

———— **Research Report** ————

The Custody Rating Scale,
Initial Security Level Placement,
and Women Offenders

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**The Custody Rating Scale, Initial Security Level Placement,
and Women Offenders**

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EXECUTIVE SUMMARY

It has been observed that federally-sentenced Aboriginal women tend to be placed at higher levels of security and custody compared to federally-sentenced Non-Aboriginal women. This observation has raised concerns, amongst correctional officials and advocacy groups, regarding the equity of security classification procedures. Currently, initial security classification decisions are based on criteria set out in the Corrections and Conditional Release Act (CCRA) and Regulations. The fundamental considerations in offender security classification include institutional adjustment, escape risk, and (should the offender escape) risk to the public for a new offence. In addition, the Custody Rating Scale (CRS; an objective security classification instrument) informs the initial security placement. However, classification decisions are also influenced by professional discretion: with clear documentation of their reasoning, caseworkers have discretion to override CRS designations.

In brief, the CRS consists of two subscales, the Institutional Adjustment (IA) subscale (5 items), and the Security Risk (SR) subscale (7 items). A statistical weighting scheme is used to score the CRS items, and items within each subscale are summed to provide a total score. As scores increase on either subscale, the designated security classification also increases. Cut-off values are applied to the subscale scores and yield ratings of minimum, medium or maximum security.

The first objective of this study was to identify the characteristics of Aboriginal women that result in a higher yield of initial placements to maximum-security. For instance, the overrepresentation could be due to Aboriginal women offenders scoring higher on the overall CRS, scoring higher on one particular subscale, or to greater use of overrides by correctional staff. A second objective was to examine the validity of the CRS for the initial security placement of Aboriginal women offenders, in relation to its performance for their Non-Aboriginal counterparts. The analyses first focused on convergent validity: what is the

concordance between CRS security level designations and actual security placement? Second, analyses queried predictive validity: how well do CRS total scores, subscales, and items predict institutional misconduct?

Data were drawn from the Offender Management System (OMS). The sample consisted of 68 Aboriginal women and 266 Non-Aboriginal women, who were admitted to federal corrections between January 1997 and January 1999. Aboriginal and Non-Aboriginal women did not differ significantly with respect to age or marital status at the time of admission to federal custody.

Analyses revealed that the CRS incorporates information that statistically differentiates Aboriginal women offenders from Non-Aboriginal women offenders. Relative to Non-Aboriginal women offenders, Aboriginal women offenders were found to be less often classified as minimum security, and more often designated as either medium or maximum security. The composite subscales of the CRS were examined to identify the factors that differentiated between Aboriginal and Non-Aboriginal women offenders. Aboriginal women had higher mean scores on both of the CRS subscales; the IA and the SR, relative to Non-Aboriginal women. More specifically, relative to Non-Aboriginal women offenders, Aboriginal women offenders scored significantly higher on three of the five IA subscale items: history of institutional misconduct, street (in)stability, and alcohol and drug use. Three of the SR subscale items also significantly differentiated Aboriginal women offenders from their Non-Aboriginal counterparts: number of prior convictions, severity of current offence, and street (in)stability. Again, in each case the Aboriginal women scored higher than their Non-Aboriginal counterparts. Notably, staff decisions to override the CRS did not differentiate between Aboriginal and Non-Aboriginal women.

An examination of the convergent validity of the scale revealed that the CRS was concordant with staff decisions (i.e., actual placement) over 85% of the time. Importantly, there was no significant difference in concordance rates between Aboriginal and Non-Aboriginal women. Overall, staff decisions were concordant

with CRS designations in 81% of cases for Aboriginal women, and in 86% of cases for Non-Aboriginal women. There were no statistically significant differences between staff overrides 'up' or 'down' by group. For Non-Aboriginal women, overrides to higher security occurred 7.1% of the time ($n = 19$), and those to lower security occurred 6.4% of the time ($n = 17$). For Aboriginal women, overrides to higher security occurred in 5.9% of cases ($n = 4$), while overrides to lower security occurred in about 13.2% of cases ($n = 9$).

The CRS security designations also demonstrated good predictive validity for both Aboriginal and Non-Aboriginal women offenders. There was a clear linear relationship between the CRS security level designation for women offenders and security incident involvement (e.g., substance abuse, escape, assault) within the six-month follow-up. Specifically, the misconduct rate for women rated as minimum-security ($n = 161$) by the CRS was 39%. For those rated as medium-security ($n = 162$), the misconduct rate was 45%; for maximum-rated women ($n = 11$), the misconduct rate was 90%. Analysis of the predictive validity of the CRS subscales revealed that the IA subscale score was a very strong predictor of involvement in institutional misconducts (both violent and general) for both Aboriginal and Non-Aboriginal women offenders. Notably, the SR subscale was also predictive of general and violent misconducts for Non-Aboriginal women.

It is important to highlight as well that there are several types of reliability and validity; the current study offers positive results with respect to the use of the CRS to assist in the initial classification for both Aboriginal and Non-Aboriginal women offenders.

TABLE OF CONTENTS

Acknowledgements.....	ii
Executive Summary.....	iii
Table of Contents.....	vi
List of Tables and Figures.....	vii
Introduction.....	1
The Present Study.....	3
Method.....	5
Study Population.....	5
Measures.....	5
Results.....	7
Initial Security Placement: Aboriginal and Non-Aboriginal Women.....	7
Custody Rating Scale - Aboriginal and Non-Aboriginal Comparisons.....	8
Concurrent Validity.....	13
Predictive Validity of the CRS.....	14
Discussion.....	22
References.....	28
Appendix A.....	30
Appendix B.....	31
Appendix C.....	32

LIST OF TABLES AND FIGURES

Table 1. Initial Security Placement: Aboriginal and Non-Aboriginal Women	7
Table 2. CRS Designation Distribution: Aboriginal and Non-Aboriginal Women	8
Table 3. Distribution of High and Low Scores on CRS Items: Aboriginal and Non-Aboriginal Women	9
Table 4. CRS Subscale Distributions: Aboriginal and Non-Aboriginal Women	12
Table 5. Concordance between CRS Designations and Actual Initial Placement.....	13
Table 6. Base-Rates of Institutional Incidents: Aboriginal and Non-Aboriginal Women	14
Table 7. Predictive Validity of the Institutional Adjustment Subscale: Aboriginal and Non-Aboriginal Women	16
Table 8. Predictive Validity of the Security Risk Subscale: Aboriginal and Non-Aboriginal Women	17
Table 9. Incident Involvement Rates at Each Security Level by Aboriginal / Non-Aboriginal Group	19

INTRODUCTION

A recent examination¹ of the federally-sentenced women offender population revealed that Aboriginal inmates were over-represented at maximum security (see Appendix A). More specifically, 36% of the women at maximum security were Aboriginal, whereas 27% of the total federally sentenced women in-custody population was Aboriginal. These statistics are consistent with previous reports (Blanchette & Motiuk, 1997; Morin, 1999; Trevethan, 1999). The over-representation of Aboriginal women offenders at higher levels of security and custody has recently been cited as an area requiring further study (e.g., Monture-Angus, 2000; Shaw & Hannah-Moffat, 2000).

The distribution of custodial security levels at any given point in time is the product of both intake classification decisions, and *reclassification* decisions. Currently, all security classification decisions are based on criteria set out in the Corrections and Conditional Release Act (CCRA) and Regulations. The fundamental considerations in offender security classification include institutional adjustment, escape risk, and (should the offender escape) risk to the public for a new offence.

In addition, the Custody Rating Scale (CRS; an objective security classification instrument) informs the initial security placement. The present investigation focused on intake classification decisions, which can be conceived of as a two-stage process. First, the Custody Rating Scale (CRS; Solicitor General Canada, 1987) provides operational criteria for legislation set out in the CCRA; it is administered and yields a security level designation of minimum, medium or maximum. Second, caseworkers review the CRS designations and either approve or override the rating; reasons for overrides must be clearly documented.

¹ Consisted of a "snapshot" of the inmate population on January 01, 2002.

The Custody Rating Scale is an objective security classification instrument. Buchanan, Whitlow and Austin (1986) define an objective classification procedure as one that (a) arrives at decisions based upon factors that have been shown to be related to placement decisions, (b) has been validated within prison populations, (c) assigns offenders to security classifications commensurate with their offence histories, (d) makes decisions in a way that is readily understandable by staff and offenders, (e) is scored completely and consistently for all offenders, (f) has high levels of inter-rater reliability, (g) is generally accepted by staff and has low levels of override, (h) records decisions in such a way that its decisions can be monitored systematically and efficiently.

A comprehensive report by Luciani, Motiuk and Nafekh (1996, p. 34) provided data on the distributions of male Aboriginal and Non-Aboriginal offenders across minimum, medium and maximum security. Based on the data they presented, it was possible to examine if there was a higher yield of initial placements to higher security for Aboriginal people (see Appendix B). Although there was a statistically significant difference between Aboriginal and Non-Aboriginal offenders by initial placement, the disparity was not nearly as large as that noted for women. This highlighted the need for further research into the validity of the CRS as a tool to aid in the initial placement of women, and specifically Aboriginal women.

Another factor that contributes to the intake security classification distribution is override decisions by caseworkers. In the study by Luciani et al. (1996) the percentages, and patterns, of override decisions within the male Aboriginal and Non-Aboriginal offender populations were similar; Grant and Luciani (1998) replicated this finding. The effect of override decisions on the women offender security classification distribution has not been fully examined. Prior reports have been based on data that were collected at Prison for Women, which was in effect, a maximum-security facility. In past reports it was not possible to calculate the concordance between CRS designations and actual placement because the

information system recorded all placements at Prison for Women as maximum (Grant & Luciani, 1998). Results from the present study were based on data collected after the opening of all the regional facilities for women offenders, and the Healing Lodge. These include: Nova Institution (Truro, Nova Scotia), Établissement Joliette (Joliette, Quebec), Grand Valley Institution (Kitchener, Ontario), Edmonton Institution (Edmonton, Alberta), and the Okimaw Ochi Healing Lodge (Maple Creek, Saskatchewan); the first of which opened in 1995, and the last opened in 1997.

When examining a security classification system it is important to consider its purpose. For the Correctional Service of Canada, the legislated objective of security classification is "protection of the public, staff members and offenders" (Corrections and Conditional Release Act, 4.d). The Service must apply the least restrictive measures that are compatible with these objectives. To accomplish this goal, it is first necessary to assess an individual's propensity to cause harm, so that appropriate levels of custody and security can be applied. Predictive validity is fundamental to security classification.

Validation research examining the CRS within the women offender population has been limited. Luciani et al. (1996), within a women offender sample, found that rates of incident involvement at minimum, medium and maximum increased in the expected rank order; this suggested a positive linear relation between CRS security designation and incident involvement. Luciani et al.'s (1996) study did not, however, examine the predictive validity of the CRS specifically within the Aboriginal women population. This study represents a more concerted effort to study the predictive validity of the CRS, and its composite items, within the Aboriginal and Non-Aboriginal women offender populations.

The Present Study

The first objective of this study was to identify the characteristics of Aboriginal women that result in a higher yield of initial placements to maximum-security. For instance, the overrepresentation could be due to Aboriginal women offenders

scoring higher on the overall CRS, scoring higher on one particular subscale, or to greater use of overrides by correctional staff. A second objective was to examine the validity of the CRS for the initial security placement of Aboriginal women offenders, in relation to its performance for their Non-Aboriginal counterparts. The analyses first focused on convergent validity: what is the concordance between CRS security level designations and actual security placement? Second, analyses queried predictive validity: how well do CRS total scores, subscales, and items predict institutional misconduct?

METHOD

Study Population

Data were drawn from the Offender Management System (OMS; CSC's automated database). The study population consisted of 334 federally sentenced women offenders who were admitted² between January 1997 and January 1999. Only cases with complete CRS information, and initial placement data, were retained for this investigation. Over half (53%) of the study participants were Caucasian, 21% were Aboriginal (<1% Inuit, 6% Métis, 15% First Nations), 15% were Black, and 10% comprised other ethnic groups. For the analyses, Aboriginal women offenders ($n = 68$) were compared with Non-Aboriginal women offenders ($n = 266$).

The difference in mean age of the Aboriginal 32.0 ($SD = 8.4$) and Non-Aboriginal 33.4 ($SD = 9.9$) women was not statistically significant. Forty-two percent of Aboriginal women and 52% of Non-Aboriginal women were married or living common-law at the time of their admission; this difference was not statistically significant. Aboriginal women differed according to the nature of their index offences: A greater relative percentage of Aboriginal women were incarcerated for perpetrating a violent offence, versus a non-violent offence, $\chi^2(1, N = 334) = 11.26, p < .001$. Specifically, half of the Aboriginal women (50.0%) were serving their sentence for a violent offence, compared to 28.6% of their Non-Aboriginal counterparts.

Measures

The Custody Rating Scale (CRS). The CRS consists of two scales, the Institutional Adjustment (IA) subscale (5 items), and the Security Risk (SR) subscale (7 items). A statistical weighting scheme is used to score the CRS items, and items within each subscale are summed to provide a total score. As

² 90.4% of the sample were admitted on a new warrant of committal; 6.3% were admitted on a revocation without a new offence, and the remaining 3.3% were admitted on a revocation with a new offence.

scores increase on either subscale, the recommended security level designation also increases. The CRS is provided in Appendix C. Most of the items are self-explanatory. Street Stability is a composite of several dynamic factors: employment / education, marital / family adjustment, criminal associates, and residence stability.

Items within each subscale are summed to provide a total score. Cut-off values are applied to the subscale scores and yield a distribution of minimum, medium or maximum. Custody Rating Scale designations are based on the higher of the two ratings between the IA subscale and SR subscale.

Institutional Misconducts. Women offenders in federal custody were followed-up within the institution for 6 months following the date that they were placed at their designated security level. Many offenders ($n = 173$; 52% of the original sample) were released on parole within 1 year of their placement date. For this reason, a 6-month follow-up period was set to ensure a sizable sample. Data were drawn from the OMS incident database. Two dichotomous indices of institutional misconduct were used in analyses: (a) non-violent, and (b) violent. Non-violent incidents included having been involved for one or more incidents of escape, possession of contraband, allegations of ongoing criminal behaviour, causing a disturbance, substance use, disciplinary infractions, self-injurious behaviour, and requests for solitary confinement. A violent incident was defined as committing one or more acts of murder, assault or hostage taking.

Results

Initial Security Placement: Aboriginal and Non-Aboriginal Women

The initial security level distribution of women offenders was examined to determine if security level placements (minimum, medium and maximum) differed for Aboriginal and Non-Aboriginal women. Table 1 presents the distribution of initial security placements, by group.

Table 1. Initial Security Placement: Aboriginal and Non-Aboriginal Women

	<u>n</u>	Minimum % (<u>n</u>)	Medium % (<u>n</u>)	Maximum % (<u>n</u>)
Aboriginal	68	29.4 (20)	60.3 (41)	10.3 (7)
Non-Aboriginal	266	55.3 (147)	42.1 (112)	2.6 (7)
Total	334	50.0 (167)	45.8 (153)	4.2 (14)

Note. Percentages were calculated within each ethnic group.

Initial security placements were significantly different by group, $\chi^2(2, N = 334) = 18.74, p < .001$. The association between actual security placement and group (Aboriginal vs. Non) was moderate, Cramer's phi (ϕ_c) = .24. Relative to Non-Aboriginal women, a smaller proportion of Aboriginal women was placed at minimum security and a larger proportion was placed at medium and maximum security.

Custody Rating Scale - Aboriginal and Non-Aboriginal Comparisons

The distribution of CRS designations is represented in Table 2. Significant between-group differences in Custody Rating Scale designations were found, $\chi^2(2, N = 334) = 30.02, p < .001$. Aboriginal women were underrepresented in minimum security designations and over represented in both medium, and maximum security designations. The association between Aboriginal / Non-Aboriginal grouping and CRS designation was moderate, $(\phi_c) = .31$.

Table 2. CRS Designation Distribution: Aboriginal and Non-Aboriginal Women

	<u>n</u>	Minimum % (<u>n</u>)	Medium % (<u>n</u>)	Maximum % (<u>n</u>)
Aboriginal	68	20.6 (14)	70.6 (48)	8.8 (6)
Non-Aboriginal	266	55.3 (147)	42.8 (114)	1.9 (5)
Total	334	48.2 (161)	48.5 (162)	3.3 (11)

As discussed earlier, Custody Rating Scale designations are derived from the CRS subscale scores. Subscale scores were examined for differences between Aboriginal and Non-Aboriginal women on the Institutional Adjustment (IA) subscale and the Security Risk (SR) subscale. The mean Aboriginal IA score, $M = 48.56 (SD = 29.43)$, exceeded the mean Non-Aboriginal IA score, $M = 29.72, (SD = 20.54)$; the difference was statistically significant, $t(84) = 4.93, p < .001$. Similarly, the mean Aboriginal SR subscale score, $M = 70.24 (SD = 17.18)$, was larger than the mean Non-Aboriginal score, $M = 58.74 (SD = 24.92)$. Again, the difference was statistically significant, $t(148) = 4.45, p < .001$.

The composite items of the IA subscale and SR subscale were contrasted between groups to further localize meaningful differences. The individual CRS item scores were not normally distributed, consequently parametric tests were

not suitable. The items were split at the nearest whole value to the combined group's median. It should be noted that, in spite of this procedure, the distributions of several of the dichotomous variables were uneven. The association between the split scores and Aboriginal versus Non-Aboriginal group was tested; results are presented in Table 3.

Table 3. Distribution of High and Low Scores on CRS Items: Aboriginal and Non-Aboriginal Women

Custody Rating Scale Scores	Aboriginal		Non-Aboriginal		χ^2	ϕ
	low_ (%)_	high (%)	low (%)	high (%)		
<u>Institutional Adjustment Score</u>						
1. History of Institutional Incidents	69.1	30.9	86.5	13.5	11.52***	.19
2. Escape History	91.2	8.8	93.2	6.8	0.34	.03
3. Street Stability	38.2	61.8	68.1	32.0	20.42***	.25
4. Alcohol / Drug Use	13.2	86.8	50.4	49.6	30.51***	.30
5. Age (at sentencing)	55.9	44.1	63.9	36.1	1.49	.07

Security Risk Score

1. Prior Convictions	42.7	57.4	63.2	36.8	9.42**	.17
2. Most Serious Outstanding Charge	80.9	19.1	84.6	15.4	0.55	.04
3. Severity of Current Offence	26.5	73.5	51.9	48.1	14.05***	.21
4. Sentence Length	89.7	10.3	83.8	16.2	1.47	-.07
5. Street Stability	41.2	58.8	68.1	32.0	16.70***	.22
6. Prior Parole and / or Statutory Release	70.6	29.4	75.9	24.1	0.82	.05
7. Age (at admission)	42.7	57.3	50.8	49.2	1.42	.07

Notes. **p < .01. *** p < .001; Aboriginal N = 68; Non-Aboriginal N = 266

Aboriginal women scored significantly higher on three of the five IA subscale items: history of institutional incidents, street (in)stability, and alcohol and drug use. Within the SR subscale, Aboriginal women were more likely to score high on: prior convictions, severity of current offence, and street (in)stability. It is interesting to note that, while Aboriginal women were considerably more likely to score 'high' on the 'severity of current offence' item, this was not reflected in differences in the CRS 'sentence length' item.

Custody Rating Scale designations are based on the interplay between the IA subscale or the SR subscale. As previously described, subscale ratings of minimum, medium, and maximum are derived by applying cutoff values to the raw scale scores of each subscale. Table 4 reports CRS distributions, by subscale, for Aboriginal and Non-Aboriginal women.

While statistical tests of significance could not be validly performed due to low expected cell counts, data in table 4 suggest that the SR subscale distinguishes medium- from minimum-security cases, while the IA subscale discriminates the maximum-security women.

Table 4. CRS Subscale Distributions: Aboriginal and Non-Aboriginal Women

Security Risk Subscale				
	<u>n</u>	Minimum % (<u>n</u>)	Medium % (<u>n</u>)	Maximum % (<u>n</u>)
Aboriginal	68	23.5 (16)	76.5 (52)	0.0 (0)
Non-Aboriginal	266	56.0 (149)	43.6 (116)	0.4 (1)
Combined	334	49.4 (165)	50.3 (168)	0.3 (1)
Institutional Adjustment Subscale				
	<u>n</u>	Minimum % (<u>n</u>)	Medium % (<u>n</u>)	Maximum % (<u>n</u>)
Aboriginal	68	88.2 (60)	2.9 (2)	8.8 (6)
Non-Aboriginal	266	97.0 (258)	1.5 (4)	1.5 (4)
Combined	334	95.2 (318)	1.8 (6)	3.0 (10)

Note: Tests of statistical significance could not be validly performed due to low expected cell counts.

Concurrent Validity

The impact of CRS overrides was considered. Overall, 14.7% of CRS designations were overridden. Concordance rates between the CRS designations and the actual initial placement decisions are shown in Table 5.

Table 5. Concordance between CRS Designations and Actual Initial Placement

Initial Placement	CRS			Total (Initial)
	Minimum % (n)	Medium % (n)	Maximum % (n)	
MIN % (f)	43.1 (144)	6.9 (23)	0 (0)	50.0 (167)
MED % (f)	5.1 (17)	39.8 (133)	.9 (3)	45.8 (153)
MAX % (f)	0.0 (0)	1.8 (6)	2.4 (8)	4.19 (14)
Total (CRS)	48.2 (161)	48.5 (162)	3.29 (11)	100.0 (334)

The proportion of cases overridden with the Aboriginal group (19.1%) was similar to that of the Non-Aboriginal group (13.5%); the difference was not statistically significant. Similarly, there were no statistically significant differences between staff overrides 'up' or 'down' by Aboriginal identity. However, there was a slight trend for staff to place Aboriginal women at security levels *lower* than that recommended by the CRS. For Non-Aboriginal women, overrides to higher security occurred 7.1% of the time (\underline{n} = 19), and those to lower security occurred 6.4% of the time (\underline{n} = 17). For Aboriginal women, overrides to higher security

occurred in 5.9% of cases ($n = 4$), while overrides to lower security occurred in about 13.2% of cases ($n = 9$).

Predictive Validity of the CRS

A six-month institutional follow-up was possible for 291 inmates (Aboriginal $n = 61$, Non-Aboriginal $n = 230$). Base-rates of incident involvement are presented in Table 6. Compared to Non-Aboriginal women, relatively fewer Aboriginal women were involved in a non-violent incident, $\chi^2 (1, N = 291) = 4.89$, $p < .05$. Although no other statistically significant differences were found between groups, there was a trend suggesting that Aboriginal women were more prone to violent incident involvement than their Non-Aboriginal counterparts.

Table 6. Base-Rates of Institutional Incidents: Aboriginal and Non-Aboriginal Women

	Non-Violent % (n)	Violent % (n)	Combined % (n)
Aboriginal ($n = 61$)	27.9 (17)	18.0 (11)	34.4 (21)
Non-Aboriginal ($n = 230$)	43.5 (100)	11.7 (27)	46.5 (107)
Combined	40.2 (117)	13.1 (38)	44.0 (128)

Tables 7 and 8 compare the predictive validity of the CRS subscales, and their composite items, by group. As before, item scores were split at the nearest

whole value to the median, to form two-by-two contingency tables. Full subscale scores³ were used to calculate point-biserial correlation coefficients.

The IA subscale score evidenced a moderate to strong correlation with both non-violent and violent incident involvement. This association held for both Aboriginal and Non-Aboriginal women, but was particularly strong for the Aboriginal group. The SR subscale score was significantly related to violent and non-violent incident involvement within the Non-Aboriginal sample, but not within the Aboriginal sample.

A history of institutional incidents and poor street stability were predictive of non-violent and violent incident involvement for Aboriginal women. Notably, severity of current offense appeared to be negatively associated with incident involvement for Aboriginal offenders. For Non-Aboriginal women, history of institutional incidents, escape history, alcohol and drug use, prior convictions, and age were independent predictors of institutional misconduct.

³ It was necessary, to perform a square-root transformation on IA subscale scores to correct for positive skewness and to limit the influence of outliers.

Table 7. Predictive Validity of the Institutional Adjustment Subscale: Aboriginal and Non-Aboriginal Women⁴

IA Subscale Items		Incident Type	
		Violent	Non-Violent
1. History of Institutional Incidents	Aboriginal	.24*	.37**
	Non-Aboriginal	.20**	.22**
2. Escape History	Aboriginal	--	--
	Non-Aboriginal	.18**	.12*
3. Street Stability	Aboriginal	.22*	.29*
	Non-Aboriginal	.09	.09
4. Alcohol and Drug Use	Aboriginal	-.18	.03
	Non-Aboriginal	.04	.16**
5. Age	Aboriginal	.00	.16
	Non-Aboriginal	.14*	.08
IA Subscale Total Score	Aboriginal	.39**	.47***
	Non-Aboriginal	.19**	.21**

⁴ Item scores represent phi calculated from 2*2 tables. Full subscale values represent biserial correlations. *p* values based on chi-square distribution. Missing values reflect cases where chi-square could not be calculated due to low expected cell frequencies. **p* < .05, ***p* < .01, *** *p* < .001 one tailed tests of significance.

Note: Aboriginal ($n = 61$); Non-Aboriginal ($n = 230$).

Table 8. Predictive Validity of the Security Risk Subscale: Aboriginal and Non-Aboriginal Women⁵

SR Subscale Items		Incident Type	
		Violent	Non-Violent
1. Prior Convictions	Aboriginal	.09	.06
	Non-Aboriginal	.14*	.19**
2. Most Serious Outstanding Charge	Aboriginal	-.09	.12
	Non-Aboriginal	.00	.07
3. Severity of Current Offense	Aboriginal	-.21	-.38
	Non-Aboriginal	.04	.06
4. Sentence Length	Aboriginal	.23	.12
	Non-Aboriginal	.07	.06
5. Street Stability	Aboriginal	.25*	.33**
	Non-Aboriginal	.06	.08
6. Prior Parole / Statutory Release	Aboriginal	.11	.21
	Non-Aboriginal	.06	.08
7. Age	Aboriginal	-.11	.15
	Non-Aboriginal	.09	.18**
Security Risk Subscale Score	Aboriginal	.01	.05
	Non-Aboriginal	.18**	.19**

Note: Aboriginal ($n = 61$); Non-Aboriginal ($n = 230$).

⁵ Item scores represent phi calculated from 2*2 tables. Full subscale values represent biserial correlations. p values based on chi-square distribution. * $p < .05$, ** $p < .01$, *** $p < .001$, one tailed tests of significance.

Differences between Aboriginal and Non-Aboriginal women were apparent; street stability was predictive of both violent and non-violent incident involvement for the Aboriginal sample, but not for the Non-Aboriginal sample. Conversely, number of prior convictions was associated with non-violent incident involvement and violent incident involvement for Non-Aboriginal inmates, but not for Aboriginal inmates.

CRS designations are derived by applying cutoff values to the subscale scores, forming three groups - minimum, medium and maximum. This process results in a loss of information because the full range of the subscale scores is not expressed. Tests of association between the censored levels and incident involvement were conducted to indicate how the CRS functioned in practice. Table 9 represents the percentages of inmates, at each CRS designation level, that were involved in at least one institutional incident during the follow-up period. The violent and non-violent incident involvement indexes were collapsed for parsimony.

Table 9. Incident Involvement Rates at Each Security Level by Aboriginal / Non-Aboriginal Group

Incident Involvement - Violent and Non-Violent Combined % (f)				
	<u>N</u>	Minimum	Medium	Maximum
<u>CRS Designation</u>				
Aboriginal	61	28.6 (4 / 14)	26.8 (11 / 41)	100.0 (6 / 6)
Non-Aboriginal	230	40.0 (48 / 120)	52.4 (55 / 105)	80.0 (4 / 5)
Total	291	38.8 (52 / 134)	45.2 (66 / 146)	90.9 (10 / 11)
<u>Actual Placement</u>				
	<u>N</u>	Minimum	Medium	Maximum
Aboriginal	61	16.7 (3 / 18)	30.6 (11 / 36)	100.0 (7 / 7)
Non-Aboriginal	230	38.5 (47 / 122)	53.5 (54 / 101)	85.7 (6 / 7)
Total	291	35.7 (50 / 140)	47.5 (65 / 137)	92.9 (13 / 14)

As shown in Table 9, the percentages of women offenders who were involved in an institutional incident, at each CRS level, increased in the expected order, from minimum to maximum. Statistical analyses showed that, overall, CRS designations were significantly associated with general incident involvement, $\chi^2(2, N = 291) = 11.38, p < .01$; Cramer's Phi (ϕ_c) was .19. When the Aboriginal

and Non-Aboriginal groups were combined, actual security placements (i.e., accounting for overrides) similarly demonstrated a strong and significant relation to incident involvement, $\chi^2(2, N = 291) = 18.12, p < .01; \phi_c = .25$. Because of the relatively small number of women rated and placed at maximum security, it was not possible to determine whether or not there is a significant linear trend within each ethnic subgroup.

Discussion

The distribution of women offender security levels at any given point in time is the product of both intake classification decisions, and *reclassification* decisions. The primary analyses confirmed differential intake security level placement for Aboriginal women, relative to their Non-Aboriginal counterparts. Specifically, Aboriginal women inmates are underrepresented at minimum security, and over-represented at both medium and maximum security. This suggests that initial security placement (as opposed to re-classification) contributes to the relatively greater proportions of Aboriginal women at medium- and maximum-security.

Currently, all security classification decisions are based on criteria set out in the Corrections and Conditional Release Act (CCRA) and Regulations. As mentioned, the fundamental considerations in offender security classification include institutional adjustment, escape risk, and (should the offender escape) risk to the public. The present investigation focused on intake classification decisions, which can be conceived of as a two-stage process. First, the Custody Rating Scale provides operational criteria for legislation set out in the CCRA; it is administered and yields a security level designation of minimum, medium or maximum. Second, caseworkers review the CRS designations and either approve or override the rating; reasons for overrides must be clearly documented.

In brief, this study sought to determine whether the higher yield of Aboriginal women at medium- and maximum-security was due to: 1) Aboriginal

women receiving higher scores on the CRS, 2) differential application of override criteria by CSC staff, or 3) both. Results revealed that between-group differences in initial security classification were not attributable to staff override decisions. In fact, there was a (non-significant) trend for staff to place Aboriginal women in security levels lower than those recommended by the CRS. Accordingly, the positive relation between CRS security classifications and Aboriginal identity was stronger in the CRS designations than in the final placement distribution. This indicates that decisions to override the CRS did not initiate, or aggravate, the more frequent placement of Aboriginal women at higher levels of security.

Item analysis of the CRS revealed that Aboriginal women typically score higher than their Non-Aboriginal counterparts on six of the twelve CRS items. Within the Institutional Adjustment subscale, Aboriginal women showed a greater history of involvement in institutional incidents, more serious drug/ alcohol abuse problems, and less 'street stability' while living in the community. Within the Security Risk subscale, Aboriginal women had more prior convictions, more serious current offences, and poorer street stability. It is interesting to note that, while Aboriginal women were considerably more likely to score 'high' on the 'severity of current offence' item, this was not reflected in differences in sentence length. These results are consistent with those reported by LaPrairie (1996), who noted that "Aboriginal people are also disproportionately represented in admissions for violent offences, particularly in federal institutions, for which they are also receiving shorter sentences than the Non-Aboriginal groups" (p. ii).

Taken together, these results suggest that the more frequent initial placement of Aboriginal women at higher security is due to their higher scores on a number of objective criteria set out in the CRS. Importantly, the current data suggest that staff override decisions play no role in the placement of Aboriginal women to relatively higher levels of security.

A second objective was to examine the validity of the CRS for Aboriginal women, in relation to its performance for their Non-Aboriginal counterparts. The analyses first focused on convergent validity and included an examination of the concordance between CRS security level designations and actual security placement decisions. The second set of analyses examined predictive validity with an exploration of how well CRS total scores, subscales, and items predict institutional misconduct within the six-month follow-up period.

Results revealed excellent convergent validity of the CRS within both Aboriginal and Non-Aboriginal subgroups. The concordance between the CRS designation and actual placement decisions was about 85%. While there were no significant differences in overrides by Aboriginal identity, there was a slight trend for staff to classify Aboriginal women at lower levels of security than those recommended by the CRS.

The CRS demonstrated very good predictive validity within the six-month follow-up period. The Institutional Adjustment subscale was a strong predictor of both violent and non-violent incident involvement for both groups, though the association was particularly strong for Aboriginal women. This finding supports results of earlier analyses, which demonstrated that the principal function of the

IA subscale is the discrimination of maximum-security inmates. Notably, all of the Aboriginal women who were CRS- recommended to maximum security were involved in at least one misconduct within the follow-up period. Two of the composite IA subscale items were also significant predictors within the Aboriginal sample: history of institutional misconduct and street stability. These results are consistent with the findings reported by Bonta (1989), who examined the predictors of institutional misconduct within a sample of provincial male Aboriginal offenders. Bonta found that education/employment, family marital, and accommodation factors were associated with institutional misconduct. The CRS 'street stability' item is a composite of these factors, and they are all dynamic predictors.

The Security Risk subscale predicted both violent and non-violent incident involvement for the Non-Aboriginal subsample. While the total SR subscale did not predict involvement for Aboriginal women, the 'street stability' item was a moderately strong predictor. This finding was not surprising, given that the items in the SR subscale are more focused on the 'risk to public safety' criteria outlined in the CCRA and regulations. Items included in the CRS are intended to predict future behaviour (both inside and outside of the institution) and to support CSC policy. For instance, items are weighted such that a person sentenced to 10 years or more for a serious offence could not be placed, at intake, into minimum security.

Some limitations of the present study are noted. It is important to bear in mind that the predictive validity of CRS factors was evaluated in relation to only

one criterion (non-violent/violent incident involvement); the other objectives of security classification were not considered. Further, incident involvement might be confounded with the actual security environment which may have either encouraged or discouraged misconduct, or documentation thereof (Kane, 1986). However, this potential limitation was mitigated in the current study, since minimum- and medium-security women live in the same environment at the regional facilities and at the Healing Lodge. Moreover, the predictive validity of the scale was tested in relation to the women's CRS scores, rather than actual placement. This means that some women rated as 'maximum' ($n = 3$) were actually placed in medium-security, some who were rated as 'medium' ($n = 6$) were actually placed in maximum-security, and so on (see Table 5).

Another limitation was a lack of statistical power⁶ within the Aboriginal study population. Power was restricted by the size of the Aboriginal group and by the use of bivariate non-parametric statistics. Consequently, it would be premature to conclude, on the basis of this study, that the items that failed to demonstrate an association with institutional misconduct are, in fact, not predictive within the Aboriginal population.

Although the current study had a relatively narrow focus, it provides some insight into how the disproportion of Aboriginal women at higher levels of security occurs. Overall, the results, albeit preliminary, suggest that the CRS is a valid

⁶ Power refers to the chance of correctly rejecting the null hypothesis. In this case the chance of finding a relation between CRS items and institutional misconduct, assuming that there actually is an association within the population.

tool for use within the women offender population in general, and the Aboriginal women offender population in particular.

REFERENCES

- Blanchette, K., & Motiuk L. (1997). *Maximum-security Female and Male Offenders: a Comparison*. Research Report # R-53. Ottawa, ON: Correctional Service of Canada.
- Bonta, J. (1989). Native Inmates: Institutional Response, Risk, and Needs. *Canadian Journal of Criminology*, 6, 49-61.
- Buchanan, R. A., Whitlow, K. L., & Austin, J. (1986). National evaluation of objective prison classification systems: The current state of the art. *Crime and Delinquency*, 32, 282-290.
- Corrections and Conditional Release Act*, C-44.6 (1992, c. 20)
- Grant, B., & Luciani, F. (1998). *Security Classification Using the Custody Rating Scale*. Research Report # R-67. Ottawa, ON: Correctional Service of Canada.
- Kane, T. R. (1986). The validity of prison classification: An introduction to practical considerations and research issues. *Crime & Delinquency*, 32, 367-390.
- LaPrairie, C. (1996). *Examining Aboriginal Corrections in Canada*. Cat. No. JS5-1/14-1996E. Ottawa, ON: Ministry of the Solicitor General Canada.
- Luciani, F., Motiuk, L. L., & Nafekh, M. (1996). *An Operational Review of the Custody Rating Scale: Reliability, Validity, and Practical Utility*. Research Report #R-47. Ottawa, ON: Correctional Service of Canada.
- Monture-Angus, P. (2000). Aboriginal women and correctional practice: reflections on the task for federally sentenced women. *An Ideal Prison?* Hannah-Moffat, K. Shaw, M. (eds.), Halifax, NS: Fernwood Publishing.
- Morin, S. (1999). *Federally Sentenced Aboriginal Women in Maximum Security: What Happened to the Promises of "Creating Choices"?* Ottawa, ON: Correctional Service of Canada.
- Research Branch, Correctional Services Canada (2002). [Cross-section of women offenders at security level by Aboriginal identity]. Unpublished raw data.

Shaw, M., & Hannah-Moffat, K. (2000). Gender, diversity, and risk assessment in Canadian corrections. *Probation Journal*, 47(3), 163-173.

Solicitor General Canada. (1987). *Development of a security classification model for Canadian federal offenders*. Ottawa, ON: Correctional Service of Canada.

Trevethan, S. (1999). Women in federal and provincial-territorial correctional facilities. *Forum on Corrections Research*, 11 (3), 9-11.

Appendix A

Cross-section of Women Offenders' Security Level by Race

	<u>n</u>	Security Placement			<u>df</u> / χ^2 / ϕ_c
		Minimum % (<u>n</u>)	Medium % (<u>n</u>)	Maximum % (<u>n</u>)	
Aboriginal	93	20.4 (19)	61.3 (57)	18.3 (17)	2
Non- Aboriginal	252	32.1 (81)	56.0 (141)	11.9 (30)	5.58*
Total	345	29.0 (100)	57.4 (198)	13.6 (47)	.13

Note. Includes federal offenders incarcerated in federal institutions as of January 01, 2002. *p = .06

Appendix B

Security Level by Race - Data source: Luciani, Motiuk, & Nafekh (1996)

	Security Placement				$df / \chi^2 / \phi_c$
	n	Minimum % (n)	Medium % (n)	Maximum % (n)	
Aboriginal	464	15 (70)	77 (357)	8 (37)	2
Non-Aboriginal	6612	24 (1587)	68 (4496)	8 (529)	19.77***
Total	7076	23 (1657)	69 (4853)	8 (566)	.05

Note. The effect size is statistically significant on account of the large sample size. Phi, a measure of association, indicates that the effect is practically non-significant. *** $p < .01$.

Appendix C

The Custody Rating Scale (The Solicitor General, 1987)

Institutional Adjustment Scale

<u>1. History of involvement in institutional incidents</u>	Points
a. no prior involvement	0
b. any prior involvement	2
c. prior involvement in one or more incidents in "greatest" or "high" severity categories	2
d. prior involvement during last five years of incarceration:	
in an assault (no weapon or serious injury)	1
in a riot or major disturbance	2
in an assault (using a weapon or causing serious injury)	2
e. involvement in one or more serious incidents prior to sentencing and / or pending placement from current commitment	5
8 X Total of a. to e.	
<u>2. Escape history</u>	
a. no escape or attempts	0
b. an escape or attempt from minimum or community custody with no actual or threatened violence:	
over two years ago	4
in last two years	12
c. an escape or attempt from medium or maximum custody or an escape from minimum or community custody with actual or threatened violence:	
over two years ago	20
in last two years	28
d. two or more escapes from any level within the last five years	28
total	
<u>3. Street stability</u>	
a. above average	0
b. average	16
c. below average	32
total	
<u>4. Alcohol / drug use</u>	
a. no identifiable problems	0
b. abuse affecting one or more life areas	3
c. serious abuse affecting several life areas	6
total	

5. Age (at the time of sentencing)

a.	18 years or less	24
b.	19	22
c.	20	20
d.	21	18
e.	22	16
f.	23	14
g.	24	12
h.	25	10
i.	26	08
j.	27	06
k.	28	04
l.	29	02
m.	30 years or more	00
	total	

Security Risk Score

<u>1. Number of prior convictions</u>		<u>Points</u>
a.	none	0
b.	one	3
c.	2 to 4	6
d.	5 to 9	9
e.	10 to 14	12
f.	over 15	15
	total	

<u>2. Most serious outstanding charge</u>		
a.	no outstanding charges	0
b.	minor	12
c.	moderate	15
d.	serious	25
e.	major	35
	total	

<u>3. Severity of current offence</u>		
a.	minor or moderate.....	12
b.	serious or major.....	36
	total	

<u>4. Sentence length</u>		
a.	1 day to 4 years.....	5
b.	5 to 9 years.....	20
c.	10 to 24 years	45
d.	over 24 years.....	65
	total	

5. Street stability

a. above average	0	
b. average.....	5	
c. below average	10	
	total	<input type="text"/>

6. Prior parole and / or statutory release

a. none.....	0	
b. 1 point for each prior parole release.....		<input type="text"/>
c. 2 points for each prior statutory release		<input type="text"/>
	total	<input type="text"/>

7.Age

a. 25 years or less.....	30	
b. 26.....	27	
c. 27.....	24	
d. 28.....	21	
e. 29.....	18	
f. 30.....	15	
g. 31.....	12	
h. 32.....	09	
i. 33.....	06	
j. 34.....	03	
k. 35 years or more.....	00	
	total	<input type="text"/>

CRS Subscale Cutoff Values

	Minimum	Medium	Maximum
<u>Institutional Adjustment Subscale</u>			
Revised (June 1998)	0 - 85.5	85.5 - 94.5	94.5 - 186
<u>Security Risk Subscale</u>			
Revised (June 1998)	7 - 63.5	63.5 - 133.5	133.5 and above
