



# Research at a glance

## Prediction of Re-Offence Using the SIR-R1 and a Proxy

**KEY WORDS:** *Statistical Information on Recidivism, SIR-R1, re-offence, risk assessment, re-offence, recidivism*

### Why we did this study

Predicting whether an offender will re-offend is complex and, obviously, very important in making release-related decisions. CSC uses the Statistical Information on Recidivism – Revised 1 (SIR-R1) as part of this assessment. The scale, used only with non-Aboriginal male offenders, estimates the likelihood of an indictable offence being committed within three years of release.

This study aimed to determine whether the SIR-R1 continues, despite changes to the offender population, to effectively predict re-offence. Also of interest was whether the SIR-R1 could predict violent and sexual re-offence. Finally, the study also examined the potential applicability of a proxy of the scale to male Aboriginal offenders and to women offenders (both Aboriginal and non-Aboriginal).

### What we did

We examined the SIR-R1 scores and post-release outcome of the 11,571 male non-Aboriginal offenders released from 2005 to 2007. In addition, we used a proxy of the SIR-R1 to approximate scale scores for all Aboriginal male ( $N = 2,846$ ), Aboriginal women ( $N = 251$ ), and non-Aboriginal women offenders ( $N = 684$ ) released in the same period.

### What we found

Results clearly showed that the SIR-R1 continues to appropriately predict general re-offence within three years among non-Aboriginal male offenders. In fact, results were quite similar to those of nearly a decade ago, demonstrating that despite changes in the offender population, the scale's predictive accuracy has not decreased.

In addition, despite the fact that the SIR-R1 was constructed only to predict general re-offence, its ability to predict violent re-offence was satisfactory. The SIR-R1 was not predictive of sexual re-offence.

Finally, the application of the SIR-R1 proxy to male Aboriginal offenders and to women offenders produced positive results. The proxy predicted re-offence in non-Aboriginal women offenders better than in their male counterparts. Predictive accuracy was somewhat less for Aboriginal offenders, though it reached levels considered acceptable.

### What it means

Results clearly supported the continued use of the SIR-R1 in case planning and release decision-making for non-Aboriginal male offenders.

Further research is proposed to identify SIR-R1 items, together with culturally-informed and gender-informed variables, that can be combined to create measures of risk of general re-offence for Aboriginal and women offenders. The creation of such measures will strengthen CSC and the Parole Board of Canada's ability to predict risk of re-offence for all offenders, regardless of gender and ethnicity.

### For more information

Barnum, G. & Gobeil, R. (2012). *Prediction of re-offence using the SIR-R1 and a proxy*. Research Report R-281. Ottawa, ON: Correctional Service of Canada.

To obtain a PDF version of the full report, contact the following address: [research@csc-scc.gc.ca](mailto:research@csc-scc.gc.ca)

**Prepared by:** Geoffrey Barnum & Renée Gobeil

### Contact

Research Branch  
(613) 995-3975  
[research@csc-scc.gc.ca](mailto:research@csc-scc.gc.ca)

