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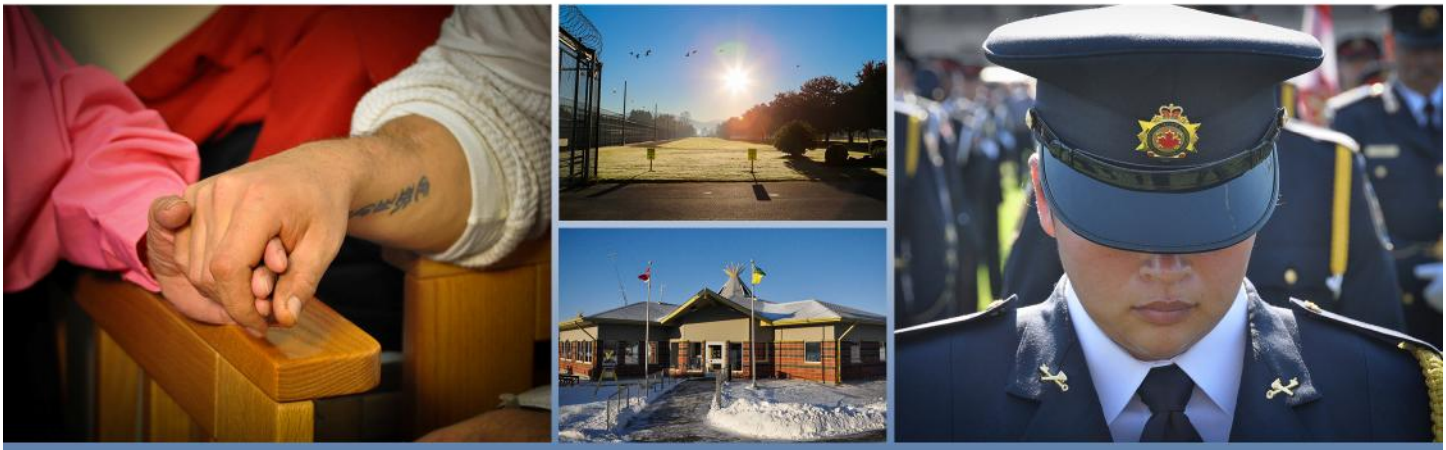

RESEARCH REPORT

The Development and Validation of a Criminal Risk Index (CRI) for Federally Sentenced Offenders in Canada

2018 Nº R-403

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The Development and Validation of a Criminal Risk Index (CRI) for Federally Sentenced Offenders in Canada

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Introduction

Implemented in 1994, the automated Offender Intake Assessment (OIA) process has been used by the Correctional Service of Canada (CSC) to produce an individualized Correctional Plan for all federally sentenced offenders. Two core components of the OIA are Static Factors Assessment and Dynamic Factors Identification and Analysis. One subcomponent of Static Factors Assessment, the Criminal History Record, is comprised of indicators covering previous youth and adult court involvement as well as current offence. Summed together, these yield a total score that reflects the nature and extent of an offender's involvement with the criminal justice system. A Criminal Risk Index (or "CRI") was derived from Criminal History Record data contained in CSC's Offender Management System. The development of CRI risk level groups involved the compilation of six complete fiscal years of first release cohorts (2006-07 to 2011-12) totaling 26,475 federal offenders (24,978 men and 1,497 women), construction of a database with subsequent outcomes (re-offence with a three year follow-up) and exploring the relationship of indictors to outcomes, the differentiation of five risk categorizations and CRI grouping predictive validity. The CRI was found to be significantly related to re-offence for men, women and Indigenous offenders. As well, for discretionary/non-discretionary releases, discretionary release failure and across major offence groupings of homicide, sex, robbery and drug offenders. Additionally, it replicated convergent validity estimates with the Custody Rating Scale, Statistical Information on Recidivism-Revised 1 scale, Reintegration Potential as well as OIA Static (risk) and Dynamic (need) Factors ratings.

In August 1991, under the auspices of an ambitious Correctional Strategy Initiative, a scheme was developed by Correctional Service Canada (CSC) to improve the assessment of criminal risk and identify offender needs (Motiuk & Pisapio, 1992). At the time, the development and pilot testing of an Offender Intake Assessment (OIA) process represented the latest generation of integrated risk assessment technology. The OIA was designed to be a comprehensive and integrated evaluation of the offender at the time of admission to the federal system (Motiuk, 1993). It involves the systematic collection and analysis of information on each offender's criminal and mental health history, social situation, education and other factors relevant to determining the risk and identifying offender needs. The two core components of the

[1] *The opinions expressed in this paper are those of the authors and do not necessarily represent the official views of the Correctional Service of Canada or the Government of Canada.*

OIA process is Static Factors Assessment and Dynamic Factors Identification and Analysis (DFIA). This comprehensive, integrated assessment package is the basis for determining the offender's institutional placement and for establishing an individualized correctional plan. The OIA process was fully automated and nationally implemented in 1994 (Motiuk 1997).

Static Factors Assessment

Upon admission to federal corrections, every offender is assessed for Static Factors risk based on the following: the Criminal History Record, the Offence Severity Record, the Sex Offence History Checklist, whether preventative detention criteria are met, the result of the Statistical Information on Recidivism-Revised 1 (SIR-R1) scale and any other risk factors described in a criminal profile report which provides details of the crime for which the offender is currently sentenced (Commissioner's Directive 705-6).

By systematically reviewing the offender's file, which includes police reports, court transcripts and criminal records, a Criminal History Record is completed. Information is gathered on previous offences, current offences, the number and types of convictions, youth court dispositions, adult court sanctions and crime-free periods. This information is compiled into three separate indices of the Criminal History Record (or CHR): previous youth court involvement, previous adult court involvement and current offences. Together, these yield a total score that reflects the nature and extent of an offender's involvement with the criminal justice system.

In a study of 5,238 federally sentenced men, Motiuk (1997) found convergent validity for the OIA Criminal History Record with the overall Static Factors risk ratings ($r = .41$, $p < .0001$) and the SIR-R1 scale ($r = -.83$, $p < .0001$). In a another study based on 64,605 (1997-2012) federal admissions, Helmus and Forrester (2014a) reported that the Static Factors component of the OIA, including its Criminal History Record subcomponent were being used as intended. The Criminal History Record items were found to be influencing the overall risk evaluations, and the assessments were related to other measures of risk. Consequently, convergent validity was found for the Criminal History Record reflected in significant correlations with the SIR-R1 scale ($r = -.66$) and a proxy measure of the SIR-R1 ($r = -.73$).

In another study based on 8,767 first releases (2006-2008) from federal custody, Helmus and Forrester (2014b) examined the predictive validity of the Static Factors component of OIA and found the Criminal History Record subcomponent performed particularly well, demonstrating large relationships to community outcomes and outperforming the overall Static Factors risk rating, the Offence Severity Record subcomponent and even the SIR-R1. These patterns held true for gender and Aboriginal ancestry groups. Statistically significant Area under the Curve (AUC) values were found for revocation without offence (.669), readmission with any offence (.717) and readmission with violent offence (.705).

Purpose of Current Study

The purpose of the current study was to transform the Criminal History Record subcomponent of the OIA process into an empirically-derived Criminal Risk Index (or "CRI"). More specially, to develop and validate an auto-populated gage that can serve as a release risk estimate separately for men and women.

Method

The construction of a database from CSC's Offender Management System entailed the compilation of six complete fiscal years (2006/07 to 2011/12) of first release cohorts (men = 24,978 and women = 1,497; Indigenous = 5,526) for a total of 26,475 federal cases (see Table 1). The data file was supplemented with the addition of post release outcome data (return to federal custody for any offence within a 3 year follow-up period) and the extraction of Static Factors - Criminal History Record items (see Appendix A), SIR-R1 scale release risk scores, Custody Rating Scale security level designations, Reintegration Potential ratings and other case characteristics (discretionary/non-discretionary release and major offence type).

Table 1

Men and Women Federal Releases - 3 Year Follow-up

Fiscal Year	*Men*	*Reoffence*	Women	Reoffence
2006-2007	4,226	22%	246	12%
2007-2008	4,275	21%	298	10%
2008-2009	4,458	20%	317	14%
2009-2010	4,148	22%	246	15%
2010-2010	3,886	20%	183	22%
2011-2010	3,935	20%	207	10%
Total	24,978	21%	1,497	13%

Custody Rating Scale

The Custody Rating Scale (CRS), an objective security classification tool used by CSC, is comprised of two separate dimensions. The first is a 5-item Institutional Adjustment sub-scale (history of involvement in institutional incidents, escape history, street stability, alcohol/drug use, age at time of sentencing), and the second is a 7-item Security Risk sub-scale (number of prior convictions, most severe outstanding charge, severity of current offence, sentence length, street stability, prior parole and/or mandatory supervision/statutory releases, age at time of first

federal admission). As scores escalate on either sub-scale, the inmate receives a higher security level designation that is necessary to maintain public, CSC staff and offender safety. In accordance with the predetermined cut-off values set for minimum, medium and maximum-security placement, an initial security level designation is generated by the CRS.

Empirical studies have consistently found that the CRS is very effective in assigning an offender to an appropriate initial security level designation (Porporino, Luciani, Motiuk & Johnston, 1989; Luciani, Motiuk, & Nafekh, 1996; Blanchette, Verbugge & Wichman, 2002; Smith, 2006; Gobeil, 2011; Barnum & Gobeil, 2012). More specifically, CRS security level ratings have been found to be significantly related to indices of institutional adjustment and security risk, including incidents (escape, drug and alcohol, violence), discretionary release rates and conditional release outcome.

Statistical Information on Recidivism Revised 1

The General Statistical Information on Recidivism (GSIR) scale was developed as part of the 'Parole Decision Making Project' initiated by the National Parole Board in 1975 (Nuffield, 1982). For nearly 35 years, it has been endorsed as a component of pre-release decision polices by the Parole Board of Canada (PBC) for federally sentenced men. The GSIR was developed as a predictive tool measuring recidivism, defined as re-arrest for an indictable offence during a post-release follow-up period of three years. The instrument was constructed by weighting 15 items that had a statistically significant relationship with recidivism, scores were assigned to each item, a simple summation technique was applied and scores were clustered to create five risk categories ranging from "very good risk" to "very poor risk".

Hann and Harman (1989) validated the GSIR and found the tool was able to distinguish high-risk offenders from low-risk offenders. Again, Hann and Harman (1992) replicated the predictive validity of the GSIR. Since then, other studies have demonstrated the GSIR to be predictive of post-release recidivism (Bonta, Harman, Hann, & Cormier, 1996; Cormier 1997). In 1996, the GSIR was revised into the SIR-R1 to improve face validity and reflect changes in legislation (Nafekh & Motiuk, 2002). Since then, the SIR-R1 has been systematically administered to all men non-Aboriginal offenders as a part of the Static Factors Assessment component of OIA. More importantly, the SIR-R1 success rates have never been changed and remain as follows:

Very Good Risk (+6 to +27) Four out of every five offenders will not commit an indictable offence after release.

Good Risk (+1 to +5) Two out of every three offenders will not commit an indictable offence after release.

Fair Risk (-4 to 0) One out of every two offenders will not commit an indictable offence after release.

Poor Risk (-8 to -5) Two out of every five offenders will not commit an indictable offence after release.

Very Poor Risk (-30 to -9) One out of every three offenders will not commit an indictable offence after release.

For program referrals to the CSC multi-target purposes, the risk ratings are collapsed into High (-30 to -5), Moderate (-4 to 5) and Low (6 to 27) whereupon offenders scoring High Risk ratings are referred to high program intensity, Moderate Risk ratings are referred to moderate program intensity and Low Risk ratings are not referred to either.

Reintegration Potential

Systematic assessment strategies can be applied to better identify and safely release offenders with good potential for successful reintegration (Motiuk & Serin, 1998). Moreover, a particular combination or convergence of objective intake classification measures – CRS security level designation, SIR-R1 release risk grouping and OIA Static/Dynamic Factors level ratings can be integrated and grouped according to Reintegration Potential (RP) ranging from "Low", "Moderate" to "High" (Motiuk & Nafekh, 2001). Based on 4,864 federally sentenced men assessed at intake and followed-up upon release to the community, higher RP was found to be significantly associated with likelihood of discretionary release and lower RP with return to prison and return with a new offence. Similarly, in a study of 228 federally sentenced women, higher RP was found to be significantly associated with likelihood of discretionary release and the highest percentage of return to federal custody was found among the Low RP group (Motiuk & Nafekh, 1999). In another study of 21,746 offenders, again those with High RP were significantly more likely to be successful on conditional release and less likely to have a revocation or a new offence (Stys et al., 2012).

OIA Static and Dynamic Factors Rating

The guidelines for determining the overall rating for level of intervention based on Static Factors are: a) a rating of 'High' reflects cases in which the Criminal History Record reflects considerable involvement with the criminal justice system, or the Offence Severity Record reflects considerable harm to society in general, and victims in particular, or the Sex Offence History Checklist reflects considerable sex offending; b) a rating of 'Low' reflects cases where all of the following conditions are met: the Criminal History Record reflects little or no involvement with the criminal justice system, the Offence Severity Record reflects little or no harm to society in general, and victims in particular, the Sex Offence History reflects little or no sex offending, iv. A review against detention criteria, as well as the score on the SIR-R1, if applicable, supports all of the aforementioned indices; and c) a rating of 'Medium' signifies that the offender is clearly not a Low criminal risk and there exists sufficient latitude to not rate the offender as High.

The DFIA component of OIA identifies seven need dimensions, including employment, marital/family, associates, substance abuse, community functioning, personal/emotional orientation and attitude. A list of indicators (about 200 in total) and rating guidelines are provided for each criminogenic need area. The guidelines for determining the overall rating for the level of intervention are: a) 'Low': there are no identified dynamic factors (i.e. factors seen as an asset to community adjustment and/or no immediate need for improvement), relatively few identified dynamic factors and rated as low or medium need for improvement; b) 'High': there are few identified dynamic factors but rated as high need for improvement or multiple dynamic factors identified, (regardless of degree or severity of needs); c) 'Medium': for any combination of dynamic factor severity and number that lie outside of either the 'Low' or 'High' guidelines as identified above.

In a meta-analytic and psychometric review of 16,645 federal admissions (1994 to 2000) who were OIA assessed and subsequently released, all seven of the dynamic factor domain ratings as well as a significant number of the individual indicators within the domains significantly predicted readmission for men, women and Indigenous offenders (Brown & Motiuk, 2005).

Examination of Criminal Risk Index (CRI)

The development of the CRI began with an exploration of the distribution of CHR

indicators for men and women and their relationship to release outcome (re-offence within three years). The summation of CHR indictors into an index yields a possible total score ranging from 0 to 38. Based on differences between aggregate scores and outcome rates for men and women, five risk categorizations were derived for the CRI. Then CRI grouping predictive validity was examined for men and women as well as Indigenous versus Non-Indigenous offenders. CRI predictive criterion validity was also examined for discretionary/non-discretionary releases, discretionary release failure and across major offence groupings of homicide, sex, robbery and drug offenders. Additionally, convergent validity estimates were generated with SIR-R1, CRS, RP, and OIA Static Factors (risk) and Dynamic Factors (need) ratings.

Results

A psychometric way of looking at the validity of the CRI is by examining the relationships between the OIA Criminal History Record indicators and re-offence. A three-year follow-up of released men and women revealed that 21% of men and 13% of women returned to federal custody with a re-offence. The return to federal custody was 29% for Indigenous offenders.

Table 2 shows the frequency distribution of the previous youth court indictors and corresponding re-offence rates when the indicator is present. Among men, all of the youth court involvement indicators were found to be significantly associated with post-release re-offending. Similarly, for women the vast majority of youth court involvement indictors were found to be significantly associated with the exception of disciplinary transfers from open to secure custody. Even though in the expected direction it was observed that statistical significance was not reached due to the low frequency of this indicator (>1%).

Table 2

Previous Youth Court Indicators and Re-Offence: Men and Women

Criminal History Record Indicator	Men	Re-offence	Women	Re-offence
Previous Offences-Youth	46%	30%	30%	22%
Number of Convictions				
One conviction	8%	20%	6%	12%
Two to four convictions	14%	26%	8%	18%
Five to nine convictions	10%	32%	7%	28%
Ten to fourteen convictions	6%	35%	3%	28%
Fifteen or more	8%	41%	5%	37%
Type of Convictions				
Scheduled convictions	21%	30%	14%	27%
Youth Court Dispositions				
Community supervision	40%	31%	25%	23%
Open custody	26%	33%	13%	28%
Secure custody	26%	34%	13%	29%
Disposition Outcomes				
Failure during community-based supervision	28%	34%	16%	25%
Disciplinary transfers from open to secure	5%	38%	2%	24%
Disciplinary reports while in secure custody	8%	38%	4%	27%
Attempt escape/UAL/escape from secure custody	6%	39%	3%	30%
Transfer from secure custody to adult facility	2%	35%	1%	0%

In Table 3 are presented the frequency distributions of the previous adult court indicators and re-offending rates. For men, all of the previous adult court involvement indicators were found to be significantly associated with post-release re-offending. As well for women, almost all of the adult court involvement indictors were found to be significantly associated with Reoffence. The one exception was previous federal term although in the expected direction.

Table 3

Previous Adult Court Indicators and Reoffence: Men and Women

Criminal History Record Indicator	Men	Re-offence	Women	Re-offence
Previous Offences-Adult	82%	23%	72%	17%
Number of Convictions				
One conviction	7%	11%	8%	9%
Two to four convictions	14%	16%	13%	13%
Five to nine convictions	16%	20%	13%	15%
Ten to fourteen convictions	11%	23%	9%	16%
Fifteen or more	34%	29%	27%	22%
Type of Convictions				
Scheduled convictions	60%	23%	42%	18%
Adult Court Sanctions				
Community supervision	74%	24%	63%	17%
Provincial Terms	69%	25%	51%	19%
Federal Terms	29%	28%	13%	18%
Sanction Outcomes				
Failure during community-based supervision	61%	26%	50%	20%
Segregations for disciplinary infractions	29%	31%	16%	19%
Attempt escape/UAL/escape from secure custody	23%	32%	13%	25%
Reclassified to higher levels of custody	17%	32%	7%	26%
Failures on conditional release	42%	28%	31%	20%
Crime-free Period				
Less than six months since last incarceration	22%	34%	11%	22%
No crime-free period of one year or more	17%	38%	10%	21%

Table 4 displays the frequency distributions of current offence indicators and related reoffending rates when the indicator exists. For men and women, the number of convictions on the current sentence being served was found to be significantly associated with re-offending. However, released offenders with non-scheduled convictions (i.e., property) were significantly less likely than those with scheduled convictions (i.e., assault, robbery) to reoffend. More specifically, the re-offence rate for men with non-scheduled convictions was 28.5% versus 17.9% with scheduled convictions and for women 17.5% with non-scheduled versus 12.1% with scheduled convictions.

Table 4

Current Offence Indicators and Re-Offence : Men and Women

Criminal History Record Indicator	Men	Re-offence	Women	Re-offence
Current Offences				
Number of Convictions				
One conviction	22%	15%	29%	8%
Two to four convictions	42%	19%	37%	13%
Five to nine convictions	24%	25%	21%	20%
Ten to fourteen convictions	7%	27%	6%	12%
Fifteen or more	5%	30%	6%	19%
Type of Convictions				
Scheduled convictions	73%	18%	75%	12%

In moving from the Criminal History Record to a CRI or simple summation of indicators, Table 5 presents the distribution of re-offence rates by CRI risk level groups for men and women. As Table 5 shows, there is a clear linear relationship between group level and release outcome for both men and women. For men, there was a statistically significant association between CRI group level and re-offence [χ^2 (4, n = 24,978) = 1,832.05, $p < .0001$; phi coefficient = 0.27]. As well for women, there was a statistically significant association between CRI group level and re-offence [χ^2 (4, n = 1,497) = 92.8, $p < .0001$; phi coefficient = 0.25].

Table 5

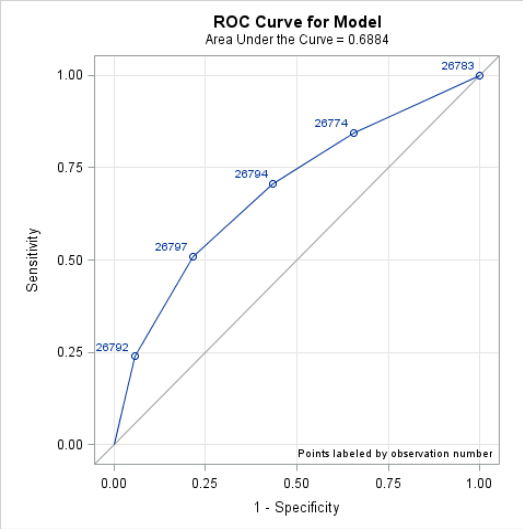
Criminal Risk Index – Groupings, Scores and 3 Year Reoffence Rates

Group	Scores –Men	*n*	Re-offence	Scores-Women	*n*	Re-offence
1	1 to 7	5,001	6%	1 to 4	375	5%
2	8 to 13	6,202	13%	5 to 8	206	7%
3	14 to 17	5,028	22%	9 to 13	369	14%
4	18 to 21	3,846	30%	14 to 18	310	16%
5	22+	4,874	37%	19+	233	30%
Total		24,951	21%		1,493	13%

Another way of examining the predictive validity of the CRI involves exploring the AUC statistic from receiver operating characteristic (ROC) curve analyses separately for men and women (see Figure 1) as well as non-Indigenous and Indigenous (see Figure 2) offenders. As reflected in the ROC curves below, the AUC values of .668 for men, .692 for women, .693 for non-Indigenous and .633 for Indigenous offenders are statistically significant and indicate that higher CRI scores are positively associated with more re-offending.

Figure 1

Men



Women

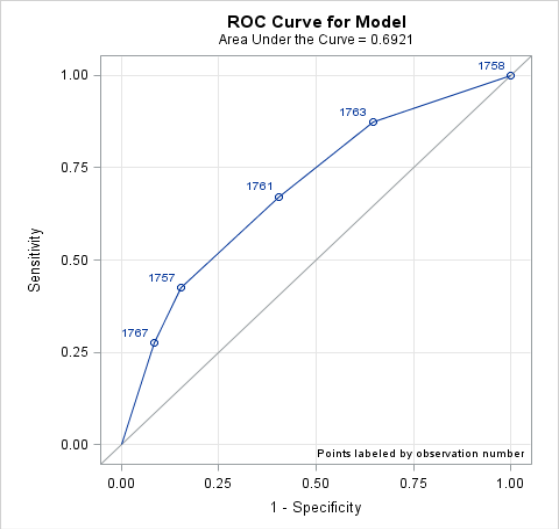
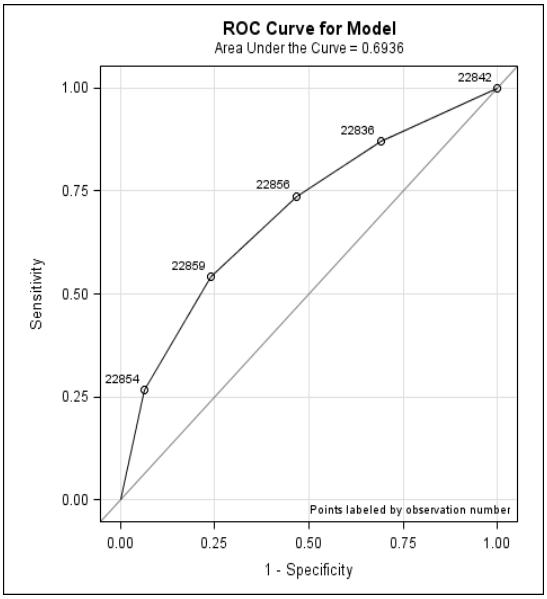
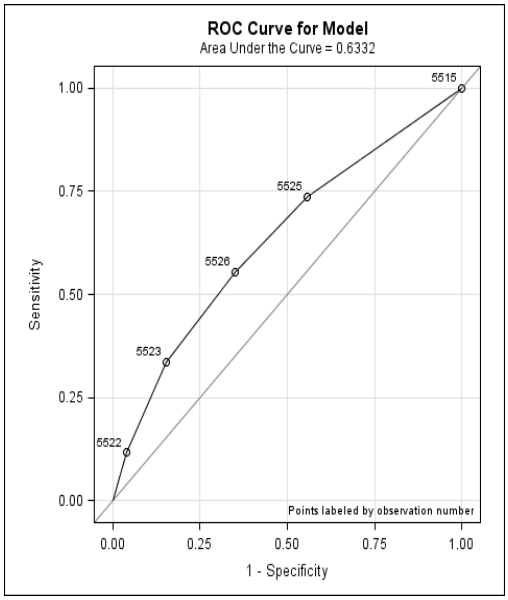


Figure 2

Non-Indigenous



Indigenous



Predictive Validity – Discretionary/Non-discretionary Release

Another predictive criterion measure relevant to the validation of the CRI is the granting of a discretionary (parole) versus non-discretionary (statutory) release by the Parole Board of Canada. Table 6 presents the distribution of discretionary and non-discretionary release rates by CRI risk level groups for men and women. As Table 6 shows, there is also a clear relationship between group level and release type for both men and women. For men, there was a statistically significant association between CRI group level and discretionary release [χ^2 (4, n = 23,873) = 3,560.5, p <.0001; phi coefficient = 0.39]. As well for women, there was a statistically significant association between CRI group level and discretionary release [χ^2 (4, n = 1,469) = 138.3, p <.0001; phi coefficient = 0.31].

Table 6

CRI Group by Discretionary/Non-discretionary Release Rates

Criminal Risk Index Grouping	Men Discretionary *n* (%)	Men Non-discretionary *n* (%)	Women Discretionary *n* (%)	Women Non-Discretionary *n* (%)
1 - Very Good	3,448 (70.4)	1,450 (29.6)	321 (87.5)	46 (12.5)
2 - Good	3,107 (52.2)	2,846 (47.8)	158 (76.7)	48 (23.3)
3 - Fair	1,594 (33.3)	3,195 (66.7)	266 (72.7)	100 (27.3)
4 - Poor	961 (26.2)	2,701 (73.7)	182 (59.9)	122 (40.1)
5 - Very Poor	787 (17.2)	3,784 (82.8)	103 (45.6)	123 (54.4)
Total	9,987	13,976	1,030	431

Predictive Validity – Discretionary Release Outcome

Further to the granting of a discretionary release is the validity of the CRI with respect to the predictive criterion measure of re-offence. In Table 7, the distribution of discretionary release failure rates by CRI risk level groups is displayed for men and women. As Table 7 shows, there is again a clear linear relationship between group level and release type for both men and

women. For men, there was a statistically significant association between CRI group level and re-offence while on discretionary release [χ^2 (4, n = 9,897) = 774.64, p <.0001; phi coefficient = 0.28]. As well for women, there was a statistically significant association between CRI group level and re-offence while on discretionary release [χ^2 (4, n = 1,030) = 85.1, p <.0001; phi coefficient = 0.29].

Table 7

CRI Group by Discretionary Release Failure Rates

Criminal Risk Index Grouping	Men	Re-offence	Women	Re-offence
1 - Very Good	3,448	5%	321	3%
2 – Good	3,107	13%	158	8%
3 - Fair	1,594	22%	266	13%
4 - Poor	961	30%	182	18%
5 - Very Poor	787	36%	103	36%
Total	9,897	18%	1,030	12%

Predictive Validity – Major Offence Groups

Table 8 shows the distribution of re-offence rates by four major offence groups - homicide, robbery, sex offence and drug. It should be noted that offenders may be present in one or more groups as there can be overlap. Again, there is a linear relationship between group level and release outcome across all major offence categories. For homicide offenders, there was a statistically significant association between CRI group level and re-offence [χ^2 (4, n = 1,686) = 34.3, p <.0001; phi coefficient = 0.14]. As well for sex offenders, there was a statistically significant association between CRI group level and re-offence [χ^2 (4, n = 3,833) = 252.39, p <.0001; phi coefficient = 0.26].

Particularly noteworthy is the relatively higher re-offence rate among robbery offenders and those in the CRI “poor’ and “very poor” risk level groups (30.0% and 38%,

respectively). In regards to robbery offenders, there was a statistically significant association between CRI group level and re-offence [χ^2 (4, n = 7,355) = 309.19, p <.0001; phi coefficient = 0.21]. Additionally for drug offenders, there was a statistically significant association between CRI group level and re-offence [χ^2 (4, n = 8,763) = 525.06, p <.0001; phi coefficient = 0.25].

Table 8

Criminal Risk Index – Groupings, Scores and Re-offence Rates

Group	Homicide	R%	Sex Offence	R%	Robbery	R%	Drug	R%
1-VG	522	13.0	1,379	1.8	669	9.7	1,672	6.9
2-G	472	13.4	1,097	5.6	1,322	17.9	2,145	12.8
3-F	277	19.9	615	13.7	1,640	24.2	1,771	21.2
4-P	216	20.4	387	20.9	1,517	30.0	1,519	25.9
5-VP	199	29.2	355	20.0	2,207	38.2	1,656	35.1
Total	1,686	17.1	3,833	8.4	7,355	27.1	8,763	19.9

Convergent Validity

In addition to predictive validity estimates expressed as significance tests and AUCs between the CRI and re-offence for men and women offenders, Table 9 presents statistically significant convergent validity for the CRI across a variety of alternative risk measures.

Table 9

Correlations (Pearson r) between Criminal Risk Index, Re-offence and Other Measures

Groups	Re-offence	SIR-R1	CRS	RP	OIA-S	OIA-D
CRI for Men	.27***	-.79***	-.39***	-.63***	.50***	.44***
CRI for Women	.23***	N/A	-.27***	-.42***	.52***	.45***

Notes: SIR-R1=Statistical Information on Recidivism; CRS=Custody Rating Scale; RP=Reintegration Potential; OIA-S=Static risk rating; OIA-D=Dynamic Risk rating; N/A = not applicable. ***p < .0001

Discussion

This study established that criminal history information derived from CSC's automated OIA process can be quantified in ways that accurately reflect relative risk estimations. In this study the CRI significantly predicted post-release re-offending for both men and women offenders. Further psychometric analyses revealed acceptable predictive estimates for Indigenous, homicide, robbery, sex and drug offenders. Moreover, convergent validity estimates were established between the CRI and other validated measures of release risk. For example, the CRI was found to be highly correlated with the SIR-R1 notwithstanding the SIR-R1is not administered to women or Indigenous offenders.

The findings with the CRI are consistent with the established literature that has consistently found that criminal history is a robust predictor of future offending (Glueck & Glueck, 1930; Schnur, 1949; Reis, 1951; Glaser, 1964; Waller, 1974; Gendreau & Leipciger, 1980; Gottfredson & Tonry, 1987), particularly among those who have not benefited from appropriate correctional programming (Andrews, Bonta & Hogue, 1990).

It may be surprising to some, keeping in mind that CRI scores were unavailable to release decision-makers, that the CRI predicted discretionary release and failure while on that form of release. The predictive accuracy of objective tools such as the CRI are a source of skepticism by some practitioners as belonging to a group of assessment instruments viewed as "static" and therefore not capable of reflecting change. While this is a limitation with these "static" tools, they have fared as well as many other assessment instruments in predicting relevant correctional outcomes (Bonta, 1996; Motiuk, 1999).

The CRI was validated on a recent and very large number of released federal offenders. The findings point to two future directions. First, the results of this study provide promise for combining a complete and validated CRI with more traditional forms of offender risk and needs assessments. The advantage of adding a different method is seen in that it may help to identify additional needs. To be certain, the idea of multi-method multi-predictor assessment and reassessment strategies is not new (Cronbach & Meehl, 1955; Motiuk, 1995). Nevertheless, the challenge remains in offender classification as the practice has been the adoption of one method over the exclusion of another.

Finally, with the growing demand for correctional programs at varying levels of intensity,

efficient and valid assessment procedures are needed. The advance of computerization in the field of corrections has been heralded as a new and efficient solution to delivering a structured assessment and intervention framework. Auto-populated assessments such as the CRI that transform existing repositories of offender information can serve as the basis for computer-assisted case management analysis.

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APPENDIX A

STATIC FACTORS ASSESSMENT

CRIMINAL HISTORY RECORD

PREVIOUS OFFENCES – *YOUTH COURT*

Number of Convictions

- ❑ Previous offences youth court?
- ❑ Fifteen or more convictions?
- ❑ Ten to fourteen convictions?
- ❑ Five to nine convictions?
- ❑ Two to four convictions?
- ❑ One conviction?

Type of Convictions

- ❑ Scheduled convictions?

Youth Court Dispositions

- ❑ Community supervision?
- ❑ Open custody?
- ❑ Secure custody?

Disposition Outcomes

- ❑ Failure during community-based supervision?
- ❑ Disciplinary transfers from open to secure?
- ❑ Disciplinary reports while in secure custody?
- ❑ Attempt escape/UAL/escape from secure custody?
- ❑ Transfer from secure custody to adult facility?

PREVIOUS OFFENCES – ADULT COURT

Number of Convictions

- ❑ Previous offences adult court?
- ❑ Fifteen or more convictions?
- ❑ Ten to fourteen convictions?

- ❑ Five to nine convictions?
- ❑ Two to four convictions?
- ❑ One conviction?

Type of Convictions

- ❑ Scheduled convictions?

Adult Court Sanctions

- ❑ Community supervision?
- ❑ Provincial terms?
- ❑ Federal terms?

Sanction Outcomes

- ❑ Failure during community-based supervision?
- ❑ Segregation for disciplinary infractions?
- ❑ Attempt escape/UAL/escapes?
- ❑ Reclassified to higher levels of custody?
- ❑ Failures on conditional release?

Crime-Free Period

- ❑ Less than six months since last incarceration?
- ❑ No crime-free period of one year or more?

CURRENT OFFENCES

Number of Convictions

- ❑ Fifteen or more current convictions?
- ❑ Ten to fourteen current convictions?
- ❑ Five to nine current convictions?
- ❑ Two to four current convictions?
- ❑ One current conviction?

Type of Convictions

- ❑ Scheduled current convictions?