	-.31	-.24	-.12
Juvenile arrests	.30	.22	ns
SIR risk score	-.51	-.35	-.21
# custodial admissions - any	.33	.27	ns
# custodial admissions - federal	.17	ns	ns
# custodial admissions - provincial	.31	.31	ns
previous sex offences - any	ns	ns	ns
previous sex offences - federal	ns	.19	ns
previous sex offences - provincial	ns	ns	ns
education level	.20	ns	ns
unemployed at time of offence	.18	.25	ns
single at time of offence	.25	.14	ns
training school (< 16)	.35	ns	-
any kind of placement (<16)	.22	ns	ns
social isolate	ns	.15	ns
parental criminality	ns	.17	ns
unstable living arrangement	.20	.29	ns
adult alcohol abuse	.17	.22	ns
adult drug abuse	.29	.30	.18
alcohol use at time of offence	.16	.17	ns
drug use at time of offence	.23	.21	ns
psychiatric hospitalisation	ns	ns	ns
force or injury	ns	ns	ns

To examine the relative contribution (in explained variance) of the various risk factors we conducted a series of stepwise regression analyses. Results of regression analyses using selected variables (based on significance) for general, violent and sexual recidivism are presented in Table 5. As shown, a substantial proportion of the variance in general and violent recidivism was explained by the SIR with some gain being made by factors such as employment status, living arrangement and substance abuse. On the other hand, a pattern of increasing severity (a composite measure taking into account previous sex

offence history and escalation in sexual offending) coupled with the SIR were the most salient predictors accounting for most of the explained variance in sexual recidivism among new released sex offender.

**Table 5.**  
**Results of Stepwise Regressions for General, Violent and Sexual Recidivism**

<b>Recidivism</b>	<b>Caseload</b>	<b>New Releases</b>
<b>General</b>	1. SIR score (.22) 2. Drug problem (.07) 3. Pattern of increasing severity (.02) 4. Admit responsibility (.01) . model = .32	1. SIR score (.33) 2. Age at release (.08) 3. Training school <16 (.04) 4. Any placement <16 (.05) 5. Unemployed at time of arrest (.04) model = .54
<b>Violent</b>	1. Sir score (.10) 2. Drug problem (.03) 3. Previous sex offences - federal (.02) model = .15	1. SIR score (.08) 2. Unstable living arrangement (.04) 3. Adult alcohol abuse (.03) 4. Unemployed at time of arrest (.03) model = .18
<b>Sexual</b>	1. Previous sex offences (.06) 2. Admits offence (.01) model = .07	1. Pattern of increasing severity (.06) 2. Sir score (.04) model = .10

## Discussion

The results of the 'Case-file Review' recidivism follow-up validated previous findings regarding the predictive value of systematically assessing and re-assessing sex offender risk. Both caseload and newly released sex offender recidivism (general, violent and sexual) could be predicted by a variety of 'static' (such as criminal history) and 'dynamic' (such as employment, substance abuse, etc.) factors. While a large number of significant predictors could be found for general and violent recidivism, the low rate of sexual re-offending limited our ability to generate many predictors of sexual recidivism.

As expected, higher rates of general and violent recidivism were found among rapists. It would appear that this group of sex offenders are more versatile in their criminality than either incest offenders or pedophiles. It is noteworthy that pedophilic offenders had a higher rate of sexual re-offending than incest offenders and rapists while in the caseload sample. This finding suggests that pedophiles may be more persistent with respect to committing sex crimes over time.

Clearly, more longitudinal research is required to firmly establish relevant risk factors for sexual recidivism. Given that released sex offenders, as a group, are at risk for committing new crimes other than sex offences, then administering risk assessment procedures which are applied to the general offender population is recommended.

## References

- Correctional Service Canada. (1991). Report of the task force on mental health. Ottawa.
- Gordon, A., & Porporino, F. (1991). Managing the treatment of incarcerated sexual offenders. Corrections Today, 53, 162-168.
- Hanson, R.K., & Bussiere, M.T. (1996). Sex offender risk predictors: A summary of research results. Forum on Corrections Research, 8, 10-12.
- Leis, T., Motiuk, L.L., & Ogloff, J. (1995). Forensic psychology: Policy and practice in corrections. Ottawa: Correctional Service Canada.
- Motiuk, L.L., & Belcourt, R. (1996). Profiling the Canadian federal sex offender population. Forum on Corrections Research, 8, 3-7.
- Motiuk, L.L., & Brown, S. (1993). Survival time until suspension for sex offenders on conditional release. Report No. 31. Research and Statistics Branch, Correctional Service Canada.
- Motiuk, L.L., & Porporino, F. (1991). The prevalence nature and severity of mental health problems among federal male inmates in Canadian penitentiaries. Report No. 24. Research and Statistics Branch, Correctional Service Canada.
- Motiuk, L.L., & Porporino, F. (1993). An examination of sex offender case histories in federal corrections. Report No. 30. Research and Statistics Branch, Correctional Service Canada.
- Nuffield, J. (1982). Parole decision-making in Canada: Research towards decision guidelines. Ottawa: Communication Division.
- Porporino, F., & Motiuk, L.L. (1991). Preliminary results of the national sex offender census. Research and Statistics Branch, Correctional Service Canada.
- Solicitor General of Canada. (1990). The management and treatment of sex offenders - Report of the working group: Sex offender treatment review. Ottawa.

Williams, S. (1996). A national strategy for managing sex offenders. Forum on Corrections Research, 8, 33-35.