

# CORRECTIONAL SERVICE CANADA

CHANGING LIVES. PROTECTING CANADIANS.



## RESEARCH REPORT

### Revalidation of the Custody Rating Scale for Non-Indigenous Women Offenders

**2023 N° R-475**

Cat. No.: PS83-3/475E-PDF

ISBN: 978-0-660-69172-5

Ce rapport est également disponible en français. Pour en obtenir un exemplaire, veuillez vous adresser à la Direction de la recherche, Service correctionnel du Canada, 340, avenue Laurier Ouest, Ottawa (Ontario) K1A 0P9.

This report is also available in French. Should additional copies be required, they can be obtained from the Research Branch, Correctional Service of Canada, 340 Laurier Ave. West, Ottawa, Ontario K1A 0P9.



**Revalidation of the Custody Rating Scale for Non-Indigenous Women Offenders**

Andrew Woodard

Laura McKendy  
&  
Leslie Anne Keown

Correctional Service of Canada

2023



## Executive Summary

**Key words:** *Custody Rating Scale; Offender Security Level; Offender Case Management; Women Offenders*

The Custody Rating Scale (CRS) is an instrument employed by the Correctional Service of Canada (CSC) to assist in determining an offender's initial security classification. The CRS is comprised of two subscales, Institutional Adjustment and Security Risk, with scores informing a CRS designation of minimum, medium, or maximum security. As per [Commissioner's Directive 705-Z](#), the CRS is used in conjunction with structured professional assessment of an offender's institutional adjustment, escape risk, and public safety risk to determine an appropriate Offender Security Level (OSL).

Previous studies have determined that the CRS holds predictive validity and is appropriate for use among women offenders (Blanchette, Verbrugge, & Wichmann, 2002; Barnum & Gobeil, 2012). As part of a series of revalidation studies, the current study examines the validity of the CRS for non-Indigenous women offenders admitted to federal custody on a Warrant of Committal (WOC,  $N = 1,414$ ) or a revocation of conditional release ( $N = 280$ ) between 2013/2014 and 2018/2019.

Concordance between the CRS and OSL was 69% for the WOC admission group, and 61% for the revocation group, demonstrating lower rates than previously reported for non-Indigenous women (i.e., Barnum & Gobeil, 2012). There was regional variation in concordance; for example, the Pacific region had the lowest rate of concordance and highest rate of security increases relative to all other regions. Discordant decisions, whereby the OSL was higher or lower than the CRS designation, were linked to profile factors in that offenders with a discordant decision typically had greater profile similarity to their respective security group relative to the concordant group associated with their CRS designation. Among new admissions, CRS designations were conceptually linked to other offender intake measures (i.e., Static Risk, Dynamic Need, Motivation and Criminal Risk Index). Conceptual congruency was enhanced with professional judgement, as evidenced by even stronger associations between OSL and intake measures.

CRS designations were associated with institutional outcomes as conceptually expected; a higher CRS designation corresponded with a greater likelihood of involvement in an institutional incident or receipt of an institutional charge. The strength of the association was stronger for new admissions relative to revocation admissions. Area Under the Curve (AUC) values exceeded the threshold of 'acceptable' predictive accuracy for new admissions across institutional outcomes. Predictive accuracy was enhanced by professional judgement; AUC values exceeded the threshold of 'good' predictive accuracy across institutional outcomes. In the case of both CRS and OSL, predictive accuracy was weaker in the case of revocation admissions.

These findings highlight that the CRS holds predictive validity for non-Indigenous women offenders at intake. Findings also point to the efficacy of professional judgement as evidenced by the enhanced conceptual congruency and greater predictive accuracy associated with OSL versus CRS. Further inquiry may be needed to explore regional variation and use of the CRS for offenders readmitted to custody following a failed release.



## Table of Contents

Executive Summary .....	iii
List of Tables .....	v
Introduction.....	1
Method .....	3
Data.....	3
Measures .....	3
Analytic Strategy .....	7
Results.....	9
Profile Information.....	9
Custody Rating Scale.....	12
Concordance between CRS and OSL .....	15
Congruence Between CRS and Conceptually-Related Measures.....	18
Institutional Outcomes .....	20
Discussion.....	25
Conclusion .....	26
References.....	27

## List of Tables

Table 1. <i>Sentence Information of Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.</i> .....	10
Table 2. <i>Risk/Need Measures for Non-Indigenous Women Offenders Admitted to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	11
Table 3. <i>Distribution of CRS Subscale and Overall CRS Designation for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	13
Table 4. <i>Percent above Minimum Value for CRS Scale Items for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	14
Table 5. <i>OSL Classification for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	15
Table 6. <i>Concordance Between CRS and OSL for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.</i> .....	15
Table 7. <i>OSL by CRS Recommendation for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.</i> .....	16
Table 8. <i>CRS-OSL Relationship by Region for Non-Indigenous Women Offenders Admitted on a Warrant of Committal to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	16
Table 9. <i>Select* Profile Information for Concordant and Discordant Security Groups for Non-Indigenous Women Offenders Admitted on a Warrant of Committal to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	17
Table 10. <i>Association between Risk/Need Measures and CRS Subscales and Overall Rating for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.</i> .....	18
Table 11. <i>Association between Risk/Need Measures and OSL for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	19
Table 12. <i>Institutional Outcomes by CRS for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	21
Table 13. <i>Institutional Outcomes by OSL for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	21
Table 14. <i>Association between CRS Subscales and Overall Rating and Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	22
Table 15. <i>Association between OSL and Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	22



Table 16. <i>ROC Analyses: Predictive Ability of CRS for Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	23
Table 17. <i>ROC Analyses: Predictive Ability of OSL for Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	23
Table 18. <i>Institutional Outcomes by CRS-OSL Group for Non-Indigenous Women Offenders Admitted on a Warrant of Committal to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	24
Table 19. <i>Risk/Need Measures by CRS-OSL Group for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	28
Table 20. <i>Release Outcomes by Institutional Adjustment for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	30
Table 21. <i>Release Outcomes by Security Risk for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	30
Table 22. <i>Release Outcomes by CRS for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	31
Table 23. <i>Association between CRS Subscales and Overall Rating and Release Outcomes for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	31
Table 24. <i>ROC Analyses: Predictive Ability of the CRS for Release Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	31
Table 25. <i>Release Outcomes by OSL for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	32
Table 26. <i>Association between OSL and Release Outcomes for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	32
Table 27. <i>ROC Analyses: Predictive Ability of OSL for Release Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.</i> .....	32

## Introduction

The Custody Rating Scale (CRS) is an objective security classification rating tool employed by the Correctional Service of Canada (CSC) to assist in determining an offender's initial security level as minimum, medium, or maximum. It is employed for both men and women upon sentence commencement, as well as at readmission following a conditional release revocation. The CRS is used alongside structured professional assessment (i.e., a review of an offender's institutional adjustment, escape risk, and public safety risk) to determine an offender's initial Offender Security Level (OSL; see [\*Commissioner's Directive 705-7\*](#)).

The Ministry Secretariat of the Solicitor General of Canada designed and developed the CRS to enhance consistency in the security classification of federal offenders across Canada (Research Division, Ministry Secretariat, 1987). In 1989, the CRS was pilot tested as an objective instrument to inform initial security level in the Quebec and Pacific regions (Porporino et al., 1989). The instrument was subsequently nationally implemented as a component of the Offender Intake Assessment (OIA) process in 1994.

The CRS was deemed valid for women offenders in a study by Blanchette, Verbrugge, and Wichmann (2002). This study examined use of the CRS among Indigenous and non-Indigenous women offenders admitted to federal custody between January of 1997 and January of 1999. The concordance rate between CRS designations and OSL classifications was 86% for non-Indigenous women. The CRS was determined to be predictive of institutional outcomes within a six-month follow-up period.

A decade later, Barnum and Gobeil (2012) re-examined use of the CRS among Indigenous and non-Indigenous women offenders. Drawing on a dataset of women offender admissions between 2008 and 2009, the study found a lower rate of concordance (i.e., 72%) relative to the earlier study, but reaffirmed the conceptual congruency and predictive accuracy of the CRS with respect to institutional outcomes. The study also noted that OSL held greater predictive accuracy relative to the CRS, highlighting the efficacy of professional judgement.

As part of a series of validation studies, the present study examines use of the CRS among women offenders admitted to federal custody between 2013/2014 and 2018/2019. The study includes an analysis of CRS-OSL concordance, conceptual congruence between the CRS and other intake measures, and the predictive validity of the CRS with respect to institutional outcomes. Results pertaining to other offender subgroups are presented in separate reports.

## Method

### Data

A dataset of all federal admissions between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019 included 2,880 women. Cases included both Warrant of Committal (WOC) admissions (i.e., offenders entering federal custody on a new federal sentence) as well as readmissions tied to conditional release revocation. Exclusions were made based on case factors that could present limits to analysis ( $N = 30$ ); specifically, cases involving offenders under provincial jurisdiction, who died prior to sentence completion, who had a court ordered release, or who were transferred to a foreign country during their sentence were excluded. Duplicate cases within the WOC and revocation groups were removed (i.e., a unique offender could only appear once per group), resulting in a total of 2,167 women offenders in the WOC group, and 683 in the revocation group. The present analysis focuses on non-Indigenous women offenders, who accounted for 1,414 offenders in the WOC group, and 280 offenders in the revocation group.

### Measures

#### *Custody Rating Scale*

The CRS includes two independently scored subscales, namely Institutional Adjustment (five items) and Security Risk (seven items). The CRS designation is based on the scores of the two subscales in conjunction with established cut-off values for minimum, medium and maximum groups:

<b>Minimum security</b>	0 to 85 on the Institutional Adjustment dimension and 0 to 63 on the Security Risk dimension.
<b>Medium security</b>	Between 86 and 94 on the Institutional Adjustment dimension and between 0 and 133 on the Security Risk dimension; or between 0 and 85 on the Institutional Adjustment dimension and between 64 and 133 on the Security Risk dimension.
<b>Maximum security</b>	95 or greater on the Institutional Adjustment dimension or 134 or greater on the Security Risk dimension.

- i. The **Institutional Adjustment** subscale of the CRS includes items that are tied to institutional behaviour/involvement in incidents:
  1. Previous institutional incidents
  2. Escape history
  3. Street stability
  4. Alcohol/drug use
  5. Age at sentencing
  
- ii. The **Security Risk** subscale of CRS includes items tied to public safety risk:
  1. Prior conviction count
  2. Most severe outstanding charge
  3. Current offence severity
  4. Sentence length
  5. Street stability
  6. Prior conditional releases
  7. Age at first federal admission

Analysis of scale items was undertaken by examining the percentage of cases in which the score exceeded the minimum value. For the Institutional Adjustment scale, the minimum value is zero in the case of all items. For the Security Risk scale, the minimum value is zero in all cases except offence severity, for which the minimum value is 12, and sentence length, for which the minimum value is 5.

### *Offender Security Level*

Offender Security Level (OSL) refers to an offender's actual security classification as minimum, medium, or maximum. OSL is indicative of the institutional security level at which the offender is housed. The CRS is one component of the initial OSL decision-making process. In an Assessment for Decision report, the Parole Officer must also undertake a professional assessment of institutional adjustment, escape risk, and public safety risk and assign ratings of low, moderate or high in each case. A security level recommendation is put forth, with a final decision rendered by the Institutional Head or District Director, unless case factors mandate a higher level of

authorization (see [Commissioner's Directive 705-7](#)).

#### *Offender Intake Assessment Measures*

Several measures that are components of the Offender Intake Assessment (OIA; see [Commissioner's Directive 705-6](#)) were used in the present analysis to understand population characteristics, patterns in CRS-OSL concordance, and CRS and OSL congruence with conceptually-related measures.

- i. Static Risk:** Overall level of Static Risk is determined by the Static Factors Assessment (SFA) Report, which pertains to the scope and severity of an offender's criminal history and sexual offence history. Responses include low, medium or high. High Static Risk reflects greater involvement in the criminal justice system, considerable harm to victims, and/or considerable sexual offending.
- ii. Dynamic Need:** Overall level of Dynamic Need is determined by the Dynamic Factor Identification and Analysis Revised (DFIA-R) Assessment Report, which pertains to criminogenic factors in seven domain areas that can be targeted through correctional interventions. Responses for overall need level include high, medium and low. High Dynamic Need reflects the presence of multiple dynamic need factors and/or a high level of need within identified need areas.
- iii. Motivation:** An offender's motivation level is tied to their desire or willingness to change. Responses include high, medium and low. High Motivation reflects the presence of self-motivation and active participation in addressing problem areas.
- iv. Accountability:** An offender's accountability level is tied to their degree of involvement in their Correctional Plan to address problem areas. Responses include high, medium and low. High Accountability reflects responsibility for actions and recognition of problem areas, willingness to self disclose, demonstration of guilt and victim empathy, and evidence indicating a low level of cognitive distortion.
- v. Reintegration Potential:** An offender's Reintegration Potential level reflects their likelihood of successful reintegration into society as a law-abiding citizen. The measure is calculated based on the results of other OIA tools (the Custody Rating Scale, the Revised Statistical Information on Recidivism and the Static Risk Rating for non-Indigenous men, and the Custody Rating Scale, the Static Risk Rating and the Dynamic

Need Rating for women and Indigenous offenders). High Reintegration Potential typically corresponds with a lack of need for formal correctional interventions within an institutional setting, though other interventions may be used.

- vi. **Engagement:** Offender engagement reflects the offender's willingness to engage in their Correctional Plan. Responses include yes (the offender is engaged) or no.
- vii. **Responsivity:** Responsivity factors reflect the presence of a characteristic that influences the offender's capacity to benefit from targeted interventions, such as learning barriers. Responses include yes (presence of a responsivity factor) or no.
- viii. **Criminal Risk Index (CRI):** The CRI is derived from the Criminal History Record section of the Static Factors Assessment and is used to guide offender intervention level. Numerical scores are used in conjunction with established cut-offs to assign program intensity, i.e., no/low, moderate or high (see Motiuk, & Vuong, 2018).

#### *Outcome Measures*

- i. **Institutional incidents:** Institutional incidents are recorded in the Offender Management System (OMS) and are categorized by type of incident. The presence of 'any incident' reflects an offender's involvement in at least one security or behavioural incident during the sentence for which the CRS was applied and following CRS administration. Only incidents with a role qualifier of 'instigator' or 'victim' were included.
- ii. **Institutional charges:** Disciplinary charges are recoded in OMS and are categorized as minor or serious. The variable 'any charge' pertains to an offender's receipt of any serious or minor disciplinary charge during the sentence for which the CRS was applied and following CRS administration. Only charges resulting in an outcome of 'guilty' were included. Serious and minor charges were also analyzed as separate outcomes.

Additional outcomes tied to release were explored in line with previous validation studies (Luciani, Motiuk, Nafekh, 1996; Grant & Luciani, 1998; Gobeil, 2011; Barnum & Gobeil, 2012). Post-release outcomes, however, were not used for validation purposes given that the CRS is tied to institutional behaviour and is not intended to predict community behaviour.

- i. **Release suspension:** In cases in which an offender was released from federal custody on the sentence for which the CRS was applied, release suspension reflects the presence of at least one suspension of the offender's conditional release. A suspension of an offender's conditional release may occur: (a) when a breach of release conditions has occurred; (b) to prevent a breach of conditions; or (c) to protect society (see: [\*Commissioner's Directive 715-2\*](#)).
- ii. **Release revocation:** In cases in which an offender was released from federal custody on the sentence for which the CRS was applied, release revocation reflects the presence of at least one revocation, with or without a new offence, tied to the offender's conditional release. As per the [\*Corrections and Conditional Release Act\*](#) (CCRA), the Parole Board of Canada has the authority to revoke an offender's conditional release.
- iii. **Release revocation with offence:** In cases in which an offender was released from federal custody on the sentence for which the CRS was applied, release revocation with offence reflects the presence of at least one revocation in which the offender incurred a new criminal offence.

### **Analytic Strategy**

The analytic strategy for the present study included four central components. First, descriptive statistics were computed to understand the characteristics of the WOC and revocation admission groups. Second, concordance between CRS designations and OSL ratings was analyzed by examining the percentage of cases in which levels overlapped. The percentage of security increases versus decreases between the CRS and OSL was also examined. Concordance patterns were explored by region and with respect to key profile characteristics. Third, congruency was explored between the CRS and conceptually-related measures (i.e., Static Risk, Dynamic Need, Criminal Risk Index, and Motivation). Congruency was also examined for OSL.

Finally, the association between the CRS and institutional outcomes was examined to consider whether a higher CRS corresponded with a greater likelihood of involvement in negative institutional events. Further, the level of predictive accuracy of the CRS with respect to institutional outcomes was examined using Receiver Operating Characteristic (ROC) curves. Institutional outcomes were also explored in relation to OSL. Release outcomes were examined



for the purpose of consistency with prior validation studies; however, given that the CRS pertains to the institutional environment and is not intended to predict release outcomes, results from this analysis are largely contained in the Appendix.

## Results

### **Profile Information**

#### *Sentence Information*

A majority of non-Indigenous offenders admitted to federal custody between 2013/2014 and 2018/2019 were serving their first federal sentence. Offenders in the WOC group were less likely to be federal recidivists relative to offenders in the revocation group (8% versus 18%). A small percentage of offenders were serving an indeterminate sentence. Among those serving determinate sentences, average sentence length was slightly lower for the WOC group compared to the revocation group (i.e., 3.1 years compared to 3.6 years). In terms of major index offence, offenders in the WOC group were most often serving time for a drug offence (45%) or a property offence (19%). Offenders in the revocation group were most often serving time for a drug offence (39%), robbery (21%), or a property offence (17%; see Table 1).

#### *Risk/Need Measures*

Offenders in the WOC group tended to have a low CRI score, low or medium Static Risk medium or high Dynamic Need, medium or high Motivation, medium Accountability and medium Reintegration Potential (see Table 2). Just over one-third had a responsivity flag, and the vast majority were deemed engaged with their Correctional Plan. Offenders in the revocation group tended to have somewhat more complex risk/need profiles; for example, they tended to have a higher CRI score, were more likely to have high Dynamic Need, and were less likely to have high ratings on the measures of Motivation, Accountability and Reintegration Potential. They were also more likely to have a responsivity flag and were less likely to be engaged with their Correctional Plan (see Table 2).

Table 1. *Sentence Information of Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.*

Characteristic	Warrant of Committal Admissions		Revocation Admissions	
	<i>N</i>	%	<i>N</i>	%
Sentence Number				
First	1299	91.9%	231	82.5%
Second Or Higher	115	8.1%	49	17.5%
Sentence Length				
Four Years or Less	1136	80.3%	213	76.1%
Over Four Years to Six Years	163	11.5%	37	13.2%
Over Six Years to 10 Years	59	4.2%	20	7.1%
Over Ten Years	10	.7%	8	2.9%
Indeterminate	46	3.3%	†	†
Major Index Offence				
Assault	85	6.0%	19	6.8%
Drug Offence	640	45.3%	109	38.9%
Homicide Related	102	7.2%	10	3.6%
Other Non-Violent Offence	67	4.7%	21	7.5%
Other Violent Offence	80	5.7%	9	3.2%
Property Offence	269	19.0%	47	16.8%
Robbery	119	8.4%	59	21.1%
Sexual Offence	43	3.0%	6	2.1%
Missing	9	.6%	†	†

†Information suppressed due to frequency fewer than 5.

Table 2. *Risk/Need Measures for Non-Indigenous Women Offenders Admitted to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Measures	Warrant of Committal Admissions*	Revocation Admissions*
CRI		
Low (1-8)	513 51.9%	67 31.2%
Moderate (9-18)	374 37.8%	109 50.7%
High (19+)	102 10.3%	39 18.1%
Static Risk		
Low	638 45.1%	78 38.0%
Medium	577 40.8%	95 46.3%
High	199 14.1%	32 15.6%
Dynamic Need		
Low	253 17.9%	20 9.8%
Medium	610 43.1%	77 37.6%
High	551 39.0%	108 52.7%
Motivation		
Low	56 4.0%	21 10.2%
Medium	652 46.1%	113 55.1%
High	706 49.9%	71 34.6%
Accountability		
Low	106 7.5%	27 13.1%
Medium	766 54.2%	121 58.7%
High	542 38.3%	58 28.2%
Reintegration Potential		
Low	162 11.5%	24 8.6%
Medium	762 53.9%	145 51.8%
High	490 34.7%	36 12.9%
Responsivity Flag	354 25.0%	69 33.5%
Engagement Flag	1304 92.2%	162 78.6%

\*Data was missing for CRI in 93 WOC admission cases, and 65 revocation admission case. Data was missing for other intake measures in 75 cases for the revocation admission group. Percentages were calculated with missing data excluded.

## **Custody Rating Scale**

### ***Institutional Adjustment***

#### *i. Overall Rating*

In terms of the Institutional Adjustment subscale of the CRS, the distribution was similar for the WOC and revocation groups (see Table 3). The vast majority of offenders had low Institutional Adjustment (97% for the WOC group, and 92% for the revocation group). Relatively few offenders had high (3% and 5%) or medium (1% and 3%) Institutional Adjustment.

#### *ii. Subscale Items*

With respect to the five items that comprise the Institutional Adjustment subscale, the percentage of offenders who scored above the minimum value was highest for street stability (i.e., 78% for the WOC group, and 94% for the revocation group), and lowest for escape history (i.e., 3% and 7%; see Table 4). Offenders in the revocation group were more likely than offenders in the WOC group to score above the minimum value on all items. The biggest difference across the two groups was in regard to incident history (i.e., 20% versus 55% scored above minimum in the WOC and revocation groups respectively).

### ***Security Risk***

#### *i. Overall Rating*

Scores on the Security Risk subscale fell mainly in the low and medium categories (high ratings were uncommon; see Table 3). Offenders in the WOC group were more likely than offenders in the revocation group have low Security Risk (i.e., 58% versus 38%) while less likely to have medium Security Risk (38% versus 62%). The percentage of offenders with high Security Risk was small for both groups (4% for the WOC group and less than 1% for revocation group).

#### *ii. Subscale Items*

With respect to the seven items that comprise the Security Risk subscale, a majority (or near majority) of offenders scored above the minimum value in the case of prior convictions, offence severity, street stability, and age at first admission (see Table 4). The percentage of offenders who scored above the minimum value was highest for street stability (i.e., 79% for the WOC group, and 94% for the revocation group). In line with having a conditional release history, most offenders

in the revocation group scored above the minimum value in the case of prior conditional releases. Across all items, offenders in the revocation group were more likely to score above the minimum value (see Table 4).

### ***Custody Rating Scale***

A majority of offenders in the WOC group had a minimum CRS designation (57%). Medium designations accounted for just over one-third of cases (37%). The breakdown for the revocation group was different; a majority of offenders had a designation of medium (60%), while minimum designations accounted for just over one-third of cases (35%). Maximum designations were uncommon in both groups (i.e., 6% for the WOC group, and 5% for the revocation group; see Table 3).

Table 3. *Distribution of CRS Subscale and Overall CRS Designation for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Rating	Warrant of Committal Admissions		Revocation Admissions	
	<i>N</i>	%	<i>N</i>	%
Institutional Adjustment				
Low	1366	96.6%	258	92.1%
Medium	11	.8%	7	2.5%
High	37	2.6%	15	5.4%
Security Risk Score				
Low	826	58.4%	106	37.9%
Medium	539	38.1%	173	61.8%
High	49	3.5%	†	†
Custody Rating Scale				
Minimum	812	57.4%	99	35.4%
Medium	524	37.1%	168	60.0%
Maximum	78	5.5%	13	4.6%

†Information suppressed due to frequency fewer than 5.

Table 4. *Percent above Minimum Value for CRS Scale Items for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

CRS Subscale Item	Percentage above Minimum Score	
	Warrant of Committal Admissions	Revocation Admissions
<b>Institutional Adjustment</b>		
History of institutional incidents (0-88)	278 19.7%	153 54.6%
Escape history (0-28)	41 2.9%	19 6.8%
Street stability (0-32)	1109 78.4%	264 94.3%
Alcohol / drug use (0-36)	861 60.9%	230 82.1%
Age at time of sentencing (0-24)	477 33.7%	115 41.1%
<b>Security Risk</b>		
Number of prior convictions (0-15)	697 49.3%	202 72.1%
Most serious outstanding charge (0-35)	130 9.2%	42 15.0%
Severity of current offence (12-69)	883 62.4%	187 66.8%
Sentence length (5-65)	252 17.8%	64 22.9%
Street stability (0-20)	1111 78.6%	262 93.6%
Prior parole / statutory release (0-63)	124 8.8%	234 83.6%
Age at first federal admission (0-30)	732 51.8%	180 64.3%

\*The minimum value is zero for all items except 'Severity of current offence' (min. value = 12) and 'Sentence length' (min. value = 5).

### Concordance between CRS and OSL

The OSL distribution was 57% minimum, 38% medium and 5% maximum for the WOC group, and 21% minimum, 73% medium, and 6% maximum for the revocation group (see Table 5). Concordance between the CRS recommendation and OSL classification was evident in 69% of cases within the WOC group, and 61% of cases within the revocation group (see Table 6). In both the WOC and revocation groups, discordant cases were predominantly between medium and minimum. Concordance was highest for minimum security designations in the case of WOC admissions (i.e., 75%; see Table 7). Within the revocation group, concordance was highest in the case of medium designations (79%). The percentage of security increases was much higher in the revocation group (27%) relative to the WOC group (15%; see Table 5), while the percentage of security decreases was somewhat higher for the WOC group (16%, compared to 11% for the revocation group).

Table 5. *OSL Classification for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

OSL	Warrant of Committal Admissions		Revocation Admissions	
	<i>N</i>	%	<i>N</i>	%
Minimum	811	57.4%	59	21.1%
Medium	536	37.9%	204	72.9%
Maximum	67	4.7%	17	6.1%

Table 6. *Concordance Between CRS and OSL for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.*

CRS-OSL Relationship	Warrant of Committal Admissions		Revocation Admissions	
	<i>N</i>	%	<i>N</i>	%
Concordant	970	68.6%	172	61.4%
Security Increase	217	15.3%	76	27.1%
Security Decrease	227	16.1%	32	11.4%



Table 7. *OSL by CRS Recommendation for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.*

OSL	CRS Level					
	Warrant of Committal Admissions			Revocation Admissions		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Minimum	606	204	†	33	25	†
	74.6%	38.9%	†	33.3%	14.9%	†
Medium	205	309	22	65	133	6
	25.2%	59.0%	28.2%	65.7%	79.2%	46.2%
Maximum	†	11	55	†	10	6
	†	2.1%	70.5%	†	6.0%	46.2%

†Information suppressed due to frequency fewer than 5.

### ***CRS and OSL Concordance by Region***

The concordance rate varied by region. Among the WOC group, concordance was highest in the Quebec (73%) and Prairie (71%) regions, and lowest in the Pacific region (60%). Security increases were most common in the Pacific region (27%), and least common in the Prairie region (11%; see Table 8). Security decreases were most common in the Prairie (19%) and Ontario (18%) regions, and least common in the Quebec region (11%). Regional patterns in discordance were not examined for the revocation admissions group due to lower numbers.

Table 8. *CRS-OSL Relationship by Region for Non-Indigenous Women Offenders Admitted on a Warrant of Committal to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

CRS-OSL Relationship	Region					Total
	Atlantic	Quebec	Ontario	Prairie	Pacific	
Concordant	141	203	324	249	53	970
	68.4%	73.3%	66.0%	70.9%	59.6%	68.6%
Security Increase	32	43	81	37	24	217
	15.5%	15.5%	16.5%	10.5%	27.0%	15.3%
Security Decrease	33	31	86	65	12	227
	16.0%	11.2%	17.5%	18.5%	13.5%	16.1%
<i>Total</i>	206	277	491	351	89	1414
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

### ***Profile Factors and CRS and OSL Concordance***

Discordance between the CRS and OSL can be linked to profile factors (see Table 9 and Appendix A). Across the WOC and revocation groups, offenders with a security level increase to medium generally had greater profile similarity to the concordant group associated with their actual security level relative to the concordant group associated with their CRS. In a similar vein, offenders who had a security level decrease to minimum had greater profile similarity to the concordant minimum group.

For example, the percentage of offenders with low Static Risk was 67% for the concordant minimum security group, and 68% for the security decrease minimum group, compared to 16% for the concordant medium security group. The percentage of offenders with high Dynamic Need was 17% and 29%, compared to 66%, across the three groups. Similar patterns were evident in regards to Motivation, CRI and Accountability ratings.

*Table 9. Select\* Profile Information for Concordant and Discordant Security Groups for Non-Indigenous Women Offenders Admitted on a Warrant of Committal to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Profile Measure	Minimum Concordant	Minimum Security Decrease	Medium Security Increase	Medium Concordant
Low Static Risk	67%	68%	16%	22%
High Dynamic Need	17%	29%	66%	58%
High Motivation	64%	73%	33%	28%
Low CRI	64%	74%	34%	38%
High Accountability	49%	57%	24%	24%

\*See Appendix A for detailed Table.

### Congruence Between CRS and Conceptually-Related Measures

Conceptual congruence was explored between the CRS and conceptually related intake measures, including Static Risk, Dynamic Need, Motivation, and the CRI. Within the WOC group, the overall CRS designation had strong and positive associations with Static Risk and Dynamic Need, with more modest associations with motivation (negative) and the CRI (positive; see Table 10). The Institutional Adjustment scale of the CRS had stronger associations with all four intake measures. Within the revocation group, associations between the CRS and intake measures were weaker, though associations with the Institutional Adjustment scale remained strong. These findings suggest there is general conceptual congruence with the CRS and other measures used during the Offender Intake Assessment process, particularly for new admissions. Conceptual congruence was enhanced through professional judgement, evidenced by stronger associations between OSL and intake measures. All intake measures were strongly associated with OSL in the case of both the WOC and revocation groups (see Table 11).

Table 10. *Association between Risk/Need Measures and CRS Subscales and Overall Rating for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013, and March 31<sup>st</sup>, 2019.*

Measure	Association ( $\gamma$ )					
	Warrant of Committal Admissions			Revocation Admissions		
	IA	SR	CRS	IA	SR	CRS
Static Risk	.729	.472	.494	.421	.301	.283
Dynamic Need	.796	.420	.449	.479	.131	.207
Motivation	-.670	-.241	-.279	-.430	.094	.022
CRI	.509	.078	.117	.444	.230	.244

Table 11. Association between Risk/Need Measures and OSL for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.

Measure	Association ( $\gamma$ )	
	Warrant of Committal Admissions	Revocation Admissions
Static Risk	.799	.647
Dynamic Need	.772	.736
Motivation	-.672	-.454
CRI	.445	.735

## **Institutional Outcomes**

Overall, 51% of offenders in the WOC group and 48% of offenders in the revocation group were involved in at least one institutional security or behavioural incident. With respect to institutional charges, 39% of offenders in the WOC group received at least one charge (35% received a minor charge, 17% received a serious charge), while 34% of offenders in the revocation group received a charge (27% for minor and 14% for serious; see Table 12 and Table 13). More favourable outcomes for offenders in the revocation group could be tied to the larger proportion of sentence served at the time of readmission.

The CRS was associated with institutional outcomes in that a higher CRS designation was associated with a greater likelihood of involvement in a negative institutional event (i.e., incident, minor charge, serious charge, or any charge). The CRS designation tended to have stronger associations with institutional outcomes relative to the Institutional Adjustment and Security Risk components independently (see Table 14). The strength of the associations were greater for the WOC group relative to the revocation group. Associations with institutional outcomes were stronger in the case of OSL across all four institutional outcome measures (see Table 15). A higher CRS score was also associated with greater likelihood of a return to custody following conditional release (i.e., a suspension or revocation). Associations with release outcomes tended to be stronger with respect to OSL.

Table 12. *Institutional Outcomes by CRS for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcome	Custody Rating Scale					
	Warrant of Committal Admissions			Revocation Admissions		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Any Incident	325 40.0%	331 63.2%	71 91.0%	38 38.4%	85 50.6%	11 84.6%
Any Minor Charge	185 22.8%	249 47.5%	57 73.1%	18 18.2%	52 31.0%	5 38.5%
Any Serious Charge	76 9.4%	131 25.0%	35 44.9%	10 10.1%	25 14.9%	† †
Any Charge	215 26.5%	274 52.3%	60 76.9%	24 24.2%	62 36.9%	8 61.5%

†Information suppressed due to frequency fewer than 5.

Table 13. *Institutional Outcomes by OSL for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcome	Offender Security Level					
	Warrant of Committal Admissions			Revocation Admissions		
	Minimum	Medium	Maximum	Minimum	Medium	Maximum
Any Incident	268 33.0%	395 73.7%	64 95.5%	20 33.9%	104 51.0%	10 58.8%
Any Minor Charge	136 16.8%	303 56.5%	52 77.6%	10 16.9%	58 28.4%	7 41.2%
Any Serious Charge	42 5.2%	163 30.4%	37 55.2%	† †	29 14.2%	5 29.4%
Any Charge	155 19.1%	341 63.6%	53 79.1%	13 22.0%	72 35.3%	9 52.9%

†Information suppressed due to frequency fewer than 5.

Table 14. Association between CRS Subscales and Overall Rating and Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.

Institutional Outcome	Association ( $\phi c$ )					
	Warrant of Committal Admissions			Revocation Admissions		
	IA	SR	CRS	IA	SR	CRS
Any Incident	.143	.273	.291	.188	.127	.199
Any Minor Charge	.208	.282	.314	.036	.154	.148
Any Serious Charge	.226	.219	.266	.085	.078	.090
Any Charge	.203	.283	.314	.100	.155	.182

Note. IA= Institutional Adjustment; SR= Security Risk; CRS = Custody Rating Scale

Table 15. Association between OSL and Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.

Institutional Outcome	Association ( $\phi c$ )	
	Warrant of Committal Admissions	Revocation Admissions
Any Incident	.436	.149
Any Minor Charge	.447	.133
Any Serious Charge	.392	.147
Any Charge	.474	.154

The Area Under the Curve (AUC) values were examined to assess the predictive ability of the CRS and OSL for institutional outcomes with respect to the WOC group. AUC values for any incident, any minor charge, and any charge fell above the threshold of ‘acceptable’ predictive accuracy as per established guidelines (i.e., 0.60 or greater; Hosmer & Lemeshow, 2000). Predictive accuracy was higher for OSL relative to CRS for WOC admissions, with all AUC values exceeding the threshold of ‘good’ predictive accuracy (i.e., 0.70 or greater). AUC values for the revocation group were lower, in all instances falling below the threshold ‘acceptable’ predictive accuracy for both the CRS and OSL (see Table 16 and Table 17).

Table 16. *ROC Analyses: Predictive Ability of CRS for Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcomes	ROC Analyses					
	Warrant of Committal			Revocation Admissions		
	AUC	SD	CI	AUC	SD	CI
Any Incident	.643	.013	.618 - .668	.587	.029	.530 - .644
Any Charge	.660	.013	.633 - .686	.586	.031	.526 - .646
Any Minor Charge	.663	.014	.636 - .690	.580	.032	.517 - .643
Any Serious Charge	.671	.018	.636 - .705	.560	.043	.476 - .643

*Note. AUC= Area Under the Curve; SD = Standard Deviation; CI = Confidence Interval*

Table 17. *ROC Analyses: Predictive Ability of OSL for Institutional Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcomes	ROC Analyses					
	Warrant of Committal			Revocation Admissions		
	AUC	SD	CI	AUC	SD	CI
Any Incident	.720	.012	.700 - .743	.567	.026	.515 - .618
Any Charge	.744	.012	.720 - .768	.568	.027	.515 - .622
Any Minor Charge	.736	.013	.711 - .761	.564	.029	.507 - .620
Any Serious Charge	.760	.015	.731 - .790	.587	.037	.514 - .659

*Note. AUC= Area Under the Curve; SD = Standard Deviation; CI = Confidence Interval*

Institutional outcomes were compared for OSL concordant/discordant groups for WOC admissions. As most offenders were classified as medium or minimum security, comparisons were limited to these two security level groups. Offenders with a security level decrease to minimum were more likely than concordant minimum security offenders to be involved in an incident or incur a charge, though less likely than concordant medium security offenders (see Table 18). Specifically, the percentage of offenders involved in incidents was 31% for the concordant minimum group, 39% for the minimum security decrease group, and 66% for the concordant medium group. This indicates that, while offenders with a security decrease to minimum did not fair as well as offenders with a CRS of minimum, they did fair better than concordant medium security offenders. Offenders with a security level increase to medium were considerably more likely than concordant minimum security offenders to be involved in incidents and incur charges, though less likely than concordant medium security offenders. Overall, these patterns suggest that



professional judgement in security level decision-making is generally exercised effectively, as evidenced by patterns in institutional outcomes.

Table 18. *Institutional Outcomes by CRS-OSL Group for Non-Indigenous Women Offenders Admitted on a Warrant of Committal to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcome	Minimum		Medium		
	Concordant	Security Decrease	Security Increase	Concordant	Security Decrease
Incident	31%	39%	66%	78%	86%
Charge	19%	21%	50%	72%	77%

## Discussion

The current study found a lower rate of concordance between CRS designations and OSL ratings for non-Indigenous women than previously reported. Specifically, the concordance rate was 69% for new admissions, and 61% for readmissions in the present study, compared to 72% in the most recent previous study (Barnum & Gobeil, 2012). The majority of discordant cases involved a shift from medium to minimum, or minimum to medium (relatively few offenders were classified as maximum security). Within the WOC group, there was a roughly equal percentage of security increases versus decreases (i.e., 15% and 16%), however, there was a considerably higher percentage of security increases in the revocation group (27%) compared to security decreases (11%). Greater discordance for readmissions may be tied to the enhanced availability of case management information pertaining to the offender's profile and background. Of note, discordance patterns varied by region, with the Pacific region having the lowest rate of concordance (60%) and highest percentage of security increases (27%) when it came to WOC offenders. The causes of regional variation were not evident from the present analysis and further inquiry may be needed to understand discrepancies.

CRS designations were associated with ratings on other measures used at intake (i.e., Static Risk, Dynamic Need, Motivation, and CRI), highlighting conceptual congruence across measures. However, associations were stronger for the WOC group relative to the revocation group. OSL had stronger associations with intake measures relative to the CRS, indicating professional judgement enhances conceptual congruency.

CRS designations were associated with institutional outcomes as conceptually expected; a higher CRS designation was associated with a greater likelihood of involvement in a negative institutional event (incident or charge). The strength of the associations and predictive accuracy were both greater in the case of WOC versus revocation offenders. Predictive accuracy was greater in the case of OSL for the WOC group, again suggesting efficacy in the use of professional judgement. Overall, findings affirm the predictive validity of the CRS for non-Indigenous women at initial intake.

## **Conclusion**

As a standardized and objective security classification tool, the CRS is a key component of security level decision-making, underpinned by the principle of using the least restrictive security setting that is required to manage an offender's risk (Porporino et al., 1989). Given the dynamic and changing federal offender population, the CRS must be periodically revalidated to ensure it is an appropriate tool for different offender subgroups. Results of the present analysis reaffirm the validity of the tool for non-Indigenous women at initial intake. The analysis also highlighted the importance of professional judgment to complement the CRS, as evidenced by the enhanced conceptual congruency and predictive accuracy associated with OSL. Given the weaker associations and predictive accuracy for revocation admissions, further inquiry may be needed to understand use of the CRS among offenders readmitted to custody following a failed conditional release.

## References

- Barnum, G., & Gobeil, R. (2012). *Revalidation of the Custody Rating Scale for Aboriginal and non-Aboriginal Non-Indigenous Women Offenders (Research Report R-273)*. Ottawa, ON: Correctional Service of Canada.
- Blanchette, K. Verbrugge, P. & Wichmann, C. (2002). *The Custody Rating Scale, initial security level placement, and Non-Indigenous Women Offenders*. Ottawa, ON: Correctional Service of Canada.
- Gobeil, R. (2011). *The Custody Rating Scale as applied to male offenders (Research Report R-256)*. Ottawa, ON: Correctional Service of Canada.
- Hosmer, D.W. & Lemehow, S. (2000). *Applied Logistic Regression (Section Edition)*. New York: John Wiley & Sons.
- Luciani, F. P., Motiuk, L. L., & Nafekh, M. (1996). *An operational review of the Custody Rating Scale: Reliability, validity and practical utility*. Ottawa, ON: Correctional Service of Canada.
- Motiuk, L., & Vuong, B. (2018). *Development and validation of a Criminal Risk Index (CRI) for federally sentenced offenders in Canada (Research Report R-403)*. Ottawa, ON: Correctional Service of Canada.
- Porporino, F. J., Luciani, F., Motiuk, L., Johnston, M., & Mainwaring, B. (1989). *Pilot implementation of a Custody Rating Scale: Interim report*. Ottawa, ON: Correctional Service Canada, Communications and Corporate Development, Research Branch.
- Research Division. Ministry Secretariat (1987). *Development of a Security Classification Model for Canadian Federal Offenders*. Ottawa, Ministry of the Solicitor General of Canada.

### Appendix A: Additional Tables

Table 19. *Risk/Need Measures by CRS-OSL Group for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Measures	Offender Security Level							Total
	Minimum		Medium			Maximum		
	Concordant	Security Decrease	Security Increase	Concordant	Security Decrease	Security Increase	Concordant	
<b>CRI</b>								
Low (1-13)	205	96	93	67	11	40	†	513
	64.3%	74.4%	33.7%	38.1%	50.0%	72.7%	†	51.9%
Moderate (14-21)	108	32	131	87	5	7	†	374
	33.9%	24.8%	47.5%	49.4%	22.7%	12.7%	†	37.8%
High (22+)	6	†	52	22	6	8	7	102
	1.9%	†	18.8%	12.5%	27.3%	14.5%	58.3%	10.3%
<b>Static Risk</b>								
Low	404	140	49	44	†	†	†	638
	66.7%	68.3%	15.9%	21.5%	†	†	†	45.1%
Medium	180	57	182	129	12	14	†	577
	29.7%	27.8%	58.9%	62.9%	54.5%	25.5%	†	40.8%
High	22	8	78	32	10	41	8	199
	3.6%	3.9%	25.2%	15.6%	45.5%	74.5%	66.7%	14.1%
<b>Dynamic Need</b>								
Low	185	65	†	†	†	†	†	253
	30.5%	31.7%	†	†	†	†	†	17.9%
Medium	317	80	104	86	11	11	†	610
	52.3%	39.0%	33.7%	42.0%	50.0%	20.0%	†	43.1%
High	104	60	203	118	11	44	11	551
	17.2%	29.3%	65.7%	57.6%	50.0%	80.0%	91.7%	39.0%
<b>Motivation</b>								
Low	8	†	15	11	†	19	†	56
	1.3%	†	4.9%	5.4%	†	34.5%	†	4.0%

Measures	Offender Security Level							<i>Total</i>
	Minimum		Medium			Maximum		
	Concordant	Security Decrease	Security Increase	Concordant	Security Decrease	Security Increase	Concordant	
Medium	209	56	193	137	17	31	9	652
	34.5%	27.3%	62.5%	66.8%	77.3%	56.4%	75.0%	46.1%
High	389	149	101	57	5	5	†	706
	64.2%	72.7%	32.7%	27.8%	22.7%	9.1%	†	49.9%
Accountability								
Low	17	†	27	26	†	28	†	106
	2.8%	†	8.7%	12.7%	†	50.9%	†	7.5%
Medium	294	85	207	130	17	25	8	766
	48.5%	41.5%	67.0%	63.4%	77.3%	45.5%	66.7%	54.2%
High	295	117	75	49	†	†	†	542
	48.7%	57.1%	24.3%	23.9%	†	†	†	38.3%

†Information suppressed due to frequency fewer than 5.

Table 20. *Release Outcomes by Institutional Adjustment for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Release Outcome	Institutional Adjustment					
	Warrant of Committal Admissions with a Conditional Release			Revocation Admissions with a Conditional Release		
	Low	Medium	High	Low	Medium	High
Suspension	326 25.0%	6 54.5%	20 55.6%	101 39.5%	5 71.4%	11 73.3%
Revocation	296 22.7%	† †	17 47.2%	48 18.8%	† †	5 33.3%
Revocation with Offence	34 2.6%	† †	† †	5 2.0%	† †	† †

†Information suppressed due to frequency fewer than 5.

Table 21. *Release Outcomes by Security Risk for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Release Outcome	Security Risk					
	Warrant of Committal Admissions with a Conditional Release			Revocation Admissions with a Conditional Release		
	Low	Medium	High	Low	Medium	High
Suspension	162 19.8%	189 35.9%	† †	35 33.3%	81 47.1%	† †
Revocation	146 17.8%	170 32.3%	† †	15 14.3%	38 22.1%	† †
Revocation with Offence	12 1.5%	24 4.6%	† †	† †	6 3.5%	† †

†Information suppressed due to frequency fewer than 5.

Table 22. *Release Outcomes by CRS for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Release Outcome	Custody Rating Scale					
	Warrant of Committal Admissions with a Conditional Release			Revocation Admissions with a Conditional Release		
	Min.	Med.	Max.	Min.	Med.	Max.
Suspension	154 19.1%	183 35.7%	15 42.9%	30 30.6%	76 45.5%	11 84.6%
Revocation	137 17.0%	166 32.4%	13 37.1%	14 14.3%	35 21.0%	5 38.5%
Revocation with Offence	11 1.4%	25 4.9%	† †	† †	6 3.6%	† †

†Information suppressed due to frequency fewer than 5.

Table 23. *Association between CRS Subscales and Overall Rating and Release Outcomes for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Release Outcome	Association ( $\phi_c$ )					
	Warrant of Committal Admissions with a Conditional Release			Revocation Admissions with a Conditional Release		
	IA	SR	CRS	IA	SR	CRS
Suspension	.127	.179	.193	.182	.152	.238
Revocation	.094	.170	.183	.086	.155	.133

Note. IA= Institutional Adjustment; SR= Security Risk; CRS = Custody Rating Scale

Table 24. *ROC Analyses: Predictive Ability of the CRS for Release Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcomes	ROC Analyses					
	Warrant of Committal			Revocation Admissions		
	AUC	SD	CI	AUC	SD	CI
Suspension	.584	.015	.554 - .614	.603	.029	.545 - .660
Revocation	.610	.016	.578 - .641	.571	.037	.498 - .644

Note. AUC= Area Under the Curve; SD = Standard Deviation; CI = Confidence Interval



Table 25. *Release Outcomes by OSL for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Release Outcome	Offender Security Level					
	Warrant of Committal Admissions with a Conditional Release			Revocation Admissions with a Conditional Release		
	Min.	Med.	Max.	Min.	Med.	Max.
Suspension	113 13.9%	219 40.9%	20 29.9%	12 20.3%	92 45.1%	13 76.5%
Revocation	122 15.1%	179 35.0%	15 45.5%	7 11.9%	41 20.3%	6 35.3%
Revocation with Offence	14 1.7%	21 4.1%	† †	† †	5 2.5%	† †

†Information suppressed due to frequency fewer than 5.

Table 26. *Association between OSL and Release Outcomes for Non-Indigenous Women Offenders Admitted to Federal Custody on a Warrant of Committal or Revocation Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Release Outcome	Association ( $\phi_c$ )	
	Warrant of Committal Admissions with a Conditional Release	Revocation Admissions with a Conditional Release
Suspension	.299	.270
Revocation	.241	.134

Table 27. *ROC Analyses: Predictive Ability of OSL for Release Outcomes for Non-Indigenous Women Offenders Admitted on a Warrant of Committal or Revocation to Federal Custody Between April 1<sup>st</sup>, 2013 and March 31<sup>st</sup>, 2019.*

Outcomes	ROC Analyses					
	Warrant of Committal			Revocation Admissions		
	AUC	SD	CI	AUC	SD	CI
Suspension	.664	.015	.635 - .693	.617	.025	.568 - .667
Revocation	.641	.016	.610 - .672	.569	.033	.505 - .634

Note. AUC= Area Under the Curve; SD = Standard Deviation; CI = Confidence Interval