

————— **Research Report** —————

**Development and Field-Test of a
Gender-Informed Security Reclassification
Scale for Women Offenders**

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**Development and Field-Test of a Gender-Informed
Security Reclassification Scale for Women Offenders**

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EXECUTIVE SUMMARY

Classification of offender populations is one of the most important functions of any correctional agency. Actuarial tools have demonstrated superiority over clinical judgment in accomplishing classification goals; in general, they are both more liberal and more accurate than the clinical method (Meehl, 1954; Grove & Meehl, 1996). However, objective security classification measures in use for female inmates have invariably been developed for males, despite evidence that there may be gender-specific risk factors for women, and that measures derived from samples of male offenders may overclassify women, resulting in frequent use of overrides by correctional staff (Van Voorhis & Presser, 2001).

The current study comprised the development and field-test of a gender-informed security reclassification scale for women. The Security Reclassification Scale for Women (SRSW) was designed to provide a national, objective, gender-informed classification tool that, in accordance with legislation, would assist in the placement of women into the 'least restrictive' measures of confinement. The development sample included 285 successive offender security level (OSL) reviews for women offenders. Statistical techniques reduced the pool of predictor variables to nine scale items, accounting for a significant proportion of variance (57%) in staff security level decisions. Scale cutoffs (minimum, medium, maximum) were chosen to maximize the concordance with actual security level decisions made by staff.

The field test sample ($n=580$) included all federal women offender security level reviews that occurred between July 2000 and June 2003. Data included all offender security level (OSL) decisions, the Security Reclassification Scale for Women (SRSW), and some additional relevant variables coded by field staff. Results showed that the SRSW is a reliable and valid tool for the security classification of federal women inmates. Compared to the current offender security level (OSL) classification method (i.e., structured clinical review), the SRSW placed fewer cases at maximum security, and more cases at minimum security. Within a fixed three-month follow-up, the SRSW was significantly more predictive of minor institutional misconduct than the structured clinical method (OSL) currently in use. Results are discussed in terms of both theoretical and operational implications.

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INTRODUCTION

The Role of Classification in Offender Management

Classification of offender populations, in use since the early 1800s (Dachelet, 2001), is one of the most important functions of any correctional agency; it serves numerous purposes.

Correctional institutions use classification systems to categorize offenders since, as Brennan (1987) argued, "bureaucratic responses must always be standardized" (p. 328). Classification is inextricably linked to the control and management of offender behaviour because it governs access to privileges and resources throughout the course of their sentence. As a management tool, appropriate classification minimizes the potential for institutional misbehaviour and violence, mitigates the probability of escape, and directs resources to where they are most needed. Accordingly, in practice, offender classification should serve to structure correctional decision-making with respect to custody/security designations, program placement, temporary and conditional release, and supervision requirements (Motiuk, 1997). The importance of classification in offender management has long been recognized. Austin (1986) noted that "a properly functioning classification system is the 'brain' of prison management as it governs inmate movement, housing, and program participation, which in turn heavily influence fiscal decisions on staffing levels and future budget needs" (p. 304).

While traditional classification models stress the importance of subjective expertise and clinical judgement in decision-making, the 'new generation' of assessment model is statistically-derived and hailed as more equitable, explicit, and efficient (Austin, 1983; Austin & Hardyman, 2004; Brennan, 1987). Research has demonstrated that subjective methods of assessment are more likely to result in over classification (Austin, 1983; Bonta & Motiuk, 1987; 1990, Hannah-Moffat, 2004). It is not surprising, therefore, that the design, development and implementation of objective procedures for classifying offenders has proliferated throughout North America (Andrews, Bonta, & Hoge, 1990; Austin, 1986; Brennan, 1987).

Most of the objective female offender classification instruments being used today were originally developed with samples of male offenders during the late 1970s and applied to women in the late 80s and early 90s. Examples include: the Level of Supervision Inventory (LSI; Andrews, 1982) and

LSI-Revised (Andrews & Bonta, 1995), the Wisconsin Risk-Needs (Baird, 1981), and the Custody Rating Scale (CRS; Solicitor General Canada, 1987). Although these instruments are applied in everyday correctional practice with men and women, relatively little research has been devoted to their validation specifically for women offenders. Even more rare is research devoted to the development of gender-specific tools for women offenders. Rather, current classification paradigms tend to assume that the same classification factors are equally salient for both men and women (Brennan, 1998; Hardyman, 2001; Hardyman & Van Voorhis, 2004).

In corrections, objective security classification systems are needed to ensure that excessive controls are not imposed on offenders and to help direct the use of limited resources and generate accurate information for long-term accommodation planning. Security classification provides corrections officials with both a practical and legal framework to address problematic inmate behaviour, to establish intervention strategies, and to maximize the management potential of correctional institutions. As such, security classification is best conceptualized as a specialized risk assessment, with very specific prediction criteria. Specifically, while most risk research in corrections focuses on the prediction of risk to the community (i.e., recidivism), security classification is more appropriately focused on risk within the institution.

The fundamental objective of security classification of inmates is "the provision of the (least restrictive) level of security to keep custodial order and prevent escape and thus risk to the community" (Farr, 2000; p.4). An effective classification schema is extremely important because a system that is too liberal can result in serious (sometimes tragic) circumstances, while one that is too austere is more costly, unfair to inmates, undermines reintegration efforts, and leaves the system vulnerable to litigation.

Security Classification in the Canadian Federal Prison System

The primary legislation guiding the federal correctional system in Canada is the Corrections and Conditional Release Act (CCRA, 1992). Section 30 of the CCRA mandates that the Correctional Service of Canada (CSC) assign a security classification of minimum, medium, or maximum to

each inmate, and that the Service give each inmate reasons, in writing, for assigning a particular security classification or for changing that classification.

As a guiding principle for practice, section 4(d) of the CCRA directs that “the Service use the least restrictive measures consistent with the protection of the public, staff members and offenders.” As per criteria set out in the CCRA, the essential considerations in offender security classification include institutional adjustment, escape risk, and (should the offender escape) risk to the public for a new offence. CSC is therefore tasked with the responsibility of assigning each inmate the lowest level of security possible, while concurrently managing risk, both within and outside of the institution.

Intake Classification

In accordance with the aforementioned standards, upon admission to federal custody, all inmates are assigned a security classification as a part of the Offender Intake Assessment (OIA; Motiuk, 1997) process. Initial security classification is informed by the Custody Rating Scale (CRS; Solicitor General of Canada, 1987), an objective risk-based measure. 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 recommended security classification also increases. Cut-off values are applied to the subscale scores and yield ratings of minimum, medium or maximum security. It is important to note that initial classification decisions are also influenced by professional discretion: with clear documentation of their reasoning, caseworkers have discretion to override CRS designations. Although the CRS was developed with a sample of male offenders, its reliability, validity, and practical utility have also been assessed favourably within Aboriginal and women offender samples (Blanchette & Motiuk, 2004; Blanchette, Verbrugge, & Wichmann, 2002; Grant & Luciani, 1998; Luciani, Motiuk, & Nafekh, 1996).

Reclassification

Following initial security classification, the CCRA directs that each offender's security level be reviewed *at least* annually¹. Correctional Service of Canada policy (Standard Operating Practice #700-14) also dictates that the security classification of each offender is reviewed prior to making a recommendation for any decision (e.g., transfer, temporary absence, work release or parole). Policy also directs that receipt of any new information affecting an offender's risk should result in an immediate review of his or her security classification. In each case, the review could result in either confirmation of the offender's security classification, or a recommendation to change the offender's security classification. As such, an inmate's security designation is not immovable. Rather, the security review process is designed to ensure the safe and timely re-integration of offenders. For those offenders who are initially classified at higher levels of security, the process of reintegration should be reflected in successive reductions in security until release into the community. Like initial classification, policy directives guide the security review process, proscribing three dimensions on which to rate the offender: 1) probability of escape, 2) risk to public safety in the event of escape, and 3) level of control and supervision required for appropriate management of the offender within the institution (i.e., institutional adjustment). Although these criteria provide a structure for the security review and reclassification process, there is also reliance on professional discretion.

In December 1998, CSC introduced the Security Reclassification Scale (SRS) for use with male inmates. The mechanically derived scale has been field-tested, with results suggesting a high degree of concurrent and convergent validity (Luciani, 1998). While initial classification (the CRS) is comprised primarily of static variables, the SRS emphasizes dynamic criteria and proximal in-custody behaviour. The SRS has an approximate 25-point scoring range, with higher scores representing higher risk and resulting in higher security ratings. Like the CRS, the SRS also includes provisions for professional discretion for staff to override the scale's recommendation. Again, staff must clearly articulate their reasons for contravening the scale's recommendation.

¹ Exceptions include minimum-security offenders and those serving a minimum life sentence for first or second degree murder. In these cases, the security review occurs every two years.

As mentioned, the SRS was developed with a sample of male offenders. Amid calls for the cessation of applying male-based measures to female offenders (Brennan, 1998; Burke & Adams, 1991; Farr, 2000; Hannah-Moffat & Shaw, 2001; Harer & Langan, 2001), the structured clinical method continues to direct the security review and reclassification process for federally sentenced women. The guidelines for consideration, as per CSC's standard operating practice (700-14) are described briefly below.

Offender Security Level (OSL) Reclassification for Women

Offender security level (OSL) reclassification for women is currently accomplished by a clinical re-evaluation of the three aforementioned risk domains: institutional adjustment, escape risk, and risk to public safety should the inmate escape. Structured policy guidelines direct professional judgment such that each of these domains is assessed as 'low', 'moderate', or 'high', and the particular combination of ratings yields a security reclassification designation. The Standard Operating Practice (SOP 700-14) provides a clear description for each possible rating.

After the structured assessment of the three risk domains, the policy provides final direction with respect to how the inmate should be security classified (minimum, medium, or maximum), based on the specific permutation of ratings on the aforementioned risk domains. An inmate should only be classified as 'minimum' security when she has been assessed as presenting a low institutional adjustment concern, a low probability of escape, and a low risk to the safety of the public in the event of escape. An inmate should be classified as 'medium' security when she has presented a low to moderate probability of escape and a moderate risk to the safety of the public in the event of escape, or as requiring a moderate institutional adjustment concern. Finally, the policy governs that the inmate be classified as 'maximum' security when she has been assessed as presenting a high probability of escape and a high risk to the safety of the public in the event of escape, or as presenting a high institutional adjustment concern².

² It is noted that there are some combinations of ratings with no clear guidelines for the overall security level recommendation. For instance, it is unclear whether an inmate rated 'high' on escape risk, but 'low' on the other two domains should be classified as 'medium' security, or as 'maximum' security.

Predicting Risk in Offender Populations

Static versus dynamic risk factors

Consistent with the Psychology of Criminal Conduct (PCC; Andrews & Bonta, 1998; 2003), research has demonstrated that static risk factors, such as age of onset of criminal behaviour and number of previous offences are good predictors of future criminal behaviour (Andrews & Bonta, 1998; Loucks & Zamble, 2000; Rettinger, 1998). Dynamic risk factors can be equated with criminogenic needs. According to PCC, they are a subset of an offender's risk level; they are dynamic characteristics of the offender that, when changed, are associated with changes in the probability of recidivism (Andrews & Bonta, 1998). Relative to static factors, results of some studies have suggested that dynamic factors such as antisocial attitudes, criminal associates, and substance abuse show as much, or more accuracy in predicting post-release recidivism (Gendreau, Little, & Goggin, 1996). Accordingly, the incremental predictive power of dynamic factors has led to their inclusion into third generation risk assessment paradigms (Bonta, 1996).

Actuarial versus clinical prediction

There are two principal ways of aggregating information to make a classification decision: actuarial (sometimes called the 'statistical' or 'mechanical' method), and clinical. The actuarial method grounds decision-making in statistical relationships (Silver & Miller, 2002). It involves formal, objective procedures to combine and weight factors that render a score and recommendation for decision. Relevant variables are selected and mathematically combined and weighted such that their statistical association with the criterion of interest is maximized (Grove & Meehl, 1996; Grove, Zald, Lebow, Snitz, & Nelson, 2000). Importantly, the weighting of factors is performed according to a set of objective, pre-defined criteria that do not vary as a function of the decision-maker. Thus, clear guidelines are established a priori in terms of what information should be collected, how it should be collected, the source(s) of information, and lastly, how variables should be combined.

The clinical method relies mostly on professional judgement that is based on informal, subjective techniques, sometimes including case conferencing strategies. In general, there are no strict pre-

defined regulations governing what information should be considered, how it should be measured, which information sources should be used, or how the variables should be combined and weighted. With this method, the assessor's professional judgement determines how best to select, combine and weight the information. Thus, the rules vary across decision-makers as well as the individual about whom the decision is being made (Bonta, 1996; Grove & Meehl, 1996; Grove et al., 2000; Marchese, 1992). Proponents of the clinical method criticize actuarial techniques primarily on three grounds: 1) they are atheoretical, 2) they fail to consider the uniqueness of the individual being assessed or the context of their behaviour (Shaw & Hannah-Moffat, 2000; Silver & Miller, 2002), and 3) they are developed based on expectations about the majority population, and therefore might be inappropriate for minority groups (Shaw & Hannah-Moffat, 2000).

Since the 1920's (e.g., Freyd, 1925; Lundberg, 1926; Viteles, 1925; all cited in Brown, 2002) many authors have evaluated the comparative accuracy of clinical versus actuarial prediction. In 1954, Meehl published the first narrative review of the research (20 studies), and concluded that actuarial prediction either equalled or outperformed clinical prediction in virtually every case. Since Meehl's (1954) initial review, numerous studies have emerged resulting in a series of narrative reviews (e.g., Dawes, Faust, & Meehl, 1989; Meehl, 1965; Marchese, 1992; Swets, Dawes, & Monahan, 2000) and a quantitative meta-analysis of the relevant literature (Grove et al., 2000). Collectively, research conducted across a diverse array of assessment realms has clearly demonstrated that actuarial/ mechanical prediction equals or supercedes clinical judgment in the majority of cases. Thus, Meehl's original conclusion made in 1954 remains uncontested over 50 years later.

Research also suggests that objective actuarial prediction instruments often yield more liberal decisions than professional judgment (Austin, 1983). With respect to security classification, actuarial tools tend to significantly lower the average classification, as well as the rate of false positive predictions (Buchanan, Whitlow, & Austin, 1986). It has been suggested that staff, left to their own professional discretion, will act more conservatively because there are serious potential consequences for under-classification such as institutional violence, inmate escape, and criminal/ violent offending in the event of escape. While over-classification also evokes

consequences, especially for the inmates, they are less apparent than those caused by under-classification (Alexander, 1986; Hannah-Moffat, 2004).

In sum, there are obvious benefits to using actuarial methods for offender classification: evidence suggests that their use results in more accurate and more liberal (lenient) decisions, relative to clinical methods (Buchanan et al., 1986). Actuarial approaches have other practical advantages as well (Zinger, 2004). At the federal level of corrections in Canada, implementation of an actuarial tool for women's re-classification would provide an equitable, objective, cost-effective, and nationally standardized approach. The use of an actuarial measure would assist staff by providing an accountability framework for their decisions. Moreover, an objective reclassification instrument would provide women inmates with explicit behavioural criteria regarding their security level, and how they could achieve a reduced security classification. Finally, actuarial methods have the potential of helping management modify policy to either reduce or increase security classification distributions; the effects of proposed policy changes can be simulated in advance.

The Impact of the Prison Environment

Research has demonstrated that security classification and custody placement are highly correlated with institutional behaviour. Not surprisingly, those placed in minimum-security custody demonstrate the least misconduct, followed by those in medium-security, followed by those in maximum-security (Blanchette et al., 2002; Collie, 2003; Hanson, Moss, Hosford, & Johnson, 1983). However, some authors argue that the prison environment at different levels of security might confound results (e.g. Fernandez & Neiman, 1998; Harer & Langan, 2001; Proctor, 1994). More specifically, it has been suggested that the environment at a maximum-security prison could incite more misconduct and violent misconduct than that at lower security. Moreover, inmates placed in higher level security might also be scrutinized more carefully by institutional staff. Minimum-security environments, on the other hand, could mitigate institutional misbehaviour, or misconducts might be less likely to come to the attention of staff.

A study by Hanson et al. (1983) offers preliminary evidence to suggest that it is the inmate's personal classification level, rather than the prison environment, that is associated with

institutional adjustment. The study examined the relative efficacy of four classification systems in predicting inmate institutional adjustment for 337 male inmates. Of relevance, two of the four systems were categorized as 'internal management' classification systems: 1) Security Level Designation, and 2) Custody Level Designation. In brief, the Security Level Designation is used to assign inmates to institutions in relation to the security level of the facility: each federal correctional institution throughout the country is assigned one of six levels of security, based on the facility's structural restraint characteristics. The Custody Level Designation indicates the degree of staff supervision required for the individual inmate. Results of Hanson et al.'s (1983) analyses indicated that the Custody Level Designation was the "single best predictor" of inmate adjustment, while Security Level Designation showed no predictive value.

Interestingly, however, there is research evidence demonstrating a strong association between security level placement and discretionary release, even when controlling for risk (Luciani, Motiuk, & Nafekh, 1996). Specifically, lower-risk offenders placed in higher security environments have lower discretionary release rates and longer incarceration periods than higher-risk offenders placed in lower security environments. These findings suggest that it is the actual placement, rather than assessed risk, of the offender that facilitates discretionary release.

Security Classification of Federal Women Inmates in Canada

The Prison for Women, until the mid 1990s the only federal prison for women offenders, opened in Kingston, Ontario in 1934. Within four years of its opening, the Archambault Commission became the first of many commissions to recommend its closure. The institution was repetitively criticized on numerous grounds, though a fundamental concern was that all women were housed within its maximum-security environment, while few (generally less than 10%) were actually classified as such.

Between 1938 and 1990, at least fifteen government reports had identified serious deficiencies in the services provided to women inmates (Arbour, 1996). Despite these concerns, the Prison for Women remained the only Canadian women's federal correctional facility for well over half a century. Pursuant to recommendations by the *Task Force on Federally Sentenced Women* (1990), the Correctional Service of Canada opened five new regional facilities and a Healing

Lodge between 1995 and 2004. The new regional facilities are classified as 'multi-level' security, accommodating women classified as 'minimum' or 'medium' security in community-style housing, and those classified as 'maximum' security in separate enhanced security units.

Issues and Concerns

The closure of Prison for Women in July, 2000 and the disparate housing conditions assigned to women classified as maximum-security has highlighted the need to ensure that security classification and placement procedures are appropriate for federal women offenders. Although the issue of women's classification has long been the subject of concern, it has recently reached a crescendo. It has been over five years since the Office of the Correctional Investigator called for "immediate action ... to address this totally unacceptable situation" (Stewart, 1999). In the report published in 2001, the Correctional Investigator re-iterated this concern: "I recommend that the [Correctional] Service develop an Action Plan with specific performance measurements and time frames to address... the verification and implementation of the security classification tools for Women and Aboriginal offenders" (Stewart, 2001, p.50). Criticisms of the current security classification procedures for women offenders continue to inundate the Service. Dissenters include government bodies (Auditor General of Canada, 2003; Canadian Human Rights Commission, 2003) as well as non-government agencies such as the Canadian Association of Elizabeth Fry Societies (CAEFS, 2004) and independent academic researchers (Hannah-Moffatt, 2004; Webster & Doob, 2004a; Webster & Doob, 2004b). The complaints focus mainly on inadequate classification standards for federal women offenders, and an investigation launched by the Canadian Human Rights Commission in 2002 continues to date. Notably, this dilemma is not unique to Canada; there is also widespread dissatisfaction with current classification systems for women in most U.S. states (Hardyman & Van Voorhis, 2004; Van Voorhis & Presser, 2001).

Gender-informed Classification for Women

Most modern classification systems fail to consider gender or diversity, as they have been designed to assess the majority (Caucasian, male) prison population. Shaw and Hannah-Moffat (2000) emphasize that it was not until the late 1970s that the first body of literature emerged on women offender classification; they argue that it "consistently concluded that in most countries the small populations of women were classified using... systems developed for men" (p.165).

Over a decade later, a survey of state correctional agencies found that the vast majority of states (40/48) used the same objective classification system for women as for men (Burke & Adams, 1991). A subsequent survey noted few changes in the situation (Morash, Bynam, & Koons, 1998). Finally, research results published more recently indicated that, of 50 state correctional agencies and the U.S. Federal Bureau of Prisons, only four states have a separate custody classification system for women (Van Voorhis & Presser, 2001).

Few would debate that there are clear and measurable differences between women by security level classification (Blanchette, 1997). Moreover, despite the failure to adequately consider women in the development process, some states and the Correctional Service of Canada have recently reported favourable findings with respect to the validity of their security classification systems for female samples (Blanchette & Motiuk, 2004; Blanchette et al., 2002; Hardyman, Austin, & Tulloch, 2002). While these validation studies suggest that the scales are equally appropriate for women, some authors argue that “one of the gender dynamics found where sexism is prevalent is that when something is declared ‘genderless’ or ‘gender-neutral’, it is male” (Bloom & Covington, 2000, p.2).

It is further suggested that the use of ‘gender neutral’ classification measures results in overclassification of women (Bloom & Covington, 2000; Shaw & Hannah-Moffat, 2000); there is some empirical evidence to support that contention (Hardyman & Van Voorhis, 2004; Van Voorhis & Presser, 2001). In their analysis of classification systems from 50 states and the Federal Bureau of Prisons, Van Voorhis and Presser (2001) concluded that “many states find that existing systems overclassify women... Too many women are unnecessarily assigned to high custody levels, which then requires officials to override the classification decisions” (p. vii). The authors noted override rates for women's classification systems as high as 70%, and suggested that models with high override rates (e.g., above 20%; Buchanan et al., 1986) were indicative of ineffective systems for women.

It is therefore paramount that new objective security classification measures incorporate empirically derived, gender-informed criteria for women. This is an important point; Shaw and Hannah-Moffat (2000) have argued that “if a classification system, with all its diverse objectives,

is based on expectations about the majority population, this may be inappropriate for minority populations with diverse backgrounds and experiences, and much greater heterogeneity” (p.165). As such, the first step in the development process is to ascertain which particular variables are salient in risk prediction for women. This is not a simple task: the inconsistencies in the risk predictors observed thus far suggest that there is still much to learn about the security classification of women inmates. In addition, the number of women offenders admitted to federal correctional facilities has grown tremendously in recent years (Boe, Olah, & Cousineau, 2000; Boe, 2001), and the growth rate is projected to continue for a least a few more years (Nafekh & Boe, 2003).

Development of the Security Reclassification Scale for Women (SRSW)

Measurable differences exist in static and dynamic risk factors between federally sentenced women by security level (Blanchette, 1997). While the SRS was developed, validated, and field-tested with male offenders, a parallel process was undertaken to develop a security reclassification protocol for women offenders.

Similar to the SRS, the Security Reclassification Scale for Women (SRSW) was developed to provide structure for staff security level recommendations. This process is consistent with other systems; many models are developed using staff consensus about the factors that are important to consider in the decision-making process (Buchanan et al., 1986). The SRSW was designed to provide a national, objective, gender-informed classification tool that, in accordance with legislation, would assist in the placement of women into the 'least restrictive' measures of confinement. The development process is described briefly here.

A 'candidate' pool of predictor variables was chosen based on a review of research on the risk factors of women offenders, in addition to consultation with the researchers involved in creation of prior classification scales, and administrators and field staff working with federally sentenced women. Data were collected for 176 variables. These variables included historical risk factors, in addition to dynamic behavioural variables such as program progress and motivation, drug and alcohol use, recent institutional behaviour (e.g., charges and incidents), social support, marital adjustment, and so on.

The development sample included 172 women for whom offender security level (OSL) decisions were available. These women ranged from 18 to 57 years of age ($M_{\text{age}}=30.85$, $SD=7.41$) when admitted for their current federal sentence. Sixty percent of the sample was Caucasian, and 25% was of Aboriginal descent. Over two thirds of the women in this sample had been admitted on a warrant of committal (69%), the remainder had been admitted on some type of revocation. The majority of these offenders were serving fixed sentences (87%), ranging in length from 2 to 20 years; 13% were serving life sentences.

A total of 285 Offender Security Level (OSL) decisions were coded based on the sample of 172 women. The number of decisions coded per woman ranged from 1 to 5. Decisions for maximum security (25%) and Aboriginal (26%) women were over-sampled, ensuring the applicability of the resultant scale for these sub-populations.

The security review is conducted periodically, and has the potential to confirm, raise or lower offenders' security classification. For the development sample, the security review period covered an average of 10 months ($SD=9$). Of the 285 decisions sampled, 54% resulted in lowered classifications, 25% resulted in a raise in security level, and 21% did not change. Half of the lowered classification ratings were from medium to minimum security, and one third of the offenders were moved from maximum to medium security. Notably, none of the offenders were reclassified to minimum from maximum security.

Univariate analyses were applied to the initial pool of predictors. Examination of the univariate correlations between the variables and the OSL decision rating (rated from minimum=1 to maximum=3) reduced the pool of 'candidate' predictors from 176 to 39; those that correlated with the OSL decision rating beyond ($p<.01$) were retained (see Appendix A). The second step in reduction of the initial pool was exclusion of variables with skewed distributions: those variables with 'ceiling' or 'floor' effects that would not be useful in further analyses. The remaining variables were entered into a stepwise (forward) regression analysis, resulting in a model that included nine variables that accounted for 57% of the variance in OSL decisions.

After the nine predictors were selected, a simple summation prediction model (Nuffield, 1982) was applied to determine the optimal item weights for scoring the scale. To determine cut-off values for the security reclassification scores (minimum, medium, or maximum), the sample was rank ordered with respect to their scores on the reclassification scale. Cut-off values were chosen to maximize concordance with the actual security level decision made by staff. The resultant scale, the SRSW is shown in Table 1: More detailed information (response options and item descriptions for each variable, security level cut-offs) is shown in Appendix B.

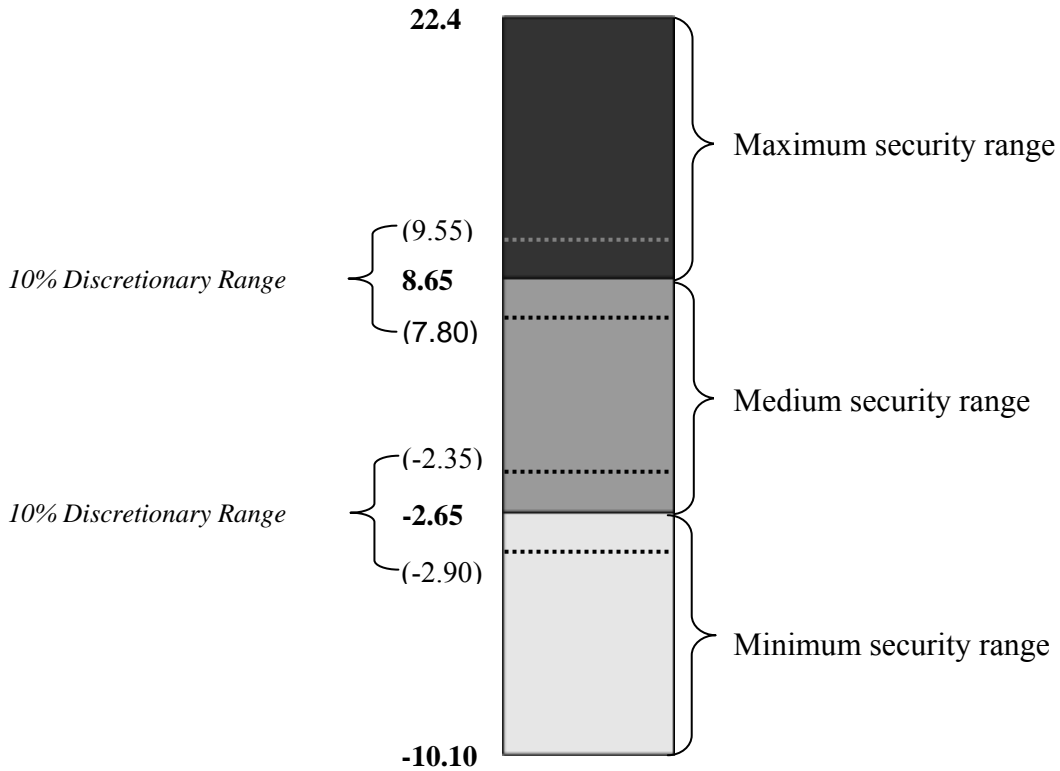
Table 1: Security Reclassification Scale for Women (SRSW) Items and Weights

Item	Weight
1. Involuntary segregation (CCRA Section 31 (3-A))	6.45
2. Correctional plan progress/ motivation	5.60
3. Serious disciplinary offences	5.50
4. Number of recorded incidents	5.00
5. Number of successful escorted temporary absences (ETAs)	2.55
6. Custody Rating Scale (CRS) incident history	2.55
7. Pay level - most recent	2.10
8. Ever unlawfully at large (UAL) from temporary absence (TA), work release (WR), or supervision	1.45
9. Family contact	1.30

As shown in Table 1 and Appendix B, the SRSW has an approximate 30-point scoring range, with higher scores representing higher assessed risk and resulting in a higher security rating recommendation. One final important point merits mention: both the SRS and the SRSW include provisions for professional discretion to adjust the scale recommendation. Specifically, at each security level cutoff, scores falling within a 10% range of the cutoff score are flexible for security level placement in *either* bin. For example, the SRSW cutoff for recommended placement to maximum security is 8.70. The ten percent discretionary range to recommend that inmate to medium security is $(8.70 + (.10 \times 8.70) = 9.55)$. As such, women with scores falling between 8.7 and 9.55 could be recommended, at the professional discretion of staff, to either medium or maximum security. This would not be considered a ‘true’ override since the scale

was built purposefully to accommodate a small margin of professional discretion. The SRSW range of scores, including 10% discretionary ranges, is illustrated in Figure 1.

Figure 1: SRSW Range of Scores



Professional discretion can also be applied in cases where the assessor’s security level recommendation is inconsistent with that of the SRSW (and the score falls outside of the 10% range). These cases would be considered as overrides to the scale. The professional override factor is accepted as an important component of classification: it allows the assessor to consider additional criteria and mitigating circumstances (e.g., assaulting staff) that could (and should) impact the security level review.

Field Test of the Security Reclassification Scale for Women

Having reviewed the relevant literature, it has become clear that a gender-informed security classification scale for women is long overdue. Moreover, between 1994 and 1998, the rate of new admissions to federal women's prisons in Canada grew at an unprecedented rate (170%), slowed only moderately in the following years (Boe, 2001), and the population increase is projected to continue for at least a couple of more years (Nafekh & Boe, 2003). As noted, there is mounting concern about the security of federal women's prisons, and the appropriateness of current security classification practices for federally sentenced women. The next phase of this study used a longitudinal design to provide a national field test of a security reclassification scale for women offenders.

METHOD

Sample

The field test sample comprised 580 consecutive security reviews for adult women offenders in federal facilities between July 2000 and June 2003. Notably, as with the development sample, it was possible to have more than one record (i.e., multiple security reviews) per offender³. Complete data for the SRSW and the structured clinical review (OSL) were collected for the sample (n = 580).

Review Period

Conceptually, the review period is the time between security reviews. For the current study, the review period consisted of a retrospective analysis, beginning at the time of the current OSL decision, and looking back in time at least six months (where possible). The time between the 'start' date and the 'end' date, as defined below, comprised the review period for the sample.

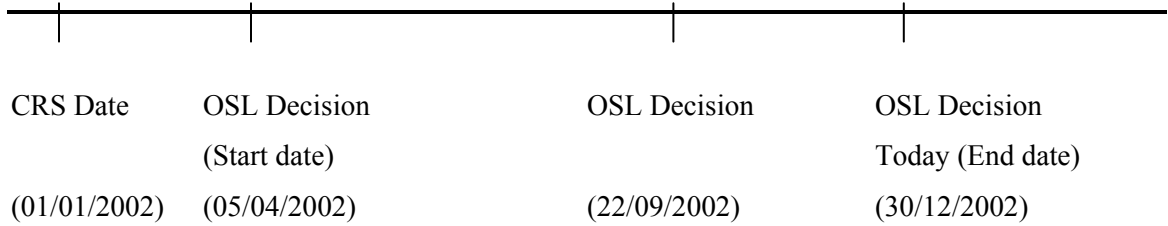
The '**end**' date of the review period was defined as the date of the current security review and OSL decision. The '**start**' date of the review period was defined as: the most recent OSL decision⁴ that occurred at least six months ago on the current term (i.e.: six months or more

³ The 580 security reviews included data for 323 individual women offenders.

⁴ This could include a CRS (initial) OSL decision.

between start and end dates of review period). To clarify, a hypothetical example is provided: suppose that today's date is December 30, 2002, and a security review has just been completed, yielding an OSL decision.

Example A:



In Example A, the OSL review period would run from today's date (30/12/2002) back to (05/04/2002). Because the most proximal OSL decision to today's (30/12/2002) is less than six months ago (22/09/02), the review period would be extended to the next most recent OSL review (05/04/2002). Therefore, the 'end' date would be today's date (30/12/2002), and the 'start' date would be (05/04/2002), covering an approximate review period of 9 months.

In Example A, the review period between 01/01/2002 (start date) and 22/09/2002 (end date) would also be included in the study, covering approximately 9-months of behaviour. As such, the woman in this hypothetical example would have two security reviews included in the current study.

To clarify, the following steps would be used to determine the review period:

Step 1: An OSL review has resulted in a security reclassification decision. The 'end' date of the review period is today's date (i.e., the date that the reclassification decision has been rendered).

Step 2: Search the Offender Management System for the most recent OSL decision (includes the initial security placement- the CRS). If that decision was at least six months ago, it will comprise the 'start' date of the review period. If not, proceed to step 3.

Step 3: Search the Offender Management System, back further in time, for the next most recent OSL decision. If *that* decision was at least six months ago, it will comprise the review 'start' date. If not, repeat step 3 until a review period of at least six months is achieved.

Step 4: If it is not possible to establish a review period of at least six months, the case review 'start' date would be the CRS date. If no CRS is available on OMS, the offender's admission date would be used as the review 'start' date.

Measures/ Data Sources

There were three main measures/ data sources for this phase of the study:

- 1) the Security Reclassification Scale for Women, described previously (see Table 1 & Appendix B),
- 2) information pertaining to actual offender security level (OSL) recommendations, as per staff assessment of the three risk domains using the structured clinical method (see part 3 of Appendix B) and
- 3) a comprehensive coding guide was used to code file information pertaining to: demographic data, admitting offence(s), additional variables that could be related to security classification criteria⁵ and the prediction of outcome, institutional misconduct data, and discretionary release information.

⁵ Additional variables that could be related to security classification criteria were gathered in order to investigate theoretical variables that may be of relevancy to security classification. Inclusion of this information exceeds the scope of this report but may be obtained from the authors.

Procedure

This phase of the study followed a longitudinal design, including three stages of data collection. The first step of data collection involved the completion of the SRSW and actual OSL decision criteria, as well as some additional information by correctional staff⁶ (parole, case management, classification officers), *immediately after* completion of their regular security review (structured clinical assessment of the three risk domains). An automated query report was used to update the researcher, on a weekly basis, of all women offender security level (OSL) reviews completed and entered on CSC's Offender Management System (OMS; an automated database containing offender file information). This allowed the researcher to ensure that, for every regular OSL review (until the desired sample was achieved), the SRSW was completed. If the SRSW was not forwarded to researchers within one week of the regular security review, an electronic mail reminder was sent to the site contact. In the event that researchers still did not receive the scale one week later, a second reminder, copied to the deputy warden, was sent. This methodology ensured every OSL review also yielded a SRSW until the desired sample size was achieved.⁷

In the second phase of the study, automated file information was downloaded to code: 1) admitting offence information and, 2) a variable follow-up on institutional misconducts and serious institutional misconducts. These data were coded for the entire sample ($n = 580$), to a cut-off date of June 30, 2003. The institutional time at risk (follow-up period) was defined as the time between the OSL review date and the next OSL review date or release date; whichever came first. If there was no later OSL review or release dates on file, the institutional follow-up cutoff date was June 30, 2003.

⁶ In May 2000, one or two staff representatives from each federal woman's facility and each maximum-security /psychiatric unit were trained in the application and administration of the SRSW. Representatives were advised that this was a 'train the trainers' approach and were instructed to train their colleagues accordingly. 'Booster training' was provided in March 2002. Ongoing support was offered to field staff from the authors/researchers at Correctional Service Canada's National Headquarters.

⁷ This study has received strong support from Correctional Service of Canada management; the data collection approach for the SRSW had been piloted on a national sample and has resulted in 100% compliance from site representatives. The data for this study represent 97% of all security reviews completed during the period under study.

The third phase of the study involved the collection of information pertaining to release: eligibility dates, release type, and conditions of release. These data were coded for all of those women who had been released as of June 30, 2003: over three-quarters (77%) of the original sample ($n = 249$ of 323 women).

Analyses

A series of descriptive statistics was conducted to provide a comprehensive overview of the sample characteristics. Correlational analyses were used to explore the relationships between the independent and dependent variables. A series of univariate *t*-tests and chi-square statistics were used to explore potential between-group differences, by demographic (e.g., age, race) and offence (e.g., sentence length, admitting offence) characteristics in SRSW security level. Concordance tables and Sign tests were computed to examine between-group differences between the SRSW and the actual security level recommendations (i.e., structured clinical method).

Areas under the receiver operating characteristic (ROC) curves were used to examine the predictive accuracy of the OSL versus SRSW security level recommendations (minimum, medium, or maximum). Differences between ROC curves were statistically compared using the method outlined in Hanley and McNeil (1983).

ROC analyses were followed up with survival analyses to examine time to failure for: 1) misconducts, and 2) major misconducts, by SRSW security level recommendation (minimum, medium, or maximum). These analyses were replicated using the actual security level recommendation (OSL) as the independent variable.

RESULTS

Descriptive/ Offence Information for Sample

As noted, the sample comprised 580 consecutive security reviews for adult women offenders in federal facilities between July 2000 and June 2003. Because many women had their security level reviewed more than one time during the study period, the 580 security reviews comprise data for 323 individual women. Verification through CSC's automated offender management system (OMS) revealed that the sample data include virtually all (97%) of the women's security reviews during the period under study. Although this indicates that the sample clearly represents the population of women's security *reviews*, it should not be considered as representative of the women *inmate* population as a whole: women at maximum-security have their classification reviewed more frequently than those at either medium or minimum security⁸. As such, the sample is overrepresented by security reviews for cases at maximum security.

The average review period (time between security reviews) for the sample was 8.65 months ($SD=4.5$), with a range of 8 days to 27.5 months. The average review period for those rated (pre-review) 'minimum' security ($n= 95$) or 'medium' security ($n= 335$) was 8.97 months ($SD= 5.1$ and 4.5, respectively). For women rated 'maximum' security ($n=150$), the average review period was significantly shorter: 7.72 ($SD=3.9$) months ($p<.05$).

Information pertaining to sample demographics is outlined in Table 2. About fifteen percent of the women were serving life sentences; excluding those, the average term aggregate sentence length was 3.7 years. It is worth noting, as well, that Aboriginal women are overrepresented in the study sample. While Aboriginal women comprise about 27% of the federally sentenced inmate population, they represent 35% of the sample of women.⁹

⁸ Correctional Service Canada policy guidelines dictate that, with the exception of those rated 'minimum' security, offenders must have their security levels review *at least* annually. Although not formal policy, those rated 'maximum' security are reviewed more frequently in practice, with a view to lowering their security level at the earliest possible time, while managing risk.

⁹ About 42% of the sample of *security reviews* (242/580) was for Aboriginal cases.

Table 2: Demographic Overview

Variable	<i>M (SD)</i>	% (n/323)
Age at review	32.6 (8.3)	
Aggregate Sentence length (years)	3.7 (2.7)	
Life sentenced		15.2 (49)
<u>Ethnicity</u>		
Caucasian		56 (182)
Aboriginal		35 (114)
Black		5 (16)
Other/ Unknown		3 (11)
<u>Marital Status</u>		
Widowed, Divorced, Single		68 (220)
Married/ common law		29 (94)
Unknown		3 (9)

Current offence information was available for 321 of the 323 women in the sample. The majority had perpetrated a violent offence, and almost one quarter of the sample consisted of homicide offenders. Current offence information for the sample is shown in Table 3.

Table 3: Current Offence Information

Present Conviction(s)	% with (n/ 321) ^a
Homicide (murder, manslaughter)	22.7 (73)
Attempt murder/ conspire to commit murder	1.3 (04)
Assault (major or minor)	25.2 (81)
Robbery (with/ without a weapon)	24.0 (77)
Kidnapping/ forcible confinement	8.1 (26)
Sexual assault	1.9 (06)
Arson	4.7 (15)
Utter threats	9.1 (29)
Weapon offences	12.8 (41)
Any violent	63.2 (203)
Drug offences (importing, trafficking)	13.7 (44)
Break and Enter	5.3 (17)
Fraud	4.7 (15)
Obstruct justice	11.3 (36)
Other non-violent	39.1 (125)

Note: ^a coded for sample of women ($n=323$; data missing for 2 women).

Security Level Pre- and Post-Review

Most security reviews for women did not result in a change in security level. As shown in Table 4, over half (56.6%) of the reviews resulted in a decision to maintain the pre-review security level. Of those who were reclassified, women were about equally likely to have their security level raised (22.0%) or lowered (21.6%). A chi square test of significance revealed that there was no significant difference in the likelihood of being reclassified ‘up’ or ‘down’ by ethnicity (Aboriginal/ non-Aboriginal).

Table 4: Pre- and Post-Review Security Levels

Pre-review security level (n)	Post-review security level (n)			
	Minimum	Medium	Maximum	Total n (%)
Minimum	45	45	5	95 (16.4)
Medium	81	177	77	335 (57.8)
Maximum	0	44	106	150 (25.9)
Total n (%)	126 (21.7)	266 (45.9)	188 (32.4)	580

SRSW: Descriptive Statistics

Internal consistency

Item-to-total correlations were computed for each of the (standardized) nine scale items. Table 5 presents those results, as well as the mean and standard deviation (unstandardized) for each scale item. As Table 5 demonstrates, with only two exceptions (items 2 and 8, bolded), all standardized item-to-total correlations met or exceeded $r = .30$. The mean standardized item-to-total correlation was moderately high, at $r = .35$.

Table 5: Standardized SRSW Item-to-total Correlations and Descriptive Statistics for Each Item

Item	<i>r</i>	<i>M (SD)</i>
Correctional Plan progress/ motivation	0.43****	.60 (2.0)
Family contact during review	0.26****	.28 (0.6)
Serious disciplinary offences during review	0.42****	.56 (2.1)
Number of recorded incidents during review	0.46****	.47 (2.0)
Pay Level- at review end	0.30****	-.65 (0.5)
Involuntary segregation during review	0.56****	1.4 (2.5)
Successful escorted temporary absences during review	0.30****	.11 (1.0)
Unlawfully at large- ever	0.07	.07 (0.6)
Custody rating scale incident history score	0.38****	.32 (1.3)

Note: **** $p < .0001$

Inter-item correlations were computed and are located in Appendix C. The mean inter-item correlation was $r = .19$. This is within an acceptable range, commensurate with other risk scales (Hare, 2003), despite the fact that one item (item 8: unlawfully at large- ever) was uncorrelated with virtually all other items. Finally, Cronbach's Alpha was computed at $r = .69$. Although a coefficient of reliability of at least $.70$ is the desired standard in most social science research, it is important to highlight that the alpha coefficient is impacted by the number of items in the scale. Specifically, scales/ tests with fewer items tend to produce small reliability coefficients (Brown, 1998). The SRSW contains only 9 items, which explains the moderately weak alpha coefficient. Removal of item 8 (unlawfully at large- ever) from the equation results in virtually no change to the raw alpha coefficient ($.70$). Taken together, these findings suggest that the SRSW is a homogenous and reliable scale.

SRSW Scores

The average overall score on the SRSW was $3.12 (SD=7.6)$, which falls into the lower bound of the medium-security classification range. The mean score for non-Aboriginal women was $2.95 (SD=7.8)$, and that for Aboriginal women was $3.36 (SD=7.4)$. T-test results indicated that this difference was not statistically significant.

To test for between-group differences in SRSW scores by age, the sample was divided into three approximately equal sized groups: group 1 (ages 18-27, $n=201$); group 2 (ages 28-35, $n=186$), and group 3 (ages 36-65, $n=193$). Mean SRSW scores were negatively associated with age. Mean group scores were: 4.5 ($SD=7.9$), 3.2 ($SD=6.8$), and 1.6 ($SD=7.8$), respectively. Pairwise t -test comparisons revealed that the SRSW score difference between the youngest and oldest age groups was statistically significant ($t=3.6, p<.001$). After applying the Bonferroni correction for multiple comparisons ($\alpha=.05/3 = 0.017$)¹⁰, the mean SRSW score for group 2 was not significantly different from those of either groups 1 or 3.

To test for between-group differences in SRSW scores by aggregate sentence length, the sample (women, not cases) was divided into three groups: 1) life-sentenced ($n=49$), 2) up to three years ($n=164$), 3) over three years ($n=110$). Life-sentenced offenders received a mean SRSW score of .51, ($SD=8.2$). Those serving sentences of over three years scored an average of 2.1 ($SD=7.1$). Finally, those serving sentences of up to three years received a mean SRSW score of 1.6 ($SD=7.2$). Paired comparison t -tests revealed no statistically significant between-group differences in SRSW scores by sentence length.

Finally, women's SRSW scores were compared by current offence. No differences were found between women with violent offences and women with only non-violent offences. Notably, however, the 'violent' offender category would include women with a current homicide offence ($n=73$), as well as those with a current assault offence ($n=81$). Homicide offenders scored significantly *lower* on the SRSW ($M= -.73, SD=8.2$) than non-homicidal women ($M=2.1, SD=7.0$) ($p<.01$). Women with an assault conviction on their current sentence scored significantly *higher* ($M= 4.7, SD=8.9$) than those with no current assault conviction ($M=.33, SD=7.6$) ($p<.0001$).

SRSW Levels

To render an SRSW security level recommendation, the cut-off values were applied and resulted in an approximate 46% yield to medium-security. To more accurately reflect the SRSW security level distribution as it would appear if the scale were implemented into practice, the 10%

¹⁰ The Bonferroni correction was applied for all post-hoc pairwise comparisons.

discretionary ranges were applied. For example, if the individual’s score fell at minimum-security, but within the range of scores to override to medium (-2.9 to -2.65) and the OSL decision was ‘medium’ then the SRSW level was changed from ‘minimum’ to ‘medium’. This was done with the assumption that the caseworker would have used the discretionary range to render a security level recommendation of ‘medium’ for that particular case. Although just fewer than 10% of the sample (57 cases) met scoring range criteria for the invocation of the professional discretion option, it was only used for 26 cases¹¹; about 4% of the entire sample. Table 6 displays the frequency of SRSW by SRSW2¹² (discretion invoked) levels.

Table 6: SRSW by SRSW2 Security Level Recommendations

SRSW Level (n)	SRSW2 (discretion invoked) Level (n)			Total n (%)
	Minimum	Medium	Maximum	
Minimum	160	5	NA	165 (28.5)
Medium	1	253	10	264 (45.5)
Maximum	NA	10	141	151 (26.0)
Total n (%)	161 (27.8)	268 (46.2)	151 (26.0)	580

As shown in Table 6, the professional discretion option has very little impact on the overall distribution of recommended security levels. While about two percent ($n=10$) of cases are moved from ‘medium’ to ‘maximum’ security, another two percent are moved from ‘maximum’ down to ‘medium’ through the built-in discretion option.

Ethnicity

Aboriginal cases were compared to non-Aboriginal cases on SRSW2 level recommendations. Security level recommendations (with discretion applied), by Aboriginal ethnicity, are presented

¹¹ For the other 31 cases, it was not necessary to invoke the discretionary option because the SRSW score fell into the same security level category as the actual OSL recommendation.

¹² Hereafter, the SRSW2 will refer to the SRSW with the discretionary option considered. It is important to highlight that the range of scores for the SRSW and the SRSW2 are identical. The SRSW2 simply incorporates the 10% margin of professional discretion into its cutoffs regarding security levels.

in Table 7. Chi-square results indicated no statistically significant difference in SRSW level recommendation by Aboriginal ethnicity.

Table 7: SRSW2 levels by Aboriginal Ethnicity

SRSW2 Recommendation	Non-Aboriginal % (n/338)	Aboriginal % (n/242)	Total % (n/580)
Minimum	31 (105)	23 (56)	28 (161)
Medium	45 (151)	48 (117)	46 (268)
Maximum	24 (82)	29 (69)	26 (151)

Table 7 suggests a trend for Aboriginal women to be rated higher security than their non-Aboriginal counterparts. However, as noted earlier, these differences were not statistically reliable. This is an interesting finding, especially given that there was a significant difference, by Aboriginal ethnicity, in *pre-review* security level ($\chi^2 = 9.3; p < .01$).

Age

Using the age groups defined previously, a chi-square test revealed significant between-group differences in SRSW level (with discretion applied) by age ($\chi^2 = 22.9; p < .0001$). Not surprisingly, the youngest group was the most likely to be assessed as ‘maximum’ security, while the oldest group was the most likely to be assessed as ‘minimum’ security. SRSW security level recommendations, by age group, are presented in Table 8.

Table 8: SRSW2 levels by Age Group

SRSW Recommendation	18-27 yrs. % (n/173)	28-35 yrs. % (n/214)	36-65 yrs. % (n/193)	Total % (n/580)
Minimum	20 (35)	23 (51)	39 (75)	28 (161)
Medium	46 (79)	51 (111)	40 (78)	46 (268)
Maximum	34 (59)	24 (52)	21 (40)	26 (151)

Sentence Length

To compare SRSW level recommendations by sentence length, the previously-defined sentence length groups were used: 1) life sentenced, 2) more than three years, 3) three years or less. No significant differences were found. Results are shown in Table 9.

Table 9: SRSW2 Levels by Sentence Length

SRSW Recommendation	Life % (n/49)	> 3 years % (n/110)	≤ 3 years % (n/164)	Total % (n/323)
Minimum	45 (22)	29 (32)	34 (56)	34 (110)
Medium	37 (18)	50 (55)	48 (79)	47 (152)
Maximum	18 (09)	21 (23)	18 (29)	19 (61)

Offence Type

Similar to *t*-test results examining between-group differences in SRSW scores, there were no differences detected between violent and non-violent women on SRSW2 level recommendations. However, when the data were further disaggregated, significant findings emerged. The chi-square tests revealed that more homicide offenders are recommended to lower security by the SRSW2 than non-homicide offenders ($\chi^2 = 17.8; p < .0001$), while those with a current conviction of assault are recommended to higher security relative to their non-assaultive counterparts ($\chi^2 = 20.1; p < .0001$). This finding was not surprising, in light of earlier results indicating higher SRSW scores for women with an assault conviction, and lower SRSW scores for women with a current homicide conviction. These results are shown in Table 10.

Table 10: SRSW2 Levels by Offence Types

SRSW Recommendation	Non-Violent % (n/118)		Violent % (n/203)		χ^2
Minimum	39	(46)	33	(67)	1.0
Medium	48	(56)	49	(99)	
Maximum	14	(16)	18	(37)	
	No Homicide % (n/248)		Homicide % (n/73)		
Minimum	29	(73)	55	(40)	17.8****
Medium	54	(134)	29	(21)	
Maximum	17	(41)	16	(12)	
	No Assault % (n/240)		Assault % (n/81)		
Minimum	41	(98)	19	(15)	20.1****
Medium	47	(113)	52	(42)	
Maximum	12	(29)	30	(24)	

Note: ****p<.0001

SRSW Concordance with OSL Decisions

Table 11 depicts the concordance between the actual security classification (OSL) and the SRSW level recommendation, post-review. Without considering the built-in 10% margin of professional discretion, the concordance between the actual offender security level (OSL) and the SRSW level was 68%. The Sign test revealed that there was no significant difference in concordance by Aboriginal ethnicity.

Table 11: Post-Review Security Levels: OSL by SRSW

Actual Offender Security Level (n)	SRSW Level Recommendation (n)			
	Minimum	Medium	Maximum	Total n (%)
Minimum	101	25	0	126 (21.7)
Medium	64	171	31	266 (45.9)
Maximum	0	68	120	188 (32.4)
Total n (%)	165 (28.5)	264 (45.5)	151 (26.0)	580

Given that the SRSW incorporates a built-in 10% margin of professional discretion, a more appropriate test of concordance compares the security level of the SRSW (with discretion invoked) to the actual OSL decision. Incorporating the margin of professional discretion, the concordance increases to over 72%. As shown in Table 12, relative to the OSL, the SRSW (with discretion) over classifies women about 7.8% of the time (45 cases out of 580), and under classifies women about 20% of the time (117 cases out of 580). Concordance rates were not statistically different by Aboriginal ethnicity, age group, sentence length, or admitting offence (violent, homicide, assault). Security levels yielded by the SRSW2 and the OSL were very highly correlated at $r = .75$ ($p < .0001$). Moreover, it is worth highlighting that no cases were discordant by two levels (i.e., rated by one method as ‘minimum’ and the other method as ‘maximum’).

Table 12: Post-Review Security Levels: OSL by SRSW2

Actual Offender Security Level (n)	SRSW2 Level Recommendation (n)			
	Minimum	Medium	Maximum	Total n (%)
Minimum	102	24	0	126 (21.7)
Medium	59	186	21	266 (45.9)
Maximum	0	58	130	188 (32.4)
Total n (%)	161 (27.8)	268 (46.2)	151 (26.0)	580

The data in Table 12 suggest that, if the SRSW2 were to replace the current reclassification protocol¹³, about 20% fewer cases would be classified as ‘maximum’ security, while the minimum-security population would increase by about 28%. A Sign test indicated that the difference between SRSW2 and OSL level classifications were highly statistically significant ($z = -5.58$ (two-tailed), $p < .0001$).

Convergent Validity

The concordance rate between the SRSW2 and the actual OSL decision (as per the structured clinical method) is an assessment of concurrent validity. Theoretically, an inmate’s recommended custody designation as assessed by the SRSW2 should be commensurate with her overall assessed risk, need, and reintegration potential. However, since these measures are not intended to measure the same construct, but rather inter-related constructs, their association would provide an estimate of convergent validity. At the federal level, inmates are evaluated on these dimensions at admission, and reassessed at approximately 6-month intervals thereafter. Using the assessment dates most proximal to (but before) the security level review end date, information was downloaded on criminal risk level, need level, and reintegration potential¹⁴ from

¹³ Notably, this statement regarding the hypothetical decrease in ‘maximum’ classifications and increase in ‘minimum’ classifications assumes either A) no staff overrides, or B) an equal proportion of overrides to and from ‘minimum’ and ‘maximum’ security.

¹⁴ For women, reintegration potential is initially assessed by the combination of overall criminal risk level (low, medium, or high), criminogenic need level (low, medium, or high), and Custody Rating Scale recommendation (minimum, medium, or maximum). It is re-evaluated through a clinical assessment at approximate 6-month intervals thereafter.

CSC's automated Offender Management System. Correlations between SRSW scores and assessments on each of these measures were statistically significant at $p < .0001$. As expected, a higher SRSW score was associated with higher assessed risk ($r = .21$), as well as higher assessed need ($r = .32$), and lower reintegration potential ($r = -.37$).

Institutional Misconducts

Descriptive Statistics

All cases were followed up for institutional misconducts and major misconducts¹⁵ post security review. The follow-up time was variable, and was defined as the time between the security review date and the next security review, or release date, whichever came first. For cases where there was no subsequent security review, and no release date, the end date of the follow-up was June 30, 2003 (study end date). For the sample ($n=580$), the mean follow-up period (institutional time at risk) was a half year: 182 days. About one-third (32%) of the cases were involved in an institutional misconduct (minor, major or both) during the follow-up period. While about one-quarter (24%) had perpetrated a minor misconduct, 16% had perpetrated a major misconduct during the follow-up period.

The time at risk was not equivalent between groups. The mean time at risk (days) for those rated 'minimum' security by the SRSW2 was significantly longer ($M= 216, SD=181$), than that for those rated either 'medium' ($M= 168, SD=128$) or 'maximum' security ($M=171, SD=138$; $p < .01$). Given the Service's mandate to employ the least restrictive measures of confinement, and the policy on security reviews, these results are not surprising. Staff would not likely see any urgency in re-assessing the security level of an inmate classified as 'minimum' security, unless that inmate was causing problems within the institution. Those classified at higher levels, however, would be re-assessed more frequently with a view to reducing their security levels as early as possible. As noted, CSC policy mandates that all offenders have their security reviewed at least once per year, excluding those classified as 'minimum' security.

¹⁵ Major disciplinary offences/ misconducts included: homicide, assault, sexual assault, fighting, threatening behaviour, hostage taking, inciting to riot/ strike, possession of drugs, possession of weapons, and escape/ attempt.

Correlations between Institutional Outcome Measures and SRSW items

The nine items comprising the SRSW were correlated with various institutional outcome criteria, partialling out time at risk. As shown in Table 13, the most highly correlated predictor, regardless of the outcome measure, was involvement in institutional misconducts during the review period.

Table 13: Correlations between SRSW Total and Item Scores and Institutional Outcome Measures

Scale Item (n=580)	Major misconduct	Number of major misconducts perpetrated	Minor misconduct	Number of minor misconducts perpetrated	Perpetrated any misconduct
1.	.10*	.15***	.11**	.14***	.13**
2.	.11**	.09*	.10*	.11**	.12**
3.	.24****	.25****	.27****	.22****	.30****
4.	.28****	.31****	.42****	.37****	.41****
5.	.01	.05	-.01	.03	-.01
6.	.22****	.21****	.21****	.23****	.23****
7.	.15***	.17****	.06	.10*	.09
8.	-.04	-.02	-.04	-.04	-.03
9.	.21****	.22****	.16****	.17****	.18****
Total score	.29****	.33****	.33****	.32****	.35****

Notes: * $p < .05$; ** $p < .01$; *** $p < .001$; **** $p < .0001$; Time at risk partialled out.

1. Correctional Plan progress/ motivation
2. Family contact during review (little or negative)
3. Serious disciplinary offences during review
4. Number of recorded incidents during review
5. Pay Level- at review end
6. Involuntary segregation during review
7. Successful escorted temporary absences during review
8. Unlawfully at large- ever
9. Custody rating scale incident history score

Between-group Differences in Misconduct Rates

To analyse between-group differences in misconducts and serious misconducts, a three-month fixed follow-up was used to control for differences in time at risk. Essentially, the three-month fixed follow-up excluded all cases that were not available for follow-up in the institution for

three months. This reduced the follow-up sample to $n=400$. During the three months time at risk, 18% of the cases ($n=72$) perpetrated a minor misconduct. Misconduct rates, by security level rating, are provided in Table 14. There was no difference in rate by Aboriginal ethnicity.

The chi-square test revealed very significant differences in the rates of minor misconducts by security classification (OSL level). Specifically, as expected, there was a linear relationship between misconduct rate and security classification, with those rated maximum security the most likely to perpetrate at least one misconduct within the three-month follow-up ($\chi^2= 25.7$, $df=2$, $p<.0001$). Between-group differences in minor misconduct rates by SRSW2 ratings were also notable ($\chi^2= 45.2$, $df=2$, $p<.0001$). Chi-square analyses also showed reliable differences in major misconducts by both OSL ($\chi^2= 25.0$, $df=2$, $p<.0001$) and SRSW2 ($\chi^2= 26.1$, $df=2$, $p<.0001$) level ratings. Finally, there were also considerable differences between groups when considering the rates for any (i.e., major or minor) misconduct, by security level classification – both for OSL ($\chi^2= 39.3$, $df=2$, $p<.0001$) and SRSW2 ($\chi^2= 53.9$, $df=2$, $p<.0001$).

Table 14: Misconduct Rates by Security Level Rating: Fixed 3-month Follow-up

	Any misconduct % (n/N)	Minor misconduct % (n/N)	Major misconduct % (n/N)
SRSW2 Rating			
Minimum	5.6 (6/107)	3.7 (4/107)	1.9 (2/107)
Medium	19.3 (35/181)	14.4 (26/181)	8.3 (15/181)
Maximum	46.4 (52/112)	37.5 (42/112)	22.0 (25/112)
OSL Rating			
Minimum	9.5 (8/84)	8.3 (7/84)	1.2 (1/84)
Medium	15.5 (27/174)	12.1 (21/174)	6.9 (12/174)
Maximum	40.9 (58/142)	31.0 (44/142)	20.4 (29/142)

Incremental Validity of the SRSW/ Impact of the Environment

For an exploratory examination into the potential impact of the environment on the prison misconduct rate, all cases rated and placed in medium-security (with the structured clinical method; OSL) were included in a comparison of misconduct rates by SRSW2 ratings. As noted earlier, almost half of the sample ($n= 266$ cases) was rated and placed in medium security by the regular structured clinical (OSL) review method. While seventy percent of those ($n= 186$) were also rated ‘medium’ security by the SRSW2, there were 59 cases that were rated ‘minimum’ by the SRSW2, and 21 cases that were rated ‘maximum’ by the SRSW2. This allowed for a comparison across three groups, holding the actual OSL designation/ placement constant. Results of the chi-square tests are provided in Table 15.

Table 15: Percentage Distribution of Institutional Misconducts/ Major Misconducts for Cases Placed in Medium Security: Comparison between Those Rated as Minimum, Medium, and Maximum by the SRSW2

Outcome Measure	SRSW2 Level Rating				χ^2
	Minimum % (n/N)	Medium % (n/N)	Maximum % (n/N)	Total % (n/N)	
Minor Misconduct	10.2 (6/59)	22.6 (42/186)	47.6 (10/21)	21.8 (58/266)	13.0**
Major Misconduct	3.4 (2/59)	12.9 (24/186)	23.8 (5/21)	11.7 (31/266)	7.2*

Note: * $p < .05$, ** $p < .01$.

Despite the fact that all cases included in the analysis (Table 15) were OSL rated and placed in medium-security, the minor and major misconduct rates were significantly different by SRSW2 level groupings. As shown, those offenders placed in medium, but rated as ‘minimum’ had the lowest rates of misconduct, while those placed in medium, but rated as ‘maximum’ had the highest rates of misconduct.

Another way to investigate the potential impact of the environment (or the classification level label) is to hold the SRSW2 level rating constant, and compare groups by actual OSL designation and placement. In this analysis, the 268 cases rated ‘medium’ security by the SRSW2 were divided into three groups according to their actual security designation/ placement as per the structured clinical (OSL) method. Of those 268 cases, only 9% ($n=24$) were OSL-rated as ‘minimum’, almost 70% ($n=186$) were OSL-rated as ‘medium’, and almost 22% ($n=58$) were OSL-rated as ‘maximum’ security. Comparisons of misconduct rates across all three groups yielded no statistically significant findings. Frequency distributions of misconduct rates, by group, are shown in Table 16.

Table 16: Percentage Distribution of Institutional Misconducts for Cases SRSW2-Rated as ‘Medium’ Security: Comparison between Cases Placed at Minimum, Medium, and Maximum Security.

Outcome Measure	Actual Security Level Placement (OSL)				χ^2
	Minimum % (n/N)	Medium % (n/N)	Maximum % (n/N)	Total % (n/N)	
Minor Misconduct	20.8 (5/24)	22.6 (42/186)	19.0 (11/58)	21.6 (58/268)	ns
Major Misconduct	4.2 (1/24)	12.9 (24/186)	19.0 (11/58)	13.4 (36/268)	ns

Taken together, the results of analyses displayed in Tables 15 and 16 suggest that it is the assessed institutional risk (as per the SRSW2), and not the actual placement, that is associated with the follow-up misconduct rate. In the current study, there is no evidence to suggest that the ‘maximum’ security environment that is inciting misconducts, or that the ‘minimum’ security environment that is mitigating the misconduct rate. Rather, the misconduct rate and major misconduct rate appears independent of the institutional environment, though not independent of the recommended security level as per the SRSW2. These results suggest that the SRSW has significant incremental validity over OSL recommendations.

ROC Results: Assessing Predictive Accuracy of the Security Classification Indices on Institutional Outcome Criteria

Receiver Operating Characteristic (ROC) curves were generated, for a fixed 3-month follow-up, to compare the predictive accuracy of the SRSW2 to the OSL security level recommendations. Recall that, 400 of the original 580 cases were available for a fixed 3-month follow-up. For this series of analyses, three outcome measures were assessed (minor misconduct, major misconduct, any misconduct), each by four classification indices (OSL level, SRSW scores, and SRSW levels with and without discretionary overrides), yielding 12 ROC curves. Results are presented in Table 17.

Table 17: ROC Results: Predicting Institutional Misconduct with Fixed 3 Month Follow-up for Sample

Model: (<i>n</i> = 400/580)	AUC (95% CI)
<u>Major institutional misconduct</u>	
SRSW level	.71 (.64-.79)****
SRSW level w/ discretion	.73 (.65-.80)****
OSL level	.72 (.64-.79)****
SRSW score	.74 (.67-.81)****
<u>Minor institutional misconduct</u>	
SRSW level	.72 (.66-.78)****
SRSW level w/ discretion	.73 (.66-.78)****
OSL level	.67 (.60-.74)****
SRSW score	.75 (.69-.81)****
<u>Any institutional misconduct</u>	
SRSW level	.72 (.66-.77)****
SRSW level w/ discretion	.73 (.67-.78)****
OSL level	.69 (.63-.75)****
SRSW score	.75 (.69-.80)****

Note: **** $p < .0001$.

As shown in Table 17, any of the various security classification indices could be used reliably to predict institutional misconduct. It merits highlighting that, in most social science research, an AUC of .70 or greater is generally considered adequate; the current structured clinical method (OSL) falls just short of that for the prediction of minor or any misconduct in the three-month fixed follow-up.

When ROC analyses were re-examined separately for Aboriginal and non-Aboriginal cases, results confirmed that the predictive ability of the SRSW2 level was as strong, or stronger, for Aboriginal women. Specifically, the AUC values for the prediction of minor misconducts were .72 and .75 for non-Aboriginal and Aboriginal cases, respectively. For major misconducts, the difference was even more marked: AUC values were .68 and .74 for non-Aboriginal and Aboriginal cases, respectively.

Using Hanley and McNeil's (1983) method for comparing ROC curves, the AUC for the SRSW2 security level was compared to that of the actual OSL security level for the prediction of the

three institutional outcome measures within the fixed three-month follow-up period. Results of the pairwise comparisons are shown in Table 18.

Table 18: ROC Results: Pairwise Comparisons between Prediction Models

Model Comparison ($n = 400/580$)	z value
<u>Major institutional misconduct</u>	
SRSW level w/ discretion versus OSL level	0.32
<u>Minor institutional misconduct</u>	
SRSW level w/ discretion versus OSL level	2.11*
<u>Any institutional misconduct</u>	
SRSW level w/ discretion versus OSL level	1.74

Note: * $p < .05$; two-tailed test of significance

As shown in Tables 17 and 18, when predicting minor institutional misconduct, the AUC for SRSW2 level (.73) significantly exceeded that generated by the structured clinical method (.67) for the prediction of minor misconduct. There was no reliable difference in the AUCs generated for the prediction of major institutional misconduct within the three-month follow-up period.

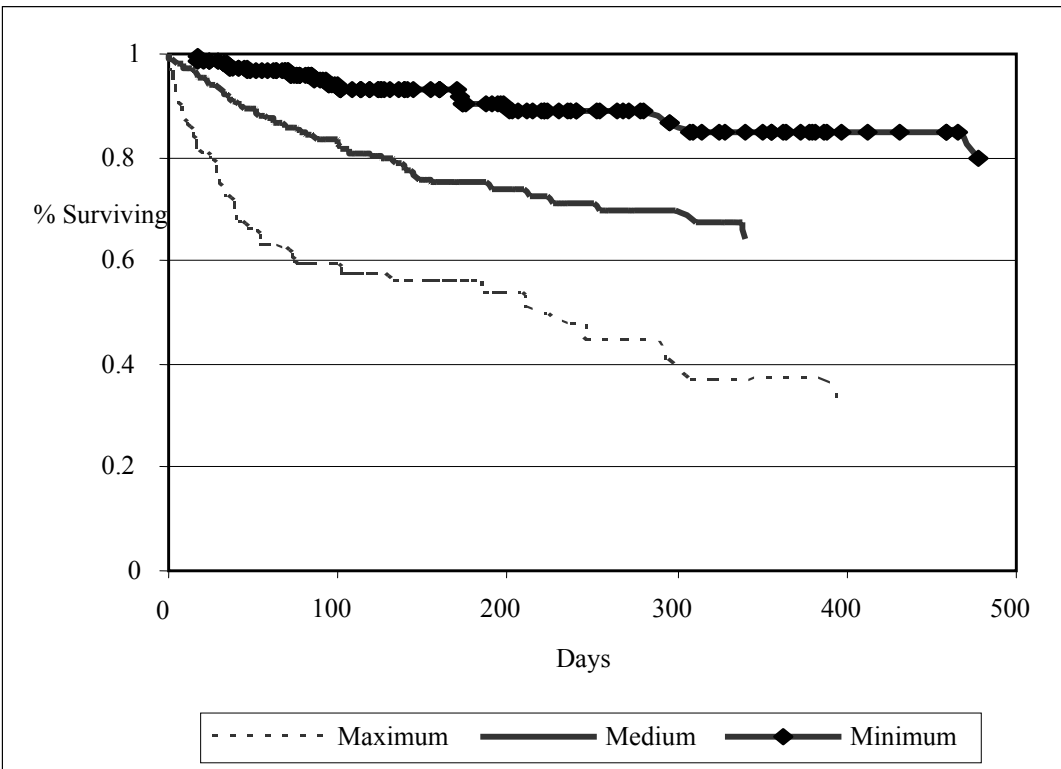
Results of Survival Analyses: Examining Time to Failure by Offender Security Levels Generated by the Structured Clinical Method (OSL) and the SRSW2

ROC analyses were followed up with Kaplan-Meier (product-limit) survival analyses to examine whether security levels generated by each method could discriminate by time-to-failure. Moreover, this method allowed for inclusion of the entire sample because time at risk is inherently controlled within the statistical model.

In analyzing time to failure for minor institutional misconducts, the survival analyses clearly suggested that survival time was not independent of SRSW2 security level. This held true regardless of whether security level was determined by the structured clinical (OSL) method, or

by the actuarial SRSW2. Looking only at the uncensored cases (i.e., those that did perpetrate a misconduct before their next review/ release/ or study end date), there was a clear linear relationship between SRSW2 security level designations and time to failure. As expected, those designated ‘minimum’ security had the longest time to failure, followed by those rated ‘medium’ security, followed by those rated ‘maximum’ security. Graphical representation of the Kaplan-Meier survival analysis examining time to minor misconduct by SRSW2 level is provided in Figure 2.

Figure 2: Survival Analysis Examining Time to Failure for Minor Misconducts by SRSW2 Security Level.



For the OSL ratings, the relationship between security level and time to failure was a little less clear. The mean time to failure was approximately the same for the ‘minimum’ and ‘medium’ censored cases, while those rated ‘maximum’ survived without incident for the least amount of time. Nonetheless, results were statistically significant at $p < .0001$. Results of both analyses are provided in Table 19.

Table 19: Survival Analysis Examining Time to Failure for Minor Misconducts by Security Level

Classification System	Security Level	N/580	N failed (%)	<i>M</i> survival time (days)	<i>M</i> survival time (uncensored)	χ^2
Structured Clinical (OSL)	Minimum	126	14 (11)	197	89	41.1****
	Medium	266	58 (22)	158	95	
	Maximum	188	70 (37)	117	52	
SRSW 2	Minimum	161	15 (9)	210	142	77.5****
	Medium	268	58 (22)	116	79	
	Maximum	151	69 (46)	132	54	

Notes: **** $p < .0001$; Wilcoxon test.

Although the majority of the data were censored for the survival analysis, examining time to failure for major misconducts, the results were similar to those for minor misconducts. Specifically, there was a clear linear relationship between time to major misconduct and assessed security level, by both classification methods. Once again, those rated ‘maximum’ security are more likely to perpetrate a major misconduct, and are likely to perpetrate it sooner, relative to those rated either ‘medium’ or ‘minimum’ security. Those rated ‘minimum’ security were much less likely to perpetrate a major misconduct; of those who did, it took them almost twice as long, relative to those rated ‘maximum’ security. Graphical representation of the Kaplan-Meier survival analysis examining time to major misconduct by SRSW2 level is provided in Figure 3. Table 20 provides a breakdown of the results of the survival analyses for the perpetration of major misconducts.

Figure 3: Survival Analysis Examining Time to Failure for Major Misconducts by SRSW2 Security Level.

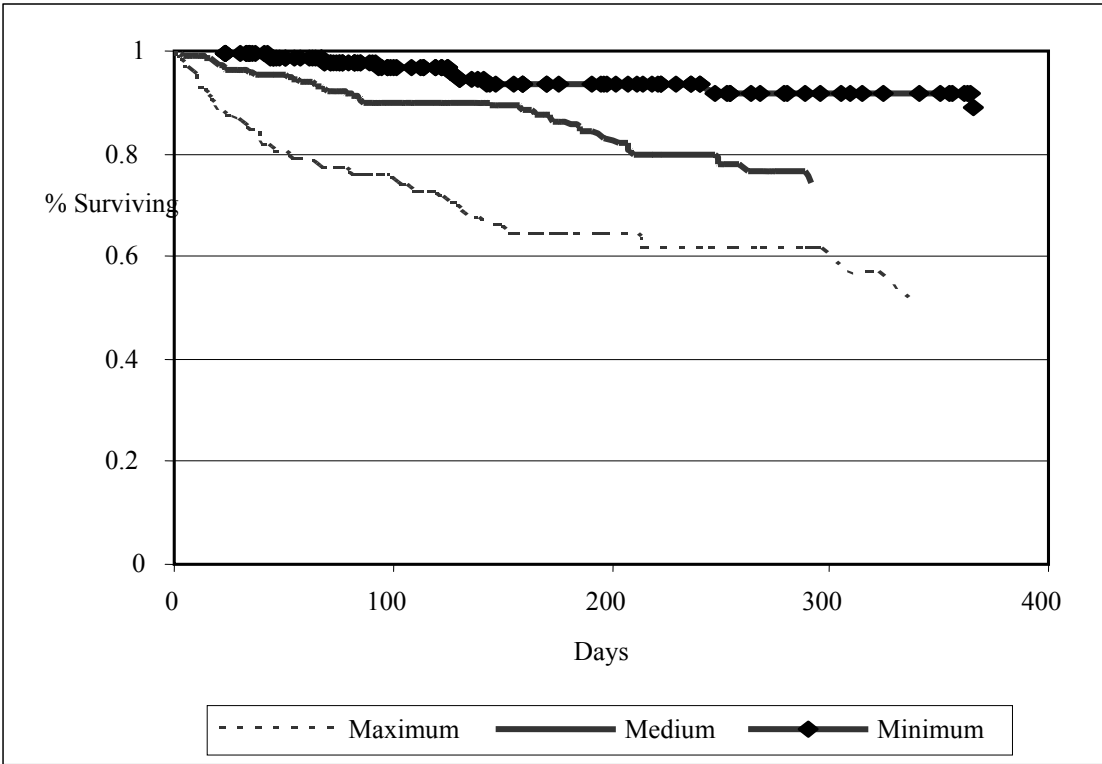


Table 20: Survival Analysis Examining Time to Failure for Major Misconducts by Security Level within Two Classification Systems: OSL and SRSW2

Classification System	Security Level	N/580	N failed (%)	<i>M</i> survival time (days)	<i>M</i> survival time (uncensored)	χ^2
Structured Clinical (OSL)	Minimum	126	8 (6)	209	131	37.3****
	Medium	266	31 (12)	171	95	
	Maximum	188	53 (28)	134	73	
SRSW2	Minimum	161	9 (5)	222	138	52.1****
	Medium	268	36 (13)	155	101	
	Maximum	151	47 (31)	132	64	

Notes: **** $p < .0001$; Wilcoxon test.

Collectively, the results of the survival analyses support those of the ROC analyses. Taken together, findings suggest that both assessment methods (OSL and SRSW2) are useful predictors of institutional misconducts and major misconducts post-review.

Release Outcome

Descriptive Statistics: Discretionary Release

Of the 323 women in the sample, 249 were released prior to the study end cutoff date of June 30, 2003. Most of those ($n=144$; 58%) were released on statutory release. An additional 39% ($n=97$) were released on day or full parole, and the remainder ($n=8$) were coded as ‘other’ release type¹⁶.

Analyses examining release type (discretionary vs. non-discretionary) by pre-release security classification revealed very significant between-group differences. Women rated ‘minimum’

¹⁶ It is important to note that this is not reflective of the release profile of federal women offenders in general. Many of the women in the current sample may have been released (and revoked) previously on the current sentence. This profile only includes women’s first release type following the date of their inclusion in the study sample.

security were much more likely to be granted day or full parole than those rated ‘medium’ security. In turn, those rated ‘medium’ security were more likely to be granted discretionary release than their counterparts rated ‘maximum’ security. These findings held true regardless of classification method used (OSL or SRSW2). Results of chi-square analyses are provided in Table 21.

Table 21: Discretionary Release Rates by Security Level Ratings

Sample: <i>n</i> =249	% Granted	(<i>n</i> / <i>N</i>)	χ^2
<u>SRSW2 Rating</u>			
Minimum	61.9	(52/ 84)	35.7*****
Medium	33.9	(40/ 118)	
Maximum	10.6	(05/ 47)	
<u>OSL Rating</u>			
Minimum	67.5	(52/ 77)	42.7*****
Medium	31.2	(38/ 122)	
Maximum	14.0	(07/ 50)	

Note: ***** $p < .0001$

ROC Results: Predicting Discretionary Release

Since discretionary release can be considered a proximal measure of assessed risk to the public, ROC curves were calculated with a view to examining whether offender security level (minimum, medium, maximum) could accurately predict discretionary release. Levels generated by the SRSW2 were compared to those generated by the regular OSL review (i.e., structured clinical method). Results of all ROC analyses predicting discretionary release are shown in Table 22.

Table 22: ROC Results: Predicting Discretionary Release

Model (<i>n</i> = 249/323)	AUC (95% CI)
<u>Discretionary Release</u>	
SRSW level w/ discretion	.71 (.64-.77)****
OSL level	.72 (.66-.79)****

Note: **** $p < .0001$

As shown in Table 22, security levels generated by the OSL and by the SRSW2 were good predictors of discretionary release. There was virtually no difference in the AUC values for the prediction of discretionary release by the OSL versus the SRSW2.

DISCUSSION

Overview

This study developed and field tested a gender-informed security reclassification scale for federally sentenced women (SRSW). By design, the sample included an overrepresentation of Aboriginal (OSL) reviews and reviews for cases rated/placed at ‘maximum’ security. It is important to underscore this, because, in addition to concerns in general with respect to women’s security classification, there is particular preoccupation with the equity of the current classification procedures for Aboriginal women and those classified as maximum-security (Canadian Association of Elizabeth Fry Societies, 1998, 2004; Webster & Doob, 2004a, 2004b).

The current research is framed as ‘gender-informed’ because both the development and validation samples were female only, and some variables cited as particularly pertinent to women’s risk and institutional adjustment were included for examination. As such, the current study did address some concerns regarding the lack of research devoted specifically to women offenders, and the failure to consider issues that might be particularly salient to women’s lives. However, because traditional empirical methods were employed, it does not purport to follow a feminist criminological methodology/ framework.

Internal Consistency

The data analyses examined the SRSW in relation to several reliability and validity criteria. Internal consistency was examined using Cronbach’s alpha, as well as inter-item and item-to-total correlations. Overall, given the small number of items in the scale, the alpha coefficient of .69 is acceptable. One item (unlawfully at large- ever) showed a weak association with the remainder of the scale variables, and removal of that item resulted in a very slight increase in the overall internal consistency¹⁷. Those results, coupled with the finding that the item was not correlated with any of the outcome measures, might lead to the recommendation that the item be removed from the scale. Webster and Doob (2004b) suggest that “...from a purely methodological perspective, items with no predictive validity can only be described as irrelevant

¹⁷ Examination of the distribution of scores for that item suggested that this was not a problem with the endorsement (base) rate: 22 percent of the sample (n=126) did have a history of being unlawfully at large (includes escape, failure to report to parole officer).

characteristics.... methodological standards demand that they be dropped from the instrument” (p.635). Other researchers, however, do not concur, and suggest that some (non or weakly predictive) factors are appropriately included to reflect correctional policy (Austin & Hardyman, 2004; Blanchette & Motiuk, 2004; Grant & Luciani, 1998). In this respect, the ‘unlawfully at large’ variable is one of only two items on the SRSW that could serve as an assessment of escape risk. As mentioned, the Service is legislatively mandated to consider escape risk as one of three broad criteria in its security classification process. Therefore, inclusion of the item increases the scale’s face validity and may therefore result in fewer staff overrides. Accordingly, one study found that having a history of being unlawfully at large was one of the best predictors of staff decisions to increase federally sentenced women’s security levels (Irving & Wichmann, 2001). It is therefore suggested that removal of the item from the SRSW is not warranted at the current time.

Concurrent Validity

Concurrent validity was assessed by comparing the SRSW classification recommendation with the actual OSL decisions made by staff (using the structured clinical method). The overall concordance between the OSL and SRSW security level recommendations was 72%. It was proposed that the concordance rate for the current field test would provide an estimate of the override rate if the SRSW were actually implemented. In general, override rates of up to 15-20% are considered within the maximally acceptable range (Austin & Hardyman, 2004; Buchanan et al., 1986). It is suggested, however, that the 72% concordance rate (and its corollary, the inferred 28% override rate) is within an acceptable range for the current field test. Importantly, for the current study, the SRSW was completed immediately *after* the actual OSL recommendation was made, and was not used to inform the classification decision in any way. It is a reasonable expectation that, if implemented, the concordance with actual decision could increase *at least* 10% because the staff would be using the scale to inform their actual decision (as opposed to completing it after the fact, as in the current study). Importantly, the override rate of the initial security classification instrument (Custody Rating Scale) was 26% about seven years *after* its implementation, which was considered a marked improvement over the 60% concordance rate (40% inferred override) reported in the development phase (Luciani et al.,

1996). As well, the concordance rate for the SRSW is as high as that reported for the SRS (men's scale) at the same (field-test) phase of development (Luciani, 1997).

Despite the high concordance rate, results suggest that the SRSW is more liberal than the OSL review (i.e., the structured clinical method). Specifically, use of the SRSW resulted in about 20% fewer cases being classified as 'maximum' security, and about 28% more cases classified as 'minimum' security. The Sign test results indicated that the differences between levels assigned by each method were statistically significant. Therefore, those results support the hypothesis that, relative to the current method (OSL), the SRSW would recommend that more women be placed at lower levels of security. The findings are consistent with other research suggesting that actuarial methods are less conservative than clinical judgment (Austin, 1983; Buchanan et al., 1986).

Convergent Validity

Convergent validity was assessed by examining the correlations between SRSW scores and indices of risk, need, and reintegration potential. Using the most contiguous assessments available, correlations were all highly statistically significant ($p < .0001$). As expected, as assessed risk and need increased, so did the probability of obtaining a high score on the SRSW. As assessed reintegration potential increased, SRSW scores decreased. This suggests that the SRSW is converging appropriately with other assessments of static and dynamic factors.

Predictive Validity

The nine items comprising the SRSW were correlated (partialling out time at risk) with various institutional adjustment criteria. Not surprisingly, the best predictor of perpetrating minor and/or major misconducts post-review was the number of recorded incidents *during* the review period. This is consistent with the Social Psychological perspectives, which posit that one of the best predictors of future behaviour is past behaviour (Andrews & Bonta, 1998). Notably, however, variables such as 'number of recorded incidents', 'serious institutional misconducts', or 'time in segregation' are generally considered static in nature. Since the SRSW effectively 'wipes the slate clean' for most (7 of 9) items at the beginning of each security review, these traditionally

static (historical) variables are measured proximally, for a fixed time period. In that sense, historical (static) variables have been transformed to changeable (dynamic) predictors. Prospective research should assess the predictive accuracy of traditionally static variables (e.g., criminal history, institutional history) for a proximal, fixed (e.g., past year) period of time, thus treating them as dynamic predictors. There is a good possibility that using static predictors more proximally could increase their predictive accuracy.

Analyses showed very significant between-group differences in the misconduct rates (minor, major, any) by SRSW level ratings. As expected, those rated 'minimum' by the scale were least likely to perpetrate misconducts during the fixed 3-month follow-up. Misconduct rates for those rated 'medium' security were higher, and those rated 'maximum' security were most likely to perpetrate misconducts during the follow-up.

ROC curves and Kaplan-Meier survival analyses were consistent with the chi-square results outlined above. Taken together, they suggest that SRSW security level ratings are predictive of both minor and major misconducts, as well as time to failure for both minor and major misconducts. All of these analyses produced results in the expected direction. While the structured clinical method (OSL) was also predictive of minor and major misconducts (and time to failure for each), the SRSW equaled or outperformed the OSL in all instances. In consideration of results presented earlier, this suggests that implementation of the SRSW would provide an overall decrease in the women's security level distribution, and that this decrease would not come at the cost of weaker predictive accuracy.

The Prison Environment and Labels

Labeling theorists have long argued that labels become self-fulfilling prophecies; the notion that behaviour is heavily influenced by assigned labels is well entrenched in the sociological-criminological literature. Accordingly, some might argue that the between-group differences in misconduct rates by security level are simply a result of the environment or the label- for example, 'maximum' security inmate. Results of exploratory analyses examining the potential impact of the environment (or actual classification) on the misconduct rate did not support labeling theory. When controlling for the environment and classification label (i.e., 'medium security'), groups differed in misconduct rates according to their SRSW level classification.

Once again, despite the fact that all cases were actually OSL rated and placed in medium-security, those rated 'minimum' by the SRSW were least likely to perpetrate misconducts, while those rated 'maximum' security were most likely to perpetrate misconducts. Conversely, when the SRSW level rating was held constant (i.e., all rated 'medium' security), groups did not differ in misconduct rates according to their actual OSL classification and placement. Taken together, these findings suggest that it is the actual assessed risk (as per the SRSW) that differentiates groups on misconduct- the label is irrelevant. These findings support earlier research with samples of (predominantly) male offenders (Luciani et al., 1996), and offer support for the incremental validity of the SRSW over the OSL.

Study limitations and Directions for Future Research

It was beyond the purview of the current study to examine the causes/ aetiology of institutional adjustment problems. However, prediction and explanation are inextricably linked. Prospective investigations seeking to understand and explain inmate (mis)behaviour will further assist in the development of better prediction tools and intervention strategies for women offenders.

One important purpose of the current study was to examine the psychometric properties of the gender-informed SRSW. The methodology used did not allow for an examination of inter-rater reliability of the scale. Notably, this is a limitation common to most security classification validation studies, quite possibly because of the usual reliance on static and/or automated data. This will be an important line of enquiry for prospective research on the SRSW.

Conclusions

Theoretical implications

Although the development of the SRSW was relatively atheoretical, its application supports elements of the Psychology of Criminal Conduct (PCC) and social learning theory. In particular, PCC suggests that criminal history is one of the best predictors of future criminal behaviour. The extrapolation to security reclassification is that past institutional behaviour is one of the best predictors of future institutional behaviour, as seen in the results of the current study.

Implementation of the SRSW would provide a clear example of applied social learning theory. Since the scale items are concretely measured and transparent, the offenders can work to reduce their security classification. Correctional Service Canada policy governs differential access to privileges and programs by security level. Accordingly, items on the SRSW represent both positive (e.g., correctional plan progress/ motivation, positive family contact) and negative (e.g., periods of segregation, recorded incidents) reinforcements, in a manner consistent with social learning theory. As such, the offenders could be motivated to produce positive behavior to facilitate their movement through the security reclassification process.

The development process for the SRSW included gender-informed considerations (e.g., parenting, family relationships, self-injurious behaviour, mental health issues) using a large female-only sample. Despite its gender specificity, the final product (SRSW) is very similar to the scale that was developed for men (SRS). Results of the current study suggest that there is little evidence for gender specific variables, though the order of relevance and weighting of predictive items might differ by gender. These results support the PCC, and are consistent with other psychological research in the field of corrections (Dowden & Andrews, 1999; Law, 2004). Importantly, however, the continued consideration of gender-informed variables and inclusion of female-only samples in correctional research is paramount. The time to discard the metaphorical ‘Adam’s rib’ is long overdue. Psychological theory can be applied to men and women in different ways, as the complex interplay of biological, social, and psychological factors will likely differ by gender. As such, the continued development and evaluation of women-centred measures, programs, and services is essential.

Operational Implications

The Correctional Service of Canada (CSC) has long advocated for the validation of current classification systems (such as the Custody Rating Scale) for women offenders. However, a better strategy is to make the classification system more responsive to the risk and need factors of women. The results of the current study suggest that the SRSW could offer the Service a gender-informed security classification tool with practical utility that meets legal requirement for the least restrictive measures of confinement. The SRSW could assist to allay concerns regarding women’s over classification (Auditor General Canada, 2003; Canadian Association of

Elizabeth Fry Societies, 2004; Canadian Human Rights Commission, 2003) and provide a nationally standardized, objective approach and an accountability framework for both inmates and staff.

Although it has been a few years since Brennan (1998) asserted that "the need to improve classification systems for women is becoming a critical issue for criminal justice policy makers, legal advocates, and administration" (p.179), most jurisdictions continue to use the same tools for classifying women and men. Almost invariably, these measures have been developed on samples of male offenders and then are applied to women. Moreover, most jurisdictions have not even performed validation studies to examine the applicability of these tools to women.

Implementation of the SRSW will make it possible for CSC management to take responsibility for the agency's risk-taking policy. This, in turn, enables staff accountability in applying the policy to individual inmates. Accordingly, Alexander (1986) noted that "it is extremely difficult to distribute responsibility and accountability for classification decisions effectively in a complex organization when the decisions are made clinically, because the rationale behind the clinical method is that each decision is unique" (p.335).

Implementation of the SRSW protocol for women will provide a more liberal and accurate security reclassification process that will promote equity and be more transparent and therefore defensible against litigation (Zinger, 2004). Results of the current study suggest the SRSW has the potential to reduce women's over classification relative to the structured clinical method currently in use. This will expedite the community reintegration process without compromising institutional security or public safety. Because the expeditious transfer of an offender to the "least restrictive" level of confinement improves the likelihood of that offender being considered favourably for discretionary release, the implementation of a more liberal (actuarial) reclassification process could help to reduce the costs associated with incarceration. More specifically if over classification is minimal, significant cost-savings will be garnered; it costs more to incarcerate inmates at higher levels of security (Proctor, 1994; Correctional Service of Canada, 2002), and women are particularly costly to incarcerate (Correctional Service of Canada, 2002).

An objective instrument provides clear behavioural standards to the offender. Brennan (1987) has documented several other advantages to objective classification methods, including: they are relatively more efficient, consistent, and reliable, there is clearer documentation available for analysis, they are more easily evaluated and refined, and they significantly reduce classification errors.

Some might argue that there are legal impediments to the implementation of a separate classification system for women. Because the law mandates equal treatment (for classification, housing, programming, and so on) of male and female offenders, some argue that parity concerns require identical classification systems for men and women (Brennan, 1998). It is suggested here that this position is misguided: identical systems can work in inequitable ways, such as when a tool is valid for one group but not another.

As noted, there has been a rapid population growth for admissions to federally sentenced women's prisons in recent years; it is not expected to slow significantly within the next few years (Boe et al., 2000; Boe, 2001; Nafekh & Boe, 2003). This, coupled with concerns from various researchers and advocacy groups from both within and outside of Canada has signaled an urgent need for the full implementation of a gender-informed security classification measure for women. While implementation of the SRSW begins to fulfill this need, continued research, with a view to re-validating, refining, and expanding the tool is paramount.

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**Appendix A: Simple Correlations between Offender Security Level and First Run of
Predictor Variables: Development Sample**

	Predictor	Simple r
1.	Compliance with institutional rules/regulations	-.73****
2.	Correctional plan - program motivation (1 st priority)	-.61****
3.	# serious offences with conviction -review (0, 1-2, 3+)	.50****
4.	# recorded incidents - review (0, 1, 2, 3+)	.49****
5.	Segregation: danger to others (# times/review: 0, 1-2, 3+)	.49****
6.	Preventative security concern- review	.46****
7.	Correctional plan - program progress (1 st priority needs)	-.40****
8.	Substance abuse problem rating	.39****
9.	Overall criminal risk	.38****
10.	# minor offences with conviction - review (0, 1, 2, 3+)	.38****
11.	# refuse urinalysis- review (0, 1-2, 3+)	.33****
12.	# self-injury -review (0, 1+)	.31****
13.	Overall case needs	.29****
14.	Quality of interpersonal relationships	-.28****
15.	Overall marital/family adjustment	-.27****
16.	CRS institutional adjustment group (<36, 36-71, >71)	.26****
17.	Source of distribution of contraband -review	.26****
18.	New charges during review	.26****
19.	Pay grade	-.26****
20.	Non-violent escape attempt- ever	.25****
21.	UAL from UTA/WR/CS- ever	.25****
22.	Psychological or psychiatric concerns noted	.24****
23.	Assaults causing serious harm- ever	.24****
24.	# Positive urinalyses- review (0, 1+)	.24****
25.	# Successful ETA: total -review (0,1-3,4-8,9+)	-.24****
26.	# Successful ETA: family related -review (0,1-2, 3+)	-.24****
27.	Assaults causing serious harm- review	.23****
28.	Total number of private family visits- review (0, 1+)	-.22****
29.	How often receives visits from family/community	-.22****
30.	Marital status- review (Married/Not)	-.21****
31.	Non-violent escape attempts- review	.20****
32.	CRS security risk group (<80, 80-129, >130)	.19****
33.	Currently on psychiatric medication	.19****
34.	Instigated serious disruption during review	.18**
35.	Maintains regular contact with family	-.18**
36.	# Successful ETA: personal development- review (0,1-2,3-6, 7-10, 11+)	-.18**
37.	Detention referral	.17**
38.	# suicide attempts- review (0, 1+)	.16**
39.	# successful UTA: family related -review (0,1-2, 3+)	-.16**

Note: ** $p < .01$; *** $p < .001$; **** $p < .0001$.

Appendix B: Security Reclassification Scale for Women (SRSW)

PART 1: BASIC OFFENDER INFORMATION

1. Identifying Information

1.1. Offender's Name:

1.2. Offender's Date of Birth (yyyy/mm/dd):

1.3. Offender's FPS #:

2. Important Dates

2.1a Offender's most recent admission date (yyyy/mm/dd):

2.1b Offender's admission type (code number):

2.2 Offender's statutory release date (yyyy/mm/dd; blank for lifers):

2.3 Offender's warrant expiry date (yyyy/mm/dd; blank for lifers):

2.4 Date of the current security review (yyyy/mm/dd):

2.5 Date of the previous security review (yyyy/mm/dd):

***** Note that the review period consists of the time between the last security (OSL) review and the current security review. In other words, the review period is the period between dates in items 2.4 and 2.5 above *****

3. Demographic Information

3.1 Offender's age at this review: _____

3.2 Offender's current marital status:

- Unmarried (widowed, divorced, single)
- Married/ Common Law
- Unknown

3.3 Offender's race/ethnicity:

- Caucasian
- Aboriginal
- Black
- Other

PART 2: REVIEW OF ADJUSTMENT AND FUNCTIONING FACTORS

1. Correctional plan: program motivation.

	(+3.20)	Limited motivation
	(+0.70)	Partial motivation/active
	(-2.40)	Full motivation/active

2. Maintains regular positive family contact.

	(+1.0)	No, very little positive contact with family
	(-0.3)	Yes, regular positive contact with family

3. Number of convictions for serious disciplinary offences during the review period.

	(-1.1)	None
	(+1.9)	One or two
	(+4.4)	Three or more

Total number of serious convictions during the review period: ____

4. Number of recorded incidents during the review period.

	(-1.50)	None
	(0.40)	One
	(+0.75)	Two
	(+3.50)	Three or more

Total number of incidents during the review period: ____

5. Ever UAL from work release, temporary absences or community supervision.

	(-0.25)	No
	(+1.20)	Yes

6. Pay level during the review period.

	(-1.10)	Level A
	(-1.10)	Level B
	(-0.30)	Level C
	(+0.70)	Level D
	(+1.00)	Basic Allowance / Unable to work
	(0.00)	Other (explain) _____

7. Number of times offender was placed in involuntary segregation for being a danger to others or the institution during the review period.

	(-1.10)	None
	(+3.25)	Once or twice
	(+5.35)	Three or more

Total number of times during the review period: ____

8. Total number of successful ETAs during the review period:

	(+1.15)	None
	(+0.70)	One to three
	(-0.85)	Four to eight
	(-1.40)	Nine or more

Total number of successful (on time) ETAs during the review period: ____

9. CRS Incident History:

	(-0.95)	None
	(+1.60)	Any Prior Involvement

Scoring Criteria for Weighted Items

1. Correctional Plan: Program motivation/progress

This item is intended to allow the user to assess the offender's motivation in programs designated to address criminogenic factors identified in the correctional plan. The user assesses how actively the offender participates in programs. Assessment is based on knowledge of the offender and on file review.

'limited motivation' is selected if the offender refuses to participate in programs to address needs outlined in her correctional plan, or if her participation is very sporadic.

'partial motivation' is to be selected if the offender participates in programming, with adequate attendance. Homework is at least partially (or sometimes) completed, and she sometimes applies lessons.

'full motivation' is to be selected if the offender is actively participating in her correctional plan, completes homework most of the time, and applies her lessons consistently.

2. Maintains regular positive family contact

This item is intended to allow the user to assess whether the offender has social support through regular positive contact with family members. The assessment is based on knowledge of the offender and file review.

'no, very little positive contact with family' is to be selected if the offender has little to no positive, regular support from her family.

'yes, regular positive contact with family' is to be selected if the offender's family is consistently emotionally supportive and available to her.

3. Number of convictions for serious disciplinary offences

During the review period only count of institutional disciplinary offences that resulted in a conviction (not charges) for a serious offence, as per the conviction date on OMS.

4. Number of recorded incidents during the review period

The application performs a count of all “institutional incidents” where the “incident date” is for the period under review regardless of severity, the offender's role, or whether they resulted in a formal conviction.

5. Pay level during the review period

Note: COMMISSIONER'S DIRECTIVE #730: INMATE PROGRAM ASSIGNMENT AND PAYMENTS states the following regarding Inmate Pay:

Pay shall normally be based on the following daily rates:

- a. **Level A pay** (\$6.90) shall be awarded to inmates who:
 1. have been earning level B pay for at least the previous three months and have met the following performance standards in relation to all program assignments in their correctional plan:
 - i. no unauthorized absences;
 - ii. no unjustified late arrivals to, or early departures from, the program assignment;
 - iii. full and active participation in all aspects of the program assignment;
 - iv. completion of all requirements of the program assignment(s) to an excellent standard;
 - v. excellent interpersonal relationships, attitude, motivation, behaviour, effort and productivity.
- b. **Level B pay** (\$6.35) shall be awarded to inmates who:
 1. have met the following performance standards in relation to all program assignments in their correctional plan for at least the three previous months:
 - i. good attendance and punctuality;
 - ii. demonstrated full and active participation in all aspects of the program assignment;
 - iii. completed all requirements of the program assignment(s) to a good standard;
 - iv. good interpersonal relationships, attitude, motivation, behaviour, effort and productivity.

- c. **Level C pay** (\$5.80) shall be awarded to inmates who:
 - 1. participate in a program assignment specified in their correctional plan;
 - 2. participate in a program assignment recommended by the case management team before a correctional plan has been finalized.
- d. **Level D pay** (\$5.25) shall be awarded to inmates who:
 - 1. participate in a work assignment but refuse to participate in any other program assignment specified in their correctional plan, or in the absence of a correctional plan, refuse to participate in any other program assigned by the Board. This includes inmates who are appealing their sentence and/or conviction and refuse a program assignment for reasons related to the appeal.

An allowance of \$2.50 shall be awarded to inmates who are unable to participate in a program assignment for reasons beyond their control.

A basic allowance of \$1 shall be awarded to inmates who refuse to participate in all assignments offered by the Program Board.

Under exceptional circumstances, institutional heads may authorize, in writing, pay for inmates at levels for which they would not otherwise be eligible.

6. Number of times offender was placed in involuntary segregation for being a danger to others or the institution

The application automatically tabulates a total count where segregation is involuntary and the reason for segregation is CCRA 31 (3-A). It will count only placements in segregation that occurred during the review period. If the inmate was in segregation during *any part* of the review period, it will be counted. The number of days in segregation is disregarded. If an offender released from segregation and then returned to segregation, this is reported as two periods, even if the return was based on the initial reasons for segregation.

7. Total number of successful ETAs during the review period

The application automatically tabulates the number of TA permits where the “absence type” is ETAs (i.e. 0005) and that the offender has successfully completed 'on time' (i.e. 0001) or 'extension' (i.e. 0002). ETAs granted for *any reason*, during *any part of the review period* will be considered by the Scale, that the “departure date” is greater than the review period start date or the “return date” is greater than the start date and less than the review end date. The application will count the total number of separate ETAs, not the number of days released on ETA.

8. Ever UAL from work release, temporary absence or community

The application automatically checks for any instances of UAL. If an official incident of UAL is found by the application, the field will be populated as 'yes', and the user will be unable to modify. If no official incident of UAL is found by the application, the field will be populated as 'no' and the user will have the option of overriding the selection to select 'yes'.

If the application selects 'no', the user will need to go further into the files to adequately respond to this item. Because not all UAL will result in formal charges, the user is to count any record of escape lawful custody on the offender's personal file as well (implication--if they escaped they must have been UAL). The user is NOT to count escape attempts - only successful escapes.

Also, if the user is certain that the offender has been UAL but there is no official record indicate "YES" and note this situation in the 'comments' section. For the purposes of the field test the user is not to include failure to appear, or breaches of trust. If these are the only indicators mark "NO" but note this fact in the 'comments' section at the end of the report.

9. CRS Incident History

The application will report the “Incident History score” (involve_in_incident_score) from the most recent CRS completed at admission.

If the score is 0, then 'none' will be selected.

If the score is above 0, then 'Any prior involvement' will be selected.

If no CRS score is available and this is the offender's first custodial sentence (including provincial) then 'none' will be selected, and the user will be allowed to modify. If no score is available on OMS, the user must create a "proxy" Incident History score by using the guidelines contained in SOP 700-04 - Offender Intake Assessment and Correctional Planning.

PART 3: SCORING THE SRSW - SECURITY LEVEL CUT-OFF VALUES

- **TOTAL SCORE FROM ITEMS 1 TO 9 ABOVE: _____**
(SCORES RANGE FROM -10.10 TO +22.40)
- Maximum Security Range: +8.70 to +22.40
Maximum-to-Medium Security professional discretion invocation (+8.70 to +9.55)
- Medium Security Range: -2.60 to +8.65
Medium-to-Maximum Security professional discretion invocation (+8.65 to +7.80)
Medium-to-Minimum Security professional discretion invocation (-2.60 to -2.35)
- Minimum Security Range: -2.65 to -10.10
Minimum-to-Medium Security professional discretion invocation (-2.65 to -2.90)

CLASSIFICATION DECISIONS

- 1. Offender's security classification level prior to this review (i.e., at OSL date noted in item 2.5 above).**

<input type="text"/>	Institutional Adjustment Risk
<input type="text"/>	Escape Risk
<input type="text"/>	Public Safety Risk
<input type="text"/>	Overall Security Level

- 2. Your recommended security classification level (for the most recent security review).**

<input type="text"/>	Institutional Adjustment Risk
<input type="text"/>	Escape Risk
<input type="text"/>	Public Safety Risk
<input type="text"/>	Overall Security Level

- 3. The classification level recommended by the Review of Adjustment and Functioning Factors.**

<input type="text"/>	Score on the Security Reclassification Scale for Women (SRSW)
<input type="text"/>	SRSW Security Level Rating

MARGIN OF PROFESSIONAL DISCRETION

If the offender's score falls within this 10% margin (see cut-offs, previous page), you will have two choices, you may either choose to invoke your discretion to adjust her level of security or you may accept the level accorded by the SRSW score. Either way this is seen as an agreement with the scale recommendation and no rationalization for your decision will be required.

No	Yes
<input type="checkbox"/>	<input type="checkbox"/>

Do you wish to use the 10% margin of Professional Discretion?

REVIEW OF THRESHOLD FACTORS

For each of the following, check 'yes' or 'no'. Check 'yes' only if the event has occurred recently (i.e., since last review). For example, the offender has an 'escape with violence' on a previous sentence, or prior to the *last* security (OSL) review, check 'no'.

If applicable, provide a detailed assessment supporting the use of your professional discretion for security level placement.

No	Yes
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Escape/attempt with violence from any level of custody or escort.
Escape/attempt/conspire from any level of custody or escort.
Assault causing serious physical harm to staff, visitor, or offender.
Instigator in a serious disruption leading to confrontation or damage.
Identified as a major source in the distribution of contraband.
Other (specify)

Please provide a full assessment supporting your invocation of the professional discretion provision:

REVIEW OF OVERRIDE FACTORS

For the following select the item which best describes the case. If applicable, provide a detailed assessment supporting the SRSW override.

No	Yes	
		Deportation order
		Pending appropriate security level availability
		Less than one year to SRD or WED
		Escape history or escape on current sentence
		Other (specify):

Provide full assessment supporting your invocation of the override provision:

Appendix C: Inter-Item Correlations: SRSW

SRSW: Inter-item correlations

Item	1.	2.	3.	4.	5.	6.	7.	8.	9.
1.	1.00								
2.	0.25****	1.00							
3.	0.24****	0.09*	1.00						
4.	0.18****	0.21****	0.52****	1.00					
5.	0.33****	0.14***	0.14***	0.06	1.00				
6.	0.28****	0.23****	0.46****	0.54****	0.20****	1.00			
7.	0.22****	0.12**	0.12**	0.12**	0.18****	0.27****	1.00		
8.	0.12**	0.02	-0.04	-0.02	0.08*	0.03	0.01	1.00	
9.	0.22****	0.08	0.26****	0.29****	0.15***	0.31****	0.20***	0.12**	1.00

Note: Correlations are with item scores on each variable.

* $p < .05$; ** $p < .01$; *** $p < .001$; **** $p < .0001$

1. Correctional Plan progress/ motivation
2. Positive family contact during review
3. Serious disciplinary offences during review
4. Number of recorded incidents during review
5. Pay Level- at review end
6. Involuntary segregation during review
7. Successful escorted temporary absences during review
8. Unlawfully at large- ever
9. Custody rating scale incident history score