

**Field-test of a Gender-informed Security Re-classification
Scale for Female Offenders**

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Abstract

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 used three samples of federal female offender case files to test a gender-informed security reclassification scale. Sample 1 ($n=580$) included all federal female offender security level reviews that occurred between July 2000 and June 2003. Data for sample 1 ($n=580$) included all offender security level (OSL) decisions, the Security Reclassification Scale for Women (SRSW), and some additional relevant variables coded by field staff. Sample 2 was comprised of a random subsample ($n=100$) of cases for which a second security classification measure, developed for use with *male* offenders, was completed. Finally, sample 3 consisted of a subsample of the most recent security reviews ($n=338$), for which numerous additional theoretically and operationally relevant variables were coded (e.g. antisocial associates, attitudes, anger/hostility).

Results showed that the SRSW is a reliable and valid tool for the security classification of federal female 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. Relative to the scale developed for male offenders, there was no difference in the frequency of overrides or in predictive accuracy with respect to institutional adjustment criteria. Contrary to expectations, the addition of theoretically relevant, dynamic variables did not increase the predictive accuracy of the scale. 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 female offenders. Even more rare is research devoted to the development of gender-specific tools for female 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).

Security Classification in the Federal Prison System

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.

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 female offender samples (Blanchette & Motiuk, 2004; Blanchette, Verbrugge, & Wichmann, 2002; Grant & Luciani, 1998; Luciani, Motiuk, & Nafekh, 1996). The CRS is provided in Appendix A.

Reclassification

Following initial security classification, the CCRA directs that each offender's security level be reviewed *at least* annually¹. Correctional Service of Canada policy also (Standard Operating Practice #700-14) 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

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.

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 (see Appendix B). 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.

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.

Gender-informed Security Re-classification for Women

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. Institutional Adjustment guidelines mandate the consideration of the seriousness and recency of five categories of factors, as well as any progress made to mitigate institutional adjustment concerns. These include:

- 1) Violent incidents
 - a) Degree of violence, harm caused
 - b) Use of a weapon
 - c) Inmate's role in the incident(s)
- 2) Disciplinary convictions
 - a) Nature of the circumstances
 - b) Pattern of convictions
- 3) Continuation of criminal activities
 - a) Preventative security information
 - b) Security reports
 - c) Police information which indicates/ suggests that the inmate continues to be involved in criminal activities (e.g., drugs, assault)
- 4) Administrative interventions
 - a) Pattern of disruptive behaviour
 - b) History of transfers to higher security
 - c) Placement in segregation because of disruptive behaviour
 - d) History of transfers or admissions to administrative segregation for protection reasons
- 5) Behaviour and program participation
 - a) Disruptive effect on the good order of the institution
 - b) Level of cooperation in addressing the dynamic factors (criminogenic needs) identified in the correctional plan

Gender-informed Security Re-classification for Women

- c) Level of participation in institutional work or personal development programs
- d) Mental health concerns causing adjustment problems
- e) Physical health concerns causing adjustment problems
- f) Socio-cultural status indicating a requirement for special intervention on an ongoing basis
- g) Special needs (e.g. protection, suicidal tendencies)

After assessment of these five broad factors (and any other relevant considerations), the assessor assigns a rating of low, moderate, or high. The Standard Operating Practice (SOP 700-14) provides a clear description for each possible rating.

An inmate rated as 'low' institutional adjustment concern would demonstrate: a) a pattern of satisfactory institutional adjustment, no special management is required, b) the ability and motivation to interact effectively and responsibly with others, individually and in groups, with little or no supervision, and c) motivation towards self-improvement by actively participating in a correctional plan designed to meet her criminogenic needs.

An inmate would be assessed as a 'moderate' institutional adjustment concern if she demonstrates: a) some difficulties causing moderate institutional adjustment problems and requiring some management intervention, b) the potential to interact effectively with others, individually and in moderately structured groups, but needs regular and often direct supervision, and/ or c) an interest and active participation in a correctional plan designed to meet her criminogenic needs, particularly those likely to lead to a transfer to a less structured environment (and, ultimately, to her reintegration into the community).

Gender-informed Security Re-classification for Women

An inmate would be rated as a 'high' institutional adjustment concern if a) she has frequent or major difficulties causing serious institutional adjustment problems and requires significant and/ or constant management intervention, b) requires a highly structured environment in which individual or group interaction is subject to constant and direct supervision, and c) an uncooperative attitude toward institutional programs and staff and presents a potentially serious management problem within the institution.

Escape Risk guidelines again suggest the consideration of the severity and recency of a number of broad factors, including 1) past escape/ attempted escape, 2) sentence status, and 3) other potential escape risk concerns.

- 1) History of escape/ attempts
 - a) From a closed perimeter institution,
 - b) From an open perimeter institution
 - c) From and escorted temporary absence, work release, or fence clearance
 - d) Use of actual or threatened violence in any escapes/ attempts
 - e) Previous breaches of trust, including failure to return from UTA
- 2) Sentence status
 - a) Outstanding charges having the potential to increase the probability of escape
 - b) Deportable
 - c) Crown appeal
 - d) Time to be served before eligibility for UTAs
- 3) Other potential escape risk considerations, including circumstances having the potential to increase and inmate's escape risk (e.g., child custody issues, gambling/ drug debts).

After the structured evaluation of these escape risk factors, the assessor assigns a rating of low, moderate, or high. The Standard Operating Practice (SOP 700-14) again provides fairly explicit rating criteria for each possible rating, as defined below.

Gender-informed Security Re-classification for Women

An inmate would be rated as a 'low' escape risk if she has no recent serious escape, no current indicators of escape potential, and no significant history of breaches of trust. An inmate would be rated as a 'moderate' escape risk if she: a) has a recent history of escape and/or attempted escapes or there are current indicators of escape potential, b) is unlikely to make active efforts to escape but may do so if the opportunity were to present itself, or c) presents a definite potential to escape from an institution that has no enclosure. Finally, an inmate would be rated as 'high' escape risk if she has demonstrated a pattern of escapes and/or attempted escapes or there are current indicator(s) of significant potential to escape.

Public Safety considerations include 1) history of violence 2) program participation, 3) mental illness or disorder, and 4) other public safety concerns.

Once again, the policy guidelines direct the assessor to consider the seriousness and recency of each factor, as well as any progress made that might mitigate concerns.

- 1) Violent incidents
 - a) History of violent behaviour
 - b) Degree of violence used, harm caused
 - c) Use of weapon
 - d) Inmate's role in the incident(s)
- 2) Program participation: consider the level and benefit of program involvement (i.e., to what extent has the inmate's progress in the correctional plan reduced the likelihood of the commission of a violent offence).
- 3) Mental illness or disorder: consider information (e.g., psychological, psychiatric assessments) which suggests that: a) mental illness or disorder has not been adequately addressed, and/or b) the inmate may fail to comply with medication prescribed to control the mental illness/ disorder.

4) Other public safety concerns

- a) Third party or other information suggesting that the inmate will likely commit a serious offence upon release;
- b) Detention/ potential detention;
- c) Level of need in any of the dynamic factor areas (employment, marital/ family, associates/ social interaction, substance abuse, community functioning, attitude, or personal/ emotional stability);
- d) Notoriety likely to invoke a negative reaction from the public, victim(s) or police and/or to receive significant media coverage (sensational crime, major sexual or drug offence, affiliation with organized crime, etc.)

As with the other assessed risk domains for women's OSL decisions, the assessor is required to provide a rating of 'low', 'moderate', or 'high' risk to public safety. Again, the policy provides concrete guidelines for the assignment of the rating.

An inmate would be rated as 'low' risk to public safety if her criminal history: a) does not involve violence, b) involves violence, but the inmate has demonstrated significant progress in addressing the dynamic which contributed to the criminal behaviour and there are no signs of the high risk situations/ offence precursors identified as a part of the offence cycle, or c) involves violence but the circumstances of the offence are such that the likelihood of reoffending violently is assessed as improbable.

A rating of 'moderate' risk to public safety would be accorded an inmate with: a) a criminal history that involves violence, but she has demonstrated some progress in addressing those dynamic factors which contributed to the violent behaviour, or b) a criminal history that involves violence, but the inmate has demonstrated a willingness to address the dynamic factors which contributed to the violent behaviour, or c) there are current indicators of moderate risk/ concern.

Finally, an inmate should be assessed as a 'high' risk to public safety if: a) her criminal history involves violence, and she has not demonstrated any progress in addressing those dynamic factors which contributed to the violent behaviour, b) a criminal history involving violence, and she has not demonstrated a willingness to address the dynamic factors which contributed to the violent behaviour, or c) there are current indicators of high risk/ concern.

After the structured assessment of the three risk domains described above, 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

Theoretical Perspectives

The significantly lower rate of crime perpetrated by women in Canada is a trend that is echoed, without exception, throughout the world (Rasko, 1979; Walklate, 2001). Studies examining self-reported criminality and victimization survey data suggest that the discrepancy is not due to systemic gender bias or to chivalry (Walklate, 2001). Most theories of crime do not specifically explain the gender difference in criminal behaviour, though a few have been applied specifically to women. A very brief synopsis of some major theoretical perspectives is presented below.

Sociological Perspectives

According to strain theory (Merton, 1938, 1957) criminal behaviour occurs when conventional aspirations exceed the levels of achievement that are attainable by way of legitimate behaviour. In this view, the psychological mediator of criminality is anomie (feelings of alienation from the wider society). Thus, strain theorists assert that criminal behaviour reflects an individual's awareness of restricted legitimate opportunity and feelings of alienation, isolation, powerlessness, normlessness, and personal distress.

A fundamental assumption of this theory is that socioeconomic status could explain a large proportion of the variability in crime. However, research results have cast significant doubt on this premise. Specifically, studies show little to no relationship between social class and crime (Cernkovich & Giordano, 1979;

Johnson, 1979), little to no relationship between social class and strain³, and a *negative* correlation between educational aspirations and crime, regardless of perceived opportunity (Johnson, 1979).

Strain theory asserts that the discrepant crime rates are a function of different aspirations for males and females. Specifically, while the prototypical male is conceived as a 'status striver', aspiring to achieve economic success, the female "is more often viewed as possessing no such aspirations and, instead, is satisfied to occupy a role dependent to the male, basking in whatever attendant status her partner's relative success confers" (Cernkovich & Giordano, 1979, p.145). In brief, strain theory suggests that the discrepancy in crime by gender is because men have been, traditionally, primarily responsible for household socioeconomic status⁴. However, the evidence suggests that strain theory does not adequately explain the gender gap in crime. Indeed, even over twenty years ago, study results showed males and females differed very little with respect to perceived access to legitimate opportunities for success. Moreover, perceived educational and occupational opportunity was only mildly related to self-reported delinquency for both genders (Simons, Miller, & Aigner, 1980).

³ Data from Cernkovich and Giordano (1979) revealed a negative relationship between social class and perception of blocked opportunity for adolescent males and females.

⁴ Adler's *Liberation Theory* (1975; cited in Hien & Hien, 1998) is also consistent with this view. Liberation Theory asserts that the rise in female crime is due to new freedoms, increased opportunities, and new expectations (stresses and strains) for women with respect to educational and vocational attainment. Adler refers to the resultant increase in women's crime the "masculinization" of female behaviour.

Agnew (1992) significantly revised and broadened strain theory to a more psychodynamic, social learning perspective. The General Strain Theory (GST) focuses on the path of frustration-anger-aggression and suggests that an individual's difficulties at home, school, or work perpetuate the strain-crime link. The GST perspective extends well beyond the aspiration-achievement discrepancy that characterized early strain theory; it recognizes that there are several sources of strain—not just the failure to achieve conventional goals related to economic success. The GST also recognizes that there are a wide variety of cognitive, behavioural, and emotional adaptations to strain.

Broidy and Agnew (1997) argue that the GST can adequately explain the lower rate of female crime in three ways: 1) males and females experience different *types* of strain, with male strains being more conducive to serious property and violent crime, 2) males and females differ in their emotional response to strain; women are more likely to respond with depression, whereas men respond with anger, which is more conducive to criminal behaviour, and 3) males differ from females with respect to their coping strategies, social supports, opportunities, social control, and the disposition to engage in crime.

Broidy and Agnew (1997) assert that, while the GST can potentially account for the higher rate of male crime, it is also well suited to explain female crime. Specifically, GST argues that several types of strain may lead to female crime under specific circumstances. Central to this argument is the assertion that oppressed individuals may turn to crime in an effort to reduce their distress or to

cope with the negative emotions associated with it. As such, GST has much in common with perspectives that explain female crime in terms of oppression.

Feminist Theory

Feminist theorizing about female criminality is focused primarily on the patriarchal structure of society and consequent oppression of girls and women (Belknap & Holsinger, 1998; Doherty, 1998). Gendered attitudes and assumptions are seen to be at the root of women's relative disadvantaged structural, social, and economic conditions, relative to men. As such, it is argued that it is critical to acknowledge and understand the importance of gender differences in addition to the gender-related dynamics inherent in society (Covington, 2002).

These theorists stress the importance of contextualizing women's 'criminal' behaviours within their marginalized social caste. Accordingly, Steffensmeier and Allen (1998, cited in Covington, 2002) suggest that "profound differences" between the lives of men and women shape their disparate patterns of criminal offending. For instance, relative to men, women are at much greater risk of sexual abuse, sexual assault, and domestic violence. Feminist theorists view women's 'survival strategies' as the most common pathway to crime. For instance, Belknap and Holsinger (1998) identified a pattern of behaviour among girls and women, which often begins with childhood victimization. This, it is argued, could result in girls running away from home and possibly drug and alcohol abuse as a means of coping. In order for them to survive on the street, and to support their addictions, drug selling and prostitution ensues. Robbery by girls and women, again to survive and support substance abuse problems, may also occur.

Zaplin (1998) suggests that such cycles of events lead to emotional distress, low self-esteem (or even self-hatred), anxiety, depression, and aggressive/impulsive behaviours. The psychological-behavioural sequelae disable the development of 'healthy' empathic or caring attitudes towards the self or others, leading to crime and potentially violence. Feminist theorists suggest that, anywhere in this sequence of events, girls and women may be 'criminalized' for their survival strategies. Notably, this perspective is similar to revised strain theory, which suggests that stressful life events lead to negative emotions (e.g., frustration, anger), which leads to delinquency/ criminality, particularly if normative coping resources (e.g., parental, peer support) are unavailable (Katz, 2000).

Feminist theory also proposes alternative 'pathways' to female offending. For instance, Belknap and Holsinger (1998) point to research documenting how male batterers coerce or force their spouses into committing crimes such as selling drugs, robbery, and prostitution. Moreover, the authors argue that, although a small portion of girls and women become very violent, it "is hardly surprising given the extreme violence experienced in their childhoods and the inadequate systemic responses" (p.35).

To explain criminality by girls and women with no history of victimization, feminist theory posits that, in a culture where girls are devalued and sexualized, even those raised in loving and healthy homes are at risk of acting out (Pipher, 1994, cited in Belknap & Holsinger, 1998). For instance, Power-Belief theory (Dougherty, 1998) asserts that, within the oppressive dynamic of the hegemony, girls and women develop a matrix of beliefs about themselves, about their own

power, and about the legitimacy of the patriarchal order. The development of these beliefs represents the dynamics of oppression from which rule violating behaviours (crime) of females are manifest. Advocates of feminist theory cite numerous studies documenting the link between victimization and criminal behaviour for girls and women (Belknap & Holsinger, 1998). This is sometimes referred to as the 'blurred boundary' thesis which argues that women's offending is intimately linked to their previous victimization (Britton, 2000).

A major shortcoming of the feminist perspective is that the empirical supporting research can be considered correlational at best. A causal connection between oppression/ victimization and women's criminality has yet to be established. Additionally, it is clear that most women who have been oppressed and victimized do not end up in the criminal justice system. Finally, feminist explanations for men's are lacking. Accordingly, Britton (2000) aptly refers to men's overrepresentation as offenders as the "screaming silence" in feminist criminology.

Differential Association Theory

Differential Association theory (Sutherland, 1947; cited in Alarid, Burton, & Cullen, 2000) focuses on the relationships between an individual's associates, values, and behaviour. Rooted in the social learning perspective, differential association theory asserts that criminal behaviour is learned through interactions with other persons and that an individual becomes delinquent when there is an

excess of definitions favourable to violation of law over definitions unfavourable to violation of law.

Research has offered some support for the applicability of differential association theory to female offenders. Specifically, Alarid et al. (2000) used three differential association variables (individual definitions toward the law, others' definitions towards the law, and number of criminal friends) to assess the likelihood of criminal behaviour in men and women. Results supported the theory and revealed that all three differential association variables were significantly related to self-reported crime and violent crime. Moreover, the effect of criminal friends on participation in crime was similar for men and women.

Differential association theory accounts for gender differences in crime through the assertion that males are exposed to more procriminal associates and values, relative to females. This assertion has received some empirical support. Simons et al (1980) conducted a large-scale survey of Iowa youths (2,012 male and 1,913 female) to determine factors associated with self-reported crime. Differential association theory was tested through the use of a scale that asked participants to comment on the values of their friends and on the way their friends would be likely to react to various deviant acts. Results revealed that the strength of the relationships between independent variables and delinquency were approximately the same for males and females, and that the between-gender differences in crime could be accounted for by females' lower endorsement of definitions favourable to law violations.

Psychology of Criminal Conduct

The major characteristic of the Psychology of Criminal Conduct (PCC; Andrews & Bonta, 1998; 2003) is the emphasis upon individual behaviour. The PCC is derived from a general personality and social psychology perspective. This approach points to a Personal, Interpersonal, Community-Reinforcement (PIC-R) explanation for criminal behaviour and recidivism.

Social psychology clearly suggests that criminal behaviour is learned and that learning is contingent on rewards and costs. Accordingly, the PIC-R perspective recognizes both the motivational/reward aspects of behaviour as well as the control/cost aspect. As noted, the PCC has built its theoretical ideology on the basic principles of learning, which indicate that to change or influence behaviour, the rewards and/or costs associated with the behaviour must be altered. These rewards and costs are derived from four potential sources (personal, interpersonal, nonmediated, and other situational factors).

While the *source* of rewards and costs might vary, so too does the potential *influence*. The impact of rewards and costs on behavior depends upon personal, biosocial factors as well as the background density of rewards and costs. As such, the PCC suggests that a range of information is needed to predict and influence behavior. Most importantly, this information includes (though is not limited to) personal characteristics such as attitudes and personality and factors pertinent to the immediate social situation (e.g., antisocial peers, density of rewards for prosocial versus antisocial behavior).

The PCC concurs with sociological perspectives suggesting that broad-based societal/ structural factors are important considerations because they control the distribution of rewards and costs within a social system. However, the PCC further maintains that the understanding individual behavior is dependent upon immediate situational and personal factors. In doing so, the PCC is best described as a multi-dimensional approach that considers the role of biological, personal, interpersonal, familial, structural/cultural, individual and situational variables in criminal conduct.

While the PCC model includes individual variables that are commensurate with other theoretical perspectives (e.g. poor education, socio-economic status, psychological distress), it suggests that the crux of explanatory power can be attributed to four key constructs: antisocial cognitions, antisocial associates, a history of antisocial behaviour, and antisocial personality (Andrews & Bonta, 1998; 2003).

While the PCC suggests that the major correlates of crime are the same within class, race, and gender, the approach also lends itself well to explaining discrepant crime rates amongst diverse groups of offenders with disparate biological, social and psychological problems. Accordingly, Andrews and Bonta (1998; 2003) suggest that the principles of the PCC can be applied to any population. Similar to the GST, the PCC has the potential to explain gender differences in crime through examination of a complex interplay of factors, including gender differences in biological markers, social situation, and psychological determinants.

A review of the sociological, criminological, and psychological literature yields a multitude of risk factors associated with criminal behavior. Based on empirical evidence, psychological researchers (Andrews & Bonta, 1998, p.356) have categorized these variables into major and minor risk factors, as listed below.

Major risk factors:

- 1) Antisocial/ procriminal attitudes, values, beliefs and cognitive-emotional states;
- 2) Pro-criminal associates and isolation from anticriminal (pro-social) others;
- 3) Temperamental and personality factors conducive to criminal activity (e.g., psychopathy, weak socialization, impulsivity, poor problem solving and poor self regulation skills).
- 4) History of anti-social behavior evident from a young age in a variety of settings and involving a number and variety of different acts;
- 5) Familial factors that include criminality and a variety of psychological problems in the family of origin, and, in particular, low levels of affection, caring and cohesiveness, poor parental supervision and discipline practices and neglect and abuse;
- 6) Low levels of personal, educational, vocational and financial achievement, and, in particular, an unstable employment record.

Minor risk factors:

- 7) Lower class origins as assessed by adverse neighborhood conditions and/or low parental educational/vocational economic achievement.
- 8) Personal distress (e.g., low self esteem, anxiety, depression)

9) Biological/neurological indicators that have yet to be integrated in a convincing manner by way of either theory or the construction of practical risk/need assessment instruments.

The PCC further suggests that criminal activity can be predicted by identifying risk factors and that criminal recidivism can be mitigated by application of a number of principles for correction intervention, most notably the principles of risk and need.

There are two aspects to the *risk principle*. The first asserts that criminal behaviour can be predicted; the second suggests that, to reduce recidivism, level of treatment should be matched to the risk level of the offender. More specifically, intensive services should be provided to higher risk offenders, while lower risk offenders fare better with minimal or no intervention. The *need principle* distinguishes between criminogenic and non-criminogenic needs. Andrews and Bonta (1998) offer a clear definition: "Criminogenic needs are a subset of an offender's risk level. They are dynamic attributes of the offender that, when changed, are associated with changes in the probability of recidivism. Non-criminogenic needs are also dynamic and changeable, but these changes are not necessarily associated with changes in recidivism" (p.243). Fundamentally, the need principle asserts that in order to reduce recidivism, treatment services should target criminogenic needs.

While research has provided strong empirical support for the risk and needs principles (Andrews, Bonta, & Hoge, 1990; Andrews, Zinger et al., 1990; Lipsey,

1995), feminist scholars dispute their applicability to women, primarily because the research is based on samples of male offenders. Hannah-Moffat (2004) argues that “categorizations of risk/need factors persist because they characterize problems and define solutions in ways that fit with the dominant correctional culture and the power structure that narrowly and instrumentally defines risk and need” (p.204).

There is preliminary evidence to support the application of components of the PCC model to female offenders (Coulson, Ilacqua, Nutbrown, Giulekas, & Cudjoe, 1996; Dowden & Andrews, 1999; Gendreau, Goggin, & Smith, 1999; Law, 2004; Rettinger, 1998). Although the PCC theory has intuitive, ‘common-sense’ appeal, it can be criticized for being so broad in scope that empirical validation of the model in a comprehensive study would be untenable. Moreover, research supporting its application to women is still in its infancy.

Static versus dynamic risk factors

Consistent with PCC, 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 information 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 was either equal to or better than clinical prediction in every case. Since Meehl's (1954) initial review, numerous studies have emerged resulting in a series of narrative reviews (e.g., Dawes, Faust, Grove, & Meehl, 1996; 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, more than 80 years of 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.

Notably, 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

female 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.

As noted earlier, security classification policy for the Correctional Service of Canada mandates an assessment of the inmate in three risk areas: escape risk, risk to public safety and security, and institutional adjustment. The legislation clearly decrees that these three risk domains be assessed at both initial and re-classification, for both men and women, and regardless of whether the clinical or actuarial method is used.

Predicting Escape Risk

The research on predicting risk of escape from prison is virtually non-existent. Interestingly, the four studies on adult inmate escape that were located were all published at least 25 years ago (Hildebrand, 1969; Holt, 1974; Scott, Mount, & Duffy, 1977; Stump & Gilbert, 1972). Some authors suggest that, because escape is a relatively rare phenomenon, the utility of statistical prediction instruments is limited (Bench & Allen, 2003; Harer & Langan, 2001; Van Voorhis & Presser, 2001). Specifically, actuarial instruments developed to predict a criterion with a low base rate (generally less than 10%) tend to have inflated false-positive rates (Van Voorhis & Presser, 2001). As such, other/ additional methods must be used to assess escape risk.

Early research with male inmates noted that one of the best predictors of future escape was past escape (Hildebrand, 1969). A subsequent study by Holt (1974) supported those findings. Holt retrospectively compared the characteristics of female escapees ($n=81$) from the California Department of Corrections to the remaining institutional population. One third of the female escapees had a prior escape on record, relative to 17% of the general population. Moreover, women escapees were characterized as having more extensive criminal backgrounds, as well as more parole violations, and prior terms of imprisonment. Based on an analysis of the larger data set (male offenders), the author noted that "the characteristics of women escapees are surprisingly similar to those of men [i.e. their male counterparts]" (p.50).

Scott and colleagues (1977) compared MMPI scores and demographic factors of female adult felons who had escaped ($n=71$) to a random sample of women who had not escaped ($n=97$) but had been incarcerated in the same prison (Iowa Women's Reformatory) within the same time period (1960 - 1974). Supporting findings based on research with male offenders (Stump & Gilbert, 1972), Scott et al.'s (1977) results revealed that age was a very good predictor of escape. As expected, those who had escaped were significantly younger. In addition, Scott et al. (1977) noted that women who had escaped had greater histories of psychiatric problems, more juvenile imprisonments, and longer sentence lengths. Again, these results supported Holt's (1974) research on women escapees, suggesting that females at risk of escape have multi-problem

profiles and are more entrenched in the criminal lifestyle than their counterparts in the general female prison population.

While the few published studies in the area of escape risk offer some preliminary conclusions, as above, it is worth noting that the literature on predicting escape is lacking in both scope and in focus. Specifically the few existing studies have attended to static predictors. Regrettably, enquiries into the specific antecedents determining the *reasons* and *timing* of escape are lacking.

Predicting Risk to Public Safety and Security

The prediction of recidivism upon the inmate's release (or in the event of escape) is a proximal method of assessing risk to public safety and security. Unfortunately, this is a daunting task, given the low base rate of escape⁵ and re-offending, and the relative lack of research on predicting recidivism for women. Federally sentenced women are more likely to be granted discretionary release than their male counterparts and are more successful upon release from prison (Correctional Service Canada, 2001, 2002; Motiuk, 1998; National Parole Board, 2000; Shaw & Hannah-Moffat, 2000). Further, they are less likely to reoffend both generally and violently, regardless of release type (Correctional Service Canada, 2001; National Parole Board, 2000). Perhaps because of these data, the science of risk prediction has evolved as pertinent to male offenders only. There are currently many instruments being used for pre-release risk assessment in Canada.

⁵ CSC's Corporate Reporting System indicates an average of about two female escapes per year over the past 5 years. The federal female incarcerated population has remained consistently above 400 during that same period of time. This suggests an escape rate of less than one half of one percent for federally sentenced women.

Common measures include, though are not limited to: Statistical Information on Recidivism Scale (SIR; Nuffield, 1982), Level of Service Inventory – Revised (Andrews & Bonta, 1985), Historical Clinical Risk Scheme (HCR-20; Webster, Douglas, Eaves & Hart, 1997; Webster, Eaves, Douglas, & Wintrup, 1995), Violence Risk Appraisal Guide (VRAG; Harris, Rice, & Quinsey, 1993), and Psychopathy Checklist-Revised (PCL-R; Hare, 1991; 2003). Regrettably, none has been developed specifically for women, and female-specific validation studies are relatively rare and generally inconclusive.

There is reliable evidence that static variables, such as criminal history, early family factors, and age are appropriate for consideration in post-release risk prediction paradigms for women (Bench & Allen, 2003; Blanchette, 1996; Loucks & Zamble, 2000; Simourd & Andrews, 1994). However, the evaluation of dynamic variables is also paramount because they drive correctional programming and add considerable predictive power to assessment paradigms (Gendreau et al., 1996; Hardyman & Van Voorhis, 2004). Unfortunately, there is still no consensus regarding which dynamic factors should be incorporated into prospective models of risk assessment for women.

A recent study conducted by Moira Law (2004) demonstrated that a variety of dynamic factors, assessed at intake, release, and successive six month intervals (approximately), could reliably predict recidivism in released female offenders. The sample included 497 federally sentenced women offenders who had been evaluated through the offender intake assessment (OIA) process and were released before May 1999. The average follow-up period was 29 months, with a

range from five days to 6 years. The dynamic factors assessed included: employment/education, marital/family, associates, substance abuse, attitudes, community functioning, personal/ emotional orientation. Analyses revealed that higher assessed needs (at release) were associated with higher recidivism rates. The relationship was statistically significant for four of the need areas: marital/family relations, associates, attitudes, and substance abuse. The strongest associations were found for the 'attitudes' and 'associates' domains. In addition, Law's research showed that *re-assessment* of dynamic factors significantly enhances predictive accuracy. Using the assessment in closest proximity to the censored event (recidivism), all seven need domains accurately predicted post-release failure. This finding was not without precedent. Andrews and Wormith (1984) found that increases in criminal sentiments ('identification with criminal others') over a six month period were associated increased recidivism, while decreased identification with criminal others was associated with a lower recidivism rate.

While there are a few studies examining the relationship between employment/ education needs and female offender recidivism, results of these are inconsistent. With a large sample ($n=441$) of women offenders, Rettinger (1998) identified education/employment as an important contributor to the prediction of recidivism. Similarly, in their meta-analysis on the correlates of female delinquency ($n=34$ effect sizes), Simourd and Andrews (1994) found that 'educational difficulties' were moderately to strongly related to delinquent behaviour in girls. In contrast, Dowden and Andrews' (1999) recent meta-analysis revealed that programs

targeting school/work ($n=7$ effect sizes) for women offenders showed a non-significant *negative* correlation with reductions in recidivism. Finally, using a large representative sample ($n=136$) of released federal women offenders, Bonta et al. (1995) showed that employment was not significantly related to recidivism. Thus, while there is evidence to suggest that education/ employment variables predict recidivism in samples of male offenders (Gendreau, Goggin, & Gray, 2000), the results are still equivocal in regards to whether this domain is criminogenic for women.

Some authors have suggested that family issues are important treatment targets for female offenders in particular (Austin, Bloom, & Donahue, 1992; Bloom & Covington, 2000; Federally Sentenced Women Program; cited in Hannah-Moffat, 1997). A few studies support this contention. Based on a review of the literature, Leischied, Cummings, VanBrunschoot, Cunningham, and Saunders (2000) reported that dysfunctional family processes and family dynamics are instrumental in promoting and maintaining aggressive behaviour in adolescent girls. In their meta-analysis, Dowden and Andrews (1999) found that programs treating family process issues ($n=9$ effect sizes) yielded the strongest reductions in reoffending for female samples. A current meta-analysis by Dowden and colleagues examining 'gender-responsive' treatment targets⁶ for female offenders revealed that the only 'gender-responsive' treatment target that yielded a significant mean reduction in reoffending was family relationships ($\eta^2 = .33$; $p < .05$) (C. Dowden, personal communication, December 2, 2004).

In one of the few studies looking at family variables as criminogenic needs for adult females, Bonta et al. (1995) reported that, while having dependents was not associated with post-release outcome, single-parents showed significantly higher recidivism rates than those with partners. Rettinger's (1998) research results confirmed that parenthood was not predictive of recidivism, though contrary to findings by Bonta et al., the data also showed no association between single-parenthood and outcome. Results of Rettinger's study did suggest, however, family or marital conflict was predictive of violent recidivism. These results were not supported by data presented by Loucks and Zamble (1999). Based on a sample of 80 released federally sentenced women, these authors reported that family cohesiveness did not contribute to the prediction of recidivism.

There is thus a lack of consensus regarding whether family variables offer predictive value in estimating women's recidivism. It is suggested that conflicting research results might be derived from the use of diverse definitions and measures for the 'marital/family' construct. Still, while there is some disagreement between research findings, the greater evidence suggests that family variables warrant further investigation as a potential predictor domain for women.

'Antisocial associates' is routinely hailed as among the most potent predictors of recidivism (Andrews & Bonta, 1998; Andrews et al., 1999; Andrews, Zinger et al., 1990). Although the majority of the evidence is based on samples of male offenders, there is also good support for this as a dynamic predictor of female offender recidivism. Dowden and Andrews (1999) reported a strong positive

⁶ Other 'gender responsive' targets examined included: relationships (general), parenting, self-sufficiency, decision-making, mental health, general, family, and individual counseling, crisis

association between correctional programming in this area and reduced reoffending for women. Similarly, Simourd and Andrews (1994) noted that antisocial peers or attitudes comprised the greatest risk factor for female youths. Blanchette and Motiuk (1995) demonstrated that 'criminal associates' was a powerful predictor of violent recidivism for federal female offenders, and Rettinger (1998) replicated those results with a larger sample ($n=441$) of provincially-sentenced women.

Antisocial attitudes are also considered amongst the most valuable treatment targets to reduce recidivism in offender populations (Andrews & Bonta, 1998; Andrews et al., 1999; Andrews, Zinger, et al., 1990). Compared to their female counterparts, antisocial attitudes are more prevalent among male offenders (Motiuk, 1997). Notwithstanding, research evidence suggests that antisocial associates is predictive in nature, regardless of gender. Simourd and Andrews' (1994) meta-analytic results suggested that antisocial attitudes (and peers) are the most important risk factors for female youths. Dowden and Andrews (1999) demonstrated that targeting antisocial attitudes in treatment renders significant reductions in reoffending for female samples. Finally, Rettinger's (1998) study showed that antisocial attitudes/ peers predicted violent recidivism for women offenders.

The relationship between substance abuse and criminal activity is well documented: about two-thirds of offenders experience some degree of substance abuse problems (Boland, Henderson, & Baker, 1998). A recent review by Weekes, Moser, and Langevin (1998; cited in Dowden & Brown, 2002) concluded that there is a consistent positive association between substance abuse and various forms of

intervention, self-esteem, life skills, and job training.

general and violent criminal activity. This conclusion supports results of other studies and theoretical arguments which suggest that substance abuse is a promising treatment target (Andrews & Bonta, 1998; Andrews, Zinger, et al., 1990). However, there is no consensus in the literature regarding whether substance abuse holds predictive value for women offenders in particular.

Based on results of a large sample study with adult inmates (1,030 male and 500 female), McClellan, Farabee, and Crouch (1997) reported that substance abuse problems were stronger predictors of criminal activity for females than males. Rettinger (1998) found that substance abuse was predictive of both general and violent recidivism for women offenders. Similarly, results of a study by Dowden and Blanchette (2002) revealed that treated female substance abusers were significantly less likely to reoffend than their untreated counterparts.

Several studies, however, fail to support substance abuse as an appropriate predictor for women. For instance, results of Dowden and Andrews' (1999) meta-analysis suggested that substance abuse is not a valuable treatment target for women offenders ($n=5$ effect sizes). Similarly, Bonta et al. (1995) found that substance abuse was not predictive of post-release outcome for their sample of federal women offenders. In a recent meta-analysis on the role of substance abuse in predicting recidivism, Dowden and Brown (2002) reported that alcohol abuse was a weak predictor, while drug abuse was a moderately strong predictor for women offenders ($n=7$ effect sizes). However, Loucks and Zamble (1999) reported that drug abuse was not a significant predictor of recidivism in their sample ($n=80$) of released women offenders.

It is likely that methodological/ measurement issues obscure the relationship between substance abuse and criminality. Blanchette (1996) found that varying the definition/method of measurement for 'substance abuse problem' affected the data accordingly. Specifically, with a sample of 76 federally sentenced women offenders, analyses revealed that meeting diagnostic criteria for substance abuse disorder was not predictive of recidivism. However, when the variable was re-defined according to whether or not the offender had consumed alcohol/drugs prior to the commission of her original offence, 'substance abuse' was predictive of recidivism. This suggests that, of women offenders who meet diagnostic criteria for substance abuse or dependence disorders, there is a subset for whom the need is criminogenic. For other women offenders, their substance abuse problems do not represent a criminogenic need.

Measures of community functioning include leisure, accommodation, finance, support, deportment, and health. According to the results of a meta-analysis by Gates, Dowden, & Brown (1998), the research support for 'community functioning' as a criminogenic need is moderate, at best. The authors identified 20 studies that yielded 79 effect sizes pertaining to community functioning variables. An overall weighted mean effect size of .10 was obtained. While the majority of the effect sizes were based on studies of males, the second author disaggregated the data by gender and found 12 effect sizes in studies of exclusively women offenders. The weighted mean effect size of 'community functioning' variables for women only was .09 (C. Dowden, August 15, 2000, personal communication). While there is no clear evidence that the broad area of 'community functioning' is criminogenic for

women, there is a strong possibility that particular subcomponents of this domain might be appropriate treatment targets. For instance, Gates, et al. (1998) showed that 'leisure' produced a very strong effect size (.24). Rettinger (1998) reported that LSI-rated 'accommodation' was a strong predictor of both general and violent recidivism in her sample of 441 provincial female offenders. Unfortunately, there is currently not enough empirical data to reinforce these findings or to examine the predictive utility of other subcomponents of this domain for women.

Robinson, Porporino, & Beal (1998), noted that "the state of the literature on personal/emotional needs factors remains under-developed particularly with respect to the predictors of recidivism" (p. 77). The problem with the lack of literature is compounded when one considers female-specific research.

Nonetheless, several authors have suggested that female offenders have additional criminogenic needs, though more research is required to confirm the relationship of these variables to recidivism (Federally Sentenced Women Program, 1994; cited in Hannah-Moffat, 1997; Jackson and Stearns, 1995; Koons, Burrow, Morash, & Bynum, 1997; Leschied, Cummings, VanBrunschoot, Cunningham, & Saunders, 2000). Dynamic factors that are commonly cited as women-specific needs/predictors can be generally subsumed in the 'personal/emotional' domain, and include low self-esteem, past and current victimization, and self-injury/ attempted suicide.

Based on research evidence with male samples, most empiricists believe that self-esteem is not criminogenic (Andrews & Bonta, 1998; Andrews et al., 1990; Gendreau et al., 1996). Current meta-analytic research by Dowden and colleagues

suggests that programs targeting self-esteem for women yield no treatment effects (C. Dowden, personal communication, December 2, 2004). However, qualitative research by others has suggested that self-esteem is a promising treatment target for female offenders (Koons et al., 1997). Although relevant gender-specific empirical data are scarce, there is some evidence to support results by Koons and her colleagues. Simourd and Andrews' (1994) meta-analysis of the correlates of delinquency found an effect size of .10 for females and .09 for males ($n=14$ studies each) for a predictor domain labeled "personal distress". The applicability of these findings to self-esteem research, however, is limited; 'personal distress' also included effect sizes relating to anxiety and psychopathology. Larivière (1999) referenced several studies correlating low self-esteem to acts of violence against weaker, vulnerable victims (as in spousal abuse and child abuse). Moreover, he cited six studies linking low self-esteem *in women* to acts of child abuse (5 studies) and neglect (1 study).

Larivière's own research (1999) also supports this position. Using meta-analytic techniques, he reviewed 39 studies containing 80 effect sizes pertinent to self-esteem. Results showed a significant overall effect ($r=-.17$), suggesting a strong association between self-esteem and antisocial behaviour (general delinquency, aggression, and violence). Notably, the magnitude of the effect more than doubled ($r=-.38$) when the focus was narrowed to women offenders ($n=13$ studies). Larivière argues that this finding is not surprising, since women tend to express more guilt about criminal and aggressive behaviours, experience more anxiety about the harm they have caused, and demonstrate less support for the

use of violence (Campbell, 1995; cited in Larivière, 1999). The author cautioned, however, that female samples included in the meta-analysis were over-represented by subjects who had engaged in child abuse, possibly resulting in an increased effect size. Notwithstanding that, these results have important implications for treating women offenders; particularly those convicted of child neglect or abuse.

Compared to male inmates, female inmates report significantly more victimization experiences (McClellan et al., 1997). It is now incontestable that there is a strong correlation between experiences of abuse and criminal behaviour (Chang, Chen, & Brownson, 2003; Howden-Windell & Clark, 1999; Siegel & Williams, 2003; Weeks & Spatz-Widom, 1998), with the vast majority of women offenders having been victimized at some point in their lives (Blanchette, 1996; Owen & Bloom, 1995; Shaw, 1991a; 1991b). One study revealed self-reported victimization rates as high as 82% among Canadian women offenders (Task Force on Federally Sentenced Women, 1990). The alarmingly high incidence of abuse reported by the *Task Force* has been supported by independent Canadian research (Blanchette, 1996; Bonta et al., 1995; Tien, Lamb, Bond, Gillstrom & Paris, 1993). Data from U.S. female inmate samples is comparable, with about 60% reporting childhood victimization, and about 75% reporting experiencing abuse as an adult (McClellan et al., 1997). Thus, there is a well-documented link between victimization experiences, both in childhood and adulthood, and criminal behaviour in women. The exact nature of this relationship, however, remains nebulous.

Although research by Koons et al (1997) suggests that past victimization represents an important treatment target for women offenders, the authors do not

necessarily suggest that 'victimization' represents a good predictor of future criminal behaviour. Loucks (1995) examined the nature of the association between victimization experiences and antisocial behaviour in a sample of federally sentenced women inmates ($n=100$). Results of his study revealed that both pre-adolescent sexual abuse and post-adolescent physical abuse correlated positively with violent offending (both institutional and criminal). However, when the victimization factors were entered into a prediction equation with other variables, their value was negligible.

In an investigation into the predictors of recidivism among Canadian federally sentenced women, Bonta et al. (1995) reported that victimization experiences were not statistically predictive, with the exception of physical abuse as an adult. Importantly, those who had experienced physical abuse as an adult were actually less likely to reoffend than their counterparts. These findings were supported by Blanchette (1996), who, controlling for time at risk in the community, noted no relationship between victimization experiences and recidivism. Similar to findings reported by Bonta et al., a negative association ($r=-.24$) was reported between abuse in adulthood and criminal recidivism; the correlation approached statistical significance. Finally, results presented by Rettinger (1998) also suggest that abuse experiences are not statistically predictive of recidivism or of violent recidivism in female offenders.

Women in prison show much more frequent mental health problems than women in general, men in general and incarcerated men, including higher levels of depression, suicidal and self-injurious behaviour (Blanchette, 1996; Blanchette,

1997a; Loucks & Zamble, 1994). Studies of Canadian federal women offenders report that about 54-59% have engaged in some form of self-injurious behaviour such as head banging, cutting, burning, or slashing (Heney, 1990; Loucks, 1995). Rates of attempted suicide among federal women offenders are reported at 48% (Loucks & Zamble, 1994). Reported rates range from 20 to 71 percent, with the highest rates being recorded for those at maximum security, and the lowest rates recorded for those at minimum security (Blanchette, 1997b).

With a sample of 100 federal women offenders, Loucks (1995) examined the relationship between self-harm and criminal behaviour. The researcher used a broad definition of self harm, including any intentional action that resulted in physical harm to the self; he did not distinguish between actions that were intended to commit suicide and those that were for other reasons (e.g., attention seeking). Results revealed that 54% of the sample reported engaging in at least one incident of self-harm at some point in their life. Moreover, self-harm was found to be positively correlated with both criminal convictions ($r=.25$) and criminal violence ($r=.24$).

While the prediction research in this area is not copious, those studies that do exist suggest that self-injury/attempted suicide is a promising predictor for women. Bonta et al. (1995) found that self-injury was predictive of general recidivism (new convictions or parole revocations) in a sample of federal female offenders; 78% of those with a history of self-injurious behaviour recidivated, versus 25% of those with no such history. Blanchette and Motiuk (1995), reported that a history of attempted suicide was a potent predictor of violent recidivism ($r=.47$;

$p < .001$) in a sample of 81 federally sentenced women. Statistical analyses further revealed that, together with two other variables (expectations about incarceration, associates), a history of attempted suicide accounted for 45% of the variance in violent recidivism. These findings were later supported with a sample of provincially sentenced women offenders (Rettinger, 1998).

It is apparent from the current review that there is a lack of predictive research with samples of women offenders. Moreover, what little *is* available is often inconsistent and therefore collectively provides only modest insight into *which* particular variables are good predictors of risk to public safety and security for women offenders. As with the research for male offenders, a number of static variables offer promise in terms of predictive power. While there is preliminary evidence to suggest that 'antisocial associates' and 'antisocial attitudes' are valuable predictors for women, the status of other dynamic factors (e.g., education/employment, marital/family, substance abuse, community functioning, self-esteem, and self-injury) remains equivocal.

Predicting Institutional Adjustment

One important goal of security classification is the minimization of institutional misconducts. Thus, an important consideration in assessing the validity of a security classification model is the prediction of institutional misconducts and violent misconducts. To assist in this endeavour, most jurisdictions implemented objective security classification systems 10 to 20 years ago (Hardyman, Austin, & Tulloch, 2002; Solicitor General Canada, 1987; Van Voorhis & Presser, 2001).

However, like the tools used to assess risk to recidivism, they have been developed, and primarily validated, on samples of male inmates. In their review of classification models in 50 states, Van Voorhis and Presser (2001) noted that "none reported using any gender-responsive systems" (p.vi). Despite the failure to adequately include women in the development process, some states and the Correctional Service of Canada have recently assessed the validity of their security classification systems favourably with female samples (Blanchette & Motiuk, 2004; Blanchette et al., 2002; Hardyman et al., 2002).

Most security classification systems include at least some static variables; many initial classification models are heavily weighted with static items (Van Voorhis & Presser, 2001). There is general consensus that age is one of the best predictors of institutional misconduct among both men and women (Brennan & Austin, 1997; Buchanan et al., 1986; Cooper & Werner, 1990; Fernandez & Neiman, 1998; Gendreau, Goggin, & Law, 1997; Hanson, Moss, Hosford, & Johnson, 1983; Hardyman, 2001; Harer & Langan, 2001; Motiuk, 1991; Proctor, 1994). Notably, however, the parameters appear to differ by gender. While age is negatively correlated with adjustment problems for both genders, women seem to 'burnout' later than their male counterparts. More specifically there is preliminary evidence that the relative rate of institutional infractions decreases at an earlier age for males than for females (Brennan & Austin, 1997; Hardyman, 2001; Hardyman & Van Voorhis, 2004).

History of institutional misconducts has also been hailed as one of the best predictors of both men's (Buchanan et al., 1986; Gendreau et al., 1997; Hanson et

al., 1983) and women's (Blanchette et al., 2002; Hardyman et al., 2002) involvement in institutional misconducts and violent institutional misconducts. This is not surprising, as there is general agreement in the psychological literature that past behaviours are amongst the most promising predictors of future behaviour (Andrews & Bonta, 1998).

The research on 'escape history' as a static predictor of institutional misconduct has resulted in mixed findings. Blanchette et al. (2002) found that the 'escape history' item on the CRS was significantly correlated with both non-violent ($r=.12$, $p<.05$) and violent ($r=.18$, $p<.01$) institutional misconducts for Canadian federal female offenders at six-month follow-up. In contrast, Harer and Langan (2001) found that, while escape history was a significant predictor for men, this was not the case for women. Hardyman et al. (2002) found no relationship between escape history and institutional misconduct for either gender. Van Voorhis and Presser (2001) noted that, in many states, the 'escape risk' variable included in statistical classification instruments results in the overclassification of women. While fewer women than men escape a secure perimeter prison, women are (at least perceived as) more likely to walk away from a community residential setting to visit children, other family, or friends. Their data indicate that in some states, women who have 'walked away' and returned on their own received additional points on the "heavily weighted escape variables... In many cases, walkaways can be counted again as disciplinary infractions" (p. viii). In discussing their findings, the authors stress the importance in differentiating according to the type of escape in gender-responsive classification.

Research on the ability of other criminal history variables to predict institutional adjustment has yielded inconsistent findings. Some researchers suggests that prior convictions are not predictive of institutional misconducts (e.g., Hardyman et al., 2002), while others report significant correlations with both violent and non-violent institutional misconducts (Blanchette et al., 2002; Blanchette, 1996; Buchanan et al., 1986; Harer & Langan, 2001). There is general agreement that outstanding criminal charges seem virtually unrelated to institutional misconducts for both men (Cooper & Werner, 1990; Hanson et al., 1983) and women (Hardyman, 2001; Blanchette et al., 2002); Hardyman (2001) noted that this is particularly true at reclassification.

Some research suggests that female inmates incarcerated for violent offences have higher rates of disciplinary infractions (Blanchette, 1996; Hardyman, 2001) and violent disciplinary infractions (Blanchette, 1996; Harer & Langan, 2001) than their non-violent peers. Accordingly, Proctor (1994) noted a positive correlation between sentence length and poor institutional adjustment. However, Proctor's study did not control for time incarcerated; thus, the probability of receiving a disciplinary infraction was increased for those serving longer sentences. Controlled data from other studies indicate that risk factors related to the current offence (severity, sentence length) are either unrelated or negatively correlated with poor institutional adjustment for both men (Buchanan et al., 1986; Cooper & Werner, 1990; Fernandez & Neiman, 1998; Hanson et al., 1983) and women (Blanchette et al., 2002). These latter findings support theories of female crime suggesting that crimes of violence among women generally involve family members or occur within

the context of personal relationships. As such, the women do not pose significant risks to the safety and security of the institution (Hannah-Moffat & Shaw, 2001; Owen, 2002; Van Voorhis & Presser, 2001).

While static factors have demonstrated predictive value, they are unalterable, and thus insensitive to change over time. As such, most view the assessment of primarily static factors as appropriate at initial security classification, while reclassification should focus more on the assessment of in-custody behaviour and program progress to identify changes in institutional adjustment, security risk, and risk to the public (Buchanan et al., 1986; Harer & Langan, 2001; Luciani, 1997; Mackenzie & Buchanan, 1990).

As discussed earlier, 'antisocial attitude' is one of the best dynamic predictors of recidivism, regardless of gender. Gendreau and colleagues (1997) suggested that the same is true for predicting prison misconducts. In their meta-analysis, they noted a significant weighted mean effect size of ($Z+=.11$, $p<.05$) for 'antisocial attitudes' and concluded that it was a strong predictor of institutional misconducts. While Gendreau et al.'s meta-analysis included data from primarily (if not all) male offenders, the research with respect to women is less conclusive. In examining data for all females admitted to the Florida District of Corrections (plus a random sample of the female 'stock' population) in the year 2000, Hardyman (2001) found that antisocial attitudes and motivations were not statistically correlated with institutional adjustment. Other researchers noted that a measure of antisocial thinking - the Psychological Inventory of Criminal Thinking Styles (PICTS) - was moderately successful in predicting institutional adjustment for women offenders

(Walters & Elliott, 1999). These data suggest that the area of antisocial attitudes/cognitions is an area in need of more research for potential consideration in security classification scales for women.

Proctor (1994) noted that education level was one of the best predictors of poor institutional adjustment in his U.S. sample of 458 male offenders ($r = -.19$; $p < .01$). These findings supported earlier research by Motiuk (1991) and Stephen (1990; cited in Proctor, 1994), and were later replicated by Fernandez and Neiman (1998) with a large sample of over 13,000 male inmates.

The relevant research with respect to women inmates in particular has rendered mixed results. Recently, Harer and Langan (2001) found that education level was a positive significant predictor for both men and women; those without a high school diploma or general equivalency were more likely to engage in institutional violence. Similarly, Blanchette (1996) found that level of education was significantly negatively correlated with violent institutional misconducts within a sample ($n = 76$) of Canadian federal female offenders. Hardyman (2001) discussed education as a 'stability factor', included in actuarial security classification instruments in some states. Examination of the relevant data, however, yielded some interesting findings. While male inmates with at least high school education had lower institutional misconduct rates than their less educated counterparts, the opposite was true for female inmates. Based on these findings, Hardyman (2001) concluded that educational achievement might be a gender-specific risk factor. Clearly, more research is needed to assess the viability of education as a gender-specific risk factor.

Gendreau et al. (1997) noted a weak to moderate relationship ($Z=+.08, p<.05$) between employment status and prison misconducts. However, Motiuk (1991) reported that employment was a reliable predictor of institutional misconducts amongst male inmates, and Hardyman (2001) found that in the Florida district of corrections, 'work competency' and 'outside work assignment' were strong predictors of positive institutional adjustment for women, particularly at initial assessment.

Despite the fact that the majority of offenders experience substance abuse problems to some extent (Boland et al., 1998), there is relatively little research on its impact on institutional adjustment. Findings with respect to the relationship of substance abuse to institutional misconduct are mixed. In the meta-analysis by Gendreau and colleagues (1997), substance abuse was a relatively weak predictor ($Z=+.05, p<.05$) of institutional misconduct. Blanchette et al. (2002) noted no association for Aboriginal women, and a moderately strong correlation with non-violent misconducts ($r=.16; p<.01$) for non-Aboriginal women. However, earlier research by Blanchette (1996) yielded findings supporting substance abuse as a predictor: those women who had used alcohol or drugs in the commission of their admitting offence were more likely to engage in institutional misconducts and to be admitted to segregation during the course of their sentence. The issue of women's substance abuse, how it should be assessed, and its relative value as a predictor in security classification warrants further attention. Relative to males, females appear to have different paths to substance abuse and the relationship between substance abuse and offending may be discrepant as well (Covington, 1998).

Despite theoretical arguments that relationships (family, friends) constitute the driving force to women's lives (Covington, 1998), most security classification measures fail to consider this factor (Hardyman et al., 2002). While Gendreau and colleagues (1997) suggested that there was only a weak to moderate ($Z+ = .08$, $p < .05$) relationship between early family factors and institutional misconduct, a more proximal assessment of family factors might yield more promising predictors. With data from the Oklahoma Department of Corrections, Hardyman and Tulloch (2000, cited in Hardyman, 2001) found that women who were involved with a male co-defendant or family member had the highest rates of institutional infractions. Similarly, Gendreau et al. (1997) noted a strong association between interpersonal conflict ($Z+ = .14$, $p < .05$) and prison misconducts. Accordingly, Hardyman (2001) found that one of the two most common institutional risk factors identified by staff working with female inmates was relationships. Taken together, these findings suggest that women who are involved with negative peers or family in the community are likely to be relatively more aggressive and disruptive within the institution.

Feminist theorizing about female criminality is focused primarily on the patriarchal structure of society and consequent oppression of girls and women (Belknap & Holsinger, 1998; Doherty, 1998). These theorists identify a pattern of behaviour among girls and women, which often begins with childhood victimization. Loucks (1995) examined the nature of the association between victimization experiences and antisocial behaviour in a sample of federally sentenced female inmates ($n=100$). Results of his study revealed that pre-adolescent sexual abuse

and post-adolescent physical abuse correlated positively with institutional convictions and criminal violence. Similarly, Forcier (as cited in Farr, 2000) noted a correlation between women's prior abuse and maladaptive institutional behaviour. Feminist theory would argue that women's institutional (mis)behaviour can be attributed to a replication of the patriarchy within the microcosm of the prison environment. However, as suggested previously, there is no compelling support for this view.

As noted earlier, there is preliminary evidence that suicide/ parasuicide is a gender-specific risk factor for women. Because self-injury is often viewed as a disciplinary infraction within the prison environment (Fillmore & Dell, 2000), research linking it to institutional misconducts could result in spurious findings. It is worth noting, however, that one study suggested that correctional staff view suicidal tendencies as amongst the most important considerations in security reclassification for women, but not for men (MacKenzie & Buchanan, 1990).

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 et al., 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 female 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 2003. The new federal 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 female offenders. Although the issue of women's classification has long been the subject of concern, it has recently reached a crescendo. It has been four 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 female 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 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).

Many have argued that because most offender classification systems were originally designed for application to males, they reflect male behaviours and risk factors that have only a tenuous relevance to female offenders (Brennan, 1998; Brennan & Austin, 1997; Farr, 2000; Hannah-Moffat & Shaw, 2001; Hardyman, 2001; Harer & Langan, 2001; Morash et al., 1998; Shaw & Hannah-Moffat, 2000). Research by Funk (1999) indicated that separate risk assessment

instruments improve classifications of risk for females, and that female risk factors differ substantially from those of their male counterparts. Hardyman and Van Voorhis (2004) noted that classification models incorporating 'gender-responsive' variables (i.e., relationships, mental health, child abuse) were more strongly predictive of prison misconduct than the traditional (male-based model).

Some authors (e.g., Owen, 2002) emphatically stress the importance of considering the context of women's lives and their 'pathways' into the criminal justice system. For instance, the evidence suggests that women are considerably less violent than men, and that the circumstances in which they act violently differ; women's violence tends to be directed at a family member or intimate partner. As such, a classification system designed for men may not accurately gauge female risk for violence and therefore may result in the overclassification of female inmates (Brennan, 1998; Hardyman & Van Voorhis, 2004; Harer & Langan, 2001; Van Voorhis & Presser, 2001). Indeed, Hardyman's (2001) analysis of a large data set from the Florida District of Corrections showed that female offenders were routinely overclassified: the rate of institutional misconduct by medium security female inmates was similar to that observed for minimum security male inmates. The study by Van Voorhis and Presser (2001) presented results indicating that the review period for reclassification was often inappropriately long for women, who generally serve shorter sentences than their male counterparts. Their survey data also suggested that correctional administrators *want* classification models that better

support gender-responsive programming, moving women more quickly through the system (Van Voorhis & Presser, 2001)

Few would debate that there are clear and measurable differences between women by security level classification (Blanchette, 1997b). 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 et al., 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 over-classification 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 female 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 at least a few more years (Nafekh & Boe, 2003).

Development of the Security Reclassification Scale for Women (SRSW)

As noted earlier, measurable differences exist in static and dynamic risk factors between federally sentenced women by security level (Blanchette, 1997b). While the SRS was developed, validated, and field-tested with male offenders, a parallel process was undertaken to develop a security reclassification protocol for female 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). Importantly, 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 female 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 ($M_{age}=30.85$, $SD=7.41$) 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.

Gender-informed Security Re-classification for Women

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 decision rating beyond ($p<.01$) were retained (see Appendix C). 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.

Gender-informed Security Re-classification for Women

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 D.

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

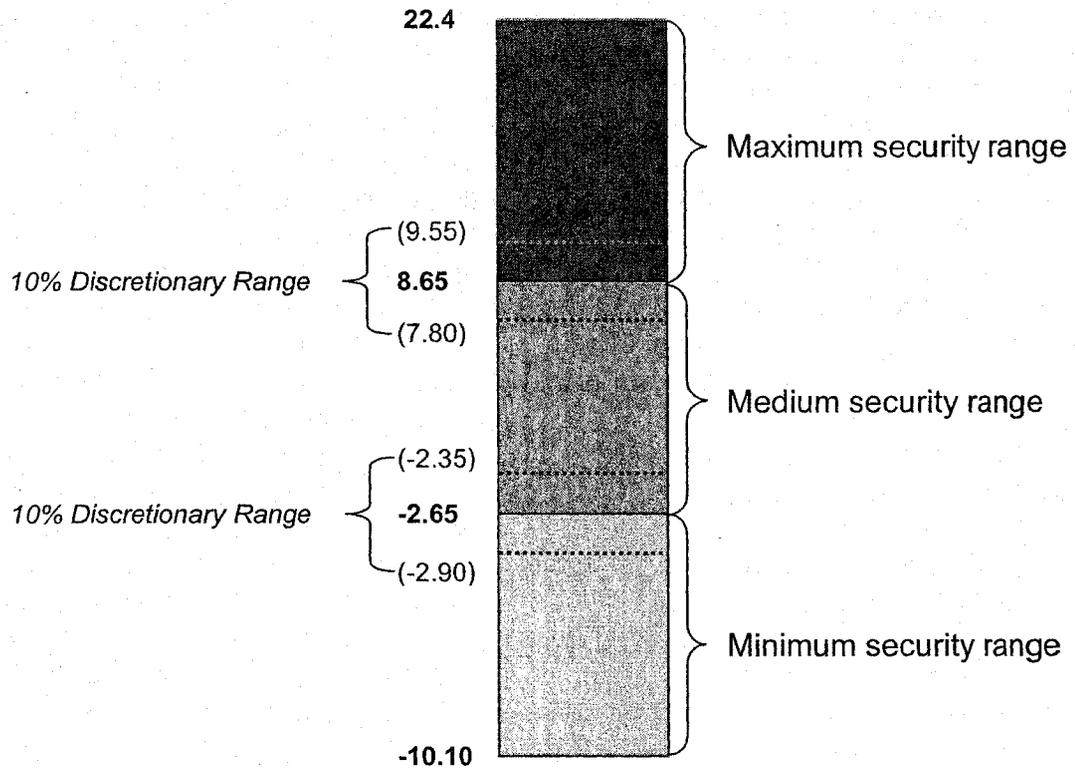
Item	Weight
1. Involuntary segregation	6.45
2. Correctional plan progress/ motivation	5.60
3. Serious disciplinary offences	5.50
4. Number of recorded incidents	5.00
5. Number of successful escorted temporary absences (ETAs)	2.55
6. Custody Rating Scale (CRS) incident history	2.55
7. Pay level - most 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 D, 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

Gender-informed Security Re-classification for Women

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 impact the security level review.

The Current Study

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 current study will use a longitudinal design to provide a national field test of a security reclassification scale for federal female offenders. Based on the review of the literature, several hypotheses are postulated:

Hypotheses

1. Given the literature suggesting that the actuarial method is often more liberal than the clinical method (Austin, 1983; Buchanan et al., 1986), it is expected that the SRSW will place more women at lower levels of security than the structured clinical method currently in use.
2. Given the literature suggesting greater predictive accuracy of actuarial techniques (Grove et al., 2000), it is expected that the SRSW will be more accurate in predicting institutional misconducts, discretionary release, and post-release recidivism than the structured clinical method currently in use.
3. Given that much of the literature suggests that scales developed for men contain items and weights that over classify women (Hardyman, 2001; Van

Voorhis & Presser, 2001), it is expected that application of the tool developed for male inmates (SRS) will result in more recommendations to place women at higher security relative to the SRSW.

4. Given that the SRSW was developed specifically for women (and may therefore be more salient/ gender-specific), it is expected that it will be relatively more predictive of outcome (institutional misconducts, discretionary release, post-release recidivism) than the scale used for male offenders (SRS).
5. Given that the SRSW was developed specifically for women (and may therefore be more salient/ gender-specific), it is expected that the SRSW will be more concordant with the actual security recommendation (as per the current reclassification method) than the SRS. If the study results support this hypothesis, the implication is that the gender-informed measure (SRSW) would result in fewer overrides relative to the male-derived tool (SRS).
6. Given the literature suggesting that dynamic factors are at least, or more predictive than static factors, it is expected that the addition of proximal, theoretically relevant (e.g., dynamic psychological) constructs to the SRSW will increase its predictive accuracy.

Method

Sample

The full sample comprised 580 consecutive security reviews for adult female 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 offender⁷. Complete data for the SRSW and the structured clinical review (OSL) were collected for the full sample ($n = 580$) to test the first two hypotheses. To test hypotheses 3, 4, and 5, a random subsample of 100 security reviews comprised the sample to run comparisons between the SRSW and the scale developed for male offenders (SRS). To test the last hypothesis, additional variables (see Appendix E, part 2B) were coded for a subsample ($n= 338$) of the most recent consecutive security reviews (i.e., all reviews from April, 2002-June 2003). To be clear- samples 2 ($n=100$) and sample 3 ($n=338$) are derivatives of the full sample ($n=580$), hereafter referred to as sample 1.

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.

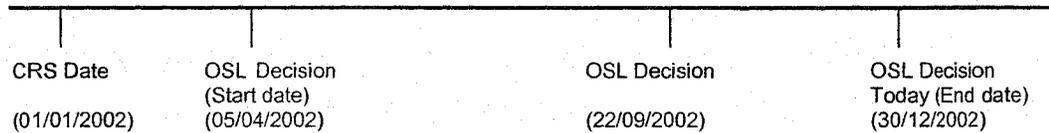
The '**end**' date of the review period was defined as the date of the current security review and OSL decision. The '**start**' date of the review period was defined as: the most recent OSL decision⁸ that occurred at least six months ago on the current term (i.e.: six months or more between start and end dates of review period). To clarify, a hypothetical example is provided: suppose that

⁷ The 580 security reviews included data for 323 individual women offenders.

⁸ This could include a CRS (initial) OSL decision.

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 four main measures/ data sources for the current study:

- 1) the Security Reclassification Scale for Women, described previously (see Table 1 & Appendix D),
- 2) the Security Reclassification Scale (SRS) developed for male offenders (see Appendix C),
- 3) 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 D) and
- 4) a comprehensive coding guide (see Appendix E). The coding guide was used to code file information pertaining to: demographic data, admitting offence(s), additional variables that could be related to security

classification criteria and the prediction of outcome, institutional misconduct data, and recidivism information.

Procedure

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 (see coding guide, Appendix E, parts 1 and 2A) by correctional staff⁹ (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 female 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 female OSL review also yielded a SRSW until the

⁹ 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 author/researcher at Correctional Service Canada's National Headquarters.

desired sample size was achieved.¹⁰ Subsequently, a research assistant, blind to the results of the SRSW and the regular security review, completed the SRS for a random subsample ($n = 100$; sample 2) of OSL reviews from the OMS database and file information.

The coding manual (Appendix E) was used to code all information for the second and third stages of the study. For a subsample of the most recent security reviews ($n=338$; sample 3), research assistants coded additional file information, including variables that are theoretically related to security classification criteria and the prediction of outcome (Appendix E, part 2B). These data were coded from a comprehensive review of the offender's file, and fall into six general categories: 1) attitudes/ institutional behaviour, 2) marital/ family relations, 3) interpersonal relations, 4) psychological/ psychiatric concerns, 5) suicidal/ self-injurious behaviour, and 6) other security risk issues (e.g., outstanding charges, preventative security concerns). Where relevant, these factors were coded for three points in time: a) ever, b) on current sentence, c) during the current review period. All research assistants were trained graduate students (Masters or Doctoral level) in the field of psychology or criminology. Each file required between two and five hours to code. To test reliability in rating estimates, the researcher (author) independently scored all items rated by the research assistants with a 10% stratified (by coder) random subsample ($n = 34$) of cases on all variables.

¹⁰ 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.

In the second phase of the study, automated file information was downloaded to code: 1) admitting offence information (Appendix E, part 3), and, 2) a variable follow-up on institutional misconducts and serious institutional misconducts (Appendix E, part 4). 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.

The third phase of the study involved the collection of information pertaining to release and post-release outcome: eligibility dates, release type, conditions of release (Appendix E, part 5), and post-release outcome (revocation, new offences: Appendix E, part 6). 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

Prior to proceeding with inferential analyses, data were examined and cleaned through a sequential multi-step process: 1) all variables were examined for data entry errors and missing data, 2) all continuous variables were then screened for univariate / multivariate outliers and normality of the distribution (skewness and kurtosis), 3) dichotomous and ordinal variables with extremely high response rates for any one response option (over 90%) were detected and excluded from higher level analyses, 4) remaining variables were screened for

multicollinearity, and 5) all remaining variables (coded by research assistants) were examined for inter-rater reliability using kappa coefficients for dichotomous/categorical variables, and intra class correlation coefficients for ≥ 3 level ordinal/continuous variables.

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 in: 1) override rates for the SRS versus the SRSW security level recommendations, and 2) SRSW versus 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 SRS versus the SRSW security level scores (i.e., continuous dependent variable). Subsequently, ROC curves were used to analyse the predictive accuracy of the SRS versus SRSW, and 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, 2) major misconducts, 3) revocation, and 4) new

offences, by SRSW security level recommendation (minimum, medium, or maximum). These analyses were replicated using the actual security level recommendation (OSL) as the independent variable, and again using the security level recommended by the men's scale (SRS) as the independent variable.

To test the hypothesis that the addition of proximal, dynamic psychological constructs would increase the predictive accuracy of the SRSW, stepwise forward) regression analyses was used to expand the SRSW with dynamic variables that meet criteria ($p < .10$; Hosmer & Lemeshow, 1989, cited in Tabachnick & Fidell, 2001) for entry into the model predicting staff OSL decisions. ROC analyses were then used to compare the predictive accuracy of the SRSW to the revised model for predicting institutional adjustment and post-release outcome.

Results

Data Screening

As mentioned, all variables were examined for data entry errors and missing data. There were no missing data for review start or end date, previous security level, or OSL recommendation. Only two cases had missing data for a variable that was required for the computation of the SRSW score and level: CRS incident history score. For those cases, the missing item score was replaced with a score of 0¹¹. Six of the 37 items coded by research assistants had missing data, to a maximum of 5 missing cases for any individual variable (less than 2% of the dataset). For those cases, the missing data were replaced with the overall means for each respective variable.

All continuous variables were then screened for univariate outliers and normality of the distribution (skewness and kurtosis). Outliers were recoded to ± 3 standard deviations of the overall group mean for their respective variables (Tabachnick & Fidell, 2001). See Appendix F for a description of the data transformations for each of the three samples: sample 1 ($n=580$); sample 2 ($n=100$), and sample 3 ($n=338$).

The presence of multivariate outliers was tested via Mahalanobis distance test. Alpha was set at 0.001 (Tabachnick & Fidell, 2001), and no multivariate outliers were detected.

¹¹ The overall group mean for this variable was 0.32 (SD=1.3). In practice, the scoring algorithm for the SRSW would insert a score of 0 for missing items because the mean score ± 1 SD always includes 0.

Dichotomous variables with extreme uneven splits (90% to 10% or worse) were dropped. Ordinal variables with extremely high response rates for any one response option (over 90%) were also dropped. See Appendix G for a frequency distribution of coded variables. Eight of the 37 variables coded by research assistants, and two of the nine (additional) variables coded by field staff were dropped from higher level analyses due to unacceptably low (or high) response rates.

For the remaining variables, an inter-correlation matrix was generated to screen for multicollinearity (correlations in excess of .80). One variable (cooperative attitude with institutional rules/ staff) was dropped because its correlation with two others (complies with rules/regulations, interacts effectively with others) was unacceptably high. See Appendix H for the inter-correlation matrix of predictor variables.

Finally, all remaining variables coded by research assistants were examined for inter-rater reliability using kappa coefficients for dichotomous/ categorical variables, and intra class correlation coefficients for >3-level ordinal/ continuous variables. Although the criterion was set liberally at .65, a number of variables were dropped from higher level analyses due to poor inter-rater reliability. See Appendix I for a complete breakdown of ICC and kappa coefficients.

After data screening was complete, a manageable set of predictor variables remained. These are listed in Table 2.

Table 2: Reduced Subset of Variables Coded from Files

Attitudes/ Institutional Behaviour

1. Antisocial attitude (general)
2. Complies with institutional rules/ regulations
3. Interacts effectively/ responsibly with others
4. Positive urinalysis/ refusal to test during review period*

Psychological/ Psychiatric Concerns

5. Anger/ Hostility
6. Negative Affect
7. Current drug /alcohol rating*

Suicide Attempts/ Self-injurious Behaviour

8. Self-injury/ attempted suicide during review*
9. Self-injury/ attempted suicide - ever

Other Security Risk Concerns:

10. Major source in distribution of contraband – during review period
11. New criminal code charges from incidents prior to/ during review period
12. Custody Rating Scale Escape History*
13. Number of assaults committed during the review period*
14. Caused a serious disruption during the review period*

Offence Information:

15. Admits guilt/ accepts responsibility for offence*
16. Degree of physical harm to victim(s) in current offence(s)
17. Used alcohol/ drugs prior to committing offence(s)
18. Victim(s) was/ were family members

Other Considerations:

19. Maintains regular positive community contact*
20. Age at security review

Note: * Coded by field staff. All others coded from files by research assistants.

Descriptive/ Offence Information for Sample 1

As noted, the full sample comprised 580 consecutive security reviews for adult female 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 female *inmate* population as a whole: women at maximum-security have their classification reviewed more frequently than those at either medium or minimum security¹². 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 3. About fifteen percent of the women were serving life sentences; excluding those, the

¹² 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.

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.¹³

Table 3: Demographic Overview of Sample 1

Variable	M (SD)	% (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 full sample is shown in Table 4.

¹³ About 42% of the sample of *security reviews* (242/580) was for Aboriginal cases.

Table 4: Current Offence Information for Sample 1

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)

Relationship of offender to victim(s)	% with (n/218) ^b
Victim(s) included partner/ spouse	9.6 (21)
Victim(s) included own child/ stepchild	0.9 (02)
Victim(s) included other family	5.1 (11)
Any family member	15.1 (33)
Victim(s) included friend/ acquaintance	28.9 (63)
Victim(s) unknown to offender (stranger)	52.3 (114)

Used alcohol/drugs prior to offence	
Yes	75.2 (164)
No / Not known	24.8 (54)

Degree of physical harm to victim(s)	
Not known or cannot assess	3.7 (08)
None	33.9 (74)
Minor injury	12.4 (27)
Serious injury	22.0 (48)
Caused death	28.0 (61)

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

^b coded for subsample (n=338 cases, representing n=218 women) of most recent security reviews.

Security Level Pre- and Post-Review for Sample 1

Most security reviews for women did not result in a change in security level. As shown in Table 5, 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 5: Pre- and Post-Review Security Levels of Sample 1

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 for Sample 1

Internal consistency

Item-to-total correlations were computed for each of the (standardized) nine scale items. Table 6 presents those results, as well as the mean and standard deviation (unstandardized) for each scale item. As Table 6

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

Item	<i>r</i>	<i>M</i> (<i>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 J. 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 (with the exception of one item) 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 ($\alpha = .05/3 = 0.17$)¹⁴, 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:

¹⁴ The Bonferroni correction was applied for all post-hoc pairwise comparisons.

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% 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

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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 cases¹⁵; about 4% of the entire sample. Table 7 displays the frequency of SRSW by SRSW2¹⁶ (discretion invoked) levels.

Table 7: SRSW by SRSW2 Security Level Recommendations for Sample 1

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 7, 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.

¹⁵ 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 recommendation.

¹⁶ 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

Ethnicity

Aboriginal cases were compared to non-Aboriginal cases on SRSW2 level recommendations. Security level recommendations (with discretion applied), by Aboriginal ethnicity, are presented in Table 8. Chi-square results indicated no statistically significant difference in SRSW level recommendation by Aboriginal ethnicity.

Table 8: SRSW2 levels by Aboriginal Ethnicity for Sample 1

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 8 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 ($\chi^2 = 9.3; p < .01$). Table 9 shows a frequency distribution of pre-review security level by Aboriginal ethnicity. Pairwise comparisons revealed that, while there was no significant difference at the minimum-security level, non-Aboriginal women were more likely to be classified (pre-review) as 'medium'

SRSW2 simply incorporates the 10% margin of professional discretion into its cutoffs regarding security levels.

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security ($\chi^2 = 9.2$, $p < .01$), and Aboriginal women were more likely to be classified as 'maximum' security ($\chi^2 = 5.7$, $p = .017$).

Table 9: Pre-review Security Level by Aboriginal Ethnicity for Sample 1

Pre-review Security Level	Non-Aboriginal % (n/338)	Aboriginal % (n/242)	Total % (n/580)
Minimum	15 (50)	19 (45)	16 (95)
Medium	63 (213)	50 (122)	58 (335)
Maximum	22 (75)	31 (75)	26 (150)

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 10.

Table 10: SRSW2 levels by Age Group for Sample 1

SRSW Recommendation	18-27 yrs.		28-35 yrs.		36-65 yrs.		Total	
	%	(n/173)	%	(n/214)	%	(n/193)	%	(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 11.

Table 11: SRSW2 Levels by Sentence Length for Sample 1

SRSW Recommendation	Life		> 3 years		≤ 3 years		Total	
	%	(n/49)	%	(n/110)	%	(n/164)	%	(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 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 than 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 12.

Table 12: 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

Concordance with OSL Decisions

Table 13 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 13: Post-Review Security Levels of Sample 1: 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 13, 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 14: Post-Review Security Levels of Sample 1: 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 14 suggest that, if the SRSW2 were to replace the current reclassification protocol¹⁷, 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 his or her overall assessed risk, need, and reintegration potential. However, since these measures are not intended to

¹⁷ 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.

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 potential¹⁸ from 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 ($r = -.37$).

¹⁸ 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.

SRSW: Descriptive Statistics for Sample 2

Security Classification Measures: Scores and Levels

Descriptive statistics for the security data for sample 2 are detailed in Appendix F, second page. As stated earlier, sample 2 ($n=100$) was created as a random subsample of the population of ($n=580$) security reviews for the period of study. It is therefore not surprising that the mean SRSW score is similar to that for sample 1; $M= 3.16$ ($SD=7.6$). Similarly, the average SRSW level recommendation was 2.01, which is again in the middle to lower bound of the medium-security range. The average recommended level with application of the men’s scale (SRS) was slightly lower, at 1.94.

Concordance with OSL Decisions

To compare the SRSW2 to the men’s scale (SRS), concordance tables were created for the subsample of cases ($n=100$) for which the men’s scale was applied. Table 15 provides a cross-tabulated frequency distribution of OSL and SRSW2 levels for sample 2.

Table 15: Post-Review Security Levels of Sample 2: OSL by SRSW2

Actual Offender Security Level (%)	SRSW2 Level Recommendation (%)			
	Minimum	Medium	Maximum	Total (%)
Minimum	9	4	0	13
Medium	16	36	5	57
Maximum	0	8	22	30
Total (%)	25	48	27	100

A cursory comparison of Tables 14 and 15 suggests that, while the distribution of SRSW2 levels is quite similar for samples 1 and 2, the actual offender security level (OSL) is different. Specifically, sample 2 has fewer offenders placed at 'minimum' security, and many (24%) more at 'medium' security. This has a measurable impact on the concordance rate. Recall that in the larger sample ($n=580$) the concordance rate was 72%. In sample 2, the concordance between actual security level and that recommended by the SRSW2 is only 67%. Once again, the Sign test revealed a significant difference in classification levels by SRSW2 versus OSL ($z=-2.44$ (two-tailed), $p=.015$). As shown in Table 15, there were 33 discordant cases. Relative to the OSL, the SRSW2 under-classified 24% of the cases, and over-classified 9% of the cases.

Given that the men's scale (SRS) also has a built-in 10% margin of professional discretion, concordance between the OSL and the SRSW2 was compared to that between the OSL and the SRS2 (i.e., SRS with discretion applied). Contrary to what was hypothesized, the concordance rate between actual classification and the scale developed for men was similar to that between actual classification and the women's scale. In fact, within this subsample, concordance was slightly higher at 70%. In total, there were 30 discordant cases. Relative to the OSL classification, the SRS2 under classified 25% of the cases, and over classified 5% of the cases. The Sign test revealed that the relative under-classification by the SRS2 was statistically significant ($z=-3.47$ (two-tailed), $p<.001$). The cross-tabulated frequency distribution is shown in Table 16.

Table 16: Post-Review Security Levels of Sample 2: OSL by SRS2

Actual Offender Security Level (%)	SRS2 Level Recommendation (%)			
	Minimum	Medium	Maximum	Total (%)
Minimum	9	4	0	13
Medium	10	46	1	57
Maximum	0	15	15	30
Total (%)	19	65	16	100

The data in Table 16 suggest that the men’s scale performs as well or better than the SRSW2 with respect to concordance with actual OSL decision. Current results suggest that the override rates would be approximately equal for both the SRSW2 and the SRS2.

Comparison of Table 15 with Table 16 suggests that, relative to the SRSW2, the SRS2 recommends fewer cases to both ‘minimum’ and ‘maximum’ security levels, placing the majority of women at ‘medium’. In terms of over or under classification relative to the actual OSL decision, the SRS2 is as liberal, if not more liberal, than the SRSW2.

The Sign test was used to compare the security levels generated by the SRSW2 to those generated by the SRS2. Notably, the scale levels were concordant for 79% of cases. Relative to the SRSW2, the men’s scale under classified 13% of cases, and over classified 8% of cases. Statistically, there was no significant difference between levels generated by the SRSW2 versus the SRS2.

Institutional Misconducts

Descriptive Statistics

All cases were followed up for institutional misconducts and major misconducts¹⁹ 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 full sample (sample 1: $n=580$), 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 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. More detailed descriptive statistics, disaggregated by sample, are shown in Appendix F.

¹⁹ 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.

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.

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 17, the most highly correlated predictor, regardless of the outcome measure, was involvement in institutional misconducts during the review period.

Table 17: 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 18. 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 18: 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 19.

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Table 19: 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 19) 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 20.

Table 20: 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 19 and 20 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.

Gender-informed Security Re-classification for Women

ROC Results: Assessing Predictive Accuracy of the Security Classification Indices on Institutional Outcome Criteria: SRSW2 and OSL.

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, (for sample 1), 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 21.

Table 21: ROC Results: Predicting Institutional Misconduct with Fixed 3 Month Follow-up for Sample 1.

Model: Full sample (n= 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 21, 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 22.

Table 22: ROC Results: Pairwise Comparisons between Prediction Models for Sample 1

Model Comparison: Full sample (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 Table 22, when predicting minor institutional misconduct, the AUC for SRSW2 level (.72) 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.

A three-month fixed follow-up was also used to compare the SRSW to the scale developed for men (SRS). Unfortunately, many of the cases in the original sample of $n=100$ were not available for three-month follow-up because they had either been reviewed again or released prior to the cutoff. The sample was therefore reduced to $n=55$. All analyses included in Table 21 were repeated with sample 2, and SRS levels (with and without discretion) and SRS score were

added as predictors for this second series of ROC analyses. Results are provided in Table 23.

Table 23: ROC Results: Predicting Institutional Misconduct with Fixed 3 Month Follow-up for Sample 2

Model: Sample 2 (<i>n</i> = 55/100)	AUC (95% CI)
<u>Major institutional misconduct</u>	
SRSW level	.73 (.47-.98)
SRSW level w/ discretion	.72 (.46-.99)
OSL level	.69 (.40-.99)
SRS level	.65 (.35-.95)
SRS level w/ discretion	.62 (.31-.92)
SRSW score	.78 (.59-.97)
SRS score	.67 (.41-.94)
<u>Minor institutional misconduct</u>	
SRSW level	.73 (.58-.89)*
SRSW level w/ discretion	.77 (.62-.92)**
OSL level	.74 (.57-.91)*
SRS level	.65 (.48-.83)
SRS level w/ discretion	.67 (.49-.85)*
SRSW score	.76 (.60-.92)*
SRS score	.70 (.54-.86)*

Note: * $p < .05$; ** $p < .01$. Any misconduct = minor misconduct, as all of those who perpetrated a major misconduct had also perpetrated a minor misconduct.

When the Bonferroni correction is applied to control for the familywise (Type 1) error rate ($\alpha/5 = .01$), the only significant predictor of minor institutional misconduct is the SRSW2 level (i.e., SRSW w/ discretion applied). None of the scale scores or levels achieved statistical significance in the prediction of major institutional misconducts, despite that fact that all SRSW-derived indices (and none of the others) yielded Areas Under the ROC Curve of over .70.

Notwithstanding that, no significant differences emerged in the pairwise

comparisons of the AUCs. Results of pairwise comparisons are shown in Table 24.

Table 24: ROC Results: Pairwise Comparisons between Prediction Models for Sample 2

Model Comparison: Sample 2 (n= 55/100)	z value
<u>Major institutional misconduct</u>	
SRSW level w/ discretion versus OSL level	0.38
SRSW level w/ discretion versus SRS level w/ discretion	0.81
SRSW score versus SRS score	1.10
<u>Minor institutional misconduct</u>	
SRSW level w/ discretion versus OSL level	0.52
SRSW level w/ discretion versus SRS level w/ discretion	1.34
SRSW score versus SRS score	1.00

Note: All ns

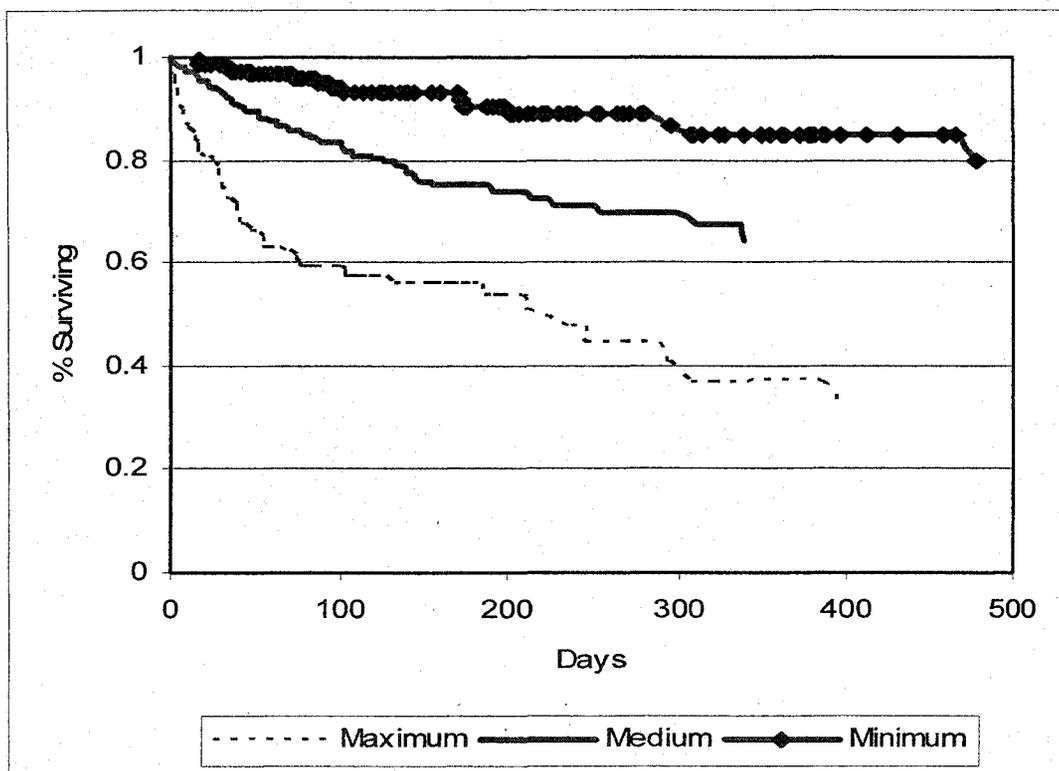
Results of Survival Analyses: Examining Time to Failure by Offender Security Levels
Generated by the Structured Clinical Method (OSL) and the SRSW2 for Sample 1.

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 25.

Table 25: Survival Analysis Examining Time to Failure (Sample 1) for Minor Misconducts by Security Level

Classification System	Security Level	N/580	N failed (%)	M survival time (days)	M 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 26 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.

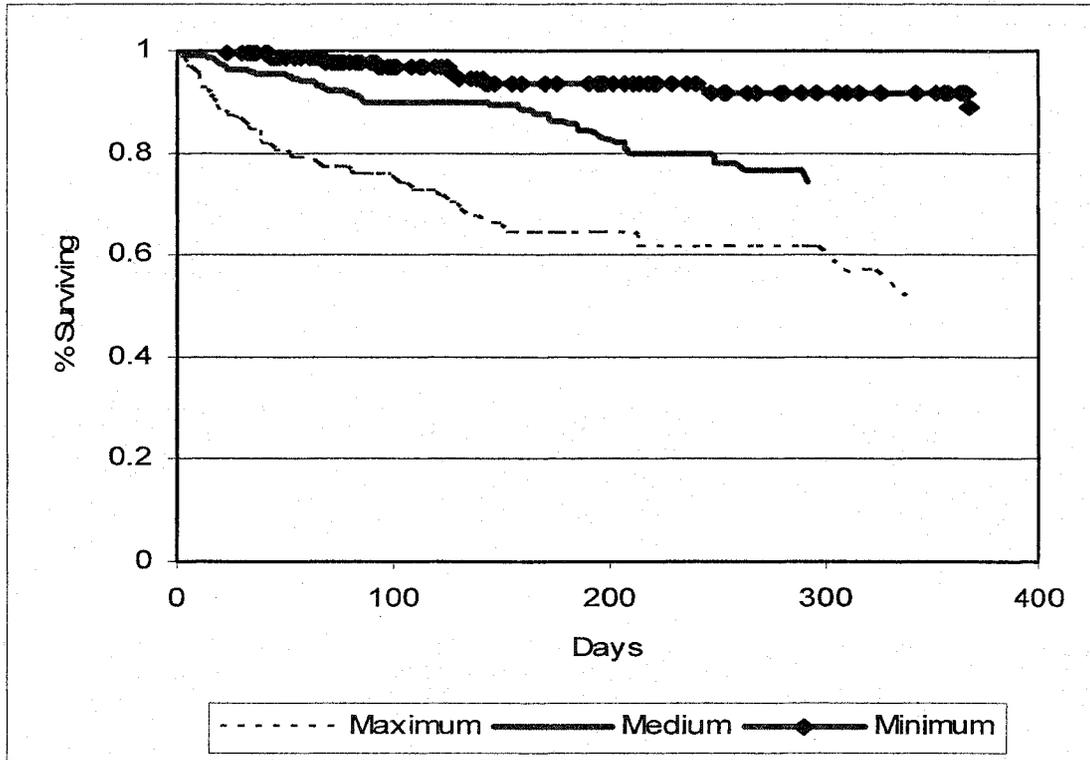


Table 26: Survival Analysis Examining Time to Failure (Sample 1) for Major Misconducts by Security Level within Two Classification Systems: OSL and SRSW2

Classification System	Security Level	N/580	N failed (%)	M survival time (days)	M 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.

Results of Survival Analyses: Examining Time to Failure by Offender Security Levels
Generated by the SRSW2 and the SRS2 for Sample 2

To test whether time to failure could be predicted by security levels generated by the men's scale (SRS2), Kaplan-Meier survival analyses were conducted for the subsample of $n=100$ cases (sample 2). Because the predictive data for the SRS2 was being compared to that of the SRSW2, and because the power of the analysis is somewhat sample-size dependent, survival curves were also re-generated for the SRSW2 for this smaller sample.

Findings indicated that security levels yielded by both methods could significantly predict time to minor misconduct. However, examination of the chi-square statistics suggests that the SRSW2 demonstrates superiority over the SRS2. Results are outlined in Table 27.

Table 27: Survival Analysis Examining Time to Failure (Sample 2) for Minor Misconducts by Security Level

Classification System	Security Level	N/100	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
SRS2	Minimum	19	0 (0)	111	---	8.9*
	Medium	65	16 (25)	120	52	
	Maximum	16	7 (44)	72	34	
SRSW2	Minimum	25	2 (8)	114	132	19.6****
	Medium	48	8 (17)	123	55	
	Maximum	27	13 (48)	87	29	

Notes: * $p < .05$, **** $p < .0001$; Wilcoxon test.

Survival analyses examining time to failure for major misconducts for sample 2 were less promising. Overall, they suggested that time to failure for major misconducts could not be predicted reliably by classification levels generated by either method. It is important to highlight, however, that the small sample and very low base rate (12%) of major misconducts within the sample may have precluded the ability to detect a difference. Results are shown in Table 28.

Table 28: Survival Analysis Examining Time to Failure (Sample 2) for Major Misconducts by Security Level

Classification System	Security Level	N/100	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
SRS2	Minimum	19	2 (11)	107	58	0.4
	Medium	65	8 (12)	136	97	
	Maximum	16	2 (13)	95	11	
SRSW2	Minimum	25	2 (8)	124	58	1.7
	Medium	48	6 (13)	130	121	
	Maximum	27	4 (15)	114	16	

Notes: all ns; Wilcoxon test.

Although the base rate of major misconducts, as shown in Table 28, was exceptionally low, it is notable that those uncensored cases rated 'maximum' security by either method engaged in major misconducts within about two weeks (on average) of their security review.

Release and Post-release Outcome

Descriptive Statistics: Discretionary Release

Rates of release, return, and reoffence are provided for samples 1, 2, and 3 separately in Appendix F. Of the 323 women in the original 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 type²⁰. The release profiles were similar for samples 2 and 3.

Analyses examining release type (discretionary vs. non-discretionary) by pre-release security classification revealed very significant between-group differences. Women rated 'minimum' 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. For the full sample, these findings held true regardless of classification method used (OSL or SRSW2). For the smaller sample (sample 2), only the SRSW2 levels discriminated those who received discretionary release. However, the same trend was evidenced for security levels generated by both the OSL and the SRS2. It is likely that a larger release sample would have yielded significant findings. Results of chi-square analyses are provided in Table 29.

²⁰ 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.

Gender-informed Security Re-classification for Women

Table 29: Discretionary Release Rates by Security Level Ratings

Sample 1: <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)	
Sample 2: <i>n</i> =52	% Granted	(<i>n</i> / <i>N</i>)	χ^2
<u>SRSW2 Rating</u>			
Minimum	60.0	(09/15)	8.0*
Medium	25.9	(07/27)	
Maximum	10.0	(01/10)	
<u>OSL Rating</u>			
Minimum	62.5	(05/08)	ns
Medium	31.3	(10/32)	
Maximum	16.7	(02/12)	
<u>SRS2 Rating</u>			
Minimum	58.3	(07/12)	ns
Medium	25.7	(09/35)	
Maximum	20.0	(01/05)	

Note: * $p < .05$; **** $p < .0001$

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. For sample 1, levels generated by the SRSW2 were compared to those generated by the regular OSL review (i.e.,

structured clinical method). For sample 2, levels generated by the SRSW2 were compared to those generated by the SRS2; the scale developed for male offenders. Results of all ROC analyses predicting discretionary release are shown in Table 30.

Table 30: ROC Results: Predicting Discretionary Release

Model: Sample 1 (<i>n</i> = 249/323)		AUC (95% CI)
<u>Discretionary Release</u>		
	SRSW level w/ discretion	.71 (.64-.77)****
	OSL level	.72 (.66-.79)****
Model: Sample 2 (<i>n</i> = 52/84)		AUC (95% CI)
<u>Discretionary Release</u>		
	SRSW level w/ discretion	.72 (.57-.87)**
	SRS level w/ discretion	.64 (.48-.81)

Note: ** $p < .01$, **** $p < .0001$

As shown in Table 30, 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.

Comparison of SRSW2 security levels to those yielded by the SRS2 suggests that the former is a better predictor of discretionary release. As shown in Table 30, the AUC was quite high, at .72. The AUC value for the SRS2 was

not statistically significant. The difference between these AUC values approached significance (two-tailed) at $z = 1.32$.

Descriptive Statistics: Post-Release Outcome

As noted earlier, of the 323 women in the original sample, 249 were released on or before the study end cutoff date (June 30, 2003). Recidivism data were collected up to February 26, 2004. Of the 249 women released, almost half ($n=113$; 45%) returned to custody before February 26, 2004. For those who did return to custody, the mean time at risk from release date to return date was 175 days (range: 22-805 days). Of the 113 women who did recidivate (return to custody), over one quarter ($n=31$) returned within three months. Half of those who returned did so within 155 days, and virtually all of those who returned (95%) did so within one year. For those who did not return to custody, time at risk was calculated as the time between release date and February 26, 2004. For that group ($n=136$), the mean time at risk was considerably longer, at 498 days (range: 31-1217 days).

Of the 249 women released, only 23 (9.2%) committed a new offence before February 26, 2004. The mean time at risk between release date and the date of the return (for the new offence) was 197 days (range: 28-805 days). Of those who did return with a new offence, the majority did so within six months. All but one of those returning with a new offence did so within one year. Overall, the mean time at risk for those who reoffended was considerably shorter than the

time at risk for those who did not commit a new offence ($M= 367$; range= 22-1217 days).

Groups of women rated, pre-release, as 'minimum' ($n=84$), 'medium' ($n=118$), and 'maximum' ($n=47$) security by the SRSW2 were compared on post-release time at risk. Mean times at risk were: 398 ($SD=328$), 330 ($SD=272$), and 321 ($SD=262$) days, respectively. Pairwise t -tests revealed no statistically significant differences in mean time at risk.

Correlations between Post-release Outcome Measures and SRSW items

The SRSW total score and the nine items comprising the SRSW were correlated with post-release outcome criteria, partialling out time at risk in the community. As shown in Table 31, total score and SRSW scale items were not highly correlated with post-release outcome criteria. No items were correlated with new offending, and only two of the nine were significantly associated with return to custody.

Table 31: Partial Correlations between SRSW Total and Item Scores and Post-release Outcome for Sample 1

Scale Item	Return to custody	New offence
1. Correctional Plan progress/ motivation	-.07	.02
2. Family contact during review (little/ negative)	.02	.11
3. Serious disciplinary offences during review	.03	.06
4. Number of recorded incidents during review	.16*	.08
5. Pay Level- at review end	-.08	.00
6. Involuntary segregation during review	-.03	.05
7. Successful escorted temporary absences during review	-.17**	.06
8. Unlawfully at large- ever	.07	-.03
9. Custody rating scale incident history score	.02	.01
Total SRSW Score	.00	.06

Note: * $p < .05$; ** $p < .01$; time at risk partialled out.

Between-group Differences in Recidivism Rates

To analyze between-group differences in post-release outcome, all women released prior to the study cutoff date of June 30, 2003 were included. As noted earlier, almost half (45%) of those women released returned to custody within the mean follow-up period of 351 days. Omnibus chi-square analyses showed no significant between-group differences, by SRSW2 level, in the rate of return to custody or in the rate of reoffending. Similarly, there were no differences by OSL security level in the rates of recidivism by either definition. Frequency distributions are shown in Table 32.

Table 32: Recidivism Rates by Pre-release Security Level for Sample 1

		Any return % (n/N)	New offences % (n/N)
SRSW2 Rating			
	Minimum	46.4 (39/84)	6.0 (5/84)
	Medium	42.4 (50/118)	10.2 (12/118)
	Maximum	51.0 (24/47)	12.8 (6/47)
OSL Rating			
	Minimum	40.3 (31/77)	5.2 (4/77)
	Medium	45.1 (55/122)	10.7 (13/122)
	Maximum	54.0 (27/50)	12.0 (6/50)

While there was a trend associating lower security to lower reoffence rates, the differences between groups did not achieve statistical significance with criterion set at $p < .05$.

ROC Results: Assessing Predictive Accuracy of the Security Classification Indices on Post-release Outcome Criteria.

First, Receiver Operating Characteristic (ROC) curves were generated for sample 1 to compare the predictive accuracy of the SRSW2 versus the OSL security level recommendations on post-release outcome criteria. Then, sample 2 was used to generate ROC curves in order to compare the predictive accuracy of the SRSW2 to the SRS2. Again for this series of analyses, two outcome measures were used: return to custody (any reason), and return with a new offence. Similar to the correlational and chi-square results, findings suggest that

the security classification indices have no predictive value with respect to post-release outcome. Results are presented in Table 33.

Table 33: ROC Results: Predicting Post-Release Outcome

Model: Full sample (n= 249/323)	AUC (95% CI)
<u>Return to custody: any reason</u>	
SRSW level	.52 (.45-.60)
SRSW level w/ discretion	.51 (.44-.58)
OSL level	.55 (.48-.62)
SRSW score	.54 (.47-.61)
<u>Return with a new offence</u>	
SRSW level	.60 (.48-.72)
SRSW level w/ discretion	.58 (.46-.70)
OSL level	.58 (.47-.70)
SRSW score	.58 (.46-.70)
Model: Sample 2 (n= 52/84)	AUC (95% CI)
<u>Return to custody: any reason</u>	
SRSW level w/ discretion	.55 (.39-.71)
SRS level w/ discretion	.55 (.39-.71)
<u>Return with a new offence</u>	
SRSW level w/ discretion	.52 (.30-.74)
SRS level w/ discretion	.57 (.36-.79)

Note: All ns

Results of Survival Analyses: Examining Time to Recidivism by Offender Security Levels

Generated by the Structured Clinical Method (OSL) and the SRSW2 for Sample 1

ROC analyses were followed up with Kaplan-Meier (product-limit) survival analyses to examine whether security levels generated by each method could

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discriminate by time-to-failure for post-release outcome measures. Similar to results generated by ROC analyses, no significant findings emerged. In short, offender security level delineated by the OSL or by the SRSW2 was not a good discriminator of post-release failure or of time to failure. Results of the Kaplan-Meier survival analyses are provided in Tables 34 and 35.

Table 34: Survival Analysis Examining Time to Failure (Sample 1) for Return to Custody by Security Level

Classification System	Security Level	N/249	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
Structured Clinical (OSL)	Minimum	77	31 (40)	405	178	1.9
	Medium	122	55 (45)	342	165	
	Maximum	50	27 (54)	291	190	
SRSW2	Minimum	84	39 (46)	398	191	0.7
	Medium	118	50 (42)	330	159	
	Maximum	47	24 (51)	321	182	

Note: All ns; Wilcoxon test.

Table 35: Survival Analysis Examining Time to Failure (Sample 1) for New Offences by Security Level

Classification System	Security Level	N/249	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
Structured Clinical (OSL)	Minimum	77	4 (5)	561	168	1.7
	Medium	122	13 (11)	508	169	
	Maximum	50	6 (4)	483	278	
SRSW 2	Minimum	84	5 (6)	571	223	1.9
	Medium	118	12 (10)	479	148	
	Maximum	47	6 (13)	530	275	

Note: All ns; Wilcoxon test.

Results of Survival Analyses: Examining Time to Failure by Offender Security Levels
Generated by the SRSW2 and the SRS2 for Sample 2

Kaplan-Meier survival analyses were run again for the subsample of $n=100$ cases (sample 2) to compare the SRSW2 to the SRS2 in predicting time to recidivism by security level. As with other analyses using return to custody and new offending as the outcome variables, no statistically significant results were obtained. Results are described in Tables 36 and 37²¹.

²¹ It is important to highlight that the survival analysis results shown in Table 37 should be interpreted with caution: survival analyses are less stable when the base rate for the outcome of interest is very low. As shown, only seven of the 52 women released reoffended within the follow-up period.

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Table 36: Survival Analysis Examining Time to Failure (Sample 2) for Return to Custody by Security Level

Classification System	Security Level	N/100	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
SRS2	Minimum	12	7 (58)	226	124	1.0
	Medium	35	17 (49)	226	158	
	Maximum	5	2 (40)	139	99	
SRSW2	Minimum	15	9 (60)	223	142	0.7
	Medium	27	12 (44)	210	148	
	Maximum	10	5 (40)	230	141	

Note: All ns; Wilcoxon test.

Table 37: Survival Analysis Examining Time to Failure (Sample 2) for New Offences by Security Level

Classification System	Security Level	N/100	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
SRS2	Minimum	12	2 (18)	338	100	0.8
	Medium	35	5 (14)	315	143	
	Maximum	5	0 (0)	315	---	
SRSW2	Minimum	15	2 (13)	346	100	0.1
	Medium	27	4 (15)	305	146	
	Maximum	10	1 (10)	323	133	

Note: All ns; Wilcoxon test.

Building on SRSW Scale Items: Can Predictive Accuracy be Increased?

To test the final hypothesis that the addition of dynamic psychological/ behavioural constructs to the SRSW would increase its predictive accuracy, a number of additional variables were coded from OMS files for 338 of the most recent (consecutive) security reviews. After extensive data screening, a manageable set of potential predictors (20) remained, as outlined in Table 2.

Correlating Predictors with Offender Security Level

The first step in the development of the expanded SRSW involved the correlation of all 'candidate' predictor variables with offender security level (OSL) determined by the structured clinical method. Table 38 shows the results of correlational analyses between potential predictors and security levels generated by both the SRSW2 and the regular structured clinical method (OSL).

Table 38: Correlations between Coded Variables and Security Levels

Variable	OSL Level	SRSW2 Level
1. Age at review	-.17****	-.20****
2. Antisocial attitude - review	.64****	.59****
3. Complies with institutional rules	-.65****	-.63****
4. Interacts effectively with others	-.70****	-.64****
5. Accepts responsibility/ admits guilt	-.32****	-.22***
6. New criminal code charges	.41****	.40****
7. Anger/ hostility problems	.66****	.63****
8. Negative affect	.21****	.28****
9. Self-injury/ attempt suicide- ever	.18***	.28****
10. Distributor contraband- review	.02	-.04
11. Degree of physical harm to victim	.04	-.04
12. Used alcohol/ drugs prior to current offence(s)	.05	-.03
13. Victim(s) were family members	-.14*	-.18**
14. Custody Rating Scale Escape History	.25****	.27****
15. Number of assaults committed - review	.44****	.41****
16. Caused a serious disruption- review	.43****	.42****
17. Positive urinalysis/ refusal - review	.04	.09
18. Self-injury/ attempted suicide during review	.25****	.35****
19. Current drug /alcohol rating	.12*	.19***
20. Regular positive community contact	-.35****	-.36****

Note: $n=338$; * $p<.05$; ** $p<.01$; *** $p<.001$; **** $p<.0001$; Items 1-13 coded by research assistants, items 14-20 coded by trained correctional staff.

Predicting OSL Decisions

As shown in Table 38, 14 of the 20 variables were correlated with OSL decisions at a probability level of $p<.001$. The next step in the development of the expanded SRSW consisted of running a stepwise (forward) regression analysis, forcing entry of SRSW score and allowing all (14) variables that met univariate significance at $p<.001$ to compete for variance in the prediction of OSL decision. Significance was set liberally at .10 due to the exploratory nature of the analysis and to allow for more variables to enter the prediction paradigm.

Results revealed that there were five additional variables that met significance ($p < .10$) for entry into the prediction model. Results of the stepwise regression analysis are shown in Table 39.

Gender-informed Security Re-classification for Women

Table 39: Summary of Stepwise Regression Analysis for Variables Predicting OSL
Decision: Sample 3 ($n=338$).

Variable	β	SE B	Model R ²
<u>Step 0</u>			
SRSW Score	.07	.00	.506
<u>Step 1</u>			
SRSW Score	.04	.00	.597
Interacts Effectively/ Responsibly	-.36	.04	
<u>Step 2</u>			
SRSW Score	.03	.00	.617
Interacts Effectively/ Responsibly	-.36	.04	
New criminal code charges	.22	.05	
<u>Step 3</u>			
SRSW Score	.03	.00	.633
Interacts Effectively/ Responsibly	-.28	.05	
Anger/ Hostility	.18	.05	
New criminal code charges	.21	.05	
<u>Step 4</u>			
SRSW Score	.03	.00	.643
Antisocial Attitude	.17	.05	
Interacts Effectively/ Responsibly	-.22	.05	
Anger/ Hostility	.15	.05	
New criminal code charges	.21	.05	
<u>Step 5</u>			
SRSW Score	.03	.00	.647
Antisocial Attitude	.16	.05	
Interacts Effectively/ Responsibly	-.22	.05	
Anger/ Hostility	.15	.05	
New criminal code charges	.20	.05	
Community Contact	-.09	.05	

Note: No other variable met the .10 significance level for entry into the model.

Expanding on the SRSW2: Creating the SRSW3

As shown in Table 39, almost 65 percent of the variance in OSL decisions could be accounted for by the SRSW score, and the five additional variables. As with the development sample, the simple summation method (Nuffield) was used to create item scores for each of the five variables. Those item scores were summed and added to the original SRSW score to create a new SRSW3 scale. The SRSW3 had a much broader range of scores than the original SRSW. The mean score was 3.0 ($SD=14.7$), with a range of -24.60 to 34.60. Finally, cutoff points were applied to the range of scores to yield the same (approximate) proportions of minimum (27%), medium (50%), and maximum (23%) security as the original scale. The SRSW3 items and weights are shown in Table 40, and the descriptive statistics for the SRSW3 are shown in Table 41.

Table 40: SRSW3 Items and Weights

Item	Weight
1. Antisocial attitude	8.15
2. Interacts effectively with others	7.10
3. Anger/ hostility	6.70
4. Involuntary Segregation	6.45
5. Correctional plan progress/ motivation	5.60
6. Serious disciplinary offences	5.50
7. Number of recorded incidents	5.00
8. New criminal code charges	3.30
9. Community contact	2.90
10. Number of successful ETAs	2.55
11. CRS incident history	2.55
12. Pay level- most recent	2.10
13. Ever UAL from TA, WR, or supervision	1.45
14. Family contact	1.30

Table 41: Descriptive Statistics for SRSW3 by Security Level

Security Level	%	(n/338)	<i>M</i> score	(<i>SD</i>)	Range of scores
Minimum	26.9	(91)	-15.4	(4.0)	-24.60 to -9.10
Medium	50.0	(169)	3.6	(6.5)	-9.00 to 15.45
Maximum	23.1	(78)	23.1	(5.2)	15.50 to 34.60

To examine reliability for the new scale, Cronbach's alpha was calculated, as well as the standardized item-to-total correlations, and inter-item correlations. Results suggested that the addition of the five new items to the scale provided a marked improvement in internal consistency. The alpha coefficient for the new scale was .84, compared to .69 for the original SRSW. Standardized item-to-total correlations were quite high; over .30 for all five new items. Table 42 provides a breakdown of standardized item-to-total correlations, and means for all variables with sample 3. Inter-item correlations for the SRSW3 are shown in Appendix K.

Table 42: Standardized SRSW3 Item-to-total Correlations and Descriptive Statistics for Each Item: Sample 3

Item (<i>n</i> =338)	<i>r</i>	<i>M</i> (<i>SD</i>)
Correctional Plan progress/ motivation	0.47****	.64 (2.0)
Family contact during review	0.30****	.23 (0.6)
Serious disciplinary offences during review	0.46****	.40 (2.0)
Number of recorded incidents during review	0.57****	.37 (2.0)
Pay Level- at review end	0.23****	-.66 (0.5)
Involuntary segregation during review	0.61****	1.5 (2.6)
Successful escorted temporary absences during review	0.27****	.12 (1.0)
Unlawfully at large- ever	-0.03	.01 (0.6)
Custody rating scale incident history score	0.42****	.36 (1.3)
Antisocial attitude	0.65****	.10 (2.5)
Anger/ Hostility	0.68****	.02 (2.6)
Interacts effectively/ responsibly with others	0.71****	.02 (2.8)
New criminal code charges	0.40****	-.07 (1.6)
Community Contact	0.37****	.05 (1.4)

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

Perusal of Table 42 suggests that there is just one item (unlawfully at large- ever) that is unquestionably very low with respect to internal consistency.

Moreover, the two other items with a moderately weak item-to total correlation are included in the original SRSW. The mean standardized item-to-total correlation for the SRSW3 was acceptably high, at $r = .44$. With the exception of item 8 (unlawfully at large- ever), inter-item correlations and other internal consistency coefficients suggest that the items in the SRSW3 are converging on a reliably homogeneous construct.

Predictive Validity of the SRSW3: Institutional Misconduct

To examine the predictive validity of the SRSW3 using institutional misconducts/ serious misconduct as the outcome of interest, first an institutional time at risk was calculated. As earlier, the time at risk was the time between the OSL review date and the next OSL review date or release date (whichever came first). Where there was no later OSL review and no later release date on file, the cutoff date of June 30, 2003 was used, because institutional misconduct data were collected up until that date.

The mean institutional follow-up period was 132 days. For those rated and placed in 'minimum' security ($n=66$), the mean follow-up was 136 days ($SD=109$). For those rated/ placed at 'medium' security ($n=169$), the follow-up was slightly longer, 146 days ($SD=107$). Once again, those rated 'maximum' security ($n=103$) had the shortest average follow-up in the institution: 113 days ($SD=62$). A t -test indicated that the difference in mean follow-up between those rated 'medium' and those rated 'maximum' was statistically significant ($t = 2.83$, $p < .01$). As such, ROC analyses required a fixed follow-up to control for differences in time at risk. As with the larger sample, a three-month fixed follow-up was used, reducing the sample size to $n=200$; those available for a three-month follow-up in the institution. Despite the reduced sample size, ROC curves have advantages over other predictive statistic measures because they are independent of the base rate and of the particular cutoffs chosen (Rice & Harris, 1995; Swets et al., 2000). Results of ROC analyses examining the predictive accuracy of the SRSW3, in relation to the SRSW2, are shown in Table 43.

Table 43: ROC Results: Predicting Institutional Misconducts with Fixed Three Month Follow-up for Sample 3

Model: Fixed follow up sample 3 (n= 200/338)	AUC (95% CI)
<u>Minor Misconduct</u>	
SRSW level w/ discretion	.69 (.59-.78)***
SRSW3 level	.68 (.59-.77)**
SRSW score	.71 (.63-.80)****
SRSW3 score	.72 (.64-.80)****
<u>Major Misconduct</u>	
SRSW level w/ discretion	.65 (.51-.79)*
SRSW3 level	.65 (.52-.80)*
SRSW score	.69 (.55-.82)*
SRSW3 score	.70 (.62-.79)*
<u>Any Misconduct</u>	
SRSW level w/ discretion	.67 (.58-.76)***
SRSW3 level	.67 (.58-.75)***
SRSW score	.70 (.62-.79)****
SRSW3 score	.71 (.62-.79)****

Note: * $p < .05$; ** $p < .01$, *** $p < .001$, **** $p < .0001$.

As shown in Table 43, the SRSW3 showed neither improvement nor loss in predictive validity over the SRSW2 with respect to institutional adjustment criteria. Moreover, this was true whether the score or the cutoffs/ level was used.

ROC analyses were followed up with Kaplan-Meier survival analyses to examine time to failure for both misconduct and major misconduct. Significant results, presented in Table 44, indicate that the SRSW3 is predictive of time to failure by security level.

Table 44: Survival Analysis Examining Time to Failure (Sample 3) for Misconducts by SRSW3 Security Level

Outcome Measure	Security Level	N/338	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
Minor	Minimum	91	6 (7)	129	71	40.1****
	Medium	169	33 (20)	118	67	
	Maximum	78	32 (44)	88	28	
Major	Minimum	91	4 (4)	131	57	20.6****
	Medium	169	16 (9)	130	83	
	Maximum	78	19 (24)	104	52	

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

Predictive Validity of the SRSW3: Discretionary Release and Post-Release Recidivism

As noted earlier, sample 3 comprised 338 security reviews (cases), for 217 women. Of those 217 women, 154 were released before the study end cutoff date of June 30, 2003. Forty percent of those ($n=62$) released were granted discretionary release in the form of day or full parole. Both the SRSW2 and the SRSW3 were excellent predictors of discretionary release, with Areas Under the ROC curves exceeding .70 and suggesting that these findings were very significant ($p < .0001$).

The time at risk in the community was calculated in the same manner as earlier with sample 1: it was the time between release and readmission (for those readmitted), or the time between release and February 26, 2004 for those not readmitted. The mean time at risk post-release was 243 days. Although

those rated (pre-release) as 'minimum' security ($n=41$) were out in the community for a longer average time ($M=259$ days, $SD=160$) than their 'medium' ($n=81$) and 'maximum' ($n=32$) rated counterparts ($M=247$, $SD=151$; $M=212$, $SD=169$, respectively), the difference was not statistically significant. ROC analyses examining the predictive accuracy of the original (SRSW2) and expanded (SRSW3) classification indices on post-release outcome were therefore generated for the full release sample ($n=154$). Results of ROC analyses for discretionary release and post-release outcome are shown in Table 45.

Table 45: ROC Results: Predicting Discretionary Release and Post-release Outcome for Sample 3.

Model: released women sample 3 ($n= 154/217$)		AUC (95% CI)
<u>Discretionary Release</u>		
SRSW level w/ discretion	.70	(.62-.79)****
SRSW3 level	.74	(.66-.82)****
SRSW score	.78	(.71-.86)****
SRSW3 score	.81	(.75-.87)****
<u>Return to custody: any reason</u>		
SRSW level w/ discretion	.54	(.44-.63)
SRSW3 level	.50	(.42-.60)
SRSW score	.52	(.42-.61)
SRSW3 score	.53	(.43-.62)
<u>Return with a new offence</u>		
SRSW level w/ discretion	.57	(.40-.75)
SRSW3 level	.61	(.46-.77)
SRSW score	.65	(.49-.82)
SRSW3 score	.67	(.52-.82)

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

Collectively, these results lead to some obvious inferences. While the security levels rendered by both the original SRSW, as well as the expanded version demonstrate excellent predictive accuracy with respect to institutional adjustment and discretionary release, they are still lacking with respect to post-release outcome. These findings were not surprising, given that they mirror those found with the larger sample. While it is worth noting that the AUC for the expanded scale (SRSW3) score in the prediction of reoffence was relatively high (.67; $p=.046$), it did not meet statistical significance with criterion set at ($\alpha=.05/4=.0125$).

Again, ROC analyses were followed up with survival analyses to examine time to failure for the two measures of recidivism: 1) return to custody, and 2) new offences. Results are shown in Table 46.

Table 46: Survival Analysis Examining Time to Failure (Sample 3) for Recidivism by SRSW3 Security Level

Outcome Measure	Security Level	N/154	N failed (%)	M survival time (days)	M survival time (uncensored)	χ^2
Any return	Minimum	52	21 (40)	241	132	0.4
	Medium	77	31 (40)	248	157	
	Maximum	25	10 (40)	231	114	
New offence	Minimum	52	2 (4)	337	100	2.0
	Medium	77	7 (9)	301	173	
	Maximum	25	3 (12)	306	98	

Notes: All ns; Wilcoxon test.

Consistent with ROC results, survival analyses results indicated that the SRSW3 showed no significant predictive accuracy with respect to recidivism.

Discussion

Overview

This study used a large sample of women's security classification reviews to field test a gender-informed security reclassification scale for federally sentenced women (SRSW)²². 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).

It is nonetheless important to underscore what this study is *not*. While an attempt was made to incorporate variables of relevance to various theoretical approaches, the admitted bias favors psychological theory and the examination of variables derived primarily from that perspective. The author underscores the importance of developing measures based on the population for which the measure will be applied - in this case, women. While some researchers have included women in their development samples, the data for this group are typically submerged within that for the larger male sample. As such, any gender differences that may have been discovered with a female-only sample are lost within the aggregate.

²² Hereafter, the SRSW refers to the SRSW with discretion applied.

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 consistency²³. 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 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 &

²³ 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

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 72% 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

unlawfully at large (includes escape, failure to report to parole officer).

findings are consistent with other research suggesting that actuarial methods are less conservative than clinical judgment (Austin, 1983; Buchanan et al., 1986).

Using a smaller subsample (sample 2; $n=100$), the SRSW was compared to the Security Reclassification Scale (SRS) developed for men to examine concordance with actual OSL decision. Given that the SRSW was developed specifically for women, it was hypothesized that it would be more concordant, relative to the men's scale. Results indicated that the concordance rate for the SRSW was similar to that for the SRS. The hypothesis was not supported, and, contrary to research by others using different classification measures (Hardyman & Van Voorhis, 2004), the results suggest that if the men's scale were implemented for use with women, the override rate would remain stable.

Given the research suggesting that scales developed for men contain items and weights that over classify women (Brennan, 1998; Harer & Langan, 2001; Van Voorhis & Presser, 2001), it was hypothesized that the tool developed for men (SRS) would result in more recommendations to place women at higher security, relative to the SRSW. Results did not support this hypothesis, as the Sign test indicated no statistical difference between security levels recommended by the SRSW2 versus the SRS2.

Perusal of the scale items for both the SRS and the SRSW offers a tentative explanation for these findings. Despite the fact that the development processes for each scale began with almost 200 'candidate' predictor variables, those that were found most predictive of OSL decisions were virtually the same for men and women. There is considerable overlap between the two systems, with the women's

scale containing only one item that is not included within the men's scale: family contact. This is consistent with other research that has identified variables such as marital status, family structure of the childhood home, and dysfunctional relationships as particularly pertinent in predicting risk and/or institutional adjustment for women (Hardyman & Van Voorhis, 2004).

The superlative importance of family factors, in both prediction and treatment paradigms for women is probably best explained by relational theory (Covington, 1998; 2002). In brief, relational theory has grown out of the early work by Jean Baker Miller (1976, cited in Covington, 2002), suggesting that women and men develop psychologically in different ways. Traditional theories of developmental psychology describe psychological growth as a progression from childlike dependence to mature independence; the ultimate goals would be to become a self-sufficient, individuated, autonomous self. Jean Baker Miller suggested that, while this perspective might adequately explain men's experiences, women's path to maturity is different. Essentially, she argued that women's primary motivation is to build a sense of connection with others. Women develop a sense of self/ self-worth through their relationships with others. Thus, it was argued that connection, not separation, is the guiding principal of psychological growth for women (Covington, 2002).

Covington (2002) suggests that relational theory is reflected in the "recurring themes of relationship and family seen in the lives of female offenders. Disconnection and violation, rather than growth-fostering relationships characterize the childhood experiences of most women in the correctional system" (p.129). As

such, women's offending might be more likely than men's to evolve out of a lack or loss of relationships that foster growth and development. This suggests, then, that women's prosocial/ adaptive connections with family and others might serve as protective factors against offending/ re-offending. As well, it would be argued that addressing relationship issues through treatment might decrease women offenders' maladaptive behaviours, such as institutional misconducts or post-release offending. Accordingly, research currently underway underscores the importance of treatment for women offenders' family relationships. A meta-analytic study by Dowden, McLaren, and Andrews is showing significant treatment effects (reduced recidivism) for women offenders who complete treatment targeting family relationships ($\eta^2 = .33$; $p < .05$) (C. Dowden, personal communication, December 2, 2004). However, it is also very important to highlight that theoretical perspectives, most notably the PCC, suggest that family factors are important treatment targets/ risk predictors for male offenders.

Despite the inclusion of gender-informed variables in the prediction paradigm, the final product (SRSW) is remarkably similar to the scale developed for male offenders. There are a couple of possible explanations for these findings. First, there is a good possibility that the relevant predictive variables do not differ substantially by gender. Rather, there appear to be subtle differences in the scale items - most notably, the men's scale contains a few variables (detention referral, psychological concerns, drug/ alcohol rating, CRS escape history, age) that did not emerge as predictive of OSL decisions for women. It will be the task of future research to determine whether there are true gender differences in the predictive

power of these items (in relation to risk, rather than OSL decisions), or whether their failure to predict for women is an artifact of extremely low (e.g. detention referral) or very high (e.g., psychological concerns) base rates for women. The scale developed for male offenders performed well with this sample of women. The 'gender-informed' scale showed a marginal improvement in terms of predictive accuracy, and resulted in a statistically equal distribution in terms of security level placement. The development of gender-informed or gender-specific measures is optimal. However, results of the current study suggest that the application of existing (male-based) risk assessment tools could be improved through item and/or cut-off re-calibration with a female sample.

The considerable item overlap between the men's and women's scales might also be explained by the empirical research methodology employed. As discussed, the development of the SRSW followed a methodology that paralleled that for the development of the men's scale. Despite the fact that gender informed the inclusion of additional variables, the research strategy was limited by the types of data available through offender file review, and it is acknowledged that the research findings are partially determined by the methodology chosen. For instance, very little information was available with respect to the context of the women's offences and/ or institutional misconducts. Although family/ community support was coded, there was no inquiry into the availability of emotional/ spiritual support. Finally, feminist researchers would recommend a greater emphasis on women's strengths/ capabilities, and the inclusion of

qualitative information, derived from interviews with the women themselves (Van Wormer, 2001).

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.

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.

Using the smaller subsample (sample 2, $n=100$), the predictive accuracy of the SRSW was compared to that of the men's scale (SRS). The requirement to fix the follow-up to three months (due to unequal times at risk between groups) produced a reduced sample of $n=55$. Nonetheless, the SRSW was still significantly predictive of minor misconducts. In contrast, the scale developed for men was not predictive of either minor or major misconduct. These results offered partial support for the hypothesis that the gender-informed SRSW would be relatively more predictive of relevant outcomes than the SRS.

Analyses revealed very significant differences, by security level, in decisions to grant discretionary release. Not surprisingly, those rated 'minimum' security were most likely to be granted parole, followed by those rated 'medium' security. This was true for security levels generated by either the structured clinical (OSL) method, or the SRSW2. There was virtually no difference in the AUC values for the prediction of discretionary release by the OSL versus the SRSW2. However, there may have been some inherent bias in favor of the OSL. Specifically, because the OSL rating also reflects the offender's actual placement, it is a reasonable expectation that the parole board would consider those women rated and placed at 'minimum' security more favourably than those at higher levels of security. Indeed, past research with male offenders has provided good evidence that offenders rated/ placed at lower security are more likely to be granted discretionary release, even when controlling for risk (Luciani, et al., 1996).

SRSW2 scale items were not highly correlated with post-release outcome criteria. No items were correlated with new offending, and only two of the nine were significantly associated with return to custody. It was therefore not surprising that ROC curves and survival analyses revealed no significant findings using recidivism (return to custody or new offending) as the outcome criteria. However, the significant between-group differences in discretionary release rates offer a potential explanation. Those who are assessed as higher risk at the outset (by whatever means) are significantly less likely to be released at the parole board's discretion. Moreover, interventions in the institutions and in the community are focused on the principles of risk and need and may have mitigated between-group differences in risk (Andrews & Bonta, 1998).

As noted earlier, as per Corrections and Conditional Release Act and Regulations, offenders are assigned the least restrictive security classification based on an assessment of factors related to institutional adjustment, escape risk and risk to public safety (in the event of escape). This presents a daunting task for classification staff, particularly with respect to women offenders. The base rate of escape is minimal; CSC's Corporate Reporting System (2004) indicates an average of less than two female escapes per year over the past five years. While no relevant statistic on the incidence of post-escape offending could be located, it can only be assumed that it is infinitesimal, given that less than one half of one percent of the federal female institutional population escapes each year. As such, prediction of risk to public safety (in the event of

escape) is fruitless. Thus, the current study used both discretionary release and post-release recidivism as proximal measures for risk to public safety.

None of the security classification measures (OSL, SRS, and SRSW) used for the current study adequately predicted recidivism. This was somewhat surprising, given that a recent study found that the CRS, an *intake* classification measure, could accurately predict post-release outcome for federally sentenced women (Blanchette & Motiuk, 2004). Nonetheless, it is important to highlight that the vast majority of evaluations of security classification systems do not even include recidivism as a measure of predictive validity (Hardyman & Van Voorhis, 2004; Harer & Langan, 2001; Proctor, 1994). The SRSW is not a panacea. It was built to provide a nationally standardized structure to clinical decisions regarding women's security classification. Perhaps it is not a realistic expectation that it predict post-release outcome. There are other measures that could be used for that purpose that are showing more promise for women offenders (e.g., Level of Service Inventory- Revised; Andrews & Bonta, 1995; Statistical Information on Recidivism Scale – Proxy; Nafekh & Motiuk, 2002).

Improving the predictive accuracy of the SRSW

The SRSW2 demonstrated accuracy in the prediction of institutional misconduct. Areas under the ROC curves were as large as, or larger than many reported in the criminal justice literature for the prediction of various outcome criteria (Andrews & Bonta, 1998; Harer & Langan, 2001; Quinsey, Harris, Rice, & Cormier, 1998). Despite those findings, the SRSW falls prey to a criticism that is

common to most actuarial tools: the items included cover a relatively narrow theoretical focus (Grove & Meehl, 1996). As such, one hypothesis of the current study was that the addition of theoretically relevant variables would significantly increase the predictive accuracy of the scale. Five variables were statistically selected, weighted, and added to the SRSW to create the SRSW3. These included: antisocial attitude, anger/ hostility, interpersonal interaction, new criminal code charges, and nature of community contact. Cutoffs were applied to yield the same distribution of 'minimum', 'medium', and 'maximum' security cases as the SRSW. Although the SRSW3 showed improved internal consistency, its predictive validity for institutional adjustment, discretionary release grants, and post-release recidivism was virtually identical to that of the original scale. The hypothesis, therefore, was not supported.

These results do not suggest that the predictive accuracy of the SRSW cannot be improved. Variables were statistically selected to maximize the prediction of the OSL decision, and then the new model was applied to the prediction of institutional adjustment and post-release outcome. This method was chosen because the SRSW was developed to provide a standardized structure to staff OSL decisions. It was assumed at the outset that those were the *correct* decisions.

While the ROC analyses confirmed that clinical offender security level (OSL) decisions are, in fact, accurate, there is also some evidence that staff consider irrelevant variables (e.g., escape history, sentence length, severity of current offence) in their classification decisions (Austin & Hardyman, 2004;

Solicitor General Canada, 1987). This was evident in the current study as well. It is noted that there were two items that were not predictive of any relevant outcome measures: 'pay level', and 'unlawfully at large- ever'. Perusal of the structured guidelines directing the current OSL review process suggests that these items would be significantly correlated with OSL decisions, because the policy directs consideration of these factors in the review process. More specifically, the policy guidelines governing the 'escape risk' rating mandate the consideration of past breaches of trust, including having a history of being unlawfully at large. Similarly, the guidelines mandate the consideration of "level of participation in institutional work or personal development programs" for the 'institutional adjustment' rating. Examination of the criteria determining offender pay level suggests that the inmate's pay level would be commensurate with her "level of participation in institutional work". As expected, post-hoc correlations between the SRSW scale items and OSL decisions indicated that all associations were statistically significant.

Since the SRSW was originally designed to predict OSL decisions, it makes sense that those items (pay level, UAL- ever) were statistically strong predictors of that outcome measure. However, subsequent analyses in the current study suggest that they are not associated with more relevant outcome criteria, such as institutional misconducts, major misconducts, or post-release outcome measures. Prospective research should re-examine the predictive relevance of these variables, with a view to replacing them with more potent

predictors that would increase the scale's internal consistency and remain consistent with policy guidelines.

In addition, the initial pool of 'candidate' variables for the construction of the SRSW3 was greatly reduced, excluding some important theoretically salient predictors (e.g. associates, marital/family adjustment, coping), because of poor inter-rater reliability. Prospective research should continue to examine variables that might be gender-specific predictors, as well as theoretically salient, dynamic attributes. More explicit rating criteria would increase item reliability, thereby increasing the pool of potential predictors. This is an important avenue of continued enquiry. The SRSW demonstrates very good predictive accuracy for institutional adjustment and discretionary release criteria. It is simple to use, and seven of the nine items can be automatically downloaded from the existing offender management system (OMS) automated database. Importantly, however, this simplicity comes at the cost of treatment utility. While the SRSW is efficient and objective, many relevant social, psychological, and clinical factors are not considered. Inclusion of more dynamic, treatment-target variables (such as education, associates) could help to motivate offenders to engage in such programs with a view to reducing their security classification (Brennan, 2004).

The current study did not examine the role of rapidly changing risk factors such as mood and situational triggers. Although theoretical perspectives such as the Personal, Interpersonal, Community-Reinforcement Perspective (PIC-R; Andrews & Bonta, 1998) emphasize the importance of criminal history, antisocial personality, criminal attitudes and criminal associates, more proximal

antecedents to institutional misconduct would likely include factors such as mood and situational triggers. While they will almost inevitably emerge as excellent correlates for women offenders, how such factors could be incorporated into an actuarial tool is yet to be determined. Perhaps they are best left as professional override considerations.

Study limitations and Directions for Future Research

The most obvious limitation of the current study was the loss of potential predictor variables through poor inter-rater reliability estimates. This was likely a function of the use of file review information through CSC's automated offender management system. Coders noted that the same data (e.g., psychological problems, antisocial attitudes) could be located from various (though inconsistent) locations within offenders' files, and those data were often contradictory. The factors and variables considered through the Offender Intake Assessment (OIA) and re-assessment processes (and therefore available through OMS) are informed primarily by the PCC. As discussed, the risk-needs research has provided ample support for the inclusion of these variables (e.g., substance abuse, marital/family factors, education/ employment) in both prediction and treatment paradigms, albeit principally for male offenders (Andrews & Bonta, 2003). Notwithstanding that, the limitations to the database are noted, including: inconsistency of data as various staff complete a range of file information, limited variability in rating variables (most items rated dichotomously or on a four-point scale), and lack of clear behavioural anchoring

criteria for ratings. A better strategy would entail the selection of a few theoretically relevant dynamic variables that could be measured through another source, such as offender interview, pencil-and-paper tests (e.g., self-esteem scales, criminal sentiments scale), or structured professional judgment.

Education could not be reliably coded (dynamically) through the file review process so was excluded from the current study. However, some authors have suggested that educational attainment was a strong predictor of violence-related misconduct for both men and women (Harer & Langan, 2001). As mentioned, inclusion of educational level in a reclassification paradigm would provide incentive for offenders to engage in educational programs.

The current study was also limited by the relatively small samples for the predictive validity components of the research. In particular, the requirement to fix the follow-up period to three months may have seriously impacted results comparing the men's scale (SRS) and the SRSW. Confidence in the current findings will be bolstered by replication studies using larger samples.

It was beyond the purview of the current study to examine the causes/etiology 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 female 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

The results of the current study suggest that the best risk predictors for institutional adjustment criteria might differ somewhat from the best predictors of post-release outcome for women. More research will be required to confirm this conclusion, as 'antisocial associates' and 'antisocial personality' were not reliably coded here. While one could argue that the base rate of reoffence for women is negligible (and therefore prediction is of questionable value), the same is not true of the return (revocation) rate. Indeed, almost half of those released in the current study did return to custody within the follow-up period. The ability of the various security classification measures (SRSW, OSL, and SRS) to predict that outcome was poor.

Prediction of post-release risk for federally sentenced women continues to present a great challenge for researchers and practitioners. To date, testing of measures that are routinely applied specifically for that purpose (e.g. SIR scale, PCL-R) in male populations has yielded unconvincing results for the application to women (Bonta et al., 1995; Salekin, Rogers, Ustad, & Sewell, 1998). Given that purpose-specific tools show modest predictive ability with women, it was not

surprising that security classification measures, intended for an alternative purpose, show little predictive power.

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. The development process to expand the SRSW (creation of the SRSW3) suggested that attitude, interpersonal interactions, and anger/ hostility were amongst the best additional variables for inclusion in the scale. Notably, these correspond appropriately with the PCC, which suggests that antisocial attitudes, antisocial associates, and antisocial personality are amongst the best validated correlates of criminal past and predictors of criminal future (Andrews & Bonta, 1998).

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). While some of the items on the men's scale were not adequately predictive for women (e.g., detention referral, age, drug/ alcohol rating), there was only one item on the women's scale that appears as a truly gender-specific security classification variable: family contact. However, the PCC suggests that 'familial factors' are amongst the major risk predictors for criminal conduct/ recidivism, which implies that it applies to men as well. Nonetheless, while the SRSW includes 'family contact' in its scoring paradigm, the men's SRS does not. Since security classification is purpose-specific risk assessment, there is a good possibility that family factors are more important to the prediction of women's institutional adjustment, relative to men's.

The current study has resulted in some 'lessons learned' that should be applied to future research on tool development for women. First, the conglomerate of initial 'candidate' predictor variables should be more explicitly informed by various theoretical perspectives *in addition to* a review of the empirical and qualitative literature, information derived from experts, staff *and* the

women themselves²⁴. This would provide for a markedly richer and more defensible pool of independent predictor items.

While it is acknowledged that the SRSW was constructed to provide a standardized, structured approach to staff decision-making, it would also be worthwhile to compare the best predictors of staff decisions to the best predictors of an alternate outcome measure- such as institutional misconduct. The weights and items on the SRSW may have been somewhat different if an alternative dependent variable had been chosen at the outset.

Taken together, 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.

²⁴ Research by McDonagh (1999) employed a qualitative methodology and interviewed a large proportion of women in maximum-security. Results suggested that women in maximum-security need to be provided more information with respect to why they are classified as such, and how they could reduce their security classification.

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 female 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 would 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 would 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 unequal 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 could begin to fulfill this need, continued research, with a view to re-validating, refining, and expanding the tool is paramount.

References

- Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology*, 30, 47-85.
- Alarid, L.F., Burton, V.S., & Cullen, F.T. (2000). Gender and crime among felony offenders: assessing the generality of social control and differential association theories. *Journal of Research in Crime and Delinquency*, 37, 171-199.
- Alexander, J. (1986). Classification objectives and practices. *Crime and Delinquency*, 32, 323-338.
- Andrews, D. A. (1982). *The Level of Supervision Inventory (LSI): The First Follow-up*. Toronto: Ontario Ministry of Correctional Services.
- Andrews, D.A., & Bonta, J. (2003). *The Psychology of Criminal Conduct*, 3rd Ed.. Cincinnati: Anderson Publishing Co..
- Andrews, D.A., & Bonta, J. (1998). *The Psychology of Criminal Conduct*, 2nd Ed.,. Cincinnati: Anderson Publishing Co..
- Andrews, D.A., & Bonta, J. (1995). *LSI-R: The Level of Service Inventory-Revised*. Toronto, Ontario: Multi-Health Systems.
- Andrews, D.A., Bonta, J., & Hoge, R.D. (1990). Classification for effective rehabilitation: Rediscovering psychology. *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D.A., & Wormith, J.S. (1984). *Criminal sentiments and criminal behaviour*. Programs Branch User Report. Ottawa: Solicitor General Canada.

- Andrews, D.A., Zinger, I., Hoge, R. D., Bonta, J., Gendreau, P., & Cullen, F. T. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis. *Criminology*, 28, 369-404.
- Arbour, L. (1996). *Commission of Inquiry into Certain Events at the Prison for Women in Kingston*. Ottawa, Ontario: Public Work and Government Services Canada.
- Auditor General Canada (2003). Correctional Service of Canada- Reintegration of Women Offenders. <http://www.oag-bvg.gc.ca/domino/reports.nsf/a1b15d892a1f761a852565c40068a492/b0bc05efe66acea085256cfb004a3e5e?OpenDocument>. Retrieved from World Wide Web November 16, 2004.
- Austin, J. (1983). Assessing the new generation of prison classification models. *Crime and Delinquency*, 561-576.
- Austin, J. (1986). Evaluating how well your classification system is operating: A practical approach. *Crime and Delinquency*, 32, 302-322.
- Austin, J., Bloom, B., & Donahue, T. (1992). *Female Offenders in the Community: An Analysis of Innovative Strategies and Programs*. Washington, DC: National Institute of Corrections
- Austin, J., & Hardyman, P. L. (2004). *Objective Prison Classification: A Guide for Correctional Agencies*. Washington, DC: National Institute of Corrections (Accession Number 019319).
- Baird, S. C. (1981). Probation and Parole Classification: The Wisconsin Model. *Corrections Today*, 43, 36-41.

- Belknap, J., & Holsinger, K. (1998). An overview of delinquent girls: How theory and practice have failed and the need for innovative changes. In R.T. Zaplin (Ed.), *Female Offenders: Critical Perspectives and Effective Interventions* (pp.31-64). Gaithersburg, Maryland: Aspen Publishers, Inc..
- Bench, L.L., & Allen, T.D. (2003). Investigating the stigma of prison classification: An experimental design. *The Prison Journal*, 83, 367-382.
- Blanchette, K. (1996). *The Relationship between Criminal History, Mental Disorder, and Recidivism among Federally Sentenced Female Offenders*. Unpublished masters thesis, Carleton University, Ottawa, Ontario, Canada.
- Blanchette, K. (1997a). *Maximum-security Female and Male Federal Offenders: A Comparison*. Research Report #R-53. Ottawa, Ontario: Correctional Service of Canada.
- Blanchette, K. (1997b). *Risk and Need Among Federally Sentenced Female Offenders: A Comparison of Minimum-, Medium-, and Maximum-security Inmates*. Research Report #R-58. Ottawa, Ontario: Correctional Service of Canada.
- Blanchette, K., & Motiuk, L. L. (1995). *Female Offender Risk Assessment: The Case Management Strategies Approach*. Poster presented at the Annual Convention of the Canadian Psychological Association, Charlottetown, Prince Edward Island.
- Blanchette, K., & Motiuk, L.L. (2004). Taking down the straw man: A reply to Webster and Doob. *Canadian Journal of Criminology and Criminal Justice* 46, 621-630.

- Blanchette, K., Verbrugge, P., & Wichmann, C.G. (2002). *The Custody Rating Scale, Initial Security Level Placement, and Women Offenders*. Research Report #127. Ottawa, Ontario: Correctional Service of Canada.
- Bloom B., & Covington, S. (2000). *Gendered Justice: Programming for Women in Correctional Settings*. Paper presented at the Annual Meeting of the American Society of Criminology, San Francisco, CA.
- Boe, R. (2001). *A Medium-Term Federal Offender Population Forecast: 2001-2004*. Research Report #R-100. Ottawa, Ontario: Correctional Service of Canada.
- Boe, R., Olah, C.L., & Cousineau, C. (2000). *Federal Imprisonment Trends for Women 1994-95 to 1998-99*. Research Report #R-93. Ottawa, Ontario: Correctional Service of Canada.
- Boland, F., Henderson, K., & Baker, J. (1998). Case need domain: 'Substance abuse assessment review'. *Forum on Corrections Research*, 10(3), 32-34.
- Bonta, J. (1996). Risk-needs assessment and treatment. In A.T. Hartland (Ed.), *Choosing Correctional Options that Work: Defining the Demand and Evaluating the Supply* (pp. 18-32). Thousand Oaks: Sage Publications.
- Bonta, J., & Motiuk, L.L. (1987). The diversion of incarcerated offenders to correctional halfway houses. *Journal of Research in Crime*, 24, 302-323.
- Bonta, J., & Motiuk, L.L. (1990). Classification to halfway houses: A quasi-experimental evaluation. *Criminology*, 28, 497-506.
- Bonta, J., Pang, B., & Wallace-Capretta, S. (1995). Predictors of recidivism among incarcerated female offenders. *The Prison Journal*, 75, 277-294.

- Brennan, T. (1987). Classification for control. In Gottfredson, D.M., & Tonry, M. (eds.). *Prediction and Classification: Criminal Justice Decision Making*. University of Chicago Press; Chicago.
- Brennan, T. (1998). Institutional classification of females: Problems and some proposals for reform. In Zaplin, R.T. (ed.) *Female offenders: Critical Perspectives and Effective Interventions*. Aspen Publishers, Inc., pp.179-204.
- Brennan, T. (2004). The roles of objective classification in jail programming and internal management. *Journal of Community Corrections*, 13, 7-10.
- Brennan, T., & Austin, J. (1997). *Women in Jail: Classification Issues*. National Institute of Corrections, U. S. Department of Justice.
- Britton, D.M. (2000). Feminism and criminology: engendering the outlaw. *The Annals of the American Academy of Political and Social Science*, 571, 57-76.
- Broidy, L., & Agnew, R. (1997). Gender and crime: A general strain theory perspective. *Journal of Research in Crime and Delinquency*, 34, 275-306.
- Brown, J. D. (1998). Statistics Corner: Questions and answers about language testing statistics: Reliability and cloze test length. *Shiken: JALT Testing & Evaluation SIG Newsletter*, 2 (2), 19-22. Retrieved November 17, 2004 from the World Wide Web: http://www.jalt.org/test/bro_3.htm.
- Brown, S.L. (2002). *The Dynamic Prediction of Criminal Recidivism: A Three-Wave Prospective Study*. Unpublished doctoral dissertation, Queen's University, Kingston, Ontario.

- Buchanan, R.A., Whitlow, K.L., & Austin, J. (1986). National evaluation of objective prison classification systems: The current state of the art. *Crime and Delinquency*, 32, 272-290.
- Burke, P., & Adams, L. (1991). *Classification of Women Offenders in State Correctional Facilities: A Handbook for Practitioners*. Washington, D.C.: National Institute of Corrections.
- Canadian Elizabeth Fry Societies (CAEFS; 1998). *Position Paper Regarding the Classification and Carceral Placement of Women Classified as Maximum Security Prisoners*. Ottawa: unpublished report. Retrieved November 20, 2004 from the World Wide Web: <http://www.elizabethfry.ca/maxe.htm>.
- Canadian Elizabeth Fry Societies (CAEFS; 2004, June). *Executive Director's Report*. Retrieved November 20, 2004 from the World Wide Web: <http://www.elizabethfry.ca/areport/2003-04/english/edreport.htm>.
- Canadian Human Rights Commission (CHRC; 2003). *Protecting Their Rights: A Systemic Review of Human Rights in Correctional Services for Federally Sentenced Women*. Ottawa, Ontario, Canada: Author.
- Cernkovich, S.A., & Giordano, P.C. (1979). Delinquency, opportunity, and gender. *Journal of Criminal Law & Criminology*, 70, 145-151.
- Chang, J., Chen, J.J., & Brownson, R.C. (2003). The role of repeat victimization in adolescent delinquent behaviours and recidivism. *Journal of Adolescent Health*, 32, 272-280.

- Collie, R.M. (2003). Sorting women's risk: New Zealand Women prisoners' misconducts and internal security risk. *New Zealand Journal of Psychology*, 32, 101-109.
- Cooper, R. P., & Werner, P.D. (1990). Predicting violence in newly admitted inmates: A lens model analysis of staff decision making. *Criminal Justice and Behavior*, 17, 431-447.
- Correctional Service of Canada (2001). [Federal recidivism of offenders while under supervision: first releases 1994-1995 to 1995-96 versus 1996-97 to 97-98]. Unpublished raw data: Research Branch.
- Correctional Service of Canada (2002). *Corporate Results*. Performance Measurement Branch, Performance Assurance Sector: Author.
- Correctional Service of Canada (2004). Corporate Reporting System. Unpublished raw data: Performance Measurement Branch, Performance Assurance Sector: Author.
- Corrections and Conditional Release Act (1992). C-20.
- Coulson, G., Ilacqua, G., Nutbrown, V., Giulekas, D., Cudjoe, F. (1996). Predictive utility of the LSI for incarcerated female offenders. *Criminal Justice and Behavior*, 23, 427-439.
- Covington, S. (1998). The relational theory of women's psychological development: implications for the criminal justice system. In R.T. Zaplin (Ed.), *Female Offenders: Critical Perspectives and Effective Interventions* (pp.113-132). Gaithersburg, Maryland: Aspen Publishers, Inc..

- Dachelet, H.N. (2001). Classification - the first step in reducing recidivism. *The International Community Corrections Association*, pp. 32-38.
- Dawes, R., Faust, D., Meehl, P. (1989). Clinical versus actuarial judgment. *Science*, 243, 1668-1674.
- Doherty, J. (1998). Power-belief theory: Female criminality and the dynamics of oppression. In R.T. Zaplin (Ed.), *Female Offenders: Critical Perspectives and Effective Interventions* (pp.133-160). Gaithersburg, Maryland: Aspen Publishers, Inc..
- Dowden, C., & Andrews, D. A. (1999). What works for female offenders: A meta-analytic review. *Crime and Delinquency*, 45, 438-452.
- Dowden, C., & Blanchette, K. (2002). An evaluation of the effectiveness of substance abuse programming for women offenders. *Journal of Offender Therapy and Comparative Criminology*, 46, 220-230.
- Dowden, C., & Brown, S.L. (2002). The role of substance abuse factors in predicting recidivism: A meta-analysis. *Psychology, Crime and Law*, 8, 243-264.
- Farr, K. (2000). Classification for female inmates: Moving forward. *Crime and Delinquency*, 46, 3-17.
- Fernandez, K.E., & Neiman, M. (1998). California's inmate classification system: Predicting inmate misconduct. *The Prison Journal*, 78, 406-422.
- Fillmore, C. & Dell, C.A. (2000). *Prairie Women, Violence and Self-Harm*. Winnipeg: The Elizabeth Fry Society of Manitoba.

- Funk, S.J. (1999). Risk assessment for juveniles on probation: A focus on gender. *Criminal Justice and Behavior*, 26, 44-68.
- Gates, M., Dowden, C., & Brown, S. L. (1998). Case need domain: "Community Functioning". *Forum on Corrections Research*, 10, 35-37.
- Gendreau, P., Goggin, C., & Gray, G. (2000). *Case Needs Review: Employment Domain*. Research Report #R-90. Ottawa, Ontario: Correctional Service of Canada.
- Gendreau, P., Goggin, C.E., & Law, M.A. (1997). Predicting prison misconducts. *Criminal justice and behavior*, 24, 414-431.
- Gendreau, P., Goggin, C., & Smith, M. (1999, May). *Is There an Actuarial Measure That is Demonstrably Superior to All Others?* Paper presented at the 60th Annual Convention of the Canadian Psychological Association. Halifax, Nova Scotia, Canada.
- Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology*, 34, 575-607.
- Grant, B. A., & Luciani, F.P. (1998). *Security Classification Using the Custody Rating Scale*. Research Report #R-67, Ottawa: Correctional Service of Canada.
- Grove, W.M., & Meehl, P. E. (1996). Comparative efficiency of informal (subjective, impressionistic) and formal (mechanical, algorithmic) prediction procedures: The clinical-statistical controversy. *Psychology, Public Policy, and Law*, 2, 293-323.

Grove, W.M., Zald, D.H., Lebow, B.S., Snitz, B.E., & Nelson, C. (2000). Clinical versus mechanical prediction: A meta-analysis. *Psychological Assessment*, 12, 19-30.

Hanley, J.A., & McNeil, B.J. (1983). A method of comparing the areas under the receiver operating characteristic curves derived from the same cases. *Radiology*, 148, 839-843.

Hannah-Moffat, K. (1997). *From Christian Maternalism to Risk Technologies: Penal Powers and Women's Knowledges in the Governance of Female Prisons*. Unpublished Doctoral Dissertation, Centre of Criminology, University of Toronto, Ontario, Canada.

Hannah-Moffat, K. (2004). Gendering risk: At what cost? Negotiations of gender and risk in Canadian women's prisons. *Feminism and Psychology*, 14, 243-249.

Hannah-Moffat K., & Shaw, M. (2001). *Taking Risks: Incorporating Gender and Culture into the Classification and Assessment of Federally Sentenced Women in Canada*. Ottawa, Ontario: Policy Research, Status of Women Canada.

Hanson, R.W., Moss, C.S., Hosford, R.E., & Johnson, M.E. (1983). Predicting inmate penitentiary adjustment: An assessment of four classificatory methods. *Crime and Delinquency*, 10, 293-309.

Hardyman, P.L. (2001). *Validation and Refinement of Objective Prison Classification Systems for Women: The Experience of Four States and*

- Common Themes*. Washington, D.C.: The Institute on Crime, Justice and Corrections, National Institute of Corrections.
- Hardyman, P.L., Austin, J., & Tulloch, O.C. (2002). *Revalidating External Prison Classification Systems: The Experience of Ten States and Model for Classification Reform*. Washington, D.C.: U.S. Department of Justice, National Institute of Corrections.
- Hardyman, P.L., & Van Voorhis, P. V. (2004). *Developing Gender-Specific Classification Systems for Women Offenders*. National Institute of Corrections (NIC Accession Number 018931).
- Hare, R. D. (1991). *Manual for the Revised Psychopathy Checklist*. Toronto: Multi-Health Systems.
- Hare, R. D. (2003). *Hare PCL-R™: 2nd Ed. Technical Manual*. Toronto: Multi-Health Systems, Inc.
- Harer, M.D. & Langan, N.P. (2001). Gender differences in predictors of prison violence: Assessing the predictive validity of a risk classification system. *Crime and Delinquency*, 47, pp.513-536.
- Harris, G.T., Rice, M.E., & Quinsey, V.L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. *Criminal Justice and Behavior*, 20, 315-335.
- Heney, J. (1990). *Report on Self-injurious Behaviour in the Kingston Prison for Women*. Ottawa, Ontario: Correctional Service of Canada.

- Hien, D., & Hien, N.M. (1998). Women, violence with intimates, and substance abuse: Relevant theory, empirical findings, and recommendations for future research. *American Journal of Drug and Alcohol Abuse, 24*, 419-438.
- Hildebrand, R.J. (1969). The anatomy of escape. *Federal Probation, 33*, 58-65.
- Holt, N. (1974). *Escape from Custody*. Research Report #52, Research Division, California Department of Corrections: Sacramento, California.
- Howden-Windell, J., & Clark, D. (1999). *Criminogenic Needs of Female Offenders*. HM Prison Service: Unpublished Report.
- Irving, J., & Wichmann, C.G. (2001). *An Investigation into Factors Leading to Increased Security Classification for Women Offenders*. Research Report #R-98, Ottawa: Correctional Service of Canada.
- Jackson, P.G., & Stearns, C.A. (1995). Gender issues in the new generation jail. *The Prison Journal, 75*, 203-221.
- Johnson, R.E. (1979). *Juvenile Delinquency and its Origins: An Integrative Theoretical Approach*. Cambridge, England: Cambridge University Press.
- Katz, R.S. (2000). Explaining girls' and women's crime and desistance in the context of their victimization experiences. *Violence Against Women, 6*, 633-660.
- Koons, B. A., Burrow, J. D., Morash, M., & Bynum, T. (1997). Expert and offender perceptions of program elements linked to successful outcomes for incarcerated women. *Crime and Delinquency, 43*, 512-532.

- Larivière, M. (1999). *The Relationship Between Self-esteem, Criminality, Aggression, and Violence: A Meta-analysis*. Unpublished comprehensive examination, Carleton University. Ottawa, Ontario, Canada.
- Law, M.A. (2004). *A Longitudinal Follow-up of Federally Sentenced Women In the Community: Assessing the Predictive Validity of the Dynamic Characteristics of the Community Intervention Scale*. Unpublished doctoral thesis, Carleton University, Ottawa, Ontario, Canada.
- Leischied, A. W., Cummings, A., VanBrunschoot, M., Cunningham, A., & Saunders, A. (2000). *Female Adolescent Aggression: A Review of the Literature and the Correlates of Aggression*. Ottawa, Ontario: Public Works and Government Services Canada.
- Lipsey, M.W. (1995). The efficacy of correctional treatment: A review and synthesis of meta-evaluations. In J. McGuire (Ed.), *What Works: Reducing Reoffending* (pp.79-111). Chichester, England: John Wiley & Sons.
- Loucks, A.D. (1995). *Criminal Behaviour, Violent Behaviour, and Prison maladjustment in Federal Female Offenders*. Unpublished doctoral thesis, Queen's University, Kingston, Ontario, Canada.
- Loucks, A.D., & Zamble, E. (1994). Some comparisons of female and male serious offenders. *Forum on Corrections Research*, 6, 22-24.
- Loucks, A.D., & Zamble, E. (1999). Predictors of recidivism in serious female offenders: Canada searches for predictors common to both men and women. *Corrections Today*, 61, 26-32.

- Loucks, A.D., & Zamble, E. (2000). *Predictors of Criminal Behavior and Prison Misconduct in Serious Female Offenders*. Unpublished manuscript, Queen's University, Kingston, Ontario.
- Luciani, F. (1997). *The Security Classification of Offenders: Development of Security Reclassification Protocols*. Unpublished manuscript, Research Branch, Ottawa, Ontario, Correctional Service of Canada.
- Luciani, F. (1998). *An Operational Review of the Security Reclassification Scale: Findings and Recommendations for Improving the Protocol*. Unpublished manuscript, Research Branch, Ottawa, Ontario: Correctional Service of Canada.
- Luciani, F., Motiuk, L., & Nafekh, M. (1996). *An Operational Review of the Custody Rating Scale: Validity, Reliability, and Practical Utility*. Research Report #R-47. Ottawa, Ontario: Correctional Service of Canada.
- MacKenzie, D.L., & Buchanan, R.A. (1990). The process of classification in prisons: A descriptive study of staff use of the system. *Journal of Crime and Justice*, 13, 1-24.
- Marchese, M.C. (1992). Clinical versus actuarial prediction: A review of the literature. *Perceptual and Motor Skills*, 75, 583-594.
- McClellan, D. S., Farabee, D., & Crouch, B. M. (1997). Early victimization, drug use, and criminality: A comparison of male and female prisoners. *Criminal Justice and Behavior*, 24, 455-476.

- McDonagh, D.M. (1999). Federally Sentenced Women Maximum-security Interview Project: 'Not Letting the Time Do You'. Correctional Service of Canada: Women Offender Sector.
- Meehl, P.E. (1954). *Clinical versus Statistical Prediction: A Theoretical Analysis and a Review of the Evidence*. Minneapolis: University of Minnesota Press.
- Meehl, P.E. (1965). Seer over sighth: The first good example. *Journal of Experimental Research in Personality*, 1, 27-32.
- Merton, R.K. (1938). Social structure and anomie. *American Sociological Review*, 3, 672-682.
- Merton, R.K. (1957). *Social Theory and Social Structure*. New York: Free Press.
- Morash, M.T., Bynam, T., & Koons, B. (1998). *Women Offenders: Programming Needs and Promising Approaches: NIJ Research in Brief*. Washington, D.C.: National Institute of Justice.
- Motiuk, L.L. (1991). *The Antecedents and Consequences of Prison Adjustment: A Systematic Assessment and Reassessment Approach*. Unpublished doctoral thesis. Ottawa: Carleton University.
- Motiuk, L.L. (1997). Classification for correctional programming: The Offender Intake Assessment (OIA) process. *Forum on Corrections Research*, 9 (1), 18-22.
- Motiuk, L.L. (1998). Profiling federal offenders on conditional release. *Forum on Corrections Research*, 10(2), 11-14.

- Nafekh, M., & Boe, R. (2003). *A Medium-term Federal Offender Population Forecast: 2003 to 2007* (Report No. R-137). Ottawa: Correctional Service of Canada.
- Nafekh, M., & Motiuk, L.L. (2002). *The Statistical Information on Recidivism-Revised 1 Scale: A Psychometric Examination* (Report N. R-126). Ottawa: Correctional Service of Canada.
- National Parole Board (2000, July). *Special Study on Federal Female Offenders from 1995/96 to 1999/00*. Unpublished draft prepared by the Performance Measurement Division.
- Nuffield, J. (1982). *Parole Decision-making in Canada: Research Toward Decision Guidelines*. Ottawa: Communications Division.
- Owen, B. (2002, July). *Treatment Needs of Women in U.S. Prisons: A Pathways Perspective*. Paper presented at the XXIIth International Congress on Law and Mental Health, Amsterdam.
- Owen, B., & Bloom, B. (1995). Profiling women prisoners: Findings from national surveys and a California sample. *The Prison Journal*, 75, 165-185.
- Proctor, J.L. (1994). Evaluating a modified version of the federal prison system's inmate classification model: An assessment of objectivity and predictive validity. *Criminal Justice and Behavior*, 21, 256-272.
- Quinsey, V.L., Harris, G.T., Rice, M.E., & Cormier, C.A. (1998). *Violent Offenders: Appraising and Managing Risk*. Washington, DC: American Psychological Association.

- Rasko, G. (1979). Significance and features of female criminality. *Acta Juridica Academiae Scientiarum Huraricae, Tomus 21*, 105-120.
- Rettinger, J.L. (1998). *A Recidivism Follow-up Study Investigating Risk and Need Within a Sample of Provincially Sentenced Women*. Unpublished doctoral thesis, Carleton University, Ottawa, Ontario, Canada.
- Rice, M.E., & Harris, G.T. (1995). Violent recidivism: Assessing predictive validity. *Journal of Consulting and Clinical Psychology, 63*, 737-748.
- Robinson, D., Porporino, F., & Beal, C. (1998). *A Review of the Literature on Personal/Emotional Need Factors*. (Research Report #R-76). Ottawa, Ontario: Correctional Service Canada.
- Salekin, R.T., Rogers, R., Ustad, K.L., & Sewell, K. W. (1998). Psychopathy and recidivism among female inmates. *Law and Human Behavior, 22*, 109-127.
- Scott, N.A., Mount, M.K., & Duffy, P.S. (1977). MMPI and demographic correlates and predictors of female prison escape. *Criminal Justice and Behavior, 4*, 284-300.
- Shaw, M. (1991a). *Survey of Federally-sentenced Women: Report to the Task Force*. (User Report #1991-4). Ottawa, Ontario: Ministry Secretariat, Solicitor General Canada.
- Shaw, M. (1991b). *The Release Study: Survey of Federally-sentenced Women in the Community*. (User Report #1991-5). Ottawa, Ontario: Ministry Secretariat, Solicitor General Canada.
- Shaw, M., & Hannah-Moffat, K. (2000). Gender, diversity, and risk assessment in Canadian corrections. *Probation Journal, 47*, 163-173.

- Siegel, J.A. & Williams, L.M. (2003). The relationship between childhood sexual abuse and female delinquency and crime: A prospective study. *Journal of Research in Crime and Delinquency, 40*, 71-94.
- Silver, E., & Miller, L.L. (2002). A cautionary note on the use of actuarial risk assessment tools for social control. *Crime and Delinquency, 48*, 138-161.
- Simons, R.L., Miller, M.G., & Aigner, S.M. (1980). Contemporary theories of deviance and female delinquency: An empirical test. *Journal of Research in Crime and Delinquency, 42-57*.
- Simourd, L., & Andrews, D.A. (1994). Correlates of delinquency: A look at gender differences. *Forum on Corrections Research, 6(1)*, 26-31.
- Solicitor General Canada. (1987). *Development of a security classification model for Canadian federal Offenders*. Ottawa, Correctional Service of Canada.
- Stewart, R. L. (1999). *Annual Report of the Correctional Investigator, 1998-1999*. Catalogue #JA1-1999. Ottawa, Ontario: Minister of Public Works and Government Services Canada.
- Stewart, R. L. (2001). *Annual Report of the Correctional Investigator, 2000-2001*. Ottawa, Ontario: Minister of Public Works and Government Services Canada.
- Stump, E.S., & Gilbert, W.W. (1972). *Experimental MMPI Scales and Other Predictors of Institutional Adjustment*. Unpublished draft, Ohio Penitentiary: Ohio Department of Corrections.

- Swets, J.A., Dawes, R.M., & Monahan, J. (2000). Psychological Science in the Public Interest: Psychological Science Can Improve Diagnostic Decisions. *Journal of the American Psychological Society, 1*, 1-26.
- Tabachnick, B.G., & Fidell, L., S. (2001). *Using Multivariate Statistics, 4th edition*. Boston, MA: Allyn & Bacon.
- Task Force on Federally Sentenced Women (1990). *Report of the Task Force on Federally Sentenced Women: Creating Choices*. Ottawa, Ontario: Ministry of the Solicitor General.
- Tien, G., Lamb, D., Bond, L., Gillstom, B., & Paris, F. (1993). *Report on the Needs Assessment of Women at the Burnaby Correctional Centre for Women*. Burnaby, British Columbia, Canada: BC Institute on Family Violence.
- Van Voorhis, P.V. & Presser, L. (2001). *Classification of Women Offenders: A National Assessment of Current Practices*. Washington, D.C.: U.S. Department of Justice, National Institute of Corrections.
- Van Wormer, K. (2001). *Counseling Female Offenders and Victims: A Strengths-Restorative Approach*. Springer: New York, NY.
- Walklate, S. (2001). *Gender, Crime, and Criminal Justice*. Portland, OR: Willan Publishing.
- Walters, G.D., & Elliott, W.N. (1999). Predicting release and disciplinary outcome with the Psychological Inventory of Criminal Thinking Styles: Female data. *Legal and Criminological Psychology, 4*, 15-21.

- Webster, C.D., Eaves, D., Douglas, K.S., & Wintrup, A. (1995). *The HCR-20 Scheme: The Assessment of Dangerousness and Risk*. Burnaby, British Columbia, Canada: Simon Fraser University.
- Webster, C.D., Douglas, K.S., Eaves, D., & Hart, S.D. (1997). *HCR-20: Assessing Risk for Violence (Version 2)*. Burnaby, British Columbia, Canada: Simon Fraser University.
- Webster, C.M., & Doob, A.N. (2004a). Classification without validity or equity: An empirical examination of the Custody Rating Scale for federally sentenced women offenders in Canada. *Canadian Journal of Criminology and Criminal Justice*, 46, 395-421.
- Webster, C.M., & Doob, A.N. (2004b). 'Taking down the strawman' or building a house of straw? Validity, equity, and the Custody Rating Scale. *Canadian Journal of Criminology and Criminal Justice*, 46, 631-638.
- Weeks, R., & Spatz-Widom, C. (1998). Self-reports of early childhood victimization among incarcerated adult male felons. *Journal of Interpersonal Violence*, 13, 346-361.
- Zaplin, R.T. (1998). Female offenders: A systems perspective. In R.T. Zaplin (Ed.), *Female Offenders: Critical Perspectives and Effective Interventions* (pp.65-78). Gaithersburg, Maryland: Aspen Publishers, Inc..
- Zinger, I. (2004). Actuarial risk assessment and human rights: A commentary. *Canadian Journal of Criminology and Criminal Justice*, 46, 607-621.

Appendix A: Custody Rating Scale

Gender-informed Security Re-classification for Women

Institutional Adjustment Scale	
1. History of involvement in institutional incidents	
a. no prior involvement	Points 0
b. any prior involvement	2
c. prior involvement in one or more incidents in "greatest" or "high" severity	
d. prior involvement during last five years of incarceration:	
in an assault (no weapon or serious injury)	1
in a riot or major disturbance	2
in an assault (using a weapon or causing serious injury)	2
e. involvement in one or more serious incidents prior to sentencing	
8 X Total of a. to e.	
2. Escape history	
a. no escape or attempts	0
b. an escape or attempt from minimum or community custody with no violence	
over two years ago	4
in last two years	12
c. an escape of attempt from medium or maximum custody or an escape from	
over two years ago	20
in last two years	28
d. two or more escapes from any level within the last five years	28
total	
3. Street stability	
a. above average	0
b. average	16
c. below average	32
total	
4. Alcohol / drug use	
a. no identifiable problems	0
b. abuse affecting one or more life areas	3
c. serious abuse affecting several life areas	6
total	
5. Age (at the time of sentencing)	
a. 18 years or less	24
b. 19	22
c. 20	20
d. 21	18
e. 22	16
f. 23	14
g. 24	12
h. 25	10
i. 26	08
j. 27	06
k. 28	04
l. 29	02
m. 30 years or more	00
total	

Gender-informed Security Re-classification for Women

Security Risk Score	
1. Number of prior convictions	
a. none	Points 0
b. one	3
c. 2 to 4	6
d. 5 to 9	9
e. 10 to 14	12
f. over 15	15
total	
2. Most serious outstanding charge	
a. no outstanding charges	0
b. minor	12
c. moderate	15
d. serious	25
e. major	35
total	
3. Severity of current offence	
a. minor or moderate	12
b. serious or major	36
total	
4. Sentence length	
a. 1 day to 4 years	5
b. 5 to 9 years	20
c. 10 to 24 years	45
d. over 24 years	65
total	
5. Street stability	
a. above average	0
b. average	5
c. below average	10
total	
6. Prior parole and / or statutory release	
a. none	0
b. 1 point for each prior parole release	_____
c. below average	_____
total	
7. Age	
a. 25 years or less	30
b. 26	27
c. 27	24
d. 28	21
e. 29	18
f. 30	15
g. 31	12
h. 32	09
i. 33	06
j. 34	03
k. 35years or more	00
total	

Gender-informed Security Re-classification for Women

Custody Rating Scale: Subscale Cutoff Values

Minimum

Medium

Maximum

Institutional Adjustment Subscale

0 - 85.5

85.5 - 94.5

94.5 - 186

Security Risk Subscale

7 - 63.5

63.5 - 133.5

133.5 and above

Appendix B: Security Reclassification Scale (SRS)

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):

Gender-informed Security Re-classification for Women

PART 2: REVIEW OF ADJUSTMENT AND FUNCTIONING FACTORS

<u>1. Serious disciplinary offences since last security review</u>	<u>Points</u>
a. None	0.5
b. One	1.0
c. Two	1.5
d. Three or more	2.0
<u>2. Minor disciplinary offences since last security review</u>	
a. None	0.5
b. One	0.5
c. Two	0.5
d. Three or more	1.0
<u>3. Recorded incidents since last security review</u>	
a. None	0.5
b. One	1.0
c. Two	2.0
d. Three or more	3.0
<u>4. Most recent pay grade</u>	
a. Zero pay	1.5
b. Basic allowance	1.0
c. Level A or level B	0.5
d. Level C or level D	1.0
<u>5. Periods of segregation since last security review</u>	
a. None	0.5
b. One or more	3.0
<u>6. Detention referral</u>	
a. Not referred	0.5
b. Anticipated referral	2.0
c. Referred for detention review	2.0
d. Detained	2.0
e. Life or indeterminate sentence	2.0
<u>7. Correctional plan progress</u>	
a. Has addressed factors	2.0
b. Has partially addressed factors	3.5
c. Has not addressed factors	5.0
<u>8. Correctional plan motivation</u>	
a. Fully motivated, participates in programs to address identified factors in correctional plan	2.0
b. Partially motivated, active in programs to address identified factors in correctional plan	4.0
c. No motivation, limited participation in programs to address identified factors in correctional plan	6.0

Gender-informed Security Re-classification for Women

<u>9. Drug and alcohol rating</u>	<u>Points</u>
a. No identifiable problems	0.5
b. Identified as a contributing factor, but has had no evidence of substance abuse during the review period	1.0
c. Identified as a contributing factor, and has had no evidence of substance abuse during the review period	1.5
<u>10. Successful Escorted Temporary Absences since last security review</u>	
a. None	2.5
b. One	2.0
c. Two	1.0
d. Three or more	0.5
<u>11. Successful Unescorted Temporary Absence/ Work Release since last security review</u>	
a. None	1.0
b. One or more	0.5
<u>12. Age at review</u>	
a. 22 years or less	1.0
b. 23 to 29 years	1.0
c. 30 to 35 years	0.5
d. 36 or older	0.5
<u>13. Psychological Concerns</u>	
a. No psychological concerns	0.5
b. Psychological concerns noted	1.5
<u>14. CRS escape history</u>	
a. Score of 0	0.5
b. Score of 4	0.5
c. Score of 12	1.0
d. Score of 20	1.0
e. Score of 28	1.0
<u>15. CRS incident history</u>	
a. Score of 0	0.5
b. Score of 16	1.0
c. Score of 24	1.0
d. Score of 32	1.5
e. Score of 40	1.5
f. Score of 48	2.0
g. Score of 56	2.0
h. Score of 64	2.0
i. Score of 72	2.0
j. Score of 80	3.0
k. Score of 88	3.0

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

- TOTAL SCORE FROM ITEMS 1 TO 15 ABOVE: _____
(SCORES RANGE FROM 10.5 TO 34.5)
- **Maximum Security Range: +27.0 to +34.5**
Maximum-to-Medium Security professional discretion invocation (+27.0 to +28.4)
- **Medium Security Range: +17.0 to +26.5**
Medium-to-Maximum Security professional discretion invocation (+25.1 to +26.6)
Medium-to-Minimum Security professional discretion invocation (+17.0 to +17.9)
- **Minimum Security Range: +10.5 to +16.5**
Minimum-to-Medium Security professional discretion invocation (+15.7 to +16.5)

CLASSIFICATION DECISIONS

1. The classification level recommended by the Review of Adjustment and Functioning Factors.

Score on the Security Reclassification Scale for Women (SRS)
SRSW Security Level Rating

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

Gender-informed Security Re-classification for Women

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 UTAWR/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 D: 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.**

<input type="checkbox"/>	(+3.20)	Limited motivation
<input type="checkbox"/>	(+0.70)	Partial motivation/active
<input type="checkbox"/>	(-2.40)	Full motivation/active

2. **Maintains regular positive family contact.**

<input type="checkbox"/>	(+1.0)	No, very little positive contact with family
<input type="checkbox"/>	(-0.3)	Yes, regular positive contact with family

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

<input type="checkbox"/>	(-1.1)	None
<input type="checkbox"/>	(+1.9)	One or two
<input type="checkbox"/>	(+4.4)	Three or more

Total number of serious convictions during the review period: _____

4. **Number of recorded incidents during the review period.**

<input type="checkbox"/>	(-1.50)	None
<input type="checkbox"/>	(0.40)	One
<input type="checkbox"/>	(+0.75)	Two
<input type="checkbox"/>	(+3.50)	Three or more

Total number of incidents during the review period: _____

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

<input type="checkbox"/>	(-0.25)	No
<input type="checkbox"/>	(+1.20)	Yes

6. **Pay level during the review period.**

<input type="checkbox"/>	(-1.10)	Level A
<input type="checkbox"/>	(-1.10)	Level B
<input type="checkbox"/>	(-0.30)	Level C
<input type="checkbox"/>	(+0.70)	Level D
<input type="checkbox"/>	(+1.00)	Basic Allowance / Unable to work
<input type="checkbox"/>	(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.

<input type="checkbox"/>	(-1.10)	None
<input type="checkbox"/>	(+3.25)	Once or twice
<input type="checkbox"/>	(+5.35)	Three or more

Total number of times during the review period: _____

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

<input type="checkbox"/>	(+1.15)	None
<input type="checkbox"/>	(+0.70)	One to three
<input type="checkbox"/>	(-0.85)	Four to eight
<input type="checkbox"/>	(-1.40)	Nine or more

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

9. CRS Incident History:

<input type="checkbox"/>	(-0.95)	None
<input type="checkbox"/>	(+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;

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- 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

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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.

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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

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

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

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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 E: Coding Guide

PART 1: BASIC OFFENDER/ FILE INFORMATION

Identifying Information

- 0.0. Coder's initials (first, last)
- 1.0. Coding date (yyyy/mm/dd):
- 1.1. Offender's Name:
- 1.2. Offender's Date of Birth (yyyy/mm/dd):
- 1.3. Offender's FPS #:

PART 2A: ADDITIONAL VARIABLES FOR CONSIDERATION (ASSESSED BY FIELD STAFF)

1. **Non-violent escape attempt during the review period.**

- No
- Yes

2. **Violent escape attempt during the review period.**

- No
- Yes

3. **Number of assaults committed by the offender during the review period.**

- None
- Once or twice
- Three or more

4. **Number of times offender instigated a serious disruption during the review period.**

- None
- Once or twice
- Three or more

5. **Number of times offender had a positive urinalysis or refusal during the review period.**

- None
- Once or twice
- Three or more

6. **Number of incidents of self-injury or attempted suicide during the review period.**

- None
- One or more

7. **CRS: Escape History.**

- No escape/attempt

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- Non-violent escape/attempt more than 2 years ago
- Non-violent escape/attempt less than 2 years ago
- Violent escape/attempt more than 2 years ago
- Violent escape/attempt less than 2 years ago or 2 or more escapes within the last 5 years

8. Current drug and alcohol rating.

- No identifiable problems
- Some problems, criminogenic uncertain, program effects
- Serious abuse, criminogenic, little/no program effect

9. Maintains regular positive community contact.

- No regular positive contact with community (volunteers, friends, etc.)
- Yes, regular positive contact with community

PART 2B: ADDITIONAL VARIABLES FOR CONSIDERATION
(CODED FROM FILES BY RESEARCH ASSISTANT)

Attitudes/Institutional Behavior

1. Correctional Plan: Program Progress (first priority needs & criminogenic factors)

- Addressed Most (1)
- Partially Addressed (2)
- Minimally /not Addressed (3)

2. Antisocial Attitudes

- Usually/ always (1)
- Sometimes (2)
- Never (3)

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Rate the next 4 items on the following scale:

(code for during review period)

unknown (not mentioned)	0
not very often/not at all	1
somewhat	2
most of the time/always	3

3. Cooperative Attitude toward Institution and Staff _____
4. Complies with Institutional Rules/Regulations _____
5. Interacts Effectively and Responsibly with Others _____
6. Accepts Responsibility/Admits Guilt for Offense _____

Marital/Family Relationships

7. Overall Marital/Family Adjustment

Above Average: a stable marriage (including common-law) exists. The offender is presently supported by an intact nuclear/ extended family. (1)

Average: the offender has a marital partner, however, periods of instability have occurred, and/or the nuclear/ extended family is somewhat unstable. (2)

Below Average: few significant family relationships are identified as having existed in the last year and/or immediate family members do not provide pro-social supportive roles. (3)

8. Has the offender lost or relinquished custody of her children during the **current sentence**?

- (1) yes
- (2) no

9. Has the offender lost or relinquished custody of her children during the **review period**?

- (1) yes
- (2) no

10. Have there been significant child custody issues during **review period**?

- (1) yes
- (2) no

11. a). Total # of Private Family Visits (PFV) during review period

b). Total # of Private Family Visits (PFV) since current sentence began

c). Total # of successful Unescorted Temporary Absences (UTA) during review

Interpersonal Relationships

(code for during review period)

12. Overall Quality of Associates

Above Average: the offender maintains contact with essentially non-criminal persons in community (1)

Average: maintains contact/associates with some unstable or criminally oriented persons, along with contact with some stable individuals (2)

Below Average: offender maintains contact/associates almost entirely with persons with criminal backgrounds or unstable lifestyles. Offender may have a co-accused in the present offense with whom social ties in the community are presently maintained (3)

Psychological/Psychiatric Concerns

(code for during review period)

13. a). Currently Prescribed Psychotropic Medication Yes (1) No (2)

b). Failure to Comply with Prescribed Medication N/A (0) Yes (1) No (2)

Rate the next 4 items on the following scale:

(code for during review period)

none 0
some noted on file 1
significant concern 2

14. Psychological/Psychiatric Concerns _____

15. Anger/ Hostility _____

16. Negative affect _____

17. Poor coping _____

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Suicide/Self-Injurious Behavior

code a) until previous review date; code b) on current sentence; code c) ever
code 1 "Yes" or 0 "No"

	(a)	(b)	(c)
18. a). # of Suicide Attempts	_____	_____	_____
b). # of Self Injurious Behaviors (Exclude Obvious Suicide Attempts)	_____	_____	_____

Other Security Risk Issues

For items # 19-21, code 1 for 'yes', code 0 for 'no':
a) until previous review date, b) on current sentence, c) ever

	(a)	(b)	(c)
19. <u>Inmate identified as a preventative security concern:</u>	_____	_____	_____
20. Identified as <u>Major Source</u> in <u>Distribution of Contraband</u>	_____	_____	_____
21. Identified as <u>Major Force</u> in Disruptive <u>Gang Activity</u>	_____	_____	_____
22. Have any new criminal code charges been laid, resulting from activity prior to or during this assessment period? Yes (1) No (2)			
23. Has the resolution of any outstanding criminal code charges resulted in an increase in sentence during the assessment period? Yes (1) No (2)			

PART 3: OFFENCE INFORMATION

1. Present / Admitting Criminal Offence(s):

Code only for the admitting offence(s) for the current term of admission.

Type of convictions:

Code yes or no for each of the following:

- | | | | |
|----|------------------------|-------|--------|
| a) | Homicide | 0. no | 1. yes |
| b) | Attempted murder | 0. no | 1. yes |
| c) | Assault | 0. no | 1. yes |
| d) | Kidnapping / abduction | 0. no | 1. yes |
| e) | Arson | 0. no | 1. yes |
| f) | Violent sex offence | 0. no | 1. yes |
| g) | Robbery | 0. no | 1. yes |
| h) | Weapons offenses | 0. no | 1. yes |
| i) | Drug offenses | 0. no | 1. yes |
| j) | Property offenses | 0. no | 1. yes |
| k) | Fraud | 0. no | 1. yes |
| l) | Obstruct justice | 0. no | 1. yes |
| m) | Fail to... | 0. no | 1. yes |
| n) | Other | 0. no | 1. yes |
- specify _____

2. Degree of physical harm to victim in most severe current offence:

Code most serious

- a) None
- b) Minor injury (e.g., hitting, slapping, striking)
- c) Serious injury (e.g., wounding, maiming, disfiguring)
- d) Caused death
- e) Not known or cannot assess (e.g. importing narcotics)

3. Relationship of victim(s) to the offender:

Code all that apply. Code most serious admitting offence (i.e. offence which received the longest sentence)

- a) None identified (stranger)
- b) Acquaintance
- c) Close friend
- d) Partner / Spouse
- e) Child / Step Child / Foster Child / Partner's Child
- f) Other relatives
- g) Not applicable
- h) Not known

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4. Used alcohol and/or drugs prior to the commission of the current offence(s)

- a) yes
- b) no
- c) unknown

PART 4: INVOLVEMENT IN INSTITUTIONAL INCIDENTS AT FOLLOW-UP

Coding end date (yyyy/mm/dd): _____

Code this section for the period following the security review and completion of the SRSW.

1.0 Serious disciplinary offences in follow-up

- a. None
- b. One
- c. Two
- d. Three or more

1.1 Date of first serious disciplinary offence (yyyy/mm/dd): ____/____/____

1.2 Serious institutional disciplinary offence type:

- | | | |
|-------------------------------|-------|--------|
| a) homicide | 0. no | 1. yes |
| b) assault | 0. no | 1. yes |
| c) sexual assault | 0. no | 1. yes |
| d) fighting | 0. no | 1. yes |
| e) threatening behaviour | 0. no | 1. yes |
| f) hostage taking | 0. no | 1. yes |
| g) inciting to riot or strike | 0. no | 1. yes |
| h) possession of drugs | 0. no | 1. yes |
| i) possession of weapon(s) | 0. no | 1. yes |
| j) escape | 0. no | 1. yes |
| k) attempted escape | 0. no | 1. yes |
| l) other | 0. no | 1. yes |

specify _____

2.0 Minor disciplinary offences since last security review

- a. None
- b. One
- c. Two
- d. Three or more

2.1 Date of first minor disciplinary offence (yyyy/mm/dd): ____/____/____

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3.0 Recorded incidents since last security review

- a. None
- b. One
- c. Two
- d. Three or more

3.1 Date of first minor disciplinary offence (yyyy/mm/dd): ____/____/____

PART 5: RELEASE INFORMATION

Code for release after most recent reclassification.

1. Day parole eligibility date (yy/mm/dd): ____/____/____

2. Full parole eligibility date (yy/mm/dd): ____/____/____

3. Mandatory supervision date (yy/mm/dd): ____/____/____

4. *First release date on current term (yy/mm/dd): ____/____/____*
Code 12.12.12. if the offender has not been released.

5. a) *First release type on current term:*

- 1. Day parole
- 2. Full parole
- 3. Mandatory supervision
- 4. Released at warrant expiry
- 8. Not applicable (i.e., offender has not been released)
- 9. Not known

b) *Completion status of first release on current term:*

- 1. termination due to end of project or program
- 2. termination due to minor breach of terms or conditions
- 3. revocation without a new offence
- 4. revocation with a new offence
- 5. release continued
- 8. not applicable
- 9. not known

PART 6: POST-RELEASE OUTCOME

1. Outcome of *first* release from current conviction(s)- i.e., after most recent reclassification
Code only one

- a) Release continued to date / WED
- b) Release revoked: no new offence (technical violation)
- c) Release revoked: new charges/ convictions
- d) Release revoked: new violent charges/ convictions
- e) Reached WED and reconvicted for new (non-violent) offence
- f) Reached WED and reconvicted for new (violent) offence
- g) Other (specify) _____
- h) Not applicable (i.e., not released)

2. Date of first reconviction or return to custody, if applicable (yyyy/mm/dd):

____/____/____

Appendix F: Description of Data Transformations

DESCRIPTION OF DATA TRANSFORMATIONS: SAMPLE 1 (N=580)

Variable	Distribution/ Violation	Original <i>M</i> (<i>SD</i>) & range	Correction	Revised <i>M</i> (<i>SD</i>) & range
<u>Security Classification Measures</u>				
SRSW Score	Normal	3.12 (7.6) [-10.1-+20.95]	NA	NA
SRSW Level	Normal	1.98 (0.7) [1-3]	NA	NA
OSL Level	Normal	2.11 (0.7) [1-3]	NA	NA
<u>Institutional Outcome Measures</u>				
Time at risk	Skew (+) Kurtosis (+) 13 outliers	186.17 (164.9) [0-1061]	Truncated upper range (recoded > 681 to 681)	182.0 (148.6) [0-681]
Perpetrated any misconduct	None	'yes' = 32%	NA	NA
Involved as perpetrator: major misconducts	None	'yes' = 16%	NA	NA
Involved as perpetrator: minor misconducts	None	'yes' = 24%	NA	NA
Involved as victim: major misconducts	Baserate <10%	'yes'= 4%	Dropped from inferential analyses	NA
Number of major misconducts (perpetrator)	Skew (+) Kurtosis (+) 8 outliers	0.31 (1.0) [0-15]	Truncated upper range (recoded > 4 to 4)	0.28 (0.8) [0-4]
Number of involvements in minor misconducts (perpetrator)	Skew (+) Kurtosis (+) 1 outlier	0.81 (6.2) [0-33]	Recoded outlier to next highest value (recoded 33 to 19)	0.79 (2.4) [0-19]

.....Table continued

Post-release Outcome Measures

Released	None	'yes' = 77% (249/323)	NA	NA
Time at risk	Normal	351.3 (291) [22-1217]	NA	NA
Returned to custody	None	'yes' = 45% (113/249)	NA	NA
Returned with a new offence	None	'yes' = 9% (23/249)	NA	NA

DESCRIPTION OF DATA TRANSFORMATIONS: SAMPLE 2 (N=100)

Variable	Distribution/ Violation	Original <i>M</i> (<i>SD</i>) & range	Correction	Revised <i>M</i> (<i>SD</i>) & range
<u>Security Classification Measures</u>				
SRSW Score	Normal	3.16 (7.6) [-10.1--19.20]	NA	NA
SRSW Level	Normal	2.01 (0.8) [1-3]	NA	NA
OSL Level	Normal	2.17 (0.6) [1-3]	NA	NA
SRS Level	Normal	1.94 (0.6) [1-3]	NA	NA
SRS Score	Normal	21.27 (4.6) [13.5-31.5]	NA	NA
<u>Institutional Outcome Measures</u>				
Time at risk	Normal	132.23 (105.1) [1-437]	NA	NA
Perpetrated any misconduct	None	'yes' = 29%	NA	NA
Involved as perpetrator: major misconducts	None	'yes' = 12%	NA	NA
Involved as perpetrator: minor misconducts	None	'yes' = 23%	NA	NA
Involved as victim: major misconducts	Base rate <10%	'yes' = 2%	Dropped from inferential analyses	NA
Number of major misconducts (as perpetrator)	Skew (+) Kurtosis (+) 2 outliers	0.24 (0.8) [0-5]	Recoded outliers to next highest value (recoded >3 to 3)	0.21 (0.7) [0-3]
Number of involvements in minor misconducts (perpetrator)	Skew (+) Kurtosis (+) 2 outliers	0.71 (2.3) [0-16]	Recoded outliers to next highest value (recoded >8 to 8)Table continued 2.63 (5.7) [0-27]

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Post-release Outcome Measures

Released	None	'yes' = 62% (52/84)	NA	NA
Time at risk	Normal	217.5 (158) [22-638]	NA	NA
Returned to custody	None	'yes' = 50% (26/52)	NA	NA
Returned with a new offence	None	'yes' = 13% (7/52)	NA	NA

DESCRIPTION OF DATA TRANSFORMATIONS: SAMPLE 3 (N=338)

Variable	Distribution/ Violation	Original <i>M</i> (<i>SD</i>) & range	Correction	Revised <i>M</i> (<i>SD</i>) & range
<u>Security Classification Measures</u>				
SRSW Score	Normal	2.96 (7.4) [-10.1-+20.95]	NA	NA
SRSW Level	Normal	1.96 (0.7) [1-3]	NA	NA
OSL Level	Normal	2.11 (0.7) [1-3]	NA	NA
<u>Institutional Outcome Measures</u>				
Time at risk	2 outliers	132.12 (96.4) [0-437]	Recoded 2 outliers to next highest value (recoded 437 and 431 to 412)	132.0 (96.0) [0-412]
Perpetrated any misconduct	None	'yes' = 27%	NA	NA
Involved as perpetrator: major misconducts	None	'yes' = 12%	NA	NA
Involved as perpetrator: minor misconducts	None	'yes' = 21%	NA	NA
Involved as victim: major misconducts	Base rate <10%	'yes' = 3%	Dropped from inferential analyses	NA
Number of major misconducts (perpetrator)	Skew (+) Kurtosis (+) 6 outliers	0.18 (.57) [0-4]	Recoded >2 to 2	0.15 (0.5) [0-2]
Number of involvements in minor misconducts (perpetrator)	Skew (+) Kurtosis (+) 5 outliers	0.57 (1.8) [0-16]	Recoded outliers to next highest value (recoded >6 to 6)	0.47 (1.2) [0-6]

.....Table continued

Gender-informed Security Re-classification for Women

Post-release Outcome Measures

Released	None	'yes' = 71% (154/217)	NA	NA
Time at risk	Normal	243.2 (157) [22-638]	NA	NA
Returned to custody	None	'yes' = 40% (62/154)	NA	NA
Returned with a new offence	None	'yes' = 8% (12/154)	NA	NA

Appendix G: Frequency Distributions of Variables Coded from Files

Item(s)- Part A: Coded by Research Assistants	% (n/338)
<hr/>	
<u>Attitudes/ Institutional Behaviour</u>	
1. Correctional plan: program progress (criminogenic needs)	
Addressed Most	12.2 (41/336)
Partially Addressed	46.7 (157)
Minimally/ Not Addressed	41.1 (138)
2. Antisocial attitude (general):	
Usually/ always	23.4 (79)
Sometimes	60.4 (204)
Never	16.3 (55)
3. Cooperative attitude towards institution/ staff	
Not very often/ not at all	28.2 (95/337)
Somewhat	37.4 (127)
Most of the time/ always	34.4 (116)
4. Complies with institutional rules/ regulations	
Not very often/ not at all	28.1 (95)
Somewhat	39.9 (135)
Most of the time/ always	32.0 (108)
5. Interacts effectively/ responsibly with others	
Not very often/ not at all	32.3 (109)
Somewhat	37.0 (125)
Most of the time/ always	30.8 (104)
6. Admits guilt/ accepts responsibility for offence	
Not very often/ not at all	14.2 (48)
Somewhat	44.7 (151)
Most of the time/ always	31.1 (105)
Unknown	10.1 (34)
 <u>Marital/ Family Relationships</u>	
7. Marital/ Family adjustment	
Above average	8.6 (29)
Average	35.8 (121)
Below average	55.6 (188)

.....Table continued

Gender-informed Security Re-classification for Women

8. Lost custody of child(ren) during the current sentence	
Yes	12.7 (43)
No	87.3 (295)
9. Lost custody of child(ren) during the review period	
Yes	3.3 (11)
No	96.7 (327)
10. Significant child custody issues during the review period	
Yes	8.0 (27)
No	92.0 (311)
11. a) Number of private family visits during the review period	
None	94.6 (315/333)
One	4.2 (14)
Two	1.2 (04)
11. b) Number of private family visits during sentence	
None	92.5 (308/333)
One	4.8 (16)
Two	1.5 (5)
Three or more	1.2 (4)
11. c) Number of successful UTA during the review period	
None	96.1 (320/333)
One	1.2 (4)
Two	1.2 (4)
Three or more	1.5 (5)

Interpersonal Relationships

12. Overall quality of associates	
Above average	7.7 (26)
Average	29.0 (98)
Below average	63.3 (214)

Psychological/ Psychiatric Concerns

13. a) Currently prescribed psychotropic medication	
Yes	35.4 (119)
No	64.6 (217)
13. b) Failure to comply with prescribed medication	
Yes	11.4 (38)
No / Not applicable	88.6 (294)

.....Table continued

14. Psychological/ psychiatric concerns	
None	6.2 (21)
Some noted on file	65.4 (221)
Significant concerns noted	28.4 (96)
15. Anger/ Hostility	
None	23.4 (79/337)
Some noted on file	41.5 (140)
Significant concerns noted	35.0 (118)
16. Negative Affect	
None	42.9 (145)
Some noted on file	43.5 (147)
Significant concerns noted	13.6 (46)
17. Poor Coping	
None	20.7 (70)
Some noted on file	50.3 (170)
Significant concerns noted	29.0 (98)

Suicide Attempts/ Self-injurious Behaviour

18. Aa) Suicide attempts during review period	
Yes	7.7 (26)
No	92.3 (312)
18. Ab) Suicide attempts - current sentence	
Yes	16.6 (56)
No	83.4 (282)
18. Ac) Suicide attempts - ever	
Yes	57.1 (193)
No	42.9 (145)
18. Ba) Self- injury during review period	
Yes	11.0 (37)
No	89.0 (301)
18. Bb) Self-injury - current sentence	
Yes	19.2 (65)
No	80.8 (273)
18. Bc) Self-injury - ever	
Yes	34.6 (117)
No	65.4 (221)

.....Table continued

Other Security Risk Concerns:

19. a) Preventative security concern during review period	
Yes	36.4 (123)
No	63.6 (215)
19. b) Preventative security concern - current sentence	
Yes	46.7 (158)
No	53.3 (180)
19. c) Preventative security concern - ever	
Yes	48.1 (163)
No	51.9 (175)
20. a) Major source in distribution of contraband - review	
Yes	6.8 (23)
No	93.2 (315)
20. b) Major source in distribution of contraband - sentence	
Yes	9.2 (31)
No	90.8 (307)
20. c) Major source in distribution of contraband - ever	
Yes	9.2 (31)
No	90.8 (307)
21. a) Major force in gang activity - review	
Yes	1.2 (04)
No	98.8 (334)
21. b) Major force in gang activity - sentence	
Yes	6.2 (21)
No	93.8 (317)
21. c) Major force in gang activity - ever	
Yes	15.1 (51)
No	84.9 (287)
22. New criminal code charges	
Yes	37.3 (126)
No	62.7 (212)
23. Increase in sentence length	
Yes	15.1 (51)
No	84.9 (287)

.....Table continued

Gender-informed Security Re-classification for Women

Item(s)- Part B: Coded by Field Staff	% (n/N)
24. Custody Rating Scale Escape History	
No escapes/ attempts	75.3 (433/575)
Non-violent escape/ attempt more than 2 years ago	13.7 (79)
Non-violent escape/ attempt within past 2 years	4.7 (27)
Violent escape/ attempt more than 2 years ago	3.7 (21)
Violent escape/ attempt within past 2 years or 2 or more escapes/ attempts within past 5 years	2.6 (15)
25. Non-violent escape/ attempt during the review period	
Yes	2.1 (12/ 579)
No	97.9 (567)
26. Violent escape/ attempt during the review period	
Yes	1.4 (08/ 576)
No	98.6 (568)
27. Number of assaults committed during the review period	
None	73.7 (426/578)
One or two	24.2 (140)
Three or more	2.1 (12)
28. Caused a serious disruption during the review period	
None	61.4 (355/578)
One or two	30.1 (174)
Three or more	8.5 (49)
29. Positive urinalysis/ refusal to test during review period	
None	82.1 (476/580)
One or two	15.5 (90)
Three or more	2.4 (14)
30. Incidents of self-injury/ attempted suicide during review	
None	87.5 (506/578)
One or more	12.5 (72)
31. Current drug /alcohol rating	
No identified problems	18.7 (108)
Some problems, criminogenic uncertain/ program effects	38.5 (222)
Serious problems- no program effects	42.8 (247)
32. Maintains regular positive community contact	
Yes	62.2 (359/577)
No	37.8 (218)

Appendix H: Inter-correlation Matrix of Predictor Variables

Gender-informed Security Re-classification for Women

Predictor variables: Inter-correlation matrix

Var.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1.	---												
2.	-.38 ^d	---											
3.	.49 ^d	-.69 ^d	---										
4.	.44 ^d	-.67 ^d	.81 ^d	---									
5.	.46 ^d	-.70 ^d	.84 ^d	.78 ^d	---								
6.	.23 ^d	-.33 ^d	.27 ^d	.23 ^d	.34 ^d	---							
7.	.26 ^d	-.24 ^d	.27 ^d	.26 ^d	.29 ^d	.10	---						
8.	.38 ^d	-.37 ^d	.44 ^d	.47 ^d	.49 ^d	.22 ^d	.52 ^d	---					
9.	-.24 ^d	.26 ^d	-.31 ^d	-.39 ^d	-.34 ^d	-.14 ^a	.17 ^b	.15 ^b	---				
10.	.19 ^c	-.19 ^c	.21 ^d	.24 ^d	.22 ^d	.03	-.11	.06	.47 ^d	---			
11.	-.45 ^d	.63 ^d	-.72 ^d	-.66 ^d	-.71 ^d	-.25 ^d	-.29 ^d	-.42 ^d	.27 ^d	.22 ^d	---		
12.	-.22 ^d	.27 ^d	-.29 ^d	-.30 ^d	-.28	.03	.04	-.12 ^a	.49 ^d	.47 ^d	.31 ^d	---	
13.	-.43 ^d	.70 ^d	-.72 ^d	-.73 ^d	-.76	-.26 ^d	-.26 ^d	.42 ^d	.36 ^d	.26 ^d	.66 ^d	.36 ^d	---
14.	-.13 ^a	.16 ^b	-.25 ^d	-.30 ^d	-.19 ^c	-.09	-.01	-.08	.37 ^d	.32 ^d	.25 ^d	.43 ^d	.28 ^d
15.	-.12 ^a	.15 ^b	-.20 ^c	-.23 ^d	-.15 ^b	-.11 ^a	-.08	-.15 ^b	.37 ^d	.29 ^d	.18 ^c	.40 ^d	.22 ^d
16.	.00	.12 ^a	-.11 ^a	-.12 ^a	-.13 ^a	.01	-.11 ^a	-.12 ^a	.31 ^d	.15 ^b	.23 ^d	.27 ^d	.15 ^b
17.	-.18 ^c	.26 ^d	-.26 ^d	-.20 ^c	-.26 ^d	.16 ^a	-.23 ^d	-.31 ^d	-.10	.07	.28 ^d	.00	.26 ^d
18.	-.11 ^a	.14 ^a	-.11 ^a	-.11 ^a	-.11 ^a	.07	-.14 ^b	-.14 ^a	-.12 ^a	.09	.11 ^a	.02	.16 ^b
19.	-.11 ^a	.12 ^a	-.14 ^a	-.06	.05	-.11 ^a	.17 ^b	.20 ^c	-.13 ^a	.12 ^a	.14 ^b	.07	.03
20.	-.05	.10	-.05	-.10	-.17 ^b	-.03	-.01	-.02	.00	.00	.01	.04	.12 ^a
21.	-.07	.13 ^a	-.06	-.09	-.16 ^b	-.03	-.06	-.03	.07	.04	.02	.07	.09
22.	-.07	.13 ^a	-.06	-.10	-.16 ^b	-.03	-.06	-.03	.07	.04	.02	.07	.09
23.	-.02	.32 ^d	-.29 ^d	-.34 ^d	-.33 ^d	-.11	-.05	-.13 ^a	.01	.00	.23 ^d	.16 ^b	.32 ^d
24.	-.02	.31 ^d	-.28 ^d	-.34 ^d	-.35 ^d	-.17 ^b	-.07	-.12 ^a	.05	.03	.27 ^d	.11 ^a	.34 ^d
25.	-.03	.28 ^d	-.23 ^d	-.30 ^d	-.28 ^d	-.16 ^b	-.03	-.06	.12	.07	.20 ^d	.14 ^b	.29 ^d
26.	-.13	-.04	.04	.07	.05	-.06	-.10	-.14 ^a	.08	-.02	.00	.07	.08

Note. ^ap < .05. ^bp < .01. ^cp < .001, ^dp < .0001.

- | | |
|--|--|
| 1. correctional plan progress/ motivation | 18. increase in sentence during review |
| 2. antisocial attitude | 19. gang affiliated- ever |
| 3. cooperative attitudes towards institution/ staff | 20. distributor of contraband- review |
| 4. complies with institutional rules/ regulations | 21. distributor of contraband- sentence |
| 5. interacts effectively/ responsibly with others | 22. distributor of contraband- ever |
| 6. admits guilt/ accepts responsibility for offence(s) | 23. preventative security- review |
| 7. marital/family adjustment | 24. preventative security- sentence |
| 8. associates- quality (prosocial) | 25. preventative security- ever |
| 9. psychological/ psychiatric concerns | 26. degree of physical harm to victim(s) |
| 10. prescribed psychotropic medication | 27. victim(s) was/ were family member(s) |
| 11. anger/ hostility | 28. used alcohol/ drugs prior to committing offence(s) |
| 12. negative affect | 29. community contact (prosocial) |
| 13. poor coping | 30. CRS escape history score |
| 14. suicide attempts during review period | 31. number of assaults during review |
| 15. suicide attempts during current sentence | 32. caused a serious disruption during review |
| 16. self-injury/ attempted suicide: ever | 33. + or refusal to provide urinalysis |
| 17. new criminal code charges during review | 34. self-injury/ attempted suicide during review |
| | 35. current drug/ alcohol rating |

Gender-informed Security Re-classification for Women

Var.	1	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
27.	-.15 ^b	-.17 ^b	.17 ^b	.15 ^b	.13 ^a	.09	-.07	.22 ^d	.01	.05	-.17 ^b	.07	.12
28.	.12 ^a	.07	.02	.01	-.05	-.31 ^d	-.08	-.11 ^a	.04	.00	.02	.03	.03
29.	.22 ^d	-.30 ^d	.31 ^d	.27 ^d	.32 ^d	.15 ^b	-.08	.20 ^c	-.10	.03	-.28 ^d	-.13 ^a	-.29 ^d
30.	-.22 ^d	.18 ^c	-.24 ^d	-.13 ^a	-.18 ^b	-.17 ^b	-.16 ^b	-.20 ^c	.05	.00	.18 ^c	-.03	.16 ^b
31.	-.24 ^d	.29 ^d	-.35 ^d	-.34 ^d	-.45 ^d	.09	-.17 ^b	-.29 ^d	.20 ^c	.13 ^a	.42 ^d	.12 ^a	.40 ^d
32.	-.28 ^d	.38 ^d	-.39 ^d	-.41 ^d	-.41 ^d	-.12 ^a	-.24 ^d	-.27 ^d	.13 ^a	.28 ^d	.40 ^d	.16 ^b	.46 ^d
33.	.02	.10	-.07	-.19 ^c	.05	.16 ^b	.03	-.07	.01	.11 ^a	.02	.03	.12 ^a
34.	-.10	.12 ^a	-.12 ^a	-.16 ^b	-.16 ^b	.03	-.11 ^a	-.14 ^a	.27 ^d	.24 ^d	.23 ^d	.24 ^d	.17 ^b
35.	-.12 ^a	.07	-.02	.01	-.05	-.31 ^d	-.08	-.11 ^a	.04	.00	.02	.06	.03

Note. ^ap < .05. ^bp < .01. ^cp < .001, ^dp < .0001.

- | | |
|--|---|
| <ul style="list-style-type: none"> 1. correctional plan progress/ motivation 2. antisocial attitude 3. cooperative attitudes towards institution/ staff 4. complies with institutional rules/ regulations 5. interacts effectively/ responsibly with others 6. admits guilt/ accepts responsibility for offence(s) 7. marital/family adjustment 8. associates- quality (prosocial) 9. psychological/ psychiatric concerns 10. prescribed psychotropic medication 11. anger/ hostility 12. negative affect 13. poor coping 14. suicide attempts during review period 15. suicide attempts during current sentence 16. self-injury/ attempted suicide: ever 17. new criminal code charges during review | <ul style="list-style-type: none"> 18. increase in sentence during review 19. gang affiliated- ever 20. distributor of contraband- review 21. distributor of contraband- sentence 22. distributor of contraband- ever 23. preventative security- review 24. preventative security- sentence 25. preventative security- ever 26. degree of physical harm to victim(s) 27. victim(s) was/ were family member(s) 28. used alcohol/ drugs prior to committing offence(s) 29. community contact (prosocial) 30. CRS escape history score 31. number of assaults during review 32. caused a serious disruption during review 33. + or refusal to provide urinalysis 34. self-injury/ attempted suicide during review 35. current drug/ alcohol rating |
|--|---|

Gender-informed Security Re-classification for Women

Var.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.
14.	---												
15.	.65 ^d	---											
16.	.28 ^d	.45 ^d	---										
17.	.05	.20 ^c	.21 ^d	---									
18.	.06	.23 ^d	.11 ^a	.53 ^d	---								
19.	.03	.08	.10	.17 ^b	.00	---							
20.	.01	.03	.07	.03	.02	.02	---						
21.	.01	.03	.10	.05	.05	.07	.81 ^d	---					
22.	.01	.03	.10	.05	.05	.07	.81 ^d	1.0 ^d	---				
23.	.15 ^b	.04	.07	.01	.08	.02	.31 ^d	.27 ^d	.27 ^d	---			
24.	.17 ^b	.08	.14 ^b	.05	.03	.04	.24 ^d	.30 ^d	.30 ^d	.79 ^d	---		
25.	.19 ^c	.10	.14 ^b	.02	.06	.02	.23 ^d	.29 ^d	.29 ^d	.72 ^d	.91 ^d	---	
26.	.00	.02	.10	.05	-.16 ^b	.01	-.20 ^c	-.12 ^a	-.12 ^a	.01	.09	.12 ^a	---
27.	.08	.04	.05	.14 ^b	.12 ^a	.07	-.12 ^a	-.14 ^b	-.14 ^b	-.02	.02	.06	.31 ^d
28.	.05	.02	.00	.02	.07	.05	.10	-.05	-.05	.04	.07	.10	.07
29.	-.10	-.12 ^a	-.11	-.17 ^b	.09	.07	.00	-.05	-.05	-.11 ^a	-.19 ^c	-.18 ^b	.07
30.	.05	.07	.03	.27 ^d	.16 ^b	.28 ^d	.02	.04	.04	.05	.04	.03	.03
31.	.07	.01	.06	.16 ^b	.13 ^a	.07	.01	.01	.01	.02	.07	.07	-.03
32.	.16 ^b	.05	.09	.16 ^b	.08	.10	.09	.01	.01	.24 ^d	.25 ^d	.23 ^d	-.10
33.	-.03	-.05	-.05	.03	.04	.00	.04	.08	.08	.20 ^c	.17 ^b	.16 ^b	-.10
34.	.58 ^d	.50 ^d	.35 ^d	.16 ^b	.11	.08	.05	.08	.08	.06	.11 ^a	.10	-.03
35.	.00	.02	.10	.14 ^a	.17 ^b	.06	.13 ^a	.08	.08	.05	.04	.01	-.24 ^d

Note. ^ap < .05. ^bp < .01. ^cp < .001, ^dp < .0001.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. correctional plan progress/ motivation 2. antisocial attitude 3. cooperative attitudes towards institution/ staff 4. complies with institutional rules/ regulations 5. interacts effectively/ responsibly with others 6. admits guilt/ accepts responsibility for offence(s) 7. marital/family adjustment 8. associates- quality (prosocial) 9. psychological/ psychiatric concerns 10. prescribed psychotropic medication 11. anger/ hostility 12. negative affect 13. poor coping 14. suicide attempts during review period 15. suicide attempts during current sentence 16. self-injury/ attempted suicide: ever 17. new criminal code charges during review | <ol style="list-style-type: none"> 18. increase in sentence during review 19. gang affiliated- ever 20. distributor of contraband- review 21. distributor of contraband- sentence 22. distributor of contraband- ever 23. preventative security- review 24. preventative security- sentence 25. preventative security- ever 26. degree of physical harm to victim(s) 27. victim(s) was/ were family member(s) 28. used alcohol/ drugs prior to committing offence(s) 29. community contact (prosocial) 30. CRS escape history score 31. number of assaults during review 32. caused a serious disruption during review 33. + or refusal to provide urinalysis 34. self-injury/ attempted suicide during review 35. current drug/ alcohol rating |
|--|---|

Gender-informed Security Re-classification for Women

Var.	27.	28.	29.	30.	31.	32.	33.	34.	35.
14.	.08	.04	-.09	.04	.06	.16 ^b	-.02	.57 ^d	.00
15.	.04	-.02	-.11 ^a	.06	.01	.05	-.05	.49 ^d	.01
16.	.05	-.01	-.10	-.02	.05	.08	-.04	.34 ^d	.10
17.	.14 ^b	.02	.17 ^c	.27 ^d	.16 ^b	.16 ^b	.02	-.15 ^b	-.13 ^a
18.	.12 ^a	.06	.08	.15 ^c	.12 ^b	.07	.03	-.11 ^a	-.17 ^c
19.	.07	.05	-.07	.27 ^d	.07	.10	.00	-.08	.05
20.	.20 ^c	-.10	.00	.01	.01	.09	.03	-.04	.12 ^a
21.	.11 ^a	-.04	-.04	.03	.00	.08	.07	-.07	.07
22.	.11 ^a	-.04	-.04	.03	-.01	.08	.07	-.07	.07
23.	.01	.03	-.11 ^a	.04	.02	.24 ^d	.20 ^c	.06	.05
24.	.08	.07	-.18 ^c	.03	.07	.25 ^d	.17 ^b	.10	.03
25.	.12 ^a	.10	-.17 ^c	.03	.06	.23 ^d	.16 ^b	.09	.00
26.	.30 ^d	.06	.06	.02	-.03	-.09	-.09	-.03	.24 ^d
27.	---	-.02	.08	-.12 ^a	-.05	-.06	.01	-.03	.04
28.	.02	---	.00	.09	.00	.01	-.05	.06	.47 ^d
29.	.08	.00	---	-.10	-.15 ^b	-.22 ^d	.05	-.18 ^c	.04
30.	.12 ^a	.09	-.10	---	.08	.12 ^a	-.03	.04	.10
31.	.05	.01	-.15 ^b	.08	---	.36 ^d	.11 ^a	.13 ^a	.12 ^a
32.	.06	.01	-.22 ^d	.12 ^a	.36 ^d	---	.25 ^d	.18 ^c	.03
33.	.01	-.05	.05	-.03	.11 ^a	.25 ^d	---	-.01	.17 ^c
34.	.03	.06	-.18 ^c	.04	.13 ^a	.18 ^c	.00	---	.01
35.	.04	.47 ^d	-.04	.10	.12 ^a	.03	.17 ^c	.01	---

Note. ^ap < .05. ^bp < .01. ^cp < .001, ^dp < .0001.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. correctional plan progress/ motivation 2. antisocial attitude 3. cooperative attitudes towards institution/ staff 4. complies with institutional rules/ regulations 5. interacts effectively/ responsibly with others 6. admits guilt/ accepts responsibility for offence(s) 7. marital/family adjustment 8. associates- quality (prosocial) 9. psychological/ psychiatric concerns 10. prescribed psychotropic medication 11. anger/ hostility 12. negative affect 13. poor coping 14. suicide attempts during review period 15. suicide attempts during current sentence 16. self-injury/ attempted suicide: ever 17. new criminal code charges during review | <ol style="list-style-type: none"> 18. increase in sentence during review 19. gang affiliated- ever 20. distributor of contraband- review 21. distributor of contraband- sentence 22. distributor of contraband- ever 23. preventative security- review 24. preventative security- sentence 25. preventative security- ever 26. degree of physical harm to victim(s) 27. victim(s) was/ were family member(s) 28. used alcohol/ drugs prior to committing offence(s) 29. community contact (prosocial) 30. CRS escape history score 31. number of assaults during review 32. caused a serious disruption during review 33. + or refusal to provide urinalysis 34. self-injury/ attempted suicide during review 35. current drug/ alcohol rating |
|--|---|

Appendix I: Inter-rater Reliability of Variables Coded by Research Assistants

Item(s)	Kappa or ICC
<u>Attitudes/ Institutional Behaviour</u>	
1. Correctional plan: program progress/motivation	.55 dropped
2. Antisocial attitude (general):	.67
3. Cooperative attitude towards institution/ staff	multicollinear
4. Complies with institutional rules/ regulations	.80
5. Interacts effectively/ responsibly with others	.80
6. Admits guilt/ accepts responsibility for offence	.66
<u>Marital/ Family Relationships</u>	
7. Marital/ Family adjustment	.57 dropped
8. Lost custody of child(ren) during the current sentence	<10% base rate
9. Lost custody of child(ren) during the review period	<10% base rate
10. Significant child custody issues during the review period	<10% base rate
11. a) Private family visits during the review period	<10% base rate
11. b) Private family visits during sentence	<10% base rate
11. c) Successful UTA during the review period	<10% base rate
<u>Interpersonal Relationships</u>	
12. Overall quality of associates	.49 dropped
<u>Psychological/ Psychiatric Concerns</u>	
13. a) Currently prescribed psychotropic medication	.46 dropped
13. b) Failure to comply with prescribed medication	.21 dropped
14. Psychological/ psychiatric concerns	.49 dropped
15. Anger/ Hostility	.72
16. Negative Affect	.65
17. Poor Coping	.44 dropped

.....Table continued

Suicide Attempts/ Self-injurious Behaviour

18. Aa) Suicide attempts during review period	<10% base rate
18. Ab) Suicide attempts - current sentence	.15 dropped
18. Ac) Suicide attempts - ever	.82
18. Ba) Self- injury during review period	<10% base rate
18. Bb) Self-injury - current sentence	<10% base rate
18. Bc) Self-injury - ever	.51 dropped

Other Security Risk Concerns:

19. a) Preventative security concern during review period	.63 dropped
19. b) Preventative security concern - current sentence	.47 dropped
19. c) Preventative security concern - ever	.47 dropped
20. a) Major source in distribution of contraband - review	.72
20. b) Major source in distribution of contraband - sentence	.62 dropped
20. c) Major source in distribution of contraband - ever	.62 dropped
21. a) Major force in gang activity - review	<10% base rate
21. b) Major force in gang activity - sentence	<10% base rate
21. c) Major force in gang activity - ever	.64 dropped
22. New criminal code charges	.66
23. Increase in sentence length	.62 dropped

Offence Information:

24. Degree of physical harm to victim(s) in current offence(s)	.84
25. Used alcohol/ drugs prior to committing offence(s)	.70
26. Victim(s) was/were family member(s)	1.0

Appendix J: Inter-Item Correlations: SRSW

Gender-informed Security Re-classification for Women

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

Appendix K: Inter-item Correlations: SRSW3

Gender-informed Security Re-classification for Women

SRSW 3: Inter-item Correlation Matrix

Var.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1.	---													
2.	.24 ^c	---												
3.	.25 ^d	.06	---											
4.	.24 ^d	.25 ^d	.48 ^d	---										
5.	.31 ^d	.08	.08	.02	---									
6.	.21 ^d	.23 ^d	.45 ^d	.53 ^d	.20 ^c	---								
7.	.11 ^a	.07	.12 ^a	.14 ^a	.16 ^b	.23 ^d	---							
8.	.10	.12 ^a	-.08	-.08	-.03	-.04	.07	---						
9.	.21 ^d	.05	.25 ^d	.30 ^d	.13 ^a	.29 ^d	.24 ^d	.13 ^a	---					
10.	.39 ^d	.25 ^d	.40 ^d	.48 ^d	.18 ^c	.45 ^d	.18 ^c	-.04	.30 ^d	---				
11.	.33 ^d	.33 ^d	.35 ^d	.57 ^d	.18 ^c	.55 ^d	.16 ^b	.08	.30 ^d	.62 ^d	---			
12.	.36 ^d	.27 ^d	.42 ^d	.52 ^d	.23 ^d	.58 ^d	.23 ^d	.10	.34 ^d	.70 ^d	.72 ^d	---		
13.	.27 ^d	.14 ^a	.25 ^d	.32 ^d	-.03	.26 ^d	.18 ^c	.20 ^c	.30 ^d	.26 ^d	.28 ^d	.25 ^d	---	
14.	.25 ^d	.31 ^d	.25 ^d	.19 ^c	.09	.27 ^d	.18 ^c	.08	.14 ^b	.30 ^d	.28 ^d	.32 ^d	.17 ^b	---

Notes: Correlations are with item scores on each variable.

^ap < .05, ^bp < .01, ^cp < .001, ^dp < .0001

1. correctional plan progress/ motivation
2. family contact (positive)
3. serious disciplinary offences- review
4. recorded incidents- review
5. pay level- review
6. involuntary segregation- danger to others
7. successful ETAs
8. UAL from work release, T.A., supervision
9. CRS incident history
10. antisocial attitude
11. anger/ hostility
12. interacts effectively/ responsibly with others
13. new criminal code charges
14. community contact