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A Recidivism Follow-up Study Investigating Risk and Need

Within a Sample of Provincially Sentenced Women

by

L. Jill Rettinger, M. A.

A dissertation submitted to
the Faculty of Graduate Studies
in partial fulfilment of
the requirements for the degree of

Doctor of Philosophy

Department of Psychology
Carleton University
Ottawa, Ontario
September 18 1998
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a Sample of Provincially Sentenced Women"**

submitted by

L. Jill Rettinger

in partial fulfillment of the requirements for
the degree of Doctor of Philosophy

Chair

External Examiner

Thesis Supervisor

Carleton University
September, 1998

Abstract

The current study was designed to establish recidivism rates and to determine which risk and need factors have predictive validity for incarcerated and community-sentenced female offenders. Over almost a five year follow-up period, 46.5% of 441 adult Ontario female offenders who were participants in a previous study (Shaw, 1994a) recidivated; 14.3% recidivated violently.

Analyses revealed that women from the institution sample had higher risk/need scores than community-sentenced women, as assessed by the Level of Supervision Inventory (LSI; Andrews, 1982). Also, recidivists scored significantly higher than non-recidivists on the LSI total score, as well as on all the LSI subscales. In particular, the recidivists scored higher than the non-recidivists on all of the major risk factors identified in the criminological literature, including LSI Attitudes/Orientation, LSI Criminal History, LSI Companions, and an Antisocial Pattern scale. These variables also differentiated between women who did and did not recidivate violently. Interestingly, with the exception of problematic childhood experiences, none of the more gender-specific variables, such as adult abuse history, self-harm history, and parenting status, differentiated recidivists from non-recidivists. A history of self-injurious behavior did contribute to the prediction of violent recidivism.

Overall, the results support the use of the LSI to determine risk and need for women. Further, the results provide direction for the development of community programs that meet the criminogenic needs of female offenders.

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A Recidivism Follow-up Study to Investigate the Level of Risk

Posed by a Sample Provincially Sentenced Women

A recent survey of the needs and characteristics of female offenders in Ontario led to the conclusion that the majority of provincially sentenced women are non-violent offenders who present little risk to public safety (Shaw, 1994a). Additionally, it was noted that the current state of corrections and rehabilitation is inadequate in addressing the needs of female offenders (Shaw, 1994a). As a result of these and similar findings (e.g., Agenda for Change, 1991; Ross & Fabiano, 1985; Shaw, 1991; Solicitor General's Special Committee on Provincially Incarcerated Women, 1992; Task Force on Federally Sentenced Women, 1990), the Women's Issues Task Force (1995) of the Ontario provincial government recommended that community sanctions and programs be developed and enhanced, with a view to reducing the use of imprisonment for provincially sentenced women.

In order to guide decarceration and program development recommendations, it is necessary to determine which female offender needs and characteristics are associated with re-offending, or are risk factors. This information can then be used to identify which offenders are most likely to succeed in the community and what supports are required for their success. Women with differing levels of criminogenic needs are likely to benefit from different levels of community supervision and programming. However, the determination of what constitutes a 'risk factor', or a criminogenic need, for

female offenders is not easily accomplished, as most research on risk and the prediction of recidivism has been based on male populations (Blanchette & Motiuk, 1996; Chesney-Lind, 1980; Loucks & Zamble, 1994). Given gender differences in criminal history, offending patterns, and psychosocial problems, it has been questioned whether the criteria used to assess risk for male offenders are appropriate for female offenders (Adler & Basemore, 1980; Chesney-Lind, 1980; Shaw, 1991).

The current research project provided information on the level of risk posed by provincial female offenders by determining rates of general and violent recidivism. Recidivists and non-recidivists were then compared on demographic characteristics, offence history, and psychosocial needs, determining which factors differentiate the two groups. Additionally, prediction models were developed. These models provide information on the extent to which various risk and need areas uniquely contribute to the prediction of recidivism.

The implications of this research are two-fold. Firstly, because the analyses determined which need areas and characteristics are related to re-offending, the results can be used to guide decision-making in terms of which provincially sentenced women are best suited for a community setting and what level of support is required to aid their success. Secondly, and perhaps more importantly, the results provide direction for the development of programs that both meet the needs of female offenders and address the areas that have the greatest impact on recidivism.

Background

There is consensus in the criminological literature that since the advent of the penal system women offenders have been treated with relative neglect compared to their male counterparts (Adelberg & Currie, 1987; Pollock-Byrne, 1990; Rafter, 1990; Shaw, Blanchette, Hattem, Thomas, & Tamarack, 1992; Shaw, 1994b). This neglect has resulted in a lack of facilities for women, a lack of programming, and a lack of knowledge about female offenders' characteristics and needs. In fact, despite a plethora of government inquiries initiated as a result of the women's movement (see Shaw, 1991), very little work has been devoted to providing a broad-based description of the women themselves. Indeed, in a pioneering book on the subject of female offenders published in 1987, the editors Adelberg and Currie noted that the chapter authors were unable to make anything but tentative statements about the lives of women offenders because of a lack of good statistical information. It was remarked that,

Hopefully, in ten years' time, we will be able to look back ...and say, 'Did we really not know the average level of education of women who go to prison? Did we really not know how many were mothers, or how old their children were, or how much money they earned, or if they came from abusive relationships?' (p.15)

The primary reason cited for this lack of attention is that female offenders represent only a small proportion of the overall offending population (Cooper,

1987; Faith & Hatch, 1989\1990; Johnson, 1987). Specifically, women comprise approximately 2% of the federal inmate population and 7% to 9% of the provincial population (Basic Facts About Corrections in Canada, 1992; Johnson & Rodgers, 1993). In Ontario, in 1995-96, 3407 adult women were sentenced to jails and detention centers, making up only 9% of all sentenced admissions (K. Underhill, personal communication, July 7, 1996). Consistent with these statistics, Axon's (1989) international review of female crime statistics revealed that most Western countries and the United States also report that female offenders are marginally represented in the criminal justice system, with women accounting for only 2.3% to 5.7% of adjudicated offenders. The consistently small numbers of female prisoners has been used as a justification by correctional managers and criminological researchers alike to devote attention and resources to the comparatively larger groups of men in conflict with the law (Cooper, 1993; Kinsey, 1993; Ross & Fabiano, 1985).

Recently, however, there has been increased support for the collection of basic demographic information on women offenders, perhaps in response to the questioning of whether a correctional model based on the male offender experience is appropriate for women (Pollock-Byrne, 1990; Ross & Fabiano, 1985). Specifically, in contrast to early feminist efforts, which emphasized the sexual discrimination in unequal treatment, it has lately been argued that 'equality', which may bring women's services up to par with those available to men, does not address the fact that the overall system is based on the male norm and is not sensitive to the differences between the needs of male and

female offenders (Hannah-Moffat, 1994; Scully-Whitaker, 1993). Consistent with this shift in focus is the recognition that in order to institute correctional services that are appropriate for women, it must first be known who the system is for, what the experiences of the women are, and what will best meet their needs. Hence, it was with the goal of understanding why women come into conflict with the law, and how they can best be helped to avoid future involvement, that recent research was undertaken to build a knowledge base about this largely 'forgotten minority' (Task Force on Federally Sentenced Women, 1990; Women's Issues Task Force, 1995).

Federal Female Offenders

Apart from a few anecdotal reports and aggregate national statistics which provided only a limited description of women in conflict with the law (see Adelberg & Currie, 1987; Johnson, 1987; Ministry of the Solicitor General, 1985), little was known about Canadian federally sentenced female offenders until 1989, when research was initiated to provide information to the Task Force on Federally Sentenced Women. The primary project, a survey of incarcerated women and women on conditional release in the community, was designed to provide a detailed picture of the female federal population by collating information on their offending histories, their past personal experiences, and by asking them about their criminal justice system experiences and programming needs. In total, 170 of 203 incarcerated women were interviewed, and 57 of about 200 women on community release were surveyed. The project, completed

in 1992, is the first national attempt to gain comprehensive information on the backgrounds and needs of women in conflict with the law in Canada.

The profile provided by the research indicated that federally sentenced women are disadvantaged in many respects (Shaw, et al., 1992). Few of the women contacted had good job experience, and most had limited marketable skills and a low level of education (Shaw, Rodgers, Blanchette, Hattem, Thomas, & Tamarack, 1991). The majority of women were young and single, and relied on social assistance as their main source of income. Despite the lack of resources, two-thirds of the incarcerated women were mothers, and 70% of the mothers had been the sole supporters of their children for at least part of their lives. Sixty-five percent of the women under community supervision had children and 54% still had responsibility for them.

A significant proportion (75%) of the incarcerated group reported substance abuse problems at some point in their life, and 71% revealed that their offending was related to substance use in some way. Fifty-three percent of the community sample reported a history of substance use and 39% reported problems at the time of the survey (Shaw, et al., 1991). The majority of incarcerated women had experienced some form of personal abuse during their lives, with 68% reporting physical abuse and 53% reporting sexual abuse. The rates of abuse reported by Aboriginal women, who were found to be over-represented in the system (23%), were even more startling, with physical abuse experienced by 90% and sexual abuse by 61% (Shaw, et al., 1992).

With regard to their offending histories, the majority of the women in prison were serving their first federal sentence (87%) and over a third (36%) had no previous convictions of any kind. A further 36% had served a previous provincial sentence. For those women with a history of offending, the majority of convictions had been for non-violent crimes, such as fraud and theft-related offences, drug-related charges, and public nuisance crimes. Fifty percent of the sample had never been to prison before. Furthermore, although 42% of the women were serving sentences for murder, attempted murder, or manslaughter, for the most part these women had no, or very minor, previous criminal justice system involvement. Specifically, 40% of these women were first offenders and another 24% had never received a prison term before, indicating a rather minor offending history (Shaw, et al., 1992). Indicative of the familial nature of women's violent crime, in 38% of the cases of serious violence (murder/manslaughter), the victim was a husband, partner, or relative, in 49% of the cases the person was a close friend or acquaintance, and in 5%, a stranger. In a third of the cases, another person took part in the offence, or was the person who actually killed the victim. Criminal history and current offence data were not reported for the community supervision sample.

These findings contributed significantly to filling the gap in knowledge about female federal offenders in Canada. The federal survey provided substantive evidence for previous claims that women caught in the Canadian justice system have a wide range of personal and social problems that are not

addressed by imprisonment, but rather are exacerbated by it (Adelburg & Currie, 1987). As a result of these findings, recent Charter of Rights and Freedoms challenges, and political will, recommendations to close the Prison for Women and build an Aboriginal sweat lodge and four regional 'cottage-style' facilities with women-centred programs have been implemented (Task Force on Federally Sentenced Women, 1990). However, these changes are applicable only for women sentenced to two years or more and thus, do not address the needs of the majority of women offenders, who come under the jurisdiction of provincial justice systems (Johnson & Rodgers, 1993).

Provincially Sentenced Women in Ontario

In Ontario, as in other provinces, few systematic studies of female offenders have been completed, and those that have been conducted suffer from problems such as small sample sizes and a focus on very specific issues. For example, the first province-wide study to provide information on Ontario's female population was designed to detail the child care responsibilities of female offenders and to assess the degree to which family problems had been created by incarceration (Rogers & Carey, 1979). Although this study was helpful in describing the child care issues of women offenders, it was obviously restrictive in the type of information collected. Similarly, Birkenmeyer and Jolly (1981) undertook a study to describe the characteristics of only Native female offenders in Ontario. Additionally, while a review of treatment and training programs detailed the lack of information about rehabilitative programs for women (Ross,

Currie, & Krug-McKay, 1980), it did not enhance the level of information about the people for whom the programs were designed. In fact, the only effort to describe Ontario's female offender population was part of a one-day survey of women in provincial institutions across Canada (Misch, Jefferson, Hayes, & Graham, 1982). This study reported on the marital status, age, sentence length, offence type, security level, and degree of family contact experienced by provincially incarcerated women. Other than the findings from this one survey, which was not specific to Ontario, it was not known who provincially sentenced women were, why they were under sentence, or what their needs were with regard to programs and support.

This lack of data on female offenders prompted Ontario's Ministry of Solicitor General and Correctional Services (formerly the Ministry of Correctional Services) to initiate a large-scale survey of provincially sentenced women. A pilot project guided the development of data collection instruments and provided preliminary information on a selected group of offenders (Ruhl & Loring, 1988). The purpose of the larger survey was to provide a detailed profile of the characteristics of women coming into conflict with the law in Ontario (Shaw, 1994a). This profile was achieved by asking the women to tell their own stories about their past, their experiences with the criminal justice system, and about their needs and program requirements.

In total, 531 adult and 84 young offender women in institutions or under community supervision in Ontario during 1991-92 were interviewed (Shaw, 1994a). Two hundred and forty-three of the adult women were incarcerated and

288 were under community supervision when they were interviewed. These numbers represent approximately 66% of the adult female population in institutions across the province, making this project the most detailed and comprehensive source of information on provincially sentenced women in Canada.

The survey revealed that, like the federal population, provincially sentenced women in Ontario are faced with a myriad of problems. The women interviewed had low levels of education and skill development, and poor employment experience. Over two-thirds (69%) of the women were mothers and 80% had been a single mother for all or part of their child's life. Over half of the sample reported physical health concerns and up to one half indicated a need for mental health services. Reflective of this need for service, over a third of the women had attempted suicide, 30% had injured themselves, and 20% reported an eating disorder. Although 69% of the women identified themselves as Caucasian, 13% of the women were Aboriginal peoples, indicating an over-representation of Native women at the provincial level as well at the federal one.

The family and personal backgrounds of the women indicated a disruptive family history. Half of the sample had family members who had been in conflict with the law and approximately 40% reported serious difficulties in their family of origin, including, alcoholism, illness, domestic violence, and separations. Additionally, 72% of the sample reported being the victim of physical abuse at some point in their lives and 48% reported sexual abuse. Emotional abuse had been suffered by 70% of the women. Fifty-eight percent of the women who

reported abuse wanted some form of counseling to help them deal with the effects of their experiences. Substance abuse was also identified as a problem, with 79% of the incarcerated and 60% of the community sample reporting a history of alcohol or drug abuse. Substance use had been involved in the criminal behavior of two-thirds of the incarcerated women and half of the community sample.

Despite the range of problems experienced by these women, the overwhelming majority were not charged with serious offences. In fact, just under half of the women were charged with property offences (46%), while the remainder were convicted of drug offences (15%), minor assaults (14%), and breach of criminal justice orders, 'moral' and public order offences, and traffic and drinking offences (20%). Only 5% of the women were charged with serious crimes involving violence. Furthermore, although more women in the institution sample had previous criminal justice experience compared to those in the community group (78% versus 43%), the majority of the sample did not have an extensive offence history. The women who did have a considerable history of incarceration were typically charged with offences similar to those for which they were currently serving sentences, indicating an ongoing pattern of minor offending for a small proportion of the sample.

The minor nature of the women's offending is reflected by their relatively short sentences. For example, 64% of the sentences were for less than 6 months, and 35% of the women were serving sentences of less than 3 months. A number of women (22%) were sentenced to prison terms of only a few days,

though at least 20% had spent a month or more on remand. Eighteen percent of the community sample had also spent time in jail while they were remanded to custody.

In total, the findings from the survey are consistent with reports from smaller-scale studies (Johnson, 1987; Ruhl & Loring, 1988; Lambert & Madden, 1976), a survey of provincially sentenced women in Nova Scotia (Solicitor General's Special Committee on Provincially Incarcerated Women, 1992), the federal survey (Shaw, et al., 1991, 1992), and studies of female offenders in Winnipeg (Robertson, Bankier, & Schwartz, 1987), the United States (Glick & Neto, 1977; Task Force on Federal Women, 1990; Wormack-Keels, 1993), and Europe (Axon, 1989; Grace 1990). Provincially sentenced women in Ontario, like federally sentenced women and female offenders elsewhere, present as an economically deprived group of young, single, women who are undereducated and underemployed, and the primary caretakers of children, often with extensive histories of personal abuse and chemical dependency.

Although it has been implied that the psychosocial problems experienced by female offenders contribute to and maintain their offending behavior (Faith & Hatch, 1989-1990; Johnson & Rodgers, 1993; Kendall, 1993; Shaw, 1991; Women's Issues Task Force, 1995), the majority of studies are descriptive in nature and report no statistical analyses to demonstrate an association between criminal behavior and the characteristics noted. Additionally, the surveys do not provide data on the presence or incidence of similar problems in a non-offender comparison group. These shortcomings severely limit the conclusions that can

be drawn about the relationship between the psychosocial problems experienced by female offenders and their involvement in criminal behavior.

Issues Arising from the Research

One of the primary issues arising from recent research is the need to consider alternative ways of dealing with provincially sentenced women. In particular, it has been noted that the current practice of repetitive short-term imprisonment is both ineffective in addressing the needs of women offenders and unnecessary in terms of the level of risk they present (Johnson & Rodgers, 1993; Pollock-Byrne, 1990; Shaw, 1994a). It has thus been recommended that community-based alternatives with expanded program facilities be developed (Agenda for Change, 1991; Shaw, 1994a; Women's Issues Task Force, 1995).

However, when considering decarceration and the expansion of community-based treatment services, it is necessary to address two related issues. First, it is necessary to determine the extent to which provincially sentenced women actually present a risk to others in terms of recidivism and violent re-offending. Second, the program needs that are most strongly related to recidivism should be established. This information can then be used to determine which women are best suited to community alternatives and what programs are required to support their successful release. In essence, decisions about the future placement, management, and programming of the female inmate population must reflect a balance between the need for treatment and support and assessments of risk. Such a balance should both improve the

quality of female offenders' lives and reduce the risk of recidivism, without compromising public safety.

Assessment of Risk and Criminogenic Needs: Theory

The notion of assessing offender risk and needs for the purpose of guiding correctional supervision and treatment grows largely out of a social learning perspective of criminal conduct. After reviewing the longitudinal and cross-sectional delinquency research, Andrews, Bonta, and Wormith (1988\1990) synthesized the state of knowledge of the correlates and predictors of criminal behavior and formulated the psychology of criminal conduct. Within this approach, criminal behavior is understood as occurring within the immediate context of personal, interpersonal, and community reinforcements (PIC-R; Andrews & Bonta, 1994). According to this perspective, behavior in any given situation is under the influence of antecedent and consequent events, which, because of prior learning and experiences, provide signals as to the likely outcome of certain actions. When the rewards associated with an antisocial behavior outweigh the costs, it is likely the behavior will occur. The availability of nondeviant alternative behaviors and an assessment of their rewards and costs is also considered in determining a course of action.

The model suggests that a number of routes can lead an individual to a particular situation and influence the assessment of that situation as favourable to crime. Some factors that are mentioned specifically include criminal friends\associates, antisocial attitudes, family relations (supervision, training, quality of affect), conventional ambitions and performance in school and

employment, neighborhood factors, temperament and ability, and family of origin variables. Particular emphasis is given to antisocial attitudes, values, and beliefs, which form the standards of conduct and generate the rationale for engaging in antisocial behavior. Criminal associates are also afforded a central role in this model, as they provide the opportunity for antisocial modeling to occur and help to govern the rewards and costs of such behavior. Although there are multiple pathways to criminal behavior, as the number of risk factors increase, so does the probability of delinquency.

An important part of this theory is the recognition that although behavior is mediated by personal and interpersonal factors, the political economy and structure of the broader social system is also responsible for the development, maintenance, and modification of the contingencies that guide behavior. In other words, a variety of personal, interpersonal, and community factors are involved in the creation of the immediate situation of action, as well as in helping to form the responses which occur. In this way, the current theory is consistent with recent feminist approaches to female criminality, wherein the historical, political, economic, and social factors relevant to women's position in society are viewed as central to understanding their criminal behavior (Gavigan, 1993). Specifically, the feminist approach also implies that a range of factors are involved in both creating a given situation and helping to determine what behaviors occur by virtue of influencing a woman's learning experiences and the availability of resources and options (Kendall, 1993).

Identification of Risk\Need Factors

A substantial body of research has been devoted to the identification of the specific personal, interpersonal, and circumstantial variables that influence criminal behavior. These efforts have yielded considerable consensus with regard to what constitutes a 'risk factor' (Andrews, Bonta, & Wormith, 1988\1990), where the term refers to a characteristic that predicts criminal behavior. Risk factors may be static (e.g., criminal history) or may be dynamic. A need factor, or criminogenic need, refers to a dynamic risk factor that is amenable to change, such that when the need is reduced, so is the likelihood of criminal behavior.

Research has found that the prediction of recidivism is enhanced by the identification of the following factors: problems in the family of origin (e.g., long-term reliance on welfare, criminality, and psychological deficits), early behavioral history and temperament, early and current family conditions (e.g., level of affection/cohesion, poor discipline and lack of supervision, neglect and abuse), educational/vocational/socio-economic achievement (e.g., underaverage level of education achieved, unstable job record, reliance on welfare), interpersonal relationships, antisocial attitudes and beliefs, behavioral history (e.g., adult and juvenile criminal involvement, an uninterrupted history of antisocial behavior beginning at a young age, including a variety of different types of offences and continuing while serving sanctions, alcohol and drug abuse, and aimless use of leisure time), and emotional/behavioral disturbance when combined with antisocial behavior (Andrews, 1989).

A recent meta-analysis has provided some insight as to the relative importance of these variables. In their review of 131 studies published between 1970 and 1994, Gendreau, Little, and Goggin, (1996) reported that the factors with the largest mean r values were: adult criminal history, antisocial personality, companions, and criminogenic needs (antisocial attitudes supportive of antisocial lifestyle and behavior regarding education and employment). Adult criminal history and criminogenic needs were almost identical in their ability to predict recidivism and both were significantly better predictors than family structure, intellectual functioning, personal distress and socioeconomic status.

Similar results were reported in a meta-analysis of young offender literature (Simourd & Andrews, 1994). Specifically, it was found that regardless of gender, the most important risk factors, in descending order, were: antisocial peers or attitudes, temperament or misconduct problems, educational difficulties, poor parent-child relations, and minor personality variables. Consistent with the adult review, personal distress, family structure, and lower social class were not strongly associated with delinquency.

In total, these literature reviews provide valuable information about the predictors of recidivism and their relative importance. Furthermore, it is clear that the lists of predictor variables include many of the identified needs of female offenders (Shaw, 1991; Shaw, 1994a ; Shaw et al, 1992). Unfortunately, however, very little research has been conducted to determine whether these factors are associated with recidivism by women. Rather, most of the research that has established the above-listed variables as risk factors was conducted

with male samples (Louks & Zamble, 1994). This lack of prediction research with women has caused many researchers and writers to question the use of “well established” risk factors to determine the level of risk posed by women (Adler & Basemore, 1980; Chesney-Lind, 1980).

The identification of what constitutes a risk factor for women is of particular relevance given the practical application of such knowledge. There are three principles of case classification that rely on the assessment of risk and criminogenic need factors (Andrews & Bonta, 1990). The risk principle states that individuals who present with high levels of risk are best served with higher levels of service, while individuals with low levels of risk should receive minimal supervision. The need principle specifies that intervention services should target criminogenic needs if reduced recidivism is the goal of service. The responsivity principle states that the style and mode of service should be matched to the offender’s learning and personality style, as well as considering the therapist-offender match. It has been found that when these principles are applied to determine the intensity, type, and mode of service for offenders, significant reductions in recidivism result (Andrews, Zinger, Hoge, Bonta, Gendreau, & Cullen, 1990). However, in order to promote effective case management strategy by employing these principles with women, it must first be established what psychosocial needs are also risk and criminogenic need factors for female offenders.

Differences Between Male and Female Offenders

It has been argued that there are important differences between male and female offenders which may invalidate the application of 'male' risk factors to female populations. For example, as Shaw (1994b) notes, although women in prison have backgrounds similar to those of men, they are generally more disadvantaged, with fewer economic resources, poorer prospects of locating employment, greater child-care responsibilities, and more extensive histories of personal abuse. She suggests that women are more vulnerable to the effects of alcohol and drugs, and have more physical health problems. Louks and Zamble (1994) found some support for these claims. Specifically, when federally sentenced men and women were compared, it was found that more women had been raised from birth to age five by someone other than their natural parents (one out of five women compared to one out of ten men) and more women were unskilled or unemployed (50% vs. 33%). Only 30% of the women were employed in a semiskilled trade, compared to 50% of the men. Additionally, women had higher levels of depression, and more suicide attempts. Interestingly, women were only half as likely as the men to report at least moderate alcohol abuse, but twice as likely to report moderate drug abuse. This may suggest that drug use\abuse is more of a risk factor for women, while alcohol use\abuse has more relevance for men.

Although these psychosocial differences are notable, perhaps the most important difference between male and female offenders (when risk assessment is the issue) is that they appear to have distinct offence patterns. Firstly, as

noted above, women account for only a small proportion of adjudicated offenders, comprising only approximately 2% of the federal population, and 7% to 9% of the provincial population. These proportions have remained relatively stable over time, as has the fact that the number of men greatly exceed the number of women charged in all offence categories (Johnson, 1986).

Secondly, the types of offences committed by men and women appear to be different. Johnson and Rodgers (1993) report that 46% of all women charged with Criminal Code offences in 1991 were charged with theft or fraud, compared to 20% of men so charged. Similarly, fraud and theft offences accounted for 35% of the female admits to Ontario's jails in 1995\96, while only 17% of the men sentenced were convicted of these offences. Further, men are more likely than women to commit violent offences, break and enter, and impaired driving. In total, only 13% of all women charged in 1991 were charged with offences involving violence (murder\manslaughter, attempted murder\assault, sexual offences, robbery), while this class of offences accounted for 21% of charges against men (Johnson & Rodgers, 1993). Consistent with this differential, in 1995\96, 24% of the men admitted to jails in Ontario were convicted of violent offences, compared to 16% of the women admitted (K. Underhill, personal communication, July 7, 1996).

While it may be argued that differences in admissions and convictions are the result of "chivalry" at both the charging and sentencing stages of the criminal justice process, there is some evidence that this is not the case entirely. For example, a 1982 Canadian victimization survey found that only 5% of the 321,

200 robbery and assault incidents reported were committed by women alone, while a further 4% were committed by mixed sex groups. Further, when self-report data are examined, women consistently report less crime than men (Andrews & Bonta, 1994). It has also been noted that whatever chivalry does exist may be selective, with women who behave violently and against traditional standards for their sex being denied the "advantage" of paternalistic behavior (Chesney-Lind, 1989). Rather, it is likely that while chivalry may play a small role in the adjudication of female offenders, other factors, such as a lack of previous crime and absence of perceived danger, may be more critical in the criminal justice processing of women (Steffensmeir, 1980).

In support of this suggestion, it appears that women who are involved in criminal behavior have less extensive criminal histories than male offenders. For example, Shaw, et al. (1992) found that only 13% of the 170 federally sentenced women surveyed had served a previous federal sentence, compared with about 40% of the male federal population. Johnson (1986) also reported that only 25% of the women admitted to the federal system between 1975 and 1984 had previous federal committals compared to 50% of the men.

The limited recidivism data available are consistent with the findings of women's less extensive criminal past and indicate that female offenders are less persistent in their criminal behavior. For example, in 1986, Harman and Hann, reported that over a 3 year release period, women had a higher success rate than men. Specifically, 79% of the women on federal parole were successful, compared to only 65% of the men. Additionally, when women did violate their

parole, either by offence or technical violation, they were less likely to be returned to prison or to commit as serious an offence as men. Similar findings have been reported in England & Wales (Posen, 1988), where after a 2 year follow-up, 36% of the women released from prison in 1983 were reconvicted, compared to 56% of the men. Furthermore, Harman and Hann (1986) found that offenders convicted of break and enter posed the worst release risk; and, as noted above, statistics show that a greater proportion of adjudicated males commit this offence than women.

Overall, the literature suggests that compared to men, fewer women engage in criminal conduct, their recidivism rate is lower, and the offences committed by women are less serious. Given these differences, the claims that female offenders present with unique circumstances and hence, should not have the same criteria applied in the assessment of risk, appear to have some credibility.

More direct support for arguments that women require special consideration in the assessment of risk comes from recent research showing that risk instruments based on male-validated factors are of limited utility in predicting the recidivism of female offenders (Hann & Harman, 1989). For example, Bonta, Pang, and Wallace-Capretta (1995) recently found that release outcome was only mildly correlated with the Statistical Information on Recidivism scale (SIR; Nuffield, 1982) for a sample of 81 female federal offenders. Furthermore, the prognostic categories did not differentiate actual risk (women in the Good risk category had the highest rates of re-offending) and two of the items occurred so

infrequently with the female sample that their utility is questionable for this group. A further two items of the SIR - employment and number of dependents - were found to be unrelated to recidivism in a different sample of female offenders (Bonta, et al., 1995).

Coulson, Nutbrown, Giulekas, Cudjoe, and Ilacqua (1996) reported more promising results when they used a modified version of the Level of Supervision Inventory (LSI; Andrews, 1982), a standard risk/need assessment instrument, to determine the level of risk posed by female offenders. It was found that of the 526 women released from prison, 38% recidivated after one year and 47% recidivated after two years. When recidivism rates were examined in relation to LSI scores, it was shown that those grouped as high risk were more likely to re-offend.

However, in this study, the cutoff points for high and low risk were modified because the women had much lower risk/need scores on this measure than what is normally reported for male offenders. The average LSI score for the female offenders was only 15.5, compared to average scores of 20.9 to 25.1 for provincially sentenced males (Bonta & Motiuk, 1987, 1990; Bonta, 1989). According to the Ontario Ministry of Solicitor General and Correctional Services' guidelines, a score of 14 is generally accepted as adequate to merit a recommendation of community release. Given this, it appears that the many of the female offenders sentenced to prison terms in this sample could reasonably have been placed in a community setting.

A further implication of the low risk/need levels found for female offenders is that a risk assessment instrument designed for a male population may overlook some of the risk factors specific to women offenders. Although the women had relatively low risk scores according to the LSI scoring guidelines, the fact remains that they were in conflict with the law. It seems reasonable to assume, therefore, that areas not assessed by this risk\need instrument may contribute to women's antisocial behavior.

In total, the findings reviewed suggest that although male and female offenders may share some risk\need factors, there may be others that are distinct to each gender. Additionally, it is possible that some variables are more important for a particular sex. This supposition was not supported by recent meta-analysis studies of risk factor literature for young offenders (Simourd & Andrews, 1994), or adults (Gendreau, Andrews, Goggin, & Chanteloupe, 1992); both studies found that the same factors had similar degrees of importance for both sexes. However, with regard to the young offender study, it may be that differences in the importance of factors are more pronounced for adults, who are independent of parental or guardian support. Also, it is possible that differences were not demonstrated by previous research because of limitations in the type of data collected. More specifically, if factors that have particular relevance for women were not assessed in both male and female samples, they would not be included in the meta-analyses of risk factors because of inadequate sampling. In this case, woman-relevant factors can not demonstrate differential importance, simply due to the scarcity of their assessment.

Risk Factor Research with Females

Compared to the wealth of information on male offenders, few studies have examined the prediction of recidivism with female offenders (see Gendreau, Andrews, Goggin, & Chanteloupe, 1992). Further, many of the studies that have been completed are limited by methodological problems such as an examination of only static factors, small sample sizes, or selected samples. Despite these problems, previous research has provided some guidance as to the factors associated with recidivism for female offenders.

In one of the first investigations of the release risk of federal female offenders, it was found that of 87 women, 43% were reconvicted during a 2 year follow-up period (Canfield, 1989). Although the sample was too small to draw any definitive conclusions, it was found that age at first arrest and release were inversely associated with recidivism. Additionally, sentence length, time served before release, and admission and release type were related to re-offending. Those offenders who were admitted with a revocation and a new offence, who had an aggregate sentence of 2 to 3 years, who served between 12 and 24 months before release, or who were admitted for property or robbery offences and were released on mandatory supervision, were more likely to be reconvicted. Women serving sentences of 3 years or more for crimes against persons and drug related charges were less likely to be reconvicted, as were women with no institutional misconducts. An important finding of this study was that women who were employed during their period of supervision, regardless of how long or successful the employment period was, were less likely to re-offend,

although employment experience upon admission to the institution was unrelated to recidivism.

The finding of employment as a protective factor is consistent with the results of Lambert and Madden's (1976) evaluation of the treatment milieu at Ontario's Vanier Centre for Women. These authors found that the 1 year recidivism rate for a sample of released inmates was 24%, with first offenders recidivating at a rate of 17% and prior incarcerates re-offending at a rate of 35%. At the 2 year follow-up point only an additional 13% of the 338 women were reconvicted. The amount of time served was related to delays, but not a reduction in overall recidivism. Specifically, women serving less than four months or more than eight months had the fastest return rates, while those serving between 4 and 8 months had the lowest recidivism rate in the first year. Notably, although financial situation, accommodation adequacy, and physical and emotional health after release were all related to recidivism, employment stability and family support were the most important factors in mitigating against re-offending. Pre-institutional variables that differentiated recidivists from non-recidivists were prior criminality (especially as a juvenile), early family problems (e.g, instability, criminality, substance abuse), serious personal problems, such as drug and alcohol abuse, and an unstable work history. Serious misbehavior leading to segregation and/or transfer was also predictive of later problems.

These results were mirrored by Morris and Wilkinson's (1995) investigation of 200 women released from prison in England. They found that the women who re-offended after 3 to 6 months were more likely to report

unsatisfactory accommodation, financial difficulties, drug problems, and a lack of paid employment. In fact, more than one-half of the women interviewed said that lack of work had been a factor in their original offending. The women who were reconvicted on follow-up were younger than non-recidivists and were also more likely to report that drugs and alcohol were a drain on their incomes. These results are consistent with those of Motiuk (1996), who reported that for a sample of 202 federally sentenced women, the most important issues within the first 6 months of release were employment, financial management, criminal associates, and behavioral\emotional difficulties. Between the 6th and 12th months of release, academic\vocational skills, employment, and family\marital needs were more significant. Not surprisingly, by 12 months in the community, there was a significant drop in the number of needs presented by the women.

Another study of federally sentenced women in Canada also found that younger women pose a greater risk for re-offending than older women (Bonta et al., 1995). In particular, it was found that in a sample of 136 federal female offenders who had been at risk for 3 years, age at penitentiary admission and age at interview were negatively associated with recidivism; age at first conviction was inversely related to recidivism in a different sample of 81 women. Criminal history variables were also associated with recidivism, with re-offending being positively associated with a prior adult conviction, prior provincial incarceration, and committing an unarmed robbery. Serving a life sentence, serving a longer sentence, having a drug-related offence, and being released on full parole were associated with less recidivism. When controlling for

criminal associates, and personal problems. Variables that were correlated with violent recidivism included using violence in the index offence, suicide attempt(s), expecting to stay out of trouble (via incarceration), being employed 50% or less of the time, and having mixed or criminal associates, a mixed or non-supporting financial history, and neutral or hostile feelings toward father. Stepwise multiple regression analyses revealed that time spent on probation, expectations about incarceration, and major personal problems accounted for 48% of the explained variance in general recidivism, while 45% of the variance in violent recidivism was accounted for by suicide attempts, expectations that incarceration would keep offender out of trouble, and having criminal associates.

In the 1996 study, drug use/dependence, alcohol use/dependence, antisocial personality disorder, and age at first violent and non-violent offence were related to outcome in non-disordered female offenders. It was also reported that having a caregiver with a substance problem was related to return to prison, and level of education was associated with a revocation for a technical violation. Blanchette and Motiuk also differentiated between having a substance abuse problem and using substances during the commission of an offence. This proved to be an important distinction, as in hierarchical regression analyses it was revealed that, along with past incarcerations, use of alcohol\drugs during the offence predicted both return to custody for any reason and having a technical violation. In their interviews with women admitted to a remand centre, Robertson, Bankier, and Schwatz (1987) found further evidence of the importance of the use of substances during or prior to an offence. They found

that the use of alcohol prior to offending was one of the variables that distinguished first time offenders from repeat offenders. Other variables which distinguished these groups were poor school performance, unemployment, being employed in low paying occupations, substance use problems, and having anger management deficits; these factors were more frequently found in the recidivist group. However, contrary to other findings, age was not found to differentiate the first offenders from recidivists.

In summary, the individual studies reviewed indicate considerable consistency as to the covariates of crime for women. Some of the most uniform correlates and predictors of criminal behavior appear to be age, criminal history\offence variables, financial problems, accommodation problems, substance abuse, emotional and behavioral problems, family factors, and employment difficulties. In fact, of the studies that assessed the relationship between employment and substance abuse and recidivism, only one (Bonta et al., 1995) found these variables to be unrelated to re-offending. Less frequently studied, but also found to be important, were antisocial personality, criminal peer groups, institutional misconduct, and the use of substances during or prior to the commission of an offence. Furthermore, insight as to potential gender-specific risk factors was provided by the studies that indicated that self-injury, being a single parent (Bonta et al., 1995), and suicide attempts (Blanchette & Motiuk, 1996) were predictive of recidivism. Taken together, the results indicate that several of the areas identified as problematic for female offenders by wide-scale surveys are also risk factors for re-offending.

However, despite the valuable information provided by the studies reviewed, the strength of conclusions that can be drawn about female criminality and risk factors is limited by several methodological constraints. Firstly, the majority of studies sampled only federally sentenced women and women who had been incarcerated. As a result of these selection biases, it is unknown whether the results will generalize to provincially sentenced women (who comprise the majority of Canadian female offenders), or community sentenced women. Secondly, many of the studies of female offenders employed a cross-sectional research design. While this design provides information as to the correlates of criminality, it does not satisfy a necessary (though not sufficient) requirement for establishing causality; that is, it does not provide evidence that the correlate preceded the criterion of criminal behavior. Although the longitudinal approach of the current study can not prove that the constructs investigated played a causative role in recidivism, it does provide evidence as to which variables actually preceded and predict criminal behavior. Lastly, with the exception of one study (Bonta et al., 1995), none of the research assessed factors other than those identified as important by research with males. The criticism with this approach is that risk and need factors that may be specific to female offenders have been excluded from study, and hence, are unable to demonstrate their importance in predicting recidivism by women. This latter issue is of particular importance if a better understanding of how women can be helped to avoid conflict with the law is to be achieved.

Current Research

The current study followed up the adult sample from the Shaw (1994a) survey. This research provides information on the actual level of risk posed by a large sample of provincial female offenders by determining rates of general and violent re-offending over an extended follow-up period. The recidivism rates for the institution and community samples were compared to determine whether the groups differed in terms of risk for recidivism. It was hypothesized that these data would provide support for the notion that only a small proportion of female offenders re-offend violently. Given their more extensive criminal records (Shaw, 1994a), it was expected that more women in the institution group would recidivate compared to the community sample.

Recidivists and non-recidivists within and across the institution and community groups were compared along various dimensions, including demographic and psychosocial variables, and Level of Supervision Inventory subtotal and total scores. Consistent with past research and claims that the social, economic, and personal difficulties experienced by women affect their involvement in crime, it was hypothesized that the recidivists would demonstrate more psychosocial problems, more extensive criminal histories, and higher LSI scores than non-recidivists. It was also expected that the incarcerated women would have a greater number of problems and higher LSI total scores, than the women under community supervision. In particular, it was expected that recidivism across groups would be associated with employment and accommodation problems, financial difficulties, family\marital conflict, emotional

problems, substance abuse, and pro-criminal peer groups and attitudes. It was also expected that younger women would demonstrate more recidivism than older women.

The Level of Supervision Inventory (LSI; Andrews, 1982) was used in the current study because, as a risk/need assessment instrument, it has shown more promise with female offenders than other tools (see Bonta et al., 1995; Coulson et al., 1996; Harman & Hann, 1989). The instrument was also relevant to the study, since it assesses several of the areas identified as needs by previous research (e.g., Grace, 1990; Shaw, 1994a; Shaw et al., 1992). Furthermore, a revised version of this instrument, the Level of Service Inventory -Ontario Version (LSI-OR; Andrews, Bonta, & Wormith, 1995), is currently being used in all institutions and probation offices across the province of Ontario to help guide decisions regarding level of supervision, program placement, and security classification. Although the LSI has been well-validated on male offenders in several settings, there is only limited research on its utility with female offenders (Coulson, et al., 1996). Hence, the use of the LSI and its revised version served to validate the instrument with both women under community supervision and incarcerated women, while providing a convenient method of organizing and quantifying information thought to be of relevance to women's offending and treatment needs.

The predictive criterion validity of the LSI subtotal scores and other areas identified as relevant to recidivism was also examined. Based on previous risk research it was expected that criminal history variables would demonstrate

considerable predictive validity, as well as age, substance abuse problems, employment difficulties, antisocial attitudes and peers, and financial problems. The influence of more gender-specific variables, such as self-injury, suicide attempts, physical and sexual abuse, and parenting concerns, was less clear. The little research that does exist suggests that self-harm variables are related to recidivism (Blanchette & Motiuk, 1996; Bonta et al., 1995), while the abuse variables have demonstrated inconsistent results, with one study linking past abuse with less re-offending (Bonta et al., 1995), and one linking sexual abuse as an adult to being a repeat offender (Long, Sultan, Kiefer, & Schrum, 1984). Given the general lack of research and inconsistent findings, the analysis of these variables was considered exploratory.

The study is unique from previous research for a variety of reasons. First, the size of the sample allowed for a variety of complex analyses that can only be accomplished with large numbers. Second, because the original sample included both women who were incarcerated and under community supervision, comparisons between these two groups could be made, whereas previous research has focused primarily on incarcerated samples. Third, the present study determined the rates of both general and violent re-offending; and fourth, the extent to which a number of need factors contribute to the prediction of recidivism was examined.

The implications of this research are many. Although it has been widely stated that female offenders present a very low level of risk, few empirical studies have been conducted to provide support for this statement. This

research specifically addressed the issue of risk and provided information on what need areas and characteristics of female offenders are also risk factors. The project determined whether incarcerated and community samples differ in terms of risk and what variables are associated with recidivism. This information is imperative to guide decisions about the appropriate placement and management of provincially sentenced women. In essence, the research provides valuable information that can be used to develop appropriate classification for provincially sentenced women. Furthermore, with the identification of criminogenic need factors, cost efficient and effective programming can be developed to meet the needs of women, while at the same time addressing concerns for public safety.

Method

Participants

The sample consisted of 441 provincially sentenced adult female offenders who were interviewed in the Winter of 1991-92 as part of the *Ontario Women in Conflict with the Law* survey (Shaw, 1994a). At the time of the original project, 202 of the women were incarcerated and 239 were under community supervision across the province of Ontario. The women who were incarcerated when they were interviewed by Shaw (1994a) comprise the institution sample for the current study, while the women who were under community supervision when they participated in the survey are referred to as the community sample.

The target sample for the current project was the 531 adult women interviewed for the Shaw (1994a) survey; however, 90 women were not followed up for a variety of reasons. Specifically, five of the women were young offenders who had been miscoded as adults, 15 women were either deported or sentenced federally for the original offence, two were deported during the follow-up period, 20 names could not be matched on the Offender Management System (OMS), six names were not provided to the researcher, two cases were dropped from the community group because they had been interviewed as incarcerates, one woman died, and one was incapacitated due to a medical condition.

An additional 14 cases from the institution group were excluded from the analyses because there was not enough information to complete the LSI (e.g., the file was completely empty, or at least 25% of the items could not be scored). Further, the LSI was not available for 24 community supervision cases: in seven

cases the file had been purged; in 12, the probation offices did not respond; and in five, the files could not be traced or no LSI had ever been completed. Chi-square analyses and t-tests revealed that these 38 cases were not significantly different from the cases for which LSIs were available in terms of age at time of interview, index offence type and severity, number of previous convictions, age at first conviction, recidivism status, and sentence length.

The sample size was based on the average daily counts of women in institutions across the province and monthly averages of women under community supervision. In order to ensure representation across the province, sampling within Ontario's five regions was designed to be proportionate to the overall offender distribution. At each site, subjects were randomly selected for participation where possible. Details for selection of the Shaw (1994a) sample are provided in Appendix A.

The average age of the sample at the time of the survey was 30.3 years ($SD = 8.84$), with a range of 18 to 66 years. Thirty-nine percent of the women were single, 30% were living common-law or were married, and 29% were separated or divorced. Seventy-four percent of the women identified themselves as Caucasian, 12% as Native peoples, 10% as black, and 4% as belonging to another minority group. Over one-third of the sample had not completed high school and 49% had completed only grade 10 or less. At the time of their current offence, 47.2% of the women who were eligible to work were unemployed.

A breakdown of the offences for which the women were charged is shown in Table B1, Appendix B. As can be seen from the table, the majority of women were charged with property offences, with the second largest number of offenders being charged with assault. The third most common category was trafficking/importing drugs. Over two-thirds (68.2%) of the women had a previous offence, and 2.0% had served a previous federal term. The sentence length for the women serving time in prison is shown in Table B2, Appendix B. Additionally, the type of release for all women who had been incarcerated is shown in Table B3, Appendix B. As can be seen from this table, 15.5% of the women from the community sample had been incarcerated prior to their community supervision.

Instruments

Recidivism. General recidivism was defined as a conviction for any new offence. Violent recidivism was defined as any conviction for an offence involving crimes against persons (e.g., murder, manslaughter, infanticide, attempted murder, wounding, rape, sexual assault, assault, and robbery). The follow-up period during which recidivism was assessed was four years and nine months from the date of release for the institution group and four years and nine months from November, 1990, (when the Shaw survey began), for the community group.

Level of Supervision Inventory. The Level of Supervision Inventory (LSI; Andrews, 1982), shown in Appendix C, is a quantitative survey of an offender's personal and social history. The 54 items of the LSI are grouped into ten

psychosocial and legal categories: Criminal History (10 items); Education/Employment (10); Financial (2); Family/Marital (4); Accommodation (3); Leisure/Recreation (2); Companions (5); Alcohol/Drug Problem (9); Emotional/Personal (5); and Attitudes/Orientation (4). Total scores are the simple sums of checked items, which are scored in a binary manner (0 = not applicable and 1 = applicable). High scores are associated with problems in the index area for the Education/Employment, Financial, Family/Marital, Accommodation, Alcohol/Drug Problem, and Emotional/Personal subscales. High scores on the Companions and Attitudes/Orientation scales indicate an association with criminal peers and endorsement of antisocial attitudes, respectively, while a high score on Criminal History indicates a more extensive criminal past. A high Leisure/Recreation score is reflective of a lack of hobbies and unstructured leisure time.

The information necessary for scoring the LSI is usually obtained via a semi-structured interview and is verified and supplemented by reviews of official files. The scoring manual for the LSI is shown in Appendix C. Modifications to scoring in the current study were made such that a homemaker was scored as employed on item 11, however, items 19 and 20 were still scored in the negative, as recommended in the manual.

The LSI has been subjected to and adequately withstood numerous tests of its psychometric properties and utility as a risk\need and classification instrument. In particular, research with male probationers and federal inmates has demonstrated that the LSI has adequate internal consistency (coefficient

alpha = .72), interrater reliability ($r = .94$), 3 month test-retest stability ($r = .80$), and convergent validity (Andrews, 1982; Andrews, Kiessling, Mickus, & Robinson, 1986; Loza & Simourd, 1994). A series of studies with provincially sentenced males has established the predictive validity of the LSI with a number of criterion measures, including success in a halfway house ($r = .52$), recidivism while on probation ($r = .47$), severity of reoffence ($r = .39$), and reincarceration ($r = .40$) (Bonta & Motiuk, 1985, 1987, 1990; Motiuk, Bonta & Andrews, 1986). The LSI has also been found to be significantly related to institutional misconducts (Bonta & Motiuk, 1992).

Level of Service Inventory- Ontario Revision. The Level of Service Inventory - Ontario Revision (LSI-OR; Andrews, Bonta, & Wormith, 1995) is a recent revision of the Level of Supervision Inventory, and will be scored from the LSI to yield eight risk/need scales, including Criminal History (8 items); Education/Employment (9); Family/Marital (4); Leisure/Recreation (2); Companions (4); Substance Abuse (8); Procriminal Attitude/Orientation (4); and Antisocial Pattern (4). The subscales of the LSI-OR correspond in meaning to their LSI counterparts, while the Antisocial Pattern scale is reflective of a general pattern of antisocial behavior. The LSI-OR has a strong emphasis on case management, allowing for the calculation of both the level of risk an individual presents, as well as the strengths possessed in the assessed areas. Preliminary research has indicated that the LSI-OR has predictive validity for both male and female offenders when general re-offending, reincarceration, and violent re-

offending are used as criterion variables (Andrews, 1994). The LSI-OR is shown in Appendix D.

Ontario Women in Conflict with the Law survey data (Shaw, 1994a). The data collected by the Shaw (1994a) survey were also available for use. Copies of the interview schedules are shown in Appendix E.

Procedure

The data collection procedure consisted of three parts. In the first phase, a master list of the names of the participants was provided by the Research Branch of the Solicitor General of Canada. Using the names provided, the Ministry of the Solicitor General and Correctional Service's Offender Management System (OMS) was accessed in order to obtain client identification numbers. A manual search using the Ministry's mainframe system determined the last known location of the samples' community and institutional files. Letters were then sent to the identified locations requesting verification of the files' existence. In the case of the community files, letters requested that photocopies of the relevant LSIs (with personal identifiers removed) be sent to the Research Branch. Arrangements were made with each institution such that the researcher was able to review the required files.

During the initial survey, the offenders identified and prioritized their programming needs in 12 areas: child related; family support; housing; work-training/job skills; employment; substance abuse counseling; physical/sexual abuse counseling; health care; help with emotional problems; legal help; and native or ethnic programs. These data, as well as demographic and offence-

related information, were used in the current project and were provided by the Research Branch of the Ministry of the Solicitor General and Correctional Services.

The second part of data collection involved obtaining Level of Supervision Inventory (LSI) information for the sample. The Level of Service Inventory - Ontario Revision (LSI-OR) was scored from the LSI. These data were obtained through a variety of methods. First, copies of the LSI dating from the 1991-1992 period were retrieved from probation offices for 232 women in the original community sample. For the remaining seven cases LSI data were obtained from the Vanier Centre for Women LSI database, as these women had been paroled or released to a Community Correctional Centre from that institution. All probation offices, except two, agreed to photocopy the relevant LSIs and mail them to the Research Branch; the copies were then forwarded to the researcher. In addition, when the OMS indicated that women in the institutional group had been on probation during the commission of the offence for which they were incarcerated, or were released from the institution on community supervision, probation-completed LSIs were requested in order to supplement the data collected through file review. Probation completed LSIs were obtained for 71 women in the institution group.

All probation officers in the province of Ontario are trained in the administration and scoring of the LSI and complete it as a standard part of their intake interview and assessment. LSIs completed by Ontario probation officers have been the subject of considerable research and have demonstrated

acceptable levels of inter-rater reliability, internal consistency, and construct and predictive validity (Andrews, Kiessling, Mickus, & Robinson, 1983; Andrews, Kiessling, Mickus, Robinson, 1986; Bonta, 1993).

LSIs were available on an automated system for 67 women who were incarcerated at the Vanier Centre for Women during the original survey. In completing these LSIs, a trained examiner read computer-presented questions individually to each woman, who then typed in a "Yes" or "No" response according to whether the item applied to her. Although the internal reliability of the scale using this method has been demonstrated to be high, with Cronbachs' alpha being .90 (Coulson, et al., 1996) and research with this data has demonstrated predictive validity (Coulson, et al., 1996), file reviews were also completed for these cases in order to corroborate the computer-scored LSIs.

Lastly, LSIs were scored from institutional file information for 196 women from the original institution sample. In the six cases where files were not available, LSI data were obtained through the Vanier Centre database or the probation files. The researcher reviewed all file documentation, including classification reports, intake assessments, misconduct reports, pre-sentence plans, medical reports, psychological assessments, release plans, correctional officer record sheets, and inmate request forms. Criminal history items were verified with OMS data. Additionally, the Shaw (1994a) survey collected data relevant to 28 items on the LSI, and those data were cross-referenced with the file information, probation-completed LSIs, and LSIs obtained from the Vanier Centre system, to identify any inconsistencies and to minimize the amount of

missing data. The form used for collating this information is shown in Appendix F. Unfortunately, data regarding leisure and recreation activities were not routinely recorded in institutional files and thus, the Leisure/Recreation subscales of the LSI and LSI-OR were dropped from all analyses for both the community and institution sample. The total score was not adjusted as a result of dropping the subscale..

Although the LSI is typically completed using information obtained through interviews, it is recommended that this method be supplemented and verified by official file information (Andrews, 1982; Andrews & Bonta, 1992). Hence, file reviews already play a role in interview-based LSIs, which have demonstrated adequate reliability and validity. However, in order to assess the inter-rater reliability of the LSIs completed by file review, 136 files were reviewed by both the primary researcher and a research assistant.

As noted above, the research employed multiple methods of obtaining LSI data in an effort to increase the validity and reliability of the LSIs completed for the study. In cases where inconsistencies in correctional or sentencing data arose, official records (OMS, institutional files, probation LSIs) were used to score the criminal history items. In the case of disagreement among data sources for other items, the data recorded closest to the survey data collection time-frame was used. If the time-frame could not be established and any source indicated the area presented a need for the woman, it was scored as such.

The third phase of data collection involved obtaining recidivism information. A manual search of Ontario's Offender Management System (OMS)

provided comprehensive information on recidivism within Ontario. Although recidivism data from the Royal Canadian Mounted Police's Canadian Police Intelligence Computer (CPIC) information were collected, the primary source of recidivism information for the study was OMS. Recidivism information was recorded using the form shown in Appendix G.

All information collected for the purpose of the study was kept confidential and no personal identifiers were retained on either hard copies or automated copies of the data. Rather, the names of the offenders were removed and replaced with a numeric identifier as the data were collected. Once data collection was complete the master list with names and assigned numeric codes was destroyed.

Results

The results which follow are organized according to the analyses performed. The first set of analyses examines the psychometric properties of the LSIs used in the current study. The second group of analyses presents differences in recidivism according to group type, while the next set examines differences between institution and community sentenced women and recidivists and non-recidivists on demographic and offence related categorical variables. The following group of results summarizes differences between both general recidivists and non-recidivists, and institution and community women on continuous variables assessing psychosocial needs. A sub-section of this set of analyses presents the results of a principle components analysis performed on data taken from the Shaw survey. The next set of analyses summarizes differences between violent recidivists and women who did not recidivate violently, as well as interactions between violent recidivism status and group type. The last set of analyses reported details the ability of the risk/need and psychosocial variables investigated in the current study to predict both general and violent recidivism.

Psychometric Properties of the LSI

The first group of analyses performed provides information of the reliability of the LSIs collected for the research. The internal consistency of the LSI was assessed by computing Cronbach's alpha for each subscale, as well as for the total LSI. The overall alpha coefficient for the LSI was .89, indicating the LSI items measure a single underlying dimension. The internal consistency

estimates for the subscales varied from .02 to .82 with a mean of .54. Subscale-total correlation coefficients were also examined, and ranged from a low of .27 for the Financial subscale, to a high of .80, for Criminal History. The Pearson Product moment correlation coefficients and alpha coefficients are shown in Appendix H, Table H4. The high inter-rater reliability estimate ($r = .92$) for the 136 LSIs that were coded by both the researcher and an assistant is also indicative of the reliability of the LSIs used in further analyses. The inter-rater correlations for each subscale and the total LSI score are shown in Appendix I, Table I5.

Group Differences in Recidivism

The next set of analyses was performed to determine whether women from the institution and community groups differed in terms of recidivism. Examination of the recidivism data revealed that 46.5% of the women were convicted of a new offence during the four year and nine month follow-up period; 14.3% were reconvicted for a violent offence. As expected, chi-square tests of independence showed that women from the institution group had a greater likelihood of general recidivism than women from the community group (70.3% vs. 26.4%, $\chi^2 = 84.95$, $df = 1$, $p = .000$, $N = 441$). Also, proportionately more women from the institution group recidivated violently compared to the community group (24.3% vs. 5.8%, $\chi^2 = 30.27$, $df = 1$, $p = .000$, $N = 441$). Overall, 77.8% of the violent recidivists were from the institution group. Although women who had a non-violent index offence were less likely (12.4%) to have a

violent reconviction ($\chi^2 = 5.40$, $df = 1$, $p = .02$, $N = 434$), only 22.5% of the women with a violent index offence recidivated violently.

Most of the women (44.4%) who recidivated did so for the first time during their first year at risk, while 25.9% recidivated for the first time during their second year in the community. A further 14.1% first recidivated in the third year, and 9.3%, in the fourth year. Only 6.3% of the women recidivated for the first time during the first nine months of their fifth year at risk.

A Multivariate Analysis of Variance (MANOVA) performed with only the recidivists revealed significant differences between the institution and community recidivists on a number of variables related to re-offending, $F_{\text{exact}}(3, 201) = 13.51$, $p = .000$. As shown in Table 1, recidivists from the institution group were reconvicted more quickly than community group recidivists, $F_{\text{exact}}(1, 203) = 27.75$, $p = .000$, and they also incurred a greater mean number of reconvictions, $F_{\text{exact}}(1, 203) = 28.71$, $p = .000$, and offences, $F_{\text{exact}}(1, 203) = 22.20$, $p = .000$. With alpha set at .05 for both the multivariate and univariate tests, the effect size for the multivariate test was .168, while the effect sizes for the tests for time to first reconviction, number of reconvictions, and number of offences, were .120, .124, and .098, respectively.

Table 1

Mean Score for Days to First Reconviction, Number of Reconvictions, and
Number of Offences by Group Type

Outcome Measure	Institution			Community		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Days to first reconviction	442.35	444.65	142	799.59	455.52	63
Number of reconvictions	4.95	4.25	142	2.02	1.32	63
Number of offences	9.66	8.80	142	4.16	4.35	63

Not surprisingly, institution group recidivists were also more likely than community group recidivists to be re-incarcerated upon conviction (94.4% vs. 79.4%, $\chi^2 = 10.68$, $df = 1$, $p = .001$, $N = 205$), although most recidivists (89.8%) received a jail term at some point during the follow-up. Overall, 34.6% of the women re-offended while they were under some form of community supervision; women from the institution sample were no more likely than community group recidivists to be reconvicted while under supervision (35.2% vs. 33.3%, $\chi^2 = 0.68$, $df = 1$, $p = .794$, $N = 205$).

Interestingly, there was no difference between the institution and community recidivists in terms of whether their most serious new offence was more, less, or of the same severity as their index offence ($\chi^2 = 4.73$, $df = 2$, $p = .093$, $N = 201$). In total, 31.7% of the recidivists committed an offence that was of the same severity as their index offence, 25.8% were reconvicted of less

severe offences, and 40.0% were reconvicted of a more serious offence.

Further, of the women who were reconvicted of an offence that was more severe than their index offence, only 44.5% were violent recidivists. As can be seen in Table J6, shown in Appendix J, property-related offences were the most frequently occurring most serious offence type committed during the follow-up.

Group Differences on Categorical Variables

A primary purpose of the study was to determine whether the institution and community groups and recidivists and non-recidivists differed on a variety of demographic and psychosocial variables and risk factors. A number of analyses were performed to accomplish this and these tests are divided according to the scale of the variables. Chi-square tests of independence were performed on the nominal variables, and analyses of variance were used to test for differences on continuous variables. The chi-square test results are presented first.

The Bonferonni correction procedure was used to set alpha at .006 (.05/9) for the following tests. Chi-square tests revealed no significant differences between the institution and community groups in terms of ethnic origin ($\chi^2 = 11.78$, $df = 1$, $p = .019$, $N = 439$) or marital status ($\chi^2 = 4.46$, $df = 1$, $p = .107$, $N = 440$). However, as can be seen from Table 2, there was a trend for more Black women be incarcerated. The actual proportion of women falling into the different ethnic and marital categories, by group, are shown in Tables 2 and 3, respectively.

Table 2

Ethnic Origin by Group

Ethnic Origin	Community		Institution	
	<u>n</u>	%	<u>n</u>	%
Caucasian	187	78.2	140	70.0
Native	27	11.3	25	12.5
Black	14	5.9	30	15.0
South/East Asian	6	2.5	2	1.0
Other	5	1.1	3	0.7

Table 3

Marital Status by Group

Marital Status	Community		Institution	
	<u>n</u>	%	<u>n</u>	%
Single	101	42.4	72	35.6
Married/Common-law	62	26.1	71	35.1
Separated/Divorced/Widowed	75	31.5	59	29.2

Although actual income was unavailable, main source of income was reported by Shaw (1994a). The proportion of women reporting various income sources is shown in Table 4. It was found that the institution and community groups did not differ in terms of the proportion of women whose main source of income was from social assistance ($\chi^2 = 4.94$, $df = 1$, $p = .026$, $N = 439$), or a job ($\chi^2 = 0.08$, $df = 1$, $p = .773$, $N = 439$), although significantly more women from the institution group reported “other” sources of income ($\chi^2 = 20.15$, $df = 1$, $p = .000$, $N = 439$). Reflecting more unstable family backgrounds, significantly more women from the institution group had been placed in the care of a protective agency as a juvenile (74.1% vs. 25.9%, $\chi^2 = 31.79$, $df = 1$, $p = .000$, $N = 425$).

Table 4

Income Source by Group

Income Source	Community		Institution	
	<u>n</u>	%	<u>n</u>	%
Social Assistance				
Yes	132	55.7	91	45.0
No	105	44.3	111	55.0
Wages				
Yes	93	39.2	82	40.9
No	144	60.8	120	59.4
Other Sources				
Yes	26	11.0	56	27.7

No	211	89.0	146	72.3
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Analyses of different types of index offences revealed that significantly more women with drug-related offences were from the institution group as opposed to the community group (72.5% vs. 27.5%, $\chi^2 = 23.42$, $df = 1$, $p = .000$, $N = 437$), while women committing a property offence were more likely to be from the community group (68.7% vs. 31.3%, $\chi^2 = 29.70$, $df = 1$, $p = .000$, $N = 437$). Property offences refer to the offences of break and enter, theft and fraud. Interestingly, there was no difference between the groups in terms of the proportion of women who had a violent index offence ($\chi^2 = 0.001$, $df = 1$, $p = .974$, $N = 437$).

Chi-squares were also used to test for associations between the variables noted above and the likelihood of recidivism. Again, alpha for each test was set at .006. These analyses revealed that neither marital status ($\chi^2 = 0.17$, $df = 2$, $p = .917$, $N = 440$) nor ethnic origin ($\chi^2 = 5.31$, $df = 1$, $p = .257$, $N = 439$) was related to recidivism status. The breakdown of recidivism by marital status is shown in Table 5.

Table 5

Marital Status by Recidivism Status

Marital Status	Recidivism		No Recidivism	
	<u>n</u>	%	<u>n</u>	%
Single	82	47.4	91	52.6
Married/Common-law	60	45.1	71	54.9
Separated/Divorced/Widowed	63	47.0	59	53.0

With regard to source of income, having social assistance as a main source of income was unrelated to recidivism ($\chi^2 = 1.49$, $df = 1$, $p = .222$, $N = 439$), although replicating the findings of Bonta et al., (1995), having other sources of income was associated with a greater likelihood of recidivism ($\chi^2 = 23.86$, $df = 1$, $p = .000$, $N = 439$). Overall, 70.7% of those with other sources of income recidivated while only 40.9% of those without other sources re-offended. Conversely, having wages from a job was associated with a reduced chance of re-offending, as only 38.3% of the women with wages recidivated compared to a recidivism rate of 51.9% for women without job wages ($\chi^2 = 7.83$, $df = 1$, $p = .005$, $N = 439$). The rates of recidivism by source of income are shown in Table 6. Finally, those women who were in care as a child had a greater chance of recidivating than those who were not in protective care. In total, 67.1% of the women who had been in care recidivated, while only 40.8% of the women who were not in care recidivated ($\chi^2 = 18.75$, $df = 1$, $p = .000$, $N = 425$).

Table 6

Income Source by Recidivism Status

Income Source	Recidivism		No Recidivism	
	<u>n</u>	%	<u>n</u>	%
Social Assistance				
Yes	110	49.3	113	50.7
No	94	43.5	122	56.5
Wages				
Yes	67	38.3	108	61.7
No	137	51.9	127	48.1
Other Sources				
Yes	58	70.7	24	29.3
No	146	40.9	211	59.1

Interestingly, property offenders were less likely to recidivate than non-property offenders, both generally (37.9% vs. 46.3%, $\chi^2 = 10.79$, $df = 1$, $p = .001$, $N = 437$), and for violence (7.7% vs. 19.8%, $\chi^2 = 12.90$, $df = 1$, $p = .003$, $N = 437$). Although drug offenders exhibited a trend toward more recidivism than non-drug offenders (60.9% vs. 44.0%, $\chi^2 = 6.63$, $df = 1$, $p = .01$, $N = 437$), this effect did not reach significance at the .006 level. The relationship between having a drug offence as the most serious index offence was also unrelated to recidivating violently ($\chi^2 = 0.000$, $df = 1$, $p = .984$, $N = 437$). Additionally, having a violent index offence was unrelated to general recidivism ($\chi^2 = 0.54$, $df = 1$, $p =$

.464, $N = 437$). Consistent with findings noted in the literature, type of institutional release was significantly associated with recidivism status ($\chi^2 = 16.67$, $df = 2$, $p = .000$, $N = 238$) for all women who had been incarcerated, including women from the community sample. A total of 70.4% of the women who served their entire sentence recidivated, while 75.0% of those who were released to a community correctional centre reoffended. Comparatively, only 42.8% of the women who were released on parole recidivated.

Group Differences on Continuous Variables: General Recidivism

Next, analyses were performed with the continuous variables. In particular, a group of analyses of variance was performed to determine whether the general recidivists differed from non-recidivists in terms of psychosocial needs and characteristics, and whether the relationship between these variables and recidivism varied by community or institution group membership. The analyses also determined whether the institution and community groups differed on various risk/need factors and personal characteristics, regardless of their general recidivism status.

First, a two-way analysis of variance (ANOVA), with recidivism status (recidivist/ non-recidivist) and group type (institution/community) as the independent variables and LSI total score as the dependent measure, was performed to address the question of whether overall psychosocial need level differed according to group and recidivism status. The analysis revealed significant main effects for both recidivism status, $F_{\text{exact}}(1, 437) = 166.23$, $p =$

.000, and group type, $F_{\text{exact}}(1,437) = 66.76$, $p = .000$. The magnitude of the effects, given by partial eta squared, were .276 and .133, respectively. As expected, the institution sample ($M = 24.28$, $SD = 8.03$, $n = 202$) scored higher than the community sample ($M = 14.54$, $SD = 7.56$, $n = 239$) and the recidivists ($M = 25.20$, $SD = 7.21$, $n = 205$) scored higher than the non-recidivists ($M = 13.62$, $SD = 7.03$, $n = 236$). The mean LSI score for the total sample was 19.00 ($SD = 9.16$). The interaction term was not significant, $F_{\text{exact}}(1, 437) = 1.17$, $p = .280$. The mean LSI score for the community recidivists was 20.68 ($SD = 7.45$); for the community non-recidivists, it was 12.35 ($SD = 6.29$); for the institution recidivists, it was 27.21 ($SD = 6.14$); and for the institution non-recidivists the mean score was 17.35 ($SD = 7.77$). An alpha level of .05 was used to judge statistical significance for all tests. Power for the interaction effect was 0.190.

The same results were found when the analysis was repeated with the LSI-OR total score serving as the dependent measure. Specifically, with alpha set at .05, there were significant main effects for both recidivism status, $F_{\text{exact}}(1,437) = 157.38$, $p = .000$, and group type, $F_{\text{exact}}(1,437) = 85.47$, $p = .000$, while the interaction was not significant, $F_{\text{exact}}(1,437) = 1.64$, $p = .201$. The effect size (partial η^2) for the recidivism and group type effects were .265 and .164, respectively. The power to detect an interaction was 0.246. As with the LSI, the institution sample had a higher mean LSI-OR score than the community sample and the recidivists scored higher than the non-recidivists. The mean LSI-OR

score for the total sample was 15.48 (SD = 8.60). The mean and standard deviation, for each group, are shown in Tables K7 and K8, Appendix K.

Although the ANOVAs provide information regarding differences among the groups on the mean risk/need total scores, it is important to determine whether the proportion of women who recidivate increases with each risk level, as prognostic risk categories are used to guide supervision requirements. In order to assess this relationship, total LSI and LSI-OR scores were used to group women into risk level categories, ranging from low to very high risk. The cutoff scores for each category were taken from Bonta and Motiuk (1992) for the LSI and from the LSI-OR manual and are shown in Tables 7 and 8 respectively.

Table 7

Recidivism by LSI Risk Level Category

	Community		Institution		Total	
LSI Risk	%		%		%	
Level	<u>n</u> ^a	Reoffend (f)	<u>n</u>	Reoffend (f)	<u>n</u>	Reoffend (f)
0-7						
Low	47	4.3 (2)	8	0	55	3.6 (2)
8-11						
Medium	40	7.5 (3)	8	0	48	6.3 (3)
12-23						
High	121	29.8 (36)	65	55.4 (36)	186	38.7 (72)
>24						
Very High	31	71.0 (22)	121	87.6 (106)	152	84.2 (128)

Note. The sample size for the community group is 239, the sample size for the institution group is 202, and the total N = 441.

The f in parentheses refers to the number of women in the risk category who re-offended .

^aThe n refers to the number of women who were classified into each risk category.

Table 8

Recidivism by LSI-OR Risk Level Category

	Community		Institution		Total	
LSI Risk	%		%		%	
Level	<u>n</u> ^a	Reoffend (f)	<u>n</u>	Reoffend (f)	<u>n</u>	Reoffend (f)
0-4						
Very Low	45	4.4 (2)	6	0	51	3.9 (2)
5-10						
Low	77	16.9 (13)	16	6.3 (1)	93	15.1 (14)
11-19						
Medium	88	33.0 (29)	58	60.3 (35)	146	43.8 (64)
20-29						
High	27	63.0 (17)	102	84.3 (86)	129	79.8 (103)
30+						
Very High	2	100.0 (2)	20	100.0 (20)	22	100.0 (22)

Note. The sample size for the community group is 239, the sample size for the institution group is 202, and the total N = 441.

The f in parentheses refers to the number of women in the risk category who re-offended .

^aThe first n refers to the number of women who were classified into each risk category.

Examination of gamma statistics revealed a significant relationship between LSI-based risk categories and recidivism, for both the institution (gamma = 0.816, $p = .000$) and community (gamma = 0.772, $p = .000$) samples, as well as for the total sample (gamma = 0.864, $p = .000$). Similarly, significant associations were found between LSI-OR-based risk categories and recidivism for the institution (gamma = 0.811 $p = .000$), community (gamma = 0.649, $p = .000$), and total samples (gamma = 0.819, $p = .000$).

As shown clearly in Tables 7 and 8, as the risk level increases, so does the proportion of women who recidivated, with high and very high risk categories showing the greatest likelihood of recidivism, while very few of the low and very low risk cases recidivated. The Pearson Product moment correlation coefficients between both LSI and LSI-OR risk categories and general recidivism are shown in Table L9, Appendix L.

Next, a series of 2 x 2 Multivariate Analysis of Variance (MANOVA) was completed to test for differences among the groups on demographic and psychosocial variables. Group type (institution/community) and recidivism status (recidivist/ non-recidivist) served as the grouping variables. As recommended by Stevens (1992), the test variables were broken into two categories - those previously and consistently found to have an empirical relationship with recidivism and those being tested on a more heuristic basis. For the MANOVA analyses, variables designated as having an established relationship with recidivism were: age (age at interview), age at first conviction, the LSI subscales Criminal History, Education/Employment, Financial, Family/Marital,

Accommodation, Companions, Alcohol/Drug Problem, Emotional/Personal, and Attitudes/Orientation, and the LSI-OR subscales Criminal History, Education/Employment, Family/Marital, Companions, Substance Abuse, Procriminal Attitude/Orientation, and Antisocial Pattern. Variables designated as being tested on an exploratory basis were factor scores resulting from a principle components analysis of selected Shaw (1994a) survey variables. The treatment of these variables is discussed in detail below.

For all MANOVA tests completed, significant multivariate effects were followed by univariate tests of significance for each dependent variable. Simple main effects tests were completed if interactions among the univariate tests were significant. Alpha was set at .05 for all multivariate tests unless otherwise stated. The multivariate and univariate effect size measure is partial eta squared. The literature suggests that for relatively large sample sizes, differences in power among the MANOVA tests (Pillais, Hotelling's T², Wilks) are negligible (e.g., Morrison, 1967; Stevens, 1992). Hotelling's test was selected because it is a natural generalization of the univariate F -test.

The first 2 x 2 MANOVA tested for differences on the demographic and psychosocial variables designated as having an established association with recidivism. For each group, the means and standard deviations for the dependent variables are provided in Table 9. The MANOVA revealed significant main effects for group type, $F_{\text{exact}}(11,401) = 13.172$, $p = .000$, and recidivism status, $F_{\text{exact}}(11, 401) = 15.154$, $p = .000$. The Group Type x Recidivism Status interaction was not significant, $F_{\text{exact}}(11,401) = 1.744$, $p = .062$. The group type

and recidivism status effect sizes were .265 and .294, respectively. The power to detect a significant interaction was 0.85. The univariate tests of significance for the group type and recidivism status effects are provided in Table 10 and 11 respectively. Given that the dependent variables included in this analysis have an established link to recidivism, an alpha level of .05 was used to judge statistical significance for the univariate tests (Stevens, 1992).

Table 9

Mean Values for Measures by Group Type and Recidivism Status

Source	Group Type		Recidivism Status	
	Community (<u>n</u> = 230)	Institution (<u>n</u> = 185)	Non- recidivist (<u>n</u> = 221)	Recidivist (<u>n</u> = 194)
<hr/>				
Age at interview				
<u>M</u>	30.69	29.72	30.89	29.55
<u>SD</u>	9.53	7.58	9.43	7.78
Age at first conviction				
<u>M</u>	25.44	21.38	26.13	20.78
<u>SD</u>	9.62	7.92	9.68	7.49
LSI Alcohol/Drug Problem				
<u>M</u>	1.93	3.92	1.76	4.02
<u>SD</u>	2.34	2.42	2.25	2.39
LSI Accommodation				
<u>M</u>	0.61	1.06	0.52	1.14
<u>SD</u>	0.76	0.84	0.66	0.87
LSI Attitudes/Orientation				
<u>M</u>	0.25	1.10	0.21	1.11
<u>SD</u>	0.68	1.06	0.54	1.11
<hr/>				

Table 9 Continued

Mean Values for Measures by Group Type and Recidivism Status

Source	<u>Group Type</u>		<u>Recidivism Status</u>	
	Community	Institution	Non recidivist	Recidivist
	(<u>n</u> = 230)	(<u>n</u> = 185)	(<u>n</u> = 221)	(<u>n</u> = 194)
<hr/> LSI Family/Marital				
<u>M</u>	1.49	1.70	1.38	1.81
<u>SD</u>	1.12	0.93	1.03	1.01
LSI Financial				
<u>M</u>	1.25	1.23	1.16	1.34
<u>SD</u>	0.70	0.67	0.69	0.66
LSI Companions				
<u>M</u>	1.40	2.59	1.37	2.58
<u>SD</u>	1.27	1.34	1.21	1.39
LSI Criminal History				
<u>M</u>	2.27	5.45	2.20	5.38
<u>SD</u>	2.15	2.36	2.08	2.42
LSI Education/Employment				
<u>M</u>	3.20	5.06	2.99	5.22
<u>SD</u>	2.58	2.73	2.55	2.61
<hr/>				

Table 9 Continued

Mean Values for Measures by Group Type and Recidivism Status

Source	<u>Group Type</u>		<u>Recidivism Status</u>	
	Community	Institution	Non recidivist	Recidivist
	(<u>n</u> = 230)	(<u>n</u> = 185)	(<u>n</u> = 221)	(<u>n</u> = 194)
<hr/> LSI Emotional/Personal				
<u>M</u>	1.53	1.64	1.44	1.75
<u>SD</u>	1.08	1.22	1.11	1.17
<hr/>				

Table 10

Univariate F-test for the Main Effect Group Type

Source	MS	MS _{error}	F
Age at interview	14.15	75.89	0.19
Age at first conviction	307.10	74.99	4.10*
LSI Alcohol/Drug Problem	116.15	5.09	22.82**
LSI Accommodation	3.39	0.58	5.83*
LSI Attitudes/Orientation	24.66	0.68	36.32**
LSI Companions	50.15	1.56	32.19**
LSI Criminal History	371.52	4.04	92.02**
LSI Education/Employment	90.47	6.45	14.03**
LSI Emotional/Personal	0.15	1.30	0.11
LSI Family/Marital	0.01	1.04	0.01
LSI Financial	1.20	0.46	2.62

* $p < .05$. ** $p < 0.01$.

Table 11

Univariate F-test for the Main Effect Recidivism Status

Source	MS	MS _{error}	F
Age at interview	117.29	75.89	1.54
Age at first conviction	1705.65	74.99	22.74**
LSI Alcohol/Drug Problem	237.93	5.09	46.75**
LSI Accommodation	21.94	1.56	38.21**
LSI Attitudes/Orientation	33.25	0.68	48.99**
LSI Companions	59.52	1.56	38.21**
LSI Criminal History	3.74	0.46	101.06**
LSI Education/Employment	247.03	6.45	38.31**
LSI Emotional/Personal	8.55	1.30	6.60**
LSI Family/Marital	14.03	1.04	13.49**
LSI Financial	3.73	0.46	8.17**

* $p < .05$. ** $p < 0.01$.

Consistent with the hypothesis, the significant effects were in the predicted direction and revealed that women from the institution sample reported an earlier age at first conviction, and scored higher on the LSI subscales of Alcohol/Drug Problem, Accommodation, Attitudes/Orientation, Companions, Criminal History, and Education/Employment. Interestingly, the institution group was not more disadvantaged than the community sample in terms of emotional/personal problems, financial difficulties, and family/marital discord. Not surprisingly, compared to the non-recidivists, recidivists had an earlier age at first conviction, and scored higher on all of the LSI subscales, indicating greater needs on all areas assessed by the LSI. The Pearson Product moment correlation coefficients between recidivism status and the LSI total and subscale scores are shown in Appendix M, Table M10.

The same analysis was completed using the LSI-OR subscale scores in place of the LSI subscales. The means and standard deviations for the dependent variables are shown in Table N11, Appendix N, while the F -values are shown in Tables N12 and N13. Generally, these results replicated the findings for the MANOVA with the LSI subscales. The effects of group type, $F_{\text{exact}}(9, 403) = 16.448$, $p = .000$, and recidivism status, $F_{\text{exact}}(9,403) = 17.638$, $p = .000$, were significant, and the interaction was not significant, $F_{\text{exact}}(9,403) = 1.446$, $p = .166$. The effect sizes were .269 and .283 for the group type and recidivism status effects, respectively. The power to detect an interaction was 0.69.

Analysis of univariate effects revealed that the institution group scored higher than the community group on the scales measuring substance abuse, criminal attitudes, criminal peers, criminal history, and employment/education problems. The incarcerated women also reported an earlier age at first conviction and exhibited higher scores on the Antisocial Pattern scale, which is specific to the LSI-OR. The recidivists scored higher than the non-recidivists on all these scales as well, and, in addition, had higher scores on the Family/Marital scale of the LSI-OR. The Pearson Product moment correlation coefficients between the LSI-OR total score and subscales and general recidivism status are shown in Table O14, Appendix O.

Principle Components Analysis. Of particular interest in the current study was the potential criminogenic nature of variables that could be considered as having particular relevance for female offenders, such as a history of abuse, self-injury, and parenting issues. Variables assessing concerns in these areas were selected from the Shaw (1994a) survey. However, because of the large number of variables available, a principle components analysis (PCA) using varimax rotation was used to reduce the data set. Included in the data reduction scheme were the following binary variables: abused as an adult, abused as a child, wanting help for abuse, family problems when growing up, taken into care as a child, history of eating disorder, history of self-injury, history of suicide attempts, wanting help for self-injurious behavior, having physical health concerns, being a single parent currently, being a single parent ever, having child-related concerns, and living with your children. The number of dependent children was also

included. The variables abused as an adult and abused as a child were created by collapsing data on the occurrence of physical, sexual and emotional abuse as an adult, and child, respectively. This was done to minimize the number of missing cases.

Table P15 in Appendix P shows the frequency of endorsement of the variables included in the PCA, by group. The correlation between these variables and recidivism status is given in Table P16, Appendix P. Other variables were excluded because they were used to score or validate the LSIs, there were large amounts of missing data, or there were indications the data were inaccurate.

Using the Kaiser rule (1960) of retaining all factors with eigen values greater than one, the principle components analysis yielded five factors. The factors and their loadings are reported in Table 12. Factor loadings of approximately .40 were used to define the factors (Stevens, 1992). The correlations between the factor scores and recidivism are shown in Table P17, Appendix P.

Table 12

Factor Scores from Principle Components Analysis

Shaw variables	Adult				
	Parent	Self-Harm	Childhood	Problems	In Care
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Number of children	.76120	.03890	.01738	.10005	.02782
Child-related worries	.54357	.01858	.05935	.32508	-.09575
Single parent ever	.92567	.03979	.04332	-.00293	.07718
Primary caregiver now	.91718	-.00790	.04332	-.04682	.06771
Live with child(ren)	.89055	-.03878	-.03768	-.08617	.03938
Self-injury history	.05590	.83436	.23081	.03281	-.12211
Suicide attempt history	.02145	.85495	-.05256	.10240	-.03966
Eating disorder	-.01416	.53732	.04554	.05786	.23585
Want help for self-injury	.02578	.55823	.03252	.32135	.17181
Abused as child	.05434	.20943	.75683	.24090	.03076
Problems growing up	.00124	.09972	.74485	.14258	.07776
Family support now	-.01456	-.10671	-.70262	.07127	-.06140
Abused as adult	.10406	.01836	.30585	.67294	-.04048
Wants help for abuse	.01571	.23239	.26621	.67294	-.02007
Physical health concerns	.00312	.13878	-.16772	.70557	.11672
In care as juvenile	-.06320	.13970	.20270	-.01343	.83470

The first factor, labeled Parent, accounted for 22.7% of the variance in the set of original variables and was defined by being a single parent, living with your child(ren), and having child-related concerns. The second factor, called Self-harm, accounted for 18.4% of the variance and was defined by the self-harm variables, including having a history of suicide, self-injury, and eating disorders, and wanting help for self-injury. The third factor (Childhood) accounted for 7.7% of the variance in the data set. A high score on this factor is indicative of being abused as a child, having problems when growing up, and having low family support currently. The fourth factor, called Adult Problems, reflects being abused as an adult and having physical health concerns. It accounted for 7.5% of the variance in the set of variables. The fifth factor was fairly specific to the variable of incare (having been in protective care as a juvenile), and hence was not retained as a factor.

Three of the normalized orthogonal factors (Self-Harm, Childhood, Adult Problems) obtained from the principal components analysis were entered into a MANOVA with group type and recidivism status as the independent variables. With alpha for the multivariate tests set at .05, the main effects of group type, $F_{\text{exact}}(3,412) = 3.06$, $p = .03$, and recidivism status, $F_{\text{exact}}(3,412) = 4.97$, $p = .002$, were significant. The Group Type x Recidivism Status interaction, $F_{\text{exact}}(3,412) = 3.48$, $p = .02$, was also significant. The effect sizes for the group type, recidivism, and interaction effects were .022, .035, and .025, respectively.

Given the exploratory nature of these analyses, univariate tests for all significant multivariate effects were performed. In order to control for the error

rate, the Bonferonni correction procedure was used to set alpha at .01 for each univariate t-test ($.10/9 = .01$). The means and standard deviations for the three factor scores, by group, and by recidivism status, are provided in Table 13.

Table 13

Mean Scores and Standard Deviations for Factor Scores by Group and Recidivism Status

				Non-
Factors	Community	Institution	Recidivist	recidivist
	(<u>n</u> =229)	(<u>n</u> =189)	(<u>n</u> =192)	(<u>n</u> =226)
Self-harm				
<u>M</u>	0.01	0.01	-0.13	0.09
<u>SD</u>	0.97	1.03	0.98	1.08
Childhood				
<u>M</u>	0.02	-0.05	-0.10	0.12
<u>SD</u>	0.99	1.00	1.02	0.99
Adult Problems				
<u>M</u>	-0.12	0.17	-0.06	0.15
<u>SD</u>	1.00	0.95	0.92	0.93

None of the univariate tests for the group type effect were significant at the .01 alpha level, though both the Adult Problems, $F(1,414) = 4.27$, $MSE = .94$, $p = .039$, and the Childhood, $F(1,414) = 4.40$, $MSE = .96$, $p = .036$, factor scores approached significance. Univariate analyses revealed that the Childhood factor was the only variable that significantly contributed to the recidivism status main effect, $F(1,414) = 10.10$, $MSE = .96$, $p = .002$, with recidivists scoring higher ($M = 0.12$, $SD = 0.99$, $n = 192$) than non-recidivists ($M = -0.13$, $SD = 0.98$, $n = 226$). Partial eta squared for this effect was .024. Univariate analyses for the interaction term provided a significant effect for Adult Problems, $F(1,414) = 6.60$, $p = .010$, with a partial eta squared of .016. The Childhood, $F(1,414) = 1.74$, $MSE = 0.974$, $p = .188$, and Self-harm, $F(1,414) = 1.21$, $MSE = 0.997$, $p = .271$, factors did not significantly contribute to the interaction effect.

The analysis of the interaction was undertaken using Spjotvoll-Stolines modification of Tukey's test for unequal n 's, as recommended by Kirk (1982). Alpha was set at .05. Tukey's test revealed that only one pair of means differed significantly - institution non-recidivists had higher scores on Adult Problems than community group non-recidivists. Indeed, the scores were almost identical, although opposite in direction. Examination of the means for the Adult Problems factor score, shown in Table 14, reveals that the institution non-recidivists had the highest Adult Problems score compared to all the other groups, while the community non-recidivists had the lowest scores. There was no difference in the scores across groups for the recidivists, whose scores fell between the institution and community non-recidivists.

When the non-recidivists were examined more closely, it was found that the institution non-recidivists were over-represented in terms of serious violent offences and drug trafficking/importing offences, compared to the community non-recidivists. While only 0.6% of the community non-recidivists had been convicted of serious violence, and 4.0% had a trafficking/importing index offence, 6.9% and 25.0% of the institution non-recidivists had been convicted of these respective offences types. Although it is unknown who the violence was against, it has been suggested elsewhere that women's serious violence is frequently directed against an abusive spouse (Flynn, 1990; Jurik & Winn, 1990; Nouwens, 1991). It may also be that women convicted of drug trafficking/importing are coerced into these activities by an abusive partner, since importing is not likely a solitary activity. Indeed, the institution non-recidivists were more likely to report committing the index offence with an accomplice compared to the community non-recidivists (31.7% vs. 17.9%, $\chi^2 = 5.00$, $df = 1$, $p = .025$, $N = 233$).

Table 14

Mean Score for the Adult Problems Factor by Group Type and Recidivism Status

Recidivism Status	Institution			Community		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Non-recidivist	0.25	0.04	60	-0.21	1.01	176
Recidivist	0.08	0.99	142	0.17	0.97	63

Because previous studies have reported on the relationship between different forms of abuse and recidivism, chi-square tests of the relationship between recidivism status and physical, emotional, and sexual abuse as an adult, and as a child, were performed on an exploratory basis. Briefly, the tests revealed that physical, sexual, and emotional abuse as a child was related to recidivism status, as those who reported experiencing these forms of abuse were more likely to re-offend than women who were not abused in these ways. These results are consistent with, and in fact, likely drive, the MANOVA Childhood main effect for recidivism status, as described above. There was no difference between the institution and community samples in terms of the proportion of women who reported experiencing any form of child abuse. Also, women who were physically abused as adults were more likely to recidivate than women who were not physically abused. A similar, though marginal effect was found when

sexual abuse as an adult was examined. However, the effects regarding adult abuse should be interpreted cautiously given the number of analyses performed, as well as the fact that the difference between the proportion of women who had been abused who recidivated versus those who did not recidivate were minimal. Indeed, although 52.1% of the women who had been physically abused recidivated, 47.9% did not. Similarly, while 53.3% of the women who had been sexually abused recidivated, 46.7% of the sexual abuse survivors did not recidivate. Detailed results are presented in Appendix Q.

Child-care responsibilities were also examined for their relationship with recidivism. In total, 70.5% of the women were mothers, with an average of 2 children each. There was no difference in the proportion of women who were mothers according to group status ($\chi^2 = 0.459$, $df = 1$, $p = .501$, $N = 440$). In total, 69.0% of the community women reported having children, as did 72.3% of the institution women. Chi-square analyses revealed no significant association between having children and recidivism ($\chi^2 = 1.64$, $df = 1$, $p = .200$, $N = 440$), as 51.9% of those without children and 48.6% of those with children recidivated.

In order to examine the relationship between recidivism and parenting issues, an analysis was performed with the parents only. An ANOVA using group type and recidivism status as the independent variables and the Parent factor score as the dependent variable revealed that neither the group type, $F_{\text{exact}}(1,284) = 0.50$, $p = 0.481$, the recidivism status, $F_{\text{exact}}(1, 284) = 0.21$, $p = .651$, nor the interaction effects, $F_{\text{exact}}(1,284) = 3.72$, $p = .060$, reached

significance at the .05 level. The means for the Parent factor for each group are shown in Table 15.

Table 15

Means for Parent Factor Score by Group Type and Recidivism Status

Factor	Community (<u>n</u> =153)	Institution (<u>n</u> =132)	Recidivist (<u>n</u> =137)	Non- recidivist (<u>n</u> =148)
<hr/>				
Parent				
<u>M</u>	0.60	0.61	0.60	0.62
<u>SD</u>	0.41	0.44	0.43	0.42

Group Differences: Violent Recidivism

The next set of analyses was performed to examine the relationship between group type and violent recidivism status. Generally, the same analyses as those described above were performed, with similar results. The group effects are not discussed or presented in tables, as they are redundant to those described with regard to general recidivism status.

The ANOVA with the LSI total score as the dependent measure and violent recidivism status (recidivated violently vs. did not recidivate violently) and group type as the independent measures yielded significant main effects for

violent recidivism status, $F_{\text{exact}}(1,437) = 61.95$, $p = .000$, and group type, $F_{\text{exact}}(1,437) = 34.69$, $p = .000$, while the interaction did not reach the .05 significance level, $F_{\text{exact}}(1,437) = 2.22$, $p = .137$. Women who recidivated violently had higher LSI scores ($M = 28.76$, $SD = 6.44$, $n = 63$) than women who did not recidivate violently ($M = 17.38$, $SD = 8.52$, $n = 378$). The partial η^2 for the violent recidivism main effect was .124, while the power to detect an interaction was 0.32. The same results were found when the LSI-OR total score was used in place of the LSI total. Specifically, the group type, $F_{\text{exact}}(1,437) = 45.90$, $p = .000$, and violent recidivism, $F_{\text{exact}}(1,437) = 62.98$, $p = .000$, effects were significant, and the interaction was not, $F_{\text{exact}}(1,437) = 1.30$, $p = .255$. The violent recidivists ($M = 24.92$, $SD = 6.30$, $n = 63$) scored higher than the women who did not recidivate violently ($M = 13.91$, $SD = 8.00$, $n = 378$). The violent recidivism effect size was .126; the power to detect an interaction was 0.20.

Gamma statistics were examined to determine the relationship between risk category and violent recidivism. Significant relationships between violent recidivism and risk level were found for the LSI-based risk categories (gamma = .854, $p = .000$), and the LSI-OR-based categories (gamma = .828, $p = .000$) for the total sample. The statistics for the community and institution groups were not reliable due to the low expected frequency in more than 20% of the cells (Blalock, 1979). However, as shown in Tables 16 and 17, the relationship between risk level and recidivism status for each group paralleled that for the total sample. Specifically, as with general recidivism status, the proportion of

women who recidivated violently increases incrementally as the risk category increases in severity. In fact, as shown in Tables 16 and 17, none of the women classified as low or very low risk recidivated violently. The Pearson Product moment correlation coefficients between risk category and violent recidivism are shown in Table L9, Appendix L.

Table 16

Violent Recidivism by LSI Risk Level Category

	Community		Institution		Total	
LSI Risk	%		%		%	
Level	<u>n</u> ^a	Reoffend (f)	<u>n</u>	Reoffend (f)	<u>n</u>	Reoffend (f)
0-7						
Low	47	0	8	0	55	0
8-11						
Medium	40	0	8	0	48	0
12-23						
High	121	5.8 (7)	65	7.7 (5)	186	6.5 (12)
>24						
Very High	31	22.6 (7)	121	36.4 (44)	52	33.6 (51)

Note. The sample size for the community group is 239, the sample size for the institution group is 202, and the total N = 441.

The f in parentheses refers to the number of women per risk category who re-offended.

^aThe first n refers to the number of women who were classified into each risk category.

Table 17

Violent Recidivism by LSI-OR Risk Level Category

	Community		Institution		Total	
LSI Risk	%		%		%	
Level	<u>n</u> ^a	Reoffend (f)	<u>n</u>	Reoffend (f)	<u>n</u>	Reoffend (f)
0-4						
Very Low	45	0	6	0	51	0
5-10						
Low	77	0	16	0	93	0
11-19						
Medium	88	8.0 (7)	58	10.3 (6)	146	8.9 (13)
20-29						
High	27	22.2 (6)	102	29.4 (30)	129	27.9 (36)
30+						
Very High	2	50.0 (1)	20	65.0 (13)	22	63.6 (22)

Note. The sample size for the community group is 239, the sample size for the institution group is 202, and the total N = 441.

The f in parentheses refers to the number of women per risk category who re-offended.

^aThe first n refers to the number of women who were classified into each risk category.

Next, a MANOVA was used to test the relationship between group type and violent recidivism status and the variables noted as having an empirical relationship with recidivism. This revealed significant main effects for both group type, $F_{\text{exact}}(11,401) = 8.48$, $p = .000$, and violent recidivism status, $F_{\text{exact}}(11,401) = 6.99$, $p = .000$, as well as a significant Group Type x Violent Recidivism interaction, $F_{\text{exact}}(11,401) = 1.88$, $p = .04$. The effect size for the group type effect was .189; for violent recidivism status, it was .161; and for the interaction term, it was .049. The Pearson Product moment correlation coefficients between the LSI total and subscale scores and violent recidivism status are shown in Table M10, Appendix M.

As shown in Table 18, univariate analyses revealed significant violent recidivism status effects for the following variables: age at first conviction, LSI Attitudes/Orientation, LSI Criminal History, LSI Companions, LSI Education/Employment, LSI Accommodation, LSI Alcohol/Drug Problem, and LSI Family/Marital. Examination of the means displayed in Table 19 demonstrates that the violent recidivists scored significantly higher on all these scales, and had an earlier age at first conviction, compared to the women who did not recidivate violently.

Table 18

Univariate F-test for the Main Effect Violent Recidivism Status

Source	MS	MS _{error}	F
Age at interview	128.40	75.85	1.69
Age at first conviction	1150.05	76.41	15.05***
LSI Alcohol/Drug Problem	137.06	5.33	25.71***
LSI Accommodation	11.93	0.60	19.70***
LSI Attitudes/Orientation	24.71	0.68	36.35***
LSI Companions	37.59	1.61	23.32***
LSI Criminal History	141.34	4.64	30.46***
LSI Education/Employment	83.37	6.77	12.31***
LSI Emotional/Personal	3.71	1.31	2.84
LSI Family/Marital	16.75	1.04	16.12***
LSI Financial	0.61	0.47	1.30

* $p < .05$. ** $p < 0.01$. *** $p < 0.001$

Table 19

Mean Values for Measures for Total Sample by Violent Recidivism Status

Source	Violent Recidivism Status	
	No Violent	Violent
	Recidivism (<u>n</u> = 357)	Recidivism (<u>n</u> = 58)
<hr/>		
Age at interview		
<u>M</u>	30.45	29.10
<u>SD</u>	8.90	7.43
Age at first conviction		
<u>M</u>	24.53	18.10
<u>SD</u>	9.26	5.62
LSI Alcohol/Drug Problem		
<u>M</u>	2.50	4.76
<u>SD</u>	2.51	2.08
LSI Accommodation		
<u>M</u>	0.73	1.33
<u>SD</u>	0.78	0.91
LSI Emotional/Personal		
<u>M</u>	1.55	1.81
<u>SD</u>	1.11	1.30
<hr/>		

Table 19 Continued

Mean Values for Measures for Total Sample by Recidivism Status

Source	Violent Recidivism Status	
	No Violent	Violent
	Recidivism (<u>n</u> = 357)	Recidivism (<u>n</u> = 58)
<hr/> LSI Family/Marital		
<u>M</u>	1.51	2.03
<u>SD</u>	1.02	1.09
<hr/>		

Examination of the interaction effects, displayed in Table 20, revealed that the LSI Family/Marital and Companions subscales contributed significantly to the interaction effect. Analysis of the interaction means was undertaken using Spjotvoll-Stolines modification of Tukey's test for unequal n's, as recommended by Kirk (1982). Alpha was set at .05. Tukey's test revealed that the violent recidivists from the community group had significantly higher Companions and Family/Marital scores than the women from the community group who did not re-offend violently. Also, violent recidivists from the institution group scored significantly higher on the two scales than community women who did not recidivate violently. The violent recidivists from the institution group did not score higher on the scales than the women from the institution group who did not

recidivate violently. The means for LSI Family/Marital and Companions, for each group, are shown in Table 21.

Table 20

Univariate F-test for the Interaction Between Group Type and Violent Recidivism Status for LSI Subscales

Source	MS	MS _{error}	F
Age at interview	114.43	75.85	1.51
Age at first conviction	26.19	76.41	0.34
LSI Alcohol/Drug Problem	19.40	5.33	3.64
LSI Accommodation	2.12	0.60	3.50
LSI Attitudes/Orientation	0.04	0.68	0.06
LSI Companions	9.28	1.61	5.76*
LSI Criminal History	0.01	4.64	0.00
LSI Education/Employment	0.34	6.77	0.05
LSI Emotional/Personal	1.07	1.31	0.82
LSI Family/Marital	6.62	1.04	6.37**
LSI Financial	1.08	0.47	2.30

* $p < .05$. ** $p < 0.01$. *** $p < 0.001$

Table 21

Mean Score for the LSI Subscales by Group Type and Violent Recidivism Status

	Violent	No Violent	Violent	No Violent
LSI Subscale	Recidivism	Recidivism	Recidivism	Recidivism
	Community	Community	Institution	Institution
	(<u>n</u> =13)	(<u>n</u> =217)	(<u>n</u> =45)	(<u>n</u> =140)
Family/Marital				
<u>M</u>	2.54	1.43	1.89	1.64
<u>SD</u>	1.33	1.07	0.98	0.91
Companions				
<u>M</u>	2.85	1.29	2.96	2.46
<u>SD</u>	1.07	1.24	1.30	1.36

The MANOVA was repeated with the LSI-OR subscales substituted for the LSI scales. The analysis yielded a significant main effect for group type, $F_{\text{exact}}(9,403) = 10.29$, $p = .000$, and violent recidivism status, $F_{\text{exact}}(9,403) = 9.06$, $p = .000$. The effect size for the group type and violent recidivism main effects were .187 and .168, respectively. The interaction was also significant, $F_{\text{exact}}(9,403) = 2.10$, $p = .03$, with an effect size of .045.

Analysis of the univariate effects revealed that the results from the LSI MANOVA were replicated, with the exception that this MANOVA included the Antisocial Pattern subscale, which showed a significant effect for violent

Table 22

Mean Scores for Factor Scores by Violent Recidivism Status

	Violent Recidivism (<u>n</u> =58)	No Violent Recidivism (<u>n</u> =360)
Factors		
Self-harm		
<u>M</u>	0.44	-0.06
<u>SD</u>	1.17	0.95
Childhood		
<u>M</u>	0.19	-0.05
<u>SD</u>	0.98	0.99
Adult Problems		
<u>M</u>	-0.01	0.01
<u>SD</u>	1.05	0.98

Due to interest in the relationship between specific types of abuse and recidivism, chi-square tests were also used to examine the relationship between physical, sexual, and emotional abuse and violent recidivism status. The detailed analyses are presented in Appendix Q. In short, analyses revealed a tendency for women who had been sexually or emotionally abused as children to be more likely to recidivate violently than women who were not survivors of these forms of childhood abuse. However, it is important to note that 81.0% of the

women who had been abused in these ways did not commit a violent offence. Similarly, although women who had been physically abused as adults were more likely to re-offend violently than women who had not been so abused, 83.1% of the physically abused women did not recidivate violently.

A further set of analyses was performed with a subsample of the participants, comprised only of the recidivists. These analyses repeated the analyses of variance performed above, with the difference that the violent recidivism status effects compared violent recidivists to non-violent recidivists, as opposed to comparing violent recidivists to a group comprised of both general recidivists and non-recidivists. Overall, the results of the analyses were similar, although minor differences were noted. The results of these analyses are presented in Appendix T.

Logistic Regression Analyses Predicting General Recidivism

The above analyses of variance determined which variables differentiated recidivists from non-recidivists and community-sanctioned offenders from incarcerated women. The next set of analyses employed logistic regression analysis to determine whether these variables were able to uniquely predict the likelihood of an offender recidivating, while controlling for the other variables in the model.

Logistic regression resembles multiple linear regression except that the former is appropriate when the dependent, or predicted, variable is categorical. When there are only two categories, as in the following analyses, logistic regression models the natural logarithm of the odds of being in the category of

interest as a linear function of the independent variables. Unlike the R^2 in multiple regression, there is no widely accepted measure of predictive adequacy for the logistic regression model. However, Aldrich and Nelson (1984) have proposed a means for assessing goodness of fit that is “in the spirit of R^2 ,” and this index is reported for each model below. Specifically, a “pseudo- R^2 ,” = $(\underline{c} / N + \underline{c})$, where $\underline{c}$ is the model chi-square statistic that tests whether all regressors are simultaneously equal to zero, and N is the sample size, is reported for each regression analysis. While the “pseudo- R^2 ” does not allow for a proportion of explained variance interpretation, it is comparable to R^2 in that it ranges from a value of zero when the model has no predictive ability, to a value of 1 when the model is a perfect fit. The second measure used to judge the adequacy of the regression is a predictive accuracy statistic called the Relative Improvement Over Chance (RIOCI; Loeber & Dishion, 1983). The RIOCI indicates the proportion by which prediction is improved when all the independent variables are used to predict recidivism status, as opposed to using none of the variables to predict outcome. This measure of predictive accuracy was designed because it is less sensitive to selection ratios and low base rates than other measures (Loeber & Dishion, 1983).

First, the ability of the LSI total score to predict general recidivism was assessed. This was accomplished by entering the LSI total score as the independent variable, predicting likelihood of recidivating. The logistic regression analysis with LSI total score as the sole independent variable resulted in a 79.7% success rate in predicting general recidivism ($\beta = 0.2045$, $SE =$

0.0198, $p = .0001$). As Table 23 shows, only 33 cases were misclassified as recidivists and only 46 were incorrectly predicted to be non-recidivists. Overall, the LSI total score correctly identified 84.3% of the non-recidivists and 74.4% of the recidivists. The use of the LSI total score to predict recidivism provides an improvement of 55.31% in predictive accuracy, over what would be expected by chance. The R^2 was 0.5140.

Table 23

Two-By-Two Prediction Table of General Recidivism with LSI Total Score

		Predicted			
		Did Not Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not				
	Recidivate	177	45.4	33	8.5
	Recidivated	46	11.8	134	34.4

Figure 1 provides a graphical representation of the relationship between LSI total score and the prediction of general recidivism.

Figure 1

Actual Versus Predicted Likelihood of Recidivating by LSI Total Score

As can be see from the figure, the LSI total score is an excellent predictor of recidivism.

The LSI-OR performed similarly, correctly classifying 79.7% of the cases (beta = 0.2139, SE = 0.0207, p = .0001). In total, when the LSI-OR total score was entered as the only predictor of general recidivism, 82.8% of the non-recidivists were correctly classified, as were 76.1% of the recidivists. The R^2 was 0.5101. The actual number of hits and misses is shown in Table 24. The RIOC achieved when using the LSI-OR model to classify women as opposed to classifying by chance alone was 57.07%, which is a fairly significant improvement.

Table 24

Two-By-Two Prediction Table of General Recidivism with LSI-OR Total Score

		Predicted			
		Did Not Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not				
	Recidivate	174	44.6	36	9.2
	Recidivated	43	11.0	137	35.1

The above examples served to show how logistic regression can be applied to predicting the likelihood of recidivating. In addition, the analysis sets a standard upon which to compare the success of more detailed analyses. The following set of logistic regression analyses were applied using the results from

the MANOVAs described above to select variables to be entered into the analyses. All variables which exhibited a significant main effect for general recidivism status, or an interaction between group type and recidivism status, were entered as predictors of general recidivism.

In the first analysis, the following variables were included in the regression analysis as predictors: age at first conviction, LSI Alcohol/Drug Problem, LSI Accommodation, LSI Attitudes/Orientation, LSI Companions, LSI Criminal History, LSI Education/Employment, LSI Emotional/Personal, Adult Problems, Childhood, most serious index offence property-related (MSO property), and most serious index offence drug-related (MSO drug). The interaction term for Group x Adult Problems was also entered as a predictor, as was the Childhood factor score.

The results from the logistic regression are provided in Table 25 ($R^2=0.5683$)

Table 25

Logistic Regression Model for the Prediction of Likelihood of Recidivating Using
LSI Subscales and Shaw Variables

Predictors	Estimate	<u>SE</u>
Intercept	-4.528 ^{***}	0.8814
Group	-0.5770	0.3442
Age at first conviction	0.0167	0.0192
LSI Alcohol/Drug Problem	0.1604 ^{**}	0.0660
LSI Attitudes/Orientation	0.6176 ^{**}	0.1958
LSI Criminal History	0.2923 ^{***}	0.0764
LSI Emotional/Personal	-0.0275	0.1293
LSI Companions	0.0939	0.1196
LSI Accommodation	0.5107 ^{**}	0.2053
LSI Employment/Education	0.1598 ^{**}	0.0556
LSI Family/Marital	0.0271	0.1460
LSI Financial	0.0743	0.2232
MSO property	-0.0003	0.1648
MSO drug	0.1811	0.2135
Adult Problems	0.1041	0.1593
Childhood	0.2077	0.1552
Group x Adult Problems	0.2391	0.1721

^{*} $p < .05$. ^{**} $p < 0.01$. ^{***} $p < 0.001$

The analysis revealed that only the LSI subscales assessing antisocial attitudes, criminal history, education/employment difficulties, accommodation problems, and substance abuse uniquely contributed to the prediction of general recidivism. As can be seen from Table 26, the omnibus regression analysis resulted in a 81.0% rate of successful predictions. In total, only 21.7% of the recidivists were misclassified as non-recidivists, and only 16.7% of the women who were predicted to be successful upon release actually re-offended. Examination of the RIOC indicates that this model provides a 60.51% improvement in prediction over the predictive accuracy that would result from chance alone.

Table 26

Two-By-Two Table of Prediction of General Recidivism with LSI Subscales and Shaw Variables

		Predicted			
		Did Not Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not				
	Recidivate	175	44.9	35	9.0
	Recidivated	39	10.0	141	36.2

A similar logistic regression analysis was performed using the LSI-OR subscales that were associated with recidivism status, as determined by the MANOVA described above. The following variables were included in the analysis: LSI-OR Substance Abuse, LSI-OR Antisocial Pattern, LSI-OR Procriminal Attitudes, LSI-OR Family/Marital, LSI-OR Companions, LSI-OR Criminal History, LSI-OR Education/Employment, age at first conviction, MSO property, MSO drug, Childhood, and the Adult Problems x Group Type interaction.

The results of the logistic regression are shown in Table 27 ($R^2 = 0.5521$).

Table 27

Logistic Regression Model for the Prediction of Likelihood of Recidivating Using
LSI-OR Subscales and Shaw Variables

Predictors	Estimate	<u>SE</u>
Intercept	-3.3754 ^{***}	0.7742
Group	-0.2712	0.1691
Age at first conviction	0.0104	0.0189
LSI-OR Substance Abuse	0.1548 [*]	0.0649
LSI-OR Procriminal Attitudes	0.7894 ^{***}	0.2468
LSI-OR Criminal History	0.3110 ^{***}	0.0812
LSI-OR Companions	0.1264	0.1186
LSI-OR Antisocial Pattern	-0.0940	0.2538
LSI-OR Employment/Education	0.1773 ^{**}	0.0568
LSI-OR Family/Marital	0.1059	0.1462
MSO property	0.0015	0.1615
MSO drug	0.1251	0.2049
Adult Problems	0.1072	0.1567
Childhood	0.2306	0.1523
Group x Adult Problems	0.1964	0.1538

^{*} p < .01. ^{**} p < 0.001. ^{***} p < 0.0001.

Examination of the table reveals that only four variables - LSI-OR Substance Abuse, LSI-OR Procriminal Attitudes, LSI-OR Criminal History and LSI-OR Education/Employment - uniquely contributed to the prediction of recidivism, controlling for the effects of the other variables in the equation. In total, the omnibus model was able to correctly classify 82.3% of the cases. Table 28 shows the proportion of correctly and incorrectly classified cases. The RIOC for this model was 64.06%, indicating that predictive accuracy is greatly enhanced by considering the variables associated with recidivism, compared to chance.

Table 28

Two-By-Two Table of Prediction of General Recidivism with LSI-OR Subscales and Shaw Variables

		Predicted			
		Did Not Recidivate		Recidivated	
		N	%	N	%
Actual	Did Not				
	Recidivate	176	45.1	34	8.7
	Recidivated	35	8.9	145	37.2

In order to more closely examine the relationship between the prediction of recidivism for female offenders with risk factors identified as the best predictors for male offenders, a stepwise regression analysis was performed, using the “Enter” method to force LSI Criminal History, LSI Attitudes/Orientation, LSI Emotional/Personal, and LSI Companions, into the equation. These four subscales were selected as they represent the “Big Four” risk factors identified in criminological research. The other variables were allowed to enter the equation if they contributed to the prediction of recidivism, over and above what was accounted for by the forced-entry variables. This analysis revealed that the four LSI subscales forced into the equation on the first step yielded an R^2 of 0.4922.

As can be seen from Table 29, LSI Attitudes/Orientation, Criminal History and Companions contributed uniquely to the prediction of recidivism when the four variables were included in the model. LSI Education/Employment and LSI Accommodation entered on the second and third steps, respectively, yielding a final R^2 of 0.5365. However, as shown in Table 30, LSI Companions did not contribute independently to the prediction of recidivism in the final model.

Table 29

Logistic Regression Model for the Prediction of Likelihood of Recidivating Using
the LSI "Big Four" Risk Factors

LSI Subscales	Estimate	<u>SE</u>
Intercept	-2.6818 ^{***}	0.3228
LSI Attitudes/Orientation	0.8164 ^{***}	0.1861
LSI Criminal History	0.3969 ^{***}	0.0622
LSI Companions	0.2212 [*]	0.1060
LSI Emotional/Personal	0.1218	0.1158

^{*} $p < .05$. ^{***} $p < 0.001$.

Table 30

Stepwise Logistic Regression Model for the Prediction of Likelihood of
Recidivating Using LSI Subscales Final Model

Factor	Estimate	<u>SE</u>
Intercept	-3.3635 ^{***}	0.3851
LSI Attitudes/Orientation	0.6714 ^{***}	0.1915
LSI Criminal History	0.3483 ^{***}	0.0649
LSI Companions	0.1594	0.1107
LSI Emotional/Personal	0.0663	0.1215
LSI Employment/Education	0.1846 ^{***}	0.0523
LSI Accommodation	0.4779 [*]	0.1882

^{*} $p < .01$. ^{***} $p < 0.001$.

As can be seen from Table 31, the final model was able to accurately classify 81.5% of the cases. Overall, 78.3% of the recidivists were correctly identified, as were 84.3% of the non-recidivists. The RIOC for this model was 60.88%.

Table 31

Two-By-Two Prediction Table of General Recidivism with Stepwise Selected LSISubscales: Final Model

		Predicted			
		Did Not Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not				
	Recidivate	177	45.4	33	8.5
	Recidivated	39	10.0	141	36.2

The stepwise regression was repeated, replacing LSI-OR subscales for the LSI scales, and including LSI-OR Antisocial Pattern instead of LSI Emotional/Personal. As can be seen from Table 32, the results were generally replicated, with the exception that LSI-OR Companions did not contribute uniquely to the prediction of recidivism when it was forced into the equation. The R^2 for this model was 0.4890. As displayed in Table 33, LSI-OR Education/Employment and LSI-OR Substance Abuse also contributed significantly to the prediction of general recidivism, bringing the final R^2 to 0.5334. As with the previous final model, 81.5% of the cases were correctly classified. Table 34 shows the actual number of hits and misses. The RIOC for this model was 59.01%.

Table 32

Logistic Regression Model for the Prediction of Likelihood of Recidivating Using the LSI-OR "Big Four" Risk Factors ($R^2 = 0.4890$)

LSI Subscales	Estimate	<u>SE</u>
Intercept	-2.4753 ^{**}	0.2739
LSI-OR Procriminal Attitudes	0.7716 ^{**}	0.2363
LSI-OR Criminal History	0.4334 ^{**}	0.0694
LSI-OR Companions	0.1980	0.1062
LSI-OR Antisocial Pattern	0.1162	0.2277

^{*} $p < .05$. ^{**} $p < 0.001$.

Table 33

Stepwise Logistic Regression Model for the Prediction of Likelihood of
Recidivating Using LSI-OR Subscales: Final Model

Factor	Estimate	<u>SE</u>
Intercept	-3.0683 ^{***}	0.3300
LSI-OR Antisocial Attitudes	0.8340 ^{***}	0.2411
LSI-OR Criminal History	0.3401 ^{***}	0.0735
LSI-OR Companions	0.1324	0.1134
LSI-OR Antisocial Pattern	-0.0537	0.2389
LSI-OR Employment/Education	0.1702 [*]	0.0553
LSI-OR Substance Abuse	0.1663 [*]	0.0614

^{*} $p < .005$. ^{***} $p < 0.001$.

Table 34

Two-By-Two Table of Prediction of Recidivism with Stepwise Selected Variables
Using LSI-OR Subscales: Final Model

		Predicted			
		Did Not Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not				
	Recidivate	180	46.2	30	7.6
	Recidivated	42	10.8	138	35.4

Another logistic regression analysis was performed to determine the predictive capacity of variables not typically assessed by risk instruments, but that may have particular relevance for female offenders. Specifically, a regression was run using the factor scores: Childhood, Adult Problems, and Self-harm. Although both Childhood and Adult Problems contributed uniquely to the prediction of recidivism, as shown in Table 35, the R^2 was only 0.0560. As shown in Table 36, only 59.2% of the cases were accurately identified on the basis of these three variables. Consistent with the low R^2 value obtained with this model, the RIOC was only 14.59%. Taken together, these values indicate that the use of the three factor scores provides only a slight improvement in predictive ability, compared to not using the predictors at all.

Table 35

Logistic Regression Model for the Prediction of Likelihood of Recidivating Using Factor Scores

Factor	Estimate	SE
Intercept	-0.1613	0.1039
Childhood	0.8340*	0.1045
Adult Problems	0.3126**	0.1677
Self-harm	0.1488	0.1026

* $p < .05$. ** $p < 0.005$.

Table 36

Two-By-Two Table of Prediction of General Recidivism with Factor Scores

		Predicted			
		Did Not Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate	146	37.4	64	16.4
	Recidivated	95	24.4	85	21.8

Logistic Regression Analyses Predicting Violent Recidivism

The relationship between the study variables and their ability to predict violent recidivism was also examined. Hence, the following set of logistic regressions generally parallels those described above, with the exception that violent recidivism status was used as the predicted variable.

The first logistic regression was performed to determine the ability of the LSI total score to predict violent recidivism for the total sample. Using the LSI total score, 87.9% of the cases were accurately classified (beta = 0.1793, SE = 0.0253, p = .0001). The R^2 was 0.3429. However, as shown in Table 37, the total LSI alone accurately identified only 20.8% of the violent recidivists, with an RIOC of 17.36%. Similarly, the R^2 resulting from the regression with LSI-OR total score as the only predictor was 0.3467, and although the overall rate of correct classifications was 87.9%, only 24.5% of the violent recidivists were identified correctly (beta = 0.1884, SE = 0.0263, p = .0001). The RIOC was slightly better for the LSI-OR model, with an improvement in prediction of 20.45% over chance. The actual number of hits and misses is shown in Table 38.

Table 37

Two-By-Two Table of Prediction of Violent Recidivism Using LSI Total Score

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	332	85.1	5	1.3
	Recidivated				
	Violently	42	10.8	11	2.8

Table 38

Two-By-Two Table of Prediction of Violent Recidivism Status Using LSI-OR Total Score

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	330	84.6	7	1.8
	Recidivated				
	Violently	40	10.2	13	3.3

The procedure used to select predictors for the regression analyses with general recidivism status was also used in the following analyses. Specifically, those variables which discriminated between violent and non-violent recidivists were selected as predictors. First, violent recidivism was predicted with the following variables: age at first conviction, and the LSI subscales Attitudes/Orientation, Alcohol/Drug Problem, Education/Employment, Accommodation, Criminal History, Companions, and Family/Marital. The Self-harm factor score was also included as a predictor, as was MSO property, and whether the index offence included violence (MSO violence). The interaction for

Group Type by LSI Family/Marital and LSI Companions was also entered. The results are shown in Table 39 ($R^2 = 0.4272$).

Table 39

Logistic Regression Model for the Prediction of Likelihood of Violently
Recidivating Using LSI Subscales and Shaw Variables

Factor	Estimate	SE
Intercept	-4.6386 ^{***}	1.2629
Age at first conviction	-0.0384	0.0343
LSI Alcohol/Drug Problem	0.0941	0.0886
LSI Attitudes/Orientation	0.4510 ^{**}	0.1828
LSI Companions	0.2272	0.1737
LSI Accommodation	0.1579	0.2236
LSI Criminal History	0.1590	0.1107
LSI Family/Marital	0.4605 [*]	0.1990
LSI Education/Employment	0.0961	0.0742
Self-harm	0.3491 [*]	0.1677
MSO property	0.1716	0.2276
MSO violence	-0.3259	0.2194
Group	-1.37886 [*]	0.6936
Group by LSI Family/Marital	0.2302	0.1975
Group by LSI Companions	0.3022	0.1680

^{*} $p < .05$. ^{**} $p < .01$. ^{***} $p < .001$

As seen in the table, group type, the LSI subscales Attitudes/Orientation and Family/Marital, and the Self-harm factor score contributed significantly and uniquely to the prediction of violent recidivism. In total, this model accurately predicted the outcome in 88.3% of the cases. As shown in Table 40, 35.8% of the women who recidivated violently were correctly classified. Further, by including all the variables which were associated with violent recidivism, the RIOC reached 30.44%.

Table 40

Two-By-Two Table of Prediction of Violent Recidivism Using LSI Subscales and Shaw Variables

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	322	83.4	11	2.8
	Recidivated				
	Violently	34	8.8	19	4.9

The analysis was repeated using the following variables: LSI-OR subscales of Substance Abuse, Procriminal Attitudes, Companions, Antisocial Pattern, and Family/Marital; age at first conviction; MSO violent; MSO property; and Self-harm. The interactions between Group Type and LSI-OR Family/Marital and LSI-OR Companions were also included in the analysis. The results are shown in Tables 41 and 42. The only variables which contributed uniquely to the prediction of violent recidivism were group type, the Self-harm factor score, and LSI-OR Antisocial Pattern and Family/Marital. This analysis yielded an R^2 of 0.4344 and resulted in an accurate prediction for 97.0% of the women who did not recidivate violently and a correct classification for 37.7% of the violent recidivists. The RIOC for this model was 32.49%. Clearly then, use of the subscales improves the detection of the violent recidivists compared to the predictive ability of the LSI and LSI-OR total scores alone.

Table 41

Logistic Regression Model for the Prediction of Likelihood of Violently
Recidivating Using LSI-OR Subscales and Shaw Variables

Factor	Estimate	SE
Intercept	-4.5023***	1.2752
Age at first conviction	-0.0291	0.0348
LSI-OR Substance Abuse	0.1359	0.0924
LSI-OR Procriminal Attitudes	0.3004	0.2053
LSI-OR Companions	0.2183	0.1745
LSI-OR Antisocial Pattern	0.6422*	0.2914
LSI-OR Family/Marital	0.3980*	0.2017
LSI-OR Education/Employment	0.0699	0.0759
LSI-OR Companions	0.2183	0.1745
LSI-OR Criminal History	0.0180	0.1262
Group	-1.5399*	0.7077
Group by LSI-OR Family/Marital	0.2825	0.2008
Group by LSI-OR Companions	0.2937	0.1686
Self-harm	0.3553*	0.1693
MSO property	0.1490	0.2282
MSO violence	-0.3715	0.2211

* p < .05. ** p < 0.01. *** p < .001

Table 42

Two-By-Two Table of Prediction of Violent Recidivism Using LSI-OR Subscales
and Shaw Variables

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	323	83.7	10	2.6
	Recidivated				
	Violently	33	8.5	20	5.2

When the four well established predictors of recidivism - LSI Criminal History, LSI Emotional/Personal, LSI Companions, and LSI Attitudes/Orientation - were entered as the only predictors of violent recidivism, the resultant R^2 was 0.3173. Table 43 shows that only Attitudes/Orientation and Criminal History significantly contributed to the prediction of violent recidivism in this model. The two-by-two contingency table of this model is presented in Table 44, and shows that while the four LSI scales alone were able to identify 97.0% of the non-violent recidivists, 73.6% of the violent recidivists were missed. The RIOC for the four variables was 21.54%.

Table 43

Logistic Regression Model for the Prediction of Likelihood of Violently
Recidivating Using the LSI "Big Four" Risk Factors

LSI Subscales	Estimate	<u>SE</u>
Intercept	4.5253***	0.5448
LSI Attitudes/Orientation	0.4741**	0.1588
LSI Criminal History	0.3288***	0.0867
LSI Companions	0.1969	0.1421
LSI Emotional/Personal	0.0994	0.1425

* $p < .05$. ** $p < 0.001$.

Table 44

Two-By-Two Table of Prediction of Violent Recidivism Using the LSI "Big Four"
Risk Factors

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	323	83.7	10	2.6
	Recidivated				
	Violently	39	73.6	14	26.4

When the “Big Four” predictors from the LSI-OR- LSI-OR Procriminal Attitudes, Companions, Antisocial Pattern, and Criminal History - were entered as predictors of violent recidivism in the next regression analysis, the model yielded an R^2 of 0.3349. As shown in Table 45, only Antisocial Pattern contributed to the prediction of violent recidivism. As displayed in Table 46, the predictive accuracy of the LSI-OR Big Four variables is similar to that achieved with the LSI Big Four. Specifically, 97.0% of the non-violent recidivists were correctly identified, while only 28.3% of the violent recidivists were correctly classified; this represents an RIOC of 23.34%.

Table 45

Logistic Regression Model for the Prediction of Likelihood of Violently Recidivating Using the LSI-OR Big Four” Risk Factors

LSI Subscales	Estimate	<u>SE</u>
Intercept	-4.1842**	0.4743
LSI-OR Procriminal Attitudes	0.2156	0.1847
LSI-OR Criminal History	0.1855	0.0984
LSI-OR Companions	0.1258	0.1461
LSI-OR Antisocial Pattern	0.8604**	0.2472

* $p < .05$. ** $p < 0.001$.

Table 46

Two-By-Two Prediction Table of Violent Recidivism Using the LSI-OR "Big Four"Risk Factors

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	323	83.7	10	2.6
	Recidivated				
	Violently	38	8.5	15	5.2

The factor scores Childhood, Adult Problems, and Self-harm were also examined for their ability to predict likelihood of violently recidivating. This analysis yielded an R^2 of 0.0731. As shown in Table 47, only the Self-harm factor significantly contributed to the prediction of violent recidivism. This model predicted that none of the women would recidivate violently, so, although it was accurate in selecting all of the non-violent recidivists, it failed to detect any of the violent recidivists. This rate of correct classifications was no better than what would be expected by chance.

Table 47

Logistic Regression Model for the Prediction of Likelihood of Violently
Recidivating Using Factor Scores

Factor	Estimate	<u>SE</u>
Intercept	-1.9242	0. 1532
Childhood	0.2347	0.1508
Adult Problems	-0.0338	0.1438
Self-harm	0.4594	0.1329

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

Discussion

Overall, the results of the study were supportive of the hypotheses. The general recidivism rate of 46.5% for the total sample is comparable to rates reported for both provincial (Coulson et al., 1996, Lambert & Madden, 1976) and federal (Blanchette & Motiuk, 1995; Bonta et al., 1995; Canfield, 1989) female offender samples. As expected, women from the institution sample were more likely to recidivate both generally and violently, compared to women who were under some form of community supervision.

Consistent with this greater likelihood of recidivism, women who were incarcerated had greater risk/need levels than women in the community, as measured by both the LSI and the LSI-OR. These anticipated findings suggest that not all female offenders pose similar risks and that, in fact, those who are incarcerated are at higher risk to re-offend than those who are under some form of community supervision.

An interesting finding regarding the total risk/need score was that the mean LSI score for the institution sample is in the range of what is typically reported for male samples (Bonta & Motiuk, 1987, 1990; Bonta, 1989) and is higher than the mean LSI score reported for other provincially (Coulson et al., 1996) and federally incarcerated women (Folsom & Atkinson, manuscript in preparation). The comparatively high LSI scores for this institution sample may have occurred for a variety of reasons. Firstly, the current study combined several methods of data collection, including interviews and file review. It could

be argued that multiple sources of data are more likely to enhance the validity of the LSI, as inconsistencies in reporting can be determined. Although there are no normative data with which to compare the mean institution LSI score from this sample, the LSI-OR scores from the current study closely correspond to the LSI-OR normative data provided by the Ministry of Solicitor General and Correctional Services (S. Wormith, personal communication, July, 1998). Given that the LSI-OR was scored from the LSI in the current study, these comparisons provide support for the validity of both the LSI and LSI-OR scores.

Secondly, only 15.8% of the current incarcerated sample were first offenders, compared to 44% and 35% in the Folsom and Atkinson (manuscript in preparation) and Coulson et al. (1996) studies, respectively. This indicates that the current sample may be comprised of more habitual offenders, who are likely to have greater psychosocial needs. This difference in sample profile is likely due to the “snapshot” nature of sample selection in the current study. The “snapshot” sample is likely to create a more serious group of offenders than admission-based samples, as offenders who are released early are likely to be underrepresented.

Overall then, the high LSI scores for the institution sample in particular reflects the high level of psychosocial needs typically reported as characteristic of incarcerated female offenders (Blanchette, 1997; Morris & Wilkinson, 1995; Shaw et al., 1991a, 1994b). The fact that the community sample had significantly lower scores suggests that selective incarceration, may, in fact,

already be occurring, with women judged by the judiciary as presenting the highest risk being sentenced to custody.

Also, as expected, analyses revealed that recidivists had higher risk/need scores than non-recidivists. In particular, recidivists scored higher on all of the LSI and LSI-OR subscales that assess the risk factors which have been identified in the criminological literature as the best predictors of criminal behavior. Specifically, recidivists scored higher than non-recidivists on the LSI and LSI-OR subscales assessing criminal history, antisocial attitudes, criminal peers, and antisocial personality/pattern. In addition, in comparison to the non-recidivists, women who recidivated had greater problems in the areas of substance abuse, employment and education, and accommodations. They also had more financial and emotional problems, and demonstrated greater family and marital conflict.

This result is congruous with previous studies which have found that in addition to having a criminal history (Blanchette & Motiuk, 1996; Bonta et al., 1995; Lambert & Madden, 1976) and antisocial peers (Blanchette & Motiuk, 1995), problems with accommodation, finances, substance use, employment (Morris & Wilkinson, 1995; Lambert & Madden, 1976; Jurick, 1983) and family stability (Lambert & Madden, 1976), are fairly consistent correlates of criminal behavior by women. As well, consistent with prior findings (Blanchette & Motiuk, 1996; Bonta et al., 1995; Canfield, 1989; Lambert & Madden, 1976), in the current study, recidivists were convicted for the first time at a younger age than non-recidivists. Furthermore, the association between recidivism and these

variables did not differ according to whether a woman was incarcerated or under community supervision, proving the stability of these risk factors across different samples. More specifically, it apparently does not matter whether a woman is incarcerated or under community supervision, problems in the psychosocial areas assessed by the LSI and LSI-OR are related to recidivism for all women.

Furthermore, despite suggestions that risk/need assessment tools developed primarily with male offender samples may not be applicable for female offenders (Adler & Basemore, 1980; Shaw, 1991), logistic regression analyses demonstrated that both the LSI and LSI-OR were excellent predictors of general recidivism. Indeed, when used alone, the LSI total score was able to correctly identify 84% of the non-recidivists and 73% of the recidivists. The LSI-OR accurately predicted the outcome for 82% of the non-recidivists and 74% of the recidivists. These rates of correct classification represent improvement over chance by 55% to 57% for the LSI and LSI-OR, respectively.

Additionally when the “Big Four” risk factors (Andrews & Bonta, 1994) were assessed for their ability to predict recidivism, a very good fit between actual and predicted likelihood of recidivism resulted. Indeed, the relationships between these four factors and recidivism were stronger than the associations between recidivism and any of the other variables assessed, with correlations ranging from .43 to .57.

Interestingly, when qualitative data are examined it appears that women themselves identify some of the same risk factors as the quantitative analyses. For example, Shaw, Rodgers, Blanchette, Hattem, Thomas, and Tamarack

(1991) found that federally sentenced women reported that money, jobs, and housing were the main tasks they had to deal with immediately if they wanted to stay out of trouble with the law. The women from the current sample most frequently identified education, employment, housing needs, and substance abuse as the areas that were most important for them to deal with to avoid re-offending. In fact, these areas were ranked as one of the top five need areas by 20% - 31% of the women.

Although this study did not make any specific hypotheses regarding the relationship between the various risk/need factors and group status and violent recidivism, some interesting findings resulted. Specifically, women who recidivated violently scored higher than women who did not commit a violent offence on measures of antisocial attitudes and peers, substance abuse, accommodation, and employment and education problems. Violent recidivists also exhibited greater levels of family and marital conflict than women who did not recidivate violently. Not surprisingly, violent recidivists also had more extensive criminal pasts, and were convicted at an earlier age. Unlike the finding for general recidivism, the violent recidivists did not have more emotional and personal problems, or greater financial difficulties than did women who did not commit a violent offence during the follow-up period. Although level of need on these factors did not vary according to violent recidivism status within the institution group, the violent recidivists from the community group demonstrated greater need in terms of family and marital conflict and criminal peers than women from the community who did not re-offend violently. Hence, it appears

that women under community sentence who have more criminal companions and less stable family lives may be at greater risk to commit violence than community-sentenced women who have fewer problems in these areas. These results were replicated with the LSI-OR, indicating that both instruments distinguish between women who do and do not recidivate violently.

Indeed, logistic regression procedures found that the LSI-OR and LSI perform similarly in terms of predicting violent recidivism. Overall, the LSI and LSI-OR total scores correctly identified between 20% and 24% of the violent recidivists, respectively. When more detailed analyses were performed, entering only those variables found to be related to violent recidivism, the prediction of violent recidivism was further improved. Specifically, between 36% and 38% of the violent recidivists were detected. The predictive accuracy attained with the full regression models represents a 30% to 32% improvement over the accuracy one might expect by chance.

In particular, the Self-harm factor score, and the Family/Marital, Attitudes/Orientation, and Antisocial Pattern scales predicted violent recidivism. Furthermore, knowledge of whether a woman was from the community or institution group aided in the prediction of violent recidivism, over and above the contribution made by the other variables assessed. This finding is particularly relevant, as it indicates that there is something different about the women from the institution group that was unassessed in the current study and which contributes to the likelihood of recidivating violently.

The predictive ability of the factor score assessing a history of self-harm is consistent with Blanchette and Motiuk's (1996) finding that a history of suicide predicted violent recidivism. Bonta et al., (1995) found that a history of self-injury was related to general recidivism. Taken together, it appears that there is a relationship between self-harm and offending, though the results are mixed as to whether self-injury is a risk factor for violent or general recidivism, or both. It is possible that both self-injury and violent recidivism are associated with a general propensity for violence and this potential relationship deserves further attention.

When the four best established predictors of recidivism (antisocial attitudes, criminal peers, criminal history and antisocial personality) were examined for their ability to predict the occurrence of violent re-offending, the attitude, antisocial personality and criminal history variables added significantly and uniquely to the prediction equation. Further, as with general recidivism, when compared to the relationships between violent recidivism and the other variables assessed in the study, these four factors had the strongest associations with violent recidivism.

In contrast to the findings discussed above, the relationship between recidivism and variables identified in the literature as more gender-specific, is less clear. Although many authors (e.g., Kinsey, 1993; CAEFS, 1988; Hatch & Faith, 1989/90) have suggested that abuse history is a factor in the offending of women, only the factor score reflecting child abuse, low family support, and problems when growing up discriminated between recidivists and non-recidivists,

with recidivists scoring higher. Hence, it appears that being a survivor of child abuse and a chaotic family of origin is related to re-offending.

However, contrary to what might be expected, women with the highest scores on the factor reflecting abuse as an adult, physical health concerns, and wanting help for abuse were actually non-recidivists from the institution group. In contrast, the community group non-recidivists had very low scores. This finding is consistent with Bonta et al.'s (1995) report that incarcerated federally sentenced women who had been physically abused women were less likely to re-offend than women who had not been physically abused.

When the two groups of non-recidivists were compared, it was found that the institution non-recidivists were over-represented in terms of having drug trafficking/importing and serious violent index offences. Although purely conjectural, it may be that these women committed violence against an abusive partner, or were coerced into participating in drug-related activities by abusive spouses. Although information regarding the victims of the violence was unavailable in the current study, other research has indicated that the majority of severe violence committed by women is domestic in nature (Rosenblatt & Greenland, 1974; Savard-Langelier-Biron, 1986). Somewhat supportive of the explanation that these women may have been pressured into committing a drug-related offence is the finding that the institution non-recidivists were more likely to have committed their index offence with an accomplice than were community non-recidivists. Hence, it may be that these women were incarcerated due to the severity of their offences, but that the offending was in fact, mediated by their

abusive situation. Speculatively, given their overall low level of risk on other factors, when the women were separated from their partners and wanted help in moving past their abusive experiences (thereby accounting for their high Adult Problems factor scores), they evidenced no recidivism.

Unfortunately, the current study was limited by the data available and was unable to provide anything beyond a rudimentary analysis of the relationship between recidivism, abuse, and offence-related details. However, it is suggested that further empirical investigations into the exact relationship between surviving abuse as an adult, the circumstances of a woman's life and offence, and recidivism be undertaken in order to clarify the linkages between abuse and offending.

Current findings also replicate Bonta et al.'s (1995) report that being a parent is unrelated to recidivism, despite implications in the literature that the parenting status of female offenders puts them at greater risk for conflict with the law (CAEFS, 1988; Wine, 1992). When the role of parenting issues was examined, analyses revealed no relationship between the number of children one has and being a single parent with child-related concerns, and recidivism.

Overall, the results of the current study suggest that a social learning perspective of criminal behavior is applicable for women. In particular, the strong relationship demonstrated between recidivism and criminal history and antisocial attitudes, peers, and personality is consistent with the central role afforded to these factors by the PIC-R theory of criminal behavior. Variables identified by the PIC-R theory as more distal, but still relevant to delinquent behavior, were

also determined to differentiate between women who did and did not recidivate. For example, women who recidivated demonstrated more employment and education problems, substance abuse, accommodation and financial difficulties, and family and marital conflict. Additionally, although the finding that recidivists scored higher than non-recidivists on the factor score reflective of childhood abuse, problems when growing up, and low family support is consistent with the feminist perspective of women's crime, it is also hypothesized by the social learning perspective. In summary then, the results are consistent with the view that a variety of personal, interpersonal, and community factors are involved in the development and maintenance of criminal behavior.

The results are also somewhat supportive of the feminist theory of female offending. Specifically, the findings could be interpreted that women offend due to difficulties encountered by their lack of viable resources (e.g., housing, employment and education). The importance of criminal attitudes and a criminal past is not negated by this theory. As not all impoverished women who lack an education and employment resources commit crimes, it is reasonable to propose that those with more antisocial attitudes and peer support for crime are more likely to engage in criminal behavior, and have more extensive criminal pasts. Although the inability of the factors assessing abuse, self-harm, and parenting issues to contribute to the prediction of recidivism over and above the more traditional measures appears to refute suggestions that abuse is strongly related to offending, simplistic interpretations regarding the role of abuse and women's crime must be avoided. The current study did find a relationship between

childhood abuse and recidivism, and preliminary analyses suggest that the relationship between experiencing adult abuse and offending may be quite complex. Further, while abuse-related variables were unable to significantly contribute to the prediction of general recidivism in the presence of other psychosocial need measures, it may be that the role played by the sequelae of abuse are less direct. For example, the experience of abuse may be predictive of substance abuse problems, which in turn, are predictive of recidivism.

Overall, however, previous and current findings provide empirical support that even when “non-traditional” need areas are assessed and allowed to compete in the prediction of recidivism by women, certain factors identified in the general criminological research perform best. Taken as a whole, these findings have far-reaching implications for the assessment of risk in female offenders, for the development of programs, and for the increased use of community alternatives to incarceration.

The results indicate that the Level of Supervision Inventory, an established risk/need instrument, and its revised version, the LSI-OR, are able to adequately predict risk of re-offending for female offenders. Variables suggested in the literature as uniquely relevant to the offending of women were unable to improve the accuracy of the LSI and LSI-OR subscores in predicting general recidivism. Hence, although abuse, self-injury, and parenting concerns are clearly need areas which require attention in order to improve the quality of life of women, they do not appear to be criminogenic needs. Until further longitudinal or experimental research is able to establish a link between these variables and

criminal behavior, and clarify the exact nature of the association between abuse, self-harm and offending, there is little evidence to support their inclusion in the determination of risk.

Similarly, although it goes without question that female offenders require assistance to address family and marital problems, emotional problems, and financial difficulties, the results indicate that if reduced recidivism is the goal, it is especially important that rehabilitative resources be directed toward helping women improve their level of education and employment situation, find appropriate housing, and deal with substance abuse problems. Also, counseling that is targeted toward increasing prosocial attitudes and reduce associations with criminal peers might positively impact on the recidivism rate of female offenders, as it has with male offenders (Andrews and Zinger, et al., 1990). It is important to note that these variables were criminogenic need factors for all female offenders, regardless of whether they were incarcerated or under community supervision, and as such, the development of programs in these areas would be of utility to all women in conflict with the law.

These recommendations grow out of the risk and need principles of case classification. It has been clearly demonstrated that correctional programs are most effective when higher risk individuals receive the most intensive service, and when those services target established criminogenic need areas (Andrews and Zinger, et al., 1990). There is little reason to expect that these principles are particular to male offenders. However, the current findings can not speak to the appropriateness of applying programs designed for male offenders to women.

Indeed, it may be that in order to adequately apply the responsivity principle, which states that service style and mode should be matched to offender characteristics, programs with a woman-centered approach may be required.

Lastly, previous claims that female offenders pose little risk to public safety were verified by the infrequent occurrence of violent recidivism over an extended follow-up period. Additionally, serious violence was very rare. Furthermore, virtually none of the women classified as low risk by the LSI and LSI-OR recidivated violently, and only 9% of the women in the medium risk group committed a violent offence. Hence, it appears that calls for decarceration do not appear unrealistic, and, as suggested in the literature (Carlen, 1990; Shaw, 1991; Immarigeon & Chesney-Lind, 1991), community-based alternatives to incarceration could be used for all but the highest risk women. The information that incarcerated women have higher risk/need scores than community-sentenced women does not necessarily mean that these women require custodial sentences for the purpose of public safety, but rather this knowledge can be applied toward effective resource planning. In fact, although some prison-based programs have been shown to reduce recidivism, the magnitude of effectiveness is less than when the programs are offered in the community (Andrews and Zinger, et al., 1990).

Despite the practical and theoretical implications of this research, the current study is unable to speak to a causal link between identified risk factors and criminal behavior. However, the study does provide important knowledge which can be used in more controlled research. Specifically, if correctional

services were to provide appropriate intervention, targeting relevant criminogenic need areas, as identified by the current study and determined by a risk assessment, subsequent reductions in need and offending would provide stronger evidence of a causal link between the need areas and criminal behavior. However, it should be stressed that it is imperative to consider the principle of responsivity, both when programs for women are being developed, and when such programs are being evaluated. Although the current research found that women offenders have many of the same criminogenic needs as male offenders, it can not be assumed that the same programs are appropriate for both genders. Rather, it is suggested here that female offenders may respond better and be better served by programs that are woman-centered in approach.

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Appendix A

Sample Selection Methods for Shaw (1994a) Survey

Sample Determination. The sample size was based on the average daily counts of women in institutions across the province and monthly averages of women under community supervision. In order to ensure representation across the province, sampling within Ontario's five regions was designed to be proportionate to the overall offender distribution, with 42% being from the Metro Region, 35% from the Central Region, 7% from the Western Region, 8% from the Eastern Region, and 8% from the Northern Region. The final target numbers for the survey were then adjusted to account for the number of probation and parole offices taking part in each region. In order to increase the representation of Aboriginal women for a subsidiary report, the Northern Region was over-sampled.

Site Selection. In total, the women were recruited from 60 different sites, including jails, detention centres, the Vanier Centre for Women, half-way houses, and probation and parole offices. For each region, the two institutions with the highest average daily count and monthly admission rates of women were selected for the study. Four to eleven probation and parole offices within each region were selected. Discussions with Regional Managers ensured that offices of various sizes and geographic locations were sampled. Due to distances and a clustering of the population in small communities in the Northern Region, the three centres with the largest numbers of women in institutions were targeted, as were the probation and parole offices in those towns.

Subject Selection. Female offenders within each site were randomly selected where possible. In larger institutions, women inmates were selected according to the first letter of their name, with a different letter being sampled each day. In small institutions, all women were asked to participate. For the community sample, probation officers were asked to select women on as random a basis as possible and to avoid selecting only those whom they felt would be easy to interview. In most cases, officers invited women to participate as they came in for their required reporting.

It is estimated that approximately 50 incarcerated women refused participation in the survey. It appears that there were no major differences between the refusals and the interviewed sample, with the exception that there were higher numbers of women from visible minorities among the refusals at the Vanier Centre for Women and the Metro Toronto West Detention Centre (MTWDC). At MTWDC women in segregation could not be accessed by the interviewers, and also women serving intermittent weekend sentences were rarely interviewed.

Data Collection Procedures. Data collection for the original survey involved in-person interviews, which, on average, lasted for one hour. The interview schedules used with the institutional and community samples were identical with the exception of tenses and additional questions about children for the institutional sample. The interviews included questions on the following areas: demographic information, children, education, family background, history of abuse, physical and mental health, employment, juvenile history, young

offender/adult history, alcohol/drug use, assessment of help/programs needed, and additional problems identified. Additional background information about the women's demographic and offence history, and an assessment of the offender's needs was provided by correctional staff at each site.

The institutional interviews were conducted in private by women who had no affiliation with the criminal justice system, while women under community supervision completed the interview schedule under the guidance of a designated probation officer. For women who had language difficulties or problems reading and/or writing, the probation officer completed the schedule during the interview. The women were assured confidentiality and none of the interview schedules identified the subjects by name.

Final Sample. Interviews were conducted with 650 women and 20 were either incomplete or lost in transit. A further 15 cases from the Northern Region were excluded from the final sample because of over-sampling from that region. Hence, the total sample reported on was 615 women - 531 adults and 84 young offenders. As noted above, only the adult sample was utilized in the current project.

Appendix B

Table B1

Most Serious Index Offence/Charge

Current Offence	Institution		Community		Total	
	<u>n</u>	%	<u>n</u>	%	<u>N</u>	%
Homicide/manslaughter	3	1.5	—		3	0.7
Serious violent ¹	13	6.4	2	0.8	15	3.4
Break and Enter	3	1.5	5	2.1	8	1.8
Non-violent sexual	—		1	0.4	1	0.2
Traffick/import drugs	39	19.3	12	5.0	51	11.6
Weapons	—		3	1.3	3	0.7
Fraud	32	15.8	56	23.4	88	20.0
Misc. against person	2	1.0	2	0.8	4	0.9
Theft/possession	26	12.9	73	30.5	99	22.4
Assault	20	9.9	38	15.9	58	13.2
Property damage/arson	4	2.0	3	1.3	7	1.6
Soliciting	10	5.0	5	2.1	15	3.4
Obstruct justice	3	1.5	3	1.3	6	1.4
Drug possession	11	5.4	7	2.9	18	4.1
Traffic code	—		4	1.7	4	0.9

Note. ¹ This category includes offences of robbery, abduction, utter threats.

Table B1 Continued

Most Serious Index Offence/Charge

Current Offence	Institution		Community		Total	
	<u>n</u>	%	<u>n</u>	%	<u>N</u>	%
Breach order/escape	17	8.4	4	1.7	21	4.8
Impaired driving	4	2.0	11	4.6	15	3.4
Public order	—		8	3.3	8	1.8
Federal statute/by-laws	2	1.0	1	0.4	3	0.7
Parole violation	2	1.0	—		2	0.5
Highway Traffic Act	2	1.0	—		2	0.5
Liquor Control Act	3	1.5	—		3	0.7
No information	6	3.0	1	0.4	7	1.6

Appendix B

Table B2

Length of Custodial Sentence*

	Institution		Community		Total	
Sentence Length	<u>n</u>	%	<u>n</u>	%	<u>N</u>	%
Up to 1 month	47	23.3	14	37.8	61	25.5
1 to 3 months	58	28.7	13	35.1	71	29.7
3 to 6 months	50	24.8	7	18.9	57	23.8
6 to 12 months	33	16.3	3	8.1	36	15.1
Over 1 year	14	6.9	—		14	5.8

Note. 37 women from the community sample had previously been incarcerated.

Table B3

Release Type

Release Type	Institution		Community	
	<u>n</u>	%	<u>n</u>	%
Sentence expiry	105	52.0	20	54.0
Early release	34	16.8	2	0.8
Parole	50	24.8	13	5.4
Release to CRC ¹	5	2.5	2	0.8
Fine paid	1	0.5	_____	
Intermittent sentence	1	0.5	_____	
Not convicted	6	3.0	_____	

Note. ¹ CRC refers to a community correctional centre or half-way house

Appendix C

Level of Supervision Inventory

CRIMINAL HISTORY

- ___ 1. Any prior convictions, adult\number ()
- ___ 2. Two or more prior convictions
- ___ 3. 3 or more prior convictions
- ___ 4. 3 or more present offences\number ()
- ___ 5. Arrested under age 16
- ___ 6. Ever incarcerated upon conviction
- ___ 7. Escape history - institution Specify _____
- ___ 8. Ever punished for institutional misconduct number ()
- ___ 9. Charge laid or parole suspended suspended during prior community supervision
- ___ 10. Official record of assault\violence

EDUCATION/EMPLOYMENT

When in labour market:

- ___ 11. Currently unemployed
- ___ 12. Frequently unemployed
- ___ 13. Never employed for full year

- ___ 14. Ever fired
School or when in school:
- ___ 15. Less than grade 10
- ___ 16. Less than grade 12
- ___ 17. Suspended or expelled at least once

Homemaker, pensioner: 18 only
School\work\unemployed:18, 19, 20

- ___ 18. Participation\Performance ()
- ___ 19. Peer Interaction ()
- ___ 20. Authority Interaction ()

FINANCIAL

- ___ 21. Problems
- ___ 22. Reliance upon social assistance

FAMILY/MARITAL

- ___ 23. Dissatisfaction with marital or equiv. sit
- ___ 24. Nonrewarding, parental
- ___ 25. Nonrewarding, other relatives ()
- ___ 26. Criminal - Family\Spouse

ACCOMMODATION

- ___ 27. Unsatisfactory
- ___ 28. 3 or more address changes last year\number ()
- ___ 29. High crime neighborhood

LEISURE/RECREATION

- ___ 30. No recent participation in organized activity
- ___ 31. Could make better use of time

ATTITUDES/ORIENTATION**COMPANIONS**

- ___ 32. A social isolate
- ___ 33. Some criminal acquaintances
- ___ 34. Some criminal friends
- ___ 35. Few anti-criminal acquaintances
- ___ 36. Few anti-criminal friends

ALCOHOL/DRUG PROBLEMS

- ___ 37. Alcohol problem, ever
- ___ 38. Drug problem, ever

- ___ 39. Alcohol Current prob.
- ___ 40. Drug problem, Current _____
- ___ 41. Law violations
- ___ 42. Marital/Family

- ___ 43. School/Work
- ___ 44. Medical
- ___ 45. Other clinical indicators.

EMOTIONAL

- ___ 46. Moderate interference
- ___ 47. Severe interference
- ___ 48. Psychiatric treatment past
- ___ 49. Psychiatric treatment, now

- ___ 50. Psychological assessment Area _____

- ___ 51. Support crime
- ___ 52. Unfavourable to convention
- ___ 53. Poor, toward sentence
- ___ 54. Poor, toward supervision

DRAFT
PRESENTLY UNDER REVISION
(October, 1992)

This guide is intended as a supplement to training in the administration and scoring of the LSI. Use of the guide without training is not advised. Use of the LSI outside of the province of Ontario is subject to permission of the authors.

THE LEVEL OF SUPERVISION INVENTORY - REVISED
(LSI - VI)

INTERVIEW AND SCORING GUIDE

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This is a revision of the original scoring guide by D.A. Andrews, J.J. Kiessling (Ottawa Probation), and S. Komisar (Windsor Probation). The development of the LSI was part of the Assessment and Evaluation Project sponsored by the Community and Research divisions of the Ontario Ministry of Correctional Services (Ontario). The project was based in the Ottawa area offices of the Eastern Region of Probation and Parole Services and consultation was provided under contract with S.B.R.C. Socio-Behavioural Research Consultants, Inc.

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FORWARD

LSI-VI is a quantitative survey of attributes of offenders and their situations relevant to level of supervision decisions. For probationers and parolees there are 58 items, while for inmates the LSI is composed of 54 items. Each item is in a "0 - 1" format and the total LSI score is the simple sum of checked items. The items are grouped as follows (with number of items in brackets):

- Criminal History (10)
- Education/Employment (10)
- Financial (2)
- Family/Marital (4)
- Accommodation (3)
- Leisure/Recreation (2)
- Companions (5)
- Alcohol/Drug Problems (9)
- Emotional/Personal (5)
- Attitudes/Orientation (4)
- Probation Conditions (4) - for probation and parolees only

The LSI relates in reasonable ways to their sub-totals and the sub-totals are mildly and positively related. The inter-rater reliability estimates were satisfactory.

In research with probationers, LSI scores predicted all of the following above chance levels: officer judgements of appropriate levels of supervision at intake; officer judgements of appropriate levels of supervision while in progress; officer judgements of the success of supervision; actual amount of supervision activity as reflected in Casebook entries; early terminations versus regular terminations; early closures versus active supervision; any evidence of inprogram recidivism, including charges pending and reconviction; multiple reconvictions; incarceration; and, officially undetected self-reported criminal activity.

Research with incarcerated offenders predicted success in correctional halfway houses, institutional misconducts, parole outcome and recidivism one year following release.

The results are consistent with a number of other studies conducted by the Research Services division in Ontario. Given that background work and the current results with the LSI, the reliable and valid assessment of risk and need is clearly possible. The approach taken emphasizes the LSI as a decision-aid with professional judgements overriding the LSI guidelines. The LSI format has a built-in flexibility which will encourage its refinement as experience warrants. With or without refinements, the use of the LSI should be monitored.

The appendices to this guide provide LSI norms for a sample of 956 inmates who were serving sentences between four months and two years (Appendix A). In addition, Appendix B provides recidivism outcome for 931 inmates.

PARENTHESES

Some items have parentheses "()" following them. Each of these items requires a rating from "3" to "0".

"3": A satisfactory situation with little opportunity or need for improvement;

"2": A relatively satisfactory situation, with some room for improvement evident;

"1": A relatively unsatisfactory situation with a need for improvement.

"0": A very unsatisfactory situation with a very clear and strong need for improvement.

When these ratings apply, the manual gives examples of questions and scoring criteria.

Whenever a "0" or "1" rating is given, a check must be placed next to that item. A check is not to be given if a "2" or a "3" rating is given.

Always consider: "Could I provide one or two illustrative examples as the basis for my rating?"

LSI SUBCOMPONENTS

CRIMINAL HISTORY

1. Any prior convictions as an adult.
Record number of prior convictions in the bracket.
2. Two or more prior convictions, at separate times; meaning that any number of counts dealt with at the same time or with one sentence equals one conviction.
3. Three or more prior convictions, at separate times.
If this item is checked, then items 1 and 2 must also be checked.
4. Three or more present offences; that is, three or more charges for which the client has been convicted and is presently serving a sentence in an institution or in the community. There is no accounting for outstanding charges on the LSI.
Record the number of present offences.
5. Arrested under age 16.
6. Ever incarcerated upon conviction. This includes incarcerations as an adult and as a young offender/juvenile delinquent. This includes incarceration for unpaid fines.
7. Escape history - institution. Any history of escape or attempted escape from a youth or adult correctional facility, including institutional and residential.
8. Ever punished for institutional misconduct.
Record the number of official institutional misconducts, excluding those for which no punishment was adjudicated.
9. Charge laid or parole suspended while under prior community supervision. Community supervision includes probation, bail, community service order, parole, and mandatory supervision.
10. Official record of assault/violence. Any prior or current assaultive/violent offences, including violent misconducts. Refers to both adult and v.c./j.d. records. An assaultive/violent offence is one in which there was harm, potential harm, or threat of harm; an element of coercion or force, be it physical or psychological; the presence of a weapon. In a case where there is an official record but no a conviction for an assaultive/violent offence, consider whether the act could be seen as serious assaultive/violent behaviour.

16. Less than regular grade 12 completed. Client has not achieved a grade 12 education during attendance at an academic or technical high school.

17. Suspended or expelled at least once.

On LSI form circle "homemaker", "pensioner", "school", "work" or "unemployed" as applicable.

18. Participation/performance ().
Homemakers and pensioners: Only item 18 applies.

Items 19 and 20 do not apply to homemakers or pensioners.

19. Peer interactions ().

20. Authority interactions ().

Reward Ratings for School or Work:

If the client is not working, or not attending school, the rating on each of the indices is "0", i.e., deprivation or low levels of reward.

If the incarcerated client was not in school and was in the labour market, but was not employed at the time of his/her incarceration, then check each of items 18, 19 and 20.

Rate the working client on the Employment Scales. Rate the student client on the School Scales. If the client is both working and attending school, then rate on each scale and the best rating should be used on the LSI.

Reward Ratings for Employment:

18. Participation/PerformanceHighest Level (3)

Expresses a strong interest in job. Expresses pride in abilities/performance. Has received positive strokes from boss (for performance). Attendance is reliable. Willing to work overtime. Wants to stay in same line of work.

Lowest Level (0)

"I hate it." Boring/dangerous/unpleasant/can't perform well. A means of earning a living only and not even satisfactory on those terms. Unreliable attendance. Often late. Wants to change jobs. May quit even if another job is not yet available.

19. Peer InteractionHighest Level (3)

Gets along with fellow workers. Talk together, take breaks together, lunch together, leisure pursuits together. Help each other on the job. Co-operative. Friendly atmosphere.

Lowest Level (0)

Continuous problems. Fighting, arguing, isolated.

20. Authority InteractionsHighest Level (3)

Respect, if not liking, for supervisor. Talks with boss, even regarding non-job matters. Would approach boss with problems. Follows orders willingly.

Lowest Level (0)

Significant and continuing problems/conflicts. Won't follow orders. Arguments. Others are treated better by the boss.

Reward Ratings for Education:

18. Participation/Performance

Highest Level (3)

High interest in school work and school-related activities. Does homework, readings, assignments promptly and reliably. Average to above average grades (C or higher). Regular attendance.

Lowest Level (0)

Active dislike for school work and activities. Homework late or not completed. Truancy, skipping classes. Wants to quit. Below average grade (D or F).

19. Peer Interactions

Highest Level (3)

Gets along with fellow students. Talk together, lunch together. Spend time together outside of school. Best friends are at same school.

Lowest Level (0)

Significant and continuous problems or virtually no contact. Isolated, fighting, arguing. Best friends are not in school.

20. Authority Interactions

Highest Level (3)

Talks to teachers in and out of class. Has (or would) seek opinion of teacher regarding a personal, interpersonal problem or accomplishment. Respects teacher. Values the opinion of teacher.

Lowest Level (0)

Avoids teacher. Hates teacher. Heckles in class. Arguments. Detentions. Sent to office for displays of disrespect.

FINANCIAL

21. Problems ().

Check if reward rating is "0" or "1".

Reward Ratings for Financial Situations:

"3"	"2"	"1"	"0"
Long-standing pattern of effective management	No current difficulties	Situational or minor difficulties or need to explore situation further	Severe difficulties or no visible means of support

Note: You may use the following questions as a guide for marking the above rating. It is appropriate to involve the client in this process.

Example Questionsa. Source of Income

With reference to the household in which you are now living or were living at the time of your incarceration, what is the estimated total annual income from all sources? Sources other than income from employment might include Unemployment Insurance, Welfare, etc.

Does the household sometimes receive Welfare, or other forms of assistance?

Worried about having sufficient money to pay debts?

Spouse/parents have complained about you spending too much on non-essentials?

b. Use of Banking Services

Do you have a bank account (savings or chequing)?

Have one or more personal cheques "bounced" or been returned "NSF"?

c. Use of Credit

Credit card?

Credit with any major department stores?

Have been denied credit because of poor credit rating?

Phone calls, letters, personal visits from creditors requesting payment of past due accounts?

d. Financial Management Skills

Personal budget?

Do you follow your budget? Or can't follow?

Worried about sufficient income to meet basic needs (housing, food)?

Declaration of personal bankruptcy has been advised, or suggested, or has occurred?

Wages have been threatened with garnishment?

The dictionary definition of "difficulty" is something which cannot easily be done; an obstacle or a hindrance; trouble. Therefore, debts (e.g., mortgage, student loan) are not necessarily difficulties if they are manageable. As a general consideration, is the client's financial situation a current stressor, regardless of the source of income (including criminal activities)?

22. Reliance upon social assistance.
Check if client is receiving General Welfare Assistance or Family Benefits Allowance. As well, Workers' Compensation, Unemployment Insurance and Disability Pension are considered here to be indicative of need as the client's present income is fixed. If client is receiving one of these forms of assistance, this item is checked.

FAMILY OF ORIGIN/MARITAL

23. Dissatisfaction with marital or equivalent situation ().
Check if reward rating is "0" or "1" for client's situation.

Highest Level (3)

Highly rewarding/caring
relationship, or satisfaction with "single"
status.

Lowest Level (0)

Unpleasant/uncaring/
hostile/indifferent.
Intimate violence.
Unsatisfied with
"single" status.

Note: You may consider the following points in assessing the
above reward rating for client's situation.

- .frequent arguments
- .sexual dissatisfaction
- .infidelity
- .unwanted pregnancy
- .conflict re: child rearing
- .conflict re: in-laws/parents
- .conflict re: money
- .conflict re: companions/friends
- .conflict re: leisure time
- .conflict associated with ex-partners
- .stress from individual problems of partners
- .difficulty re: openness/warmth/intimacy
- .communication problems
- .excessive dependence
- .contemplating separation/divorce
- .implementing separation/divorce
- .accepting separation/divorce
- .child access and custody issues
- .harassment from ex-partner
- .physical, psychological, and/or sexual abuse

24. Non-rewarding, parental ().
Check if reward rating is "0" or "1" for client's
interaction with parents.

Reward Rating for Interaction with Parents:

"3" indicates a highly rewarding, satisfying relationship.
"0" indicates a punishing, unpleasant, uncaring, hostile,
indifferent relationship; OR that both parents are deceased;
OR that one parent is deceased or absent from home and there
is a negative relationship with the one seen most often.

Highest Level (3)

See or write each other often. Hug or kiss when greeting. Liking/loving. Open and warm. Talk about important matters. Care about what parents think, expect, feel.

Lowest Level (0)

Arguments when together. See or write each other rarely. Dislike. Hate. Don't care what parents think, feel or expect.

25. Non-rewarding, other relatives ().

Reward Rating for Interaction with Other Relatives:

Record one of "3", "2", "1", or "0". A "3" indicates a highly rewarding relationship and "0" indicates no positive relationships with others such as siblings, grandparents, aunts, uncles, cousins, or in-laws, who are seen or contacted regularly. The levels are similar to those in item 24.

26. Criminal family/spouse:
Check if parent, sibling, spouse or close relative has a criminal record.

This area is dynamic and is assessed on current family/marital interactions. There may well be historical issues from family/marital relationships that are present needs. Such needs may be noted in the Emotional/Personal area.

ACCOMMODATION

27. Unsatisfactory ().
Check if the reward rating is "0" or "1", or client has no fixed address.

Reward Ratings for Accommodation:

Highest Level (3)

Very satisfied with accommodation situation. Takes pride in house, yard and neighbourhood. Helps keep up the place.

Lowest Level (0)

Unhappy/dissatisfied. No pride, no attempt to improve residence. Wants to move. Others who live there want him/her to move.

28. Three or more address changes/number.
Record number of address changes within the last twelve months, or in the year prior to incarceration. Do not include a period of incarceration as an address change unless the client does not return to prior address upon release.
29. High crime neighbourhood.
Check if client resides in a high crime neighbourhood, or if neighbourhood has a high proportion of offenders. Example questions may include: Do the police visit your home area often? Are there people in the area who are dealing drugs, doing B & Es, or fencing stolen property? Consider if the area is criminally active or opportune.

LEISURE/RECREATION

When in the community:

30. No recent participation in an organized activity.
Check if the client has not participated or been involved in a formal organization during the last twelve months, or in the year prior to incarceration; e.g., union, service club, sports club or team, church.

Concerning the client who is participating in an Anonymous group, (e.g., A.A., N.A., C.A.) consider the motivation or incentives for attending and the degree of involvement. Is the client participating in the group's social activities (e.g., dances, weekend BBQs)? Is the client getting social rewards from participation?

31. Could make better use of time ().
Check if the reward rating is "0" or "1" based on the following criteria:

Reward Ratings for Leisure/Recreation:

Highest Level (3)

Involved in highly rewarding/satisfying activities; e.g., stamp collecting, weight lifting, martial arts, car repairs.

Lowest Level (0)

No leisure activities/bored/a lot of idle time.

At the risk of making a value judgement, discover in what ways a client's activities are rewarding for him/her. How is his/her use of time possibly impacting on, or relating to, other need areas (e.g., education/employment, alcohol/drug)?

COMPANIONS

When in the community:

32. A social isolate.
Check if client lacks a significant, intimate and mutual relationship with a non-relative. Client may express difficulty in meeting others or keeping friends, or is unable to get along with others. Client may present as shy, withdrawn and with limited social skills. Client may demonstrate a chronic inability to form a bond, to interact with someone as a friend. Client may express extreme independence or disregard for the feelings and expectations of others. Client engages in solitary activities, but not by his/her choice.
33. Some criminal acquaintances.
Check if client associates with, or did associate with prior to incarceration, individuals who are not close friends, but have criminal records or are involved in criminal activity. If item 34 is checked, this item must also be checked.
34. Some criminal friends.
Check if client has friends, or did prior to incarceration, who have criminal records or are involved in criminal activity. Friends are associates with whom one spends leisure time, whose opinions are valued, who provide help when in difficulty, etc.
35. No anti-criminal acquaintances.
Check if client does not have any acquaintances who are not involved in criminal activity or who are without criminal records. If this item is checked, then item 36 must also be checked.
36. No anti-criminal friends.
Check if client does not have any friends who are not involved in criminal activities or who do not have criminal records.

ALCOHOL/DRUG PROBLEM

(Excludes nicotine and caffeine.)

37. Alcohol problem ever.
If item 39 is checked, then this item must be checked. Some clients will report heavy alcohol consumption but also claim it is no problem. Assessment of alcohol "problem" depends upon the interviewer's assessment and not the client's evaluation.
38. Drug problem ever.
If item 40 is checked, then this item must be checked.
39. Alcohol problem, currently ().
Check if rating is "0" or "1" for client's alcohol abuse, or if client perceives him/herself as having a problem with alcohol. Current refers to the past year. When assessing an incarcerated client consider his/her drinking behaviour during the year prior to incarceration. Consider also any drinking behaviour while incarcerated.
40. Drug problem, currently ().
Check if rating is "0" or "1" for client's drug abuse, or if client perceives him/herself as having a problem with drugs. Specify the problem drug(s) in the space provided. Current refers to the past year. When assessing an incarcerated client consider his/her drug-taking behaviour during the year prior to incarceration. Consider also any drug-taking behaviour while incarcerated.

Substance Abuse Ratings:

Highest Level (3)
No evidence of current problems. An abstainer or controlled recreational user. Items 41-45 are evaluated based on current use. If the client has stopped alcohol/drug abuse for more than a year, then these items are not covered.

Lowest Level (0)
At least one of items 41 through 45 checked on basis of current use.

41. Law violation.
Check if the use (not possession only) of drugs or alcohol contributed, is contributing or could contribute to violation of the law, based on client's official record or your knowledge of client's situation. Examples: trafficking in drugs to support a habit; B & Es and thefts of property to fence for money for drugs; parole violations.

42. Marital/Family.
Check if the use of alcohol contributed to problems with marital or family situation, or significant others have had complaints about client's drug use or drinking.
43. School/Work.
Check if the use of drugs or alcohol contributed to problems with school or employment. Examples: hangover prevented going to school or work; asked to leave school because of drug use; loss of employment because of intoxication.
44. Medical.
Check if the use of drugs or alcohol has contributed to physical complaints, or a medical doctor has warned the client about drug/alcohol use.
45. Other indicators.
Check if: there is frequent use and a high quantity of consumption; drinking to unconsciousness; difficulty reducing intake; financial difficulties due to use; use of substance to avoid hangover or withdrawal; D.T.s; use of the substance first thing in the morning; sneaking drinks or "fixes"; blackouts.

EMOTIONAL/PERSONAL

"Interference" refers to an individual's ability to respond to life's stressors, and to the quality of that person's functioning in the real world. Is his/her ability and functioning affected by psychological or psychiatric problems? Assess client's level of adaptive functioning with regard to the past year.

46. Moderate interference.

The scoring of this item is left to the discretion of the scorer. However, if item 47 is checked, this item must also be checked. Examples of moderate interference or emotional distress: signs of mild anxiety (insomnia, worrying); signs of mild depression (quiet, underassertive). Consider here also the client whose emotional and cognitive functioning seems stabilized through mental health intervention

47. Severe interference.

To be checked based on any indicator(s) of client's mental health problems. The intent of the item is to detect active psychosis in a client. The following types of questions are suggested as a means of exploring some indicators of mental health problems.

- .Concerns about emotional stability?
- .Considering psychiatric consultation?
- .Considering voluntary admission to a psychiatric facility?
- .Committal to a psychiatric hospital may be necessary?
- .Imminent suicide risk?
- .Interference so severe as to require mental health professional in planning for service to client?

Severe emotional and cognitive interference may also be detected by observing the following types of indicators during the interview.

- .excessive sweating
- .extreme passivity or aggression
- .verbal abusiveness
- .odd or strange verbalizations
- .very slow or very fast speech
- .rambling conversation
- .reports of auditory and/or visual hallucinations
- .delusional thinking

48. Mental health treatment, past.

49. Mental health treatment, present.

50. Psychological assessment indicators.
 If the client has been assessed within the past year and the interviewer has knowledge of the problems that the assessment indicated were present, then check this item and note what that assessment indicated.

If the client has never been assessed, or if it is unknown whether the client has ever been assessed, but there are indicators of problems with the following, check this item and note the problems that the client's behaviours indicate. For example:

- .intellectual functioning
- .academic/vocational potential
- .academic/vocational interests
- .excessive fears; negative attitudes towards self, depression, tension
- .hostility; anger; potential for assaultive behaviour; over-assertion/aggression
- .impulse control; self-management skills
- .interpersonal confidence; interpersonal skills; under-assertive
- .contact with reality; severe withdrawal; over-activity; possibility of delusion/hallucination
- .disregard for feelings of others; possibility of reduced ability or inability to experience guilt/shame; may be superficially "charming" but appears to repeatedly disregard rules and feelings of others
- .criminal acts which don't make sense, appear irrational
- .other (specify)

ATTITUDES/ORIENTATION

This need area is concerned with what and how a person thinks about him/herself, others and the world. Are his/her attitudes, values and beliefs and thinking procriminal, antisocial or anticriminal, prosocial?

51. Supportive of crime ().
Check if rating is "0" or "1" for client's procriminal, antisocial orientation:

Highest Level (3)

Emphasis on negative consequences of law violation for the offender, the victim and the community. Acceptance of responsibility for actions and the consequences. Rejection of, or placing more realistic limits on rationalizations or justifications for law violations. Sensitivity to other people's needs and feelings. Identification with the victim(s) of a crime. Expressions of the risks involved in associating with criminal others or accepting their values.

Lowest Level (0)

Emphasis on usefulness of criminal activity. Motives are more readily served by crime than by noncrime. Acceptance of the common rationalizations or justifications for law violations (e.g., "It wasn't my fault." "No one was hurt." "The victim had it coming to him." "The cops were always on me for something.") Denial or minimization of responsibility for actions and the consequences. Outright rejection of, or failure to empathize or be sensitive to the feelings, wishes and expectations of others including the victim(s) of criminal behaviour. Acceptance of criminal others and their values and activities. Expressed hostility toward the criminal justice system.

52. Unfavourable toward convention ().
Here, "convention" means an alternative to crime and criminal lifestyle. Check if rating is "0" or "1" for client's anticriminal, prosocial orientation:

Highest Level (3)

Supportive of society's institutions (government, business, labour, service systems, home and family, school and work, spiritual institutions, recreational and social organizations) and their underlying values (order, peace, justice, material satisfaction, love and affection, security, interpersonal satisfactions, monetary and other satisfactions of achievements). Positive attitudes and feelings toward conventional/noncriminal others (peers, parents, siblings, spouse, teachers, employers). Valued interactions with these others. Indicated positive functions of conventional activities (working, studying, playing sports, controlled drinking....) and emphasis on rewards of such activities. Sense of accomplishment and feelings of self-worth based on achievement in conventional pursuits and activities.

Lowest Level (0)

Generalized disregard for convention/noncrime alternatives. Non-supportive, hostile, rejection of the underlying values. Weak ties to conventional settings such as home and family, and school and work. Negative, hostile, rejecting of non-criminal others; "I don't care what they think." Invalidation or rejection of noncriminal activities and their rewards. Tolerance for deviance in general.

53. Poor, toward sentence.
Check if client denies the fairness/appropriateness of his/her sentence.
54. Poor toward supervision.
Check if client objects to his/her classification or placement, and/or there is an unwillingness to comply or cooperate, or to seek assistance for significant problems.

Appendix D

Level of Supervision-Ontario Revision

A. GENERAL RISK/NEED FACTORS**1. CRIMINAL HISTORY**

- 1 Any prior y.o. dispositions (number =)
or adult dispositions (number =)
- 2 Two or more prior adult/youth dispositions
- 3 Three or more prior adult/youth dispositions
- 4 Three or more present offences (number =)
- 5 Arrested or charged under age 16
- 6 Ever incarcerated upon judgement
- 7 Ever punished for institutional misconduct/
behaviour report (number =)
- 8 Charge laid, probation breached or parole
suspended during prior community supervision
- Subtotal Strength —

2. EDUCATION/EMPLOYMENT

- 9 Currently unemployed
- 10 Frequently unemployed
- 11 Never employed for full year
- 12 Less than regular grade 10 or equivalent
- 13 Less than regular grade 12 or equivalent
- 14 Suspended or expelled at least once
- 15 Participation/Performance ()
- 16 Peer interactions ()
- 17 Authority interactions ()
- Subtotal Strength —

3. FAMILY/MARITAL

- 18 Dissatisfaction with marital or equivalent
situation ()
- 19 Nonrewarding, parental ()
- 20 Nonrewarding, other relatives ()
- 21 Criminal - Family/Spouse
- Subtotal Strength —

4. LEISURE/RECREATION

- 22 No recent participation in an organized activity
- 23 Could make better use of time ()
- Subtotal Strength —

5. COMPANIONS

- 24 Some criminal acquaintances
- 25 Some criminal friends
- 26 No anti-criminal acquaintances
- 27 No anti-criminal friends ()
- Subtotal Strength —

6. PROCRIMINAL ATTITUDE/ORIENTATION

- 28 Supportive of crime ()
- 29 Unfavourable toward convention ()
- 30 Poor, toward sentence/offence
- 31 Poor, toward supervision/treatment
- Subtotal Strength —

7. SUBSTANCE ABUSE

- 32 Alcohol problem, ever
- 33 Drug problem, ever
- 34 Alcohol problem, currently ()
- 35 Drug problem, currently ()
- 36 Law violations
- 37 Marital/Family
- 38 School/Work
- 39 Medical or other clinical indicators
- Subtotal Strength —

8. ANTISOCIAL PATTERN

- 40 Specialized assessment for Antisocial
pattern
- 41 Early and diverse antisocial behaviour:
Arrested/charged under age 16
(Item 5),
plus at least one of:
a) official record of assault/
violence ()
b) escape history ()
c) charge laid, probation breached or
parole suspended during prior
community supervision community
supervision (Item 8)
- 42 Criminal attitude. At least one of:
(Item 28), (Item 29),
(Item 31)
- 43 A pattern of generalized trouble. At
least four of:
Financial problems (),
3 or more address changes ()
(Item 11), (Item 12),
(Item 14), (Item 19),
(Item 23), (Item 27)
- Subtotal Strength —

B. SPECIFIC RISK/NEED FACTORS**1. PERSONAL PROBLEMS WITH
CRIMINOGENIC POTENTIAL**

- 1 Clear problems of compliance
(specific conditions)
- 2 Diagnosis of "psychopathy"
- 3 Diagnosis of other personality
disorder
- 4 Threat from third party
- 5 Problem-solving/self-
management skill deficits
- 6 Anger management deficits
- 7 Intimidating/Controlling
- 8 Inappropriate sexual activity
- 9 Poor social skills
- 10 Peers outside age range
- 11 Racist/sexist behaviour
- 12 Underachievement
- 13 Outstanding charges
- 14 Other (specify) _____

2. HISTORY OF PERPETRATION

- 1 Sexual assault (extrafamilial)
- 2 Sexual assault (intrafamilial)
- 3 Physical assault (extrafamilial)
- 4 Physical assault (intrafamilial)
- 5 Assault on an authority figure
- 6 Weapon use
- 7 Fire setting
- 8 Escapes/U.A.L.
- 9 Impaired Driving

**C. PRISON EXPERIENCE:
INSTITUTIONAL FACTORS**

- 1 Last classification maximum
- 2 Last classification medium
- 3 Last classification minimum
- 4 Protective custody
- 5 Treatment recommended/order
- 6 Misconduct/Behaviour Report
current incarceration
(number =)
- 7 Administrative segregation
- 8 Security management concerns
- 9 Past federal penitentiary

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THE LEVEL OF SERVICE INVENTORY - ONTARIO REVISION

(LSI-OR)

INTERVIEW AND SCORING GUIDE

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This guide is intended as a supplement to training in the administration and scoring of LSI-OR. Use of the guide without training is not advised. Use of the LSI outside of the province of Ontario is subject to permission of the authors.

This is a revision of the original scoring guide by D. A. Andrews, J. J. Kiessling (Ottawa Probation), and S. Kominar (Windsor Probation). The initial development of the LSI was part of the Assessment and Evaluation Project sponsored by the Community and Research divisions of the Ontario Ministry of Correctional Services (Ontario). The initial project was based in the Ottawa area offices of the Eastern Region of Probation and Parole Services and consultation was provided under contract with S.B.R.C. Socio-Behavioural Research Consultants, Inc. The present revision was completed under contract with the Ontario Ministry of the Solicitor General and Correctional Services (LSI/Classification Project). Thanks to J. Stephen Wormith for his extraordinary efforts in the consultations, form design, and manual wording.

** December 1995 **

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ACKNOWLEDGEMENT

The original Assessment and Evaluation Project was initiated in the Ottawa offices by the then Area Manager, Bill Jackson. Mr. Toffelmire (Eastern Region office) and Dr. Birkenmeyer (Research, Head Office) agreed that the project had province-wide implications, and it became a formal joint project of the Community and the Research divisions of the Ontario Ministry of Correctional Services. Ottawa Area Managers Jerry Kiessling and Lorraine Braithwaite were supportive throughout. The Ottawa and Area Officers were intimately involved during the initial two years of research and continued to contribute to the project's development for several years. The research services of Susan Mickus and Wendy Watkins were of great value to the initial project. Thanks also to David Robinson, Vi Porter, Velvet Heeney and Penny Faulkner.

Since the original probation research the LSI has been evaluated for halfway placements and institutional classification. Much of the institutions research was completed with the collaboration of Lawrence L. Motiuk. Support for these studies came from a number of people too numerous to mention all by name. However, we thank Mr. Syd Shoom, Regional Director (E), Mr. George Tegman (Regional Director-North; retired) and Dr. Paul Gendreau.

Subsequently, LSI research and applications have been extended to provincially incarcerated women (by Grant Coulson and colleagues), to young offenders (by Ian Shields and colleagues, by Catherine Carvell and colleagues, and by David Simourd), mentally disordered offenders (by Vern Quinsey, Marnie Rice, Grant Harris, Catherine Cormier and their colleagues), to Canadian federal male offenders (by Wagdy Loza, David Simourd and others in CSC), to probationers in Colorado (by Brad Bogue, Vern Fogg and their colleagues), to decision-making within the provincial parole board (by Don Wadell and Robert Rowe), to offenders in contact with voluntary sector agencies (by Don Wadell, Joan Hawkins, Marilyn Van Dieten, and their JHS Ottawa colleagues) and to other groups in other locations. In fact, interest in the LSI has been so great that it is now available outside of the Ontario government as the Level of Service Inventory-Revised (LSI-R: published by Multi-Health Systems Inc.).

Of particular interest within Ontario were a recent series of projects on risk/need assessment and intervention with Phase one young offenders. These projects supported by OMCSS entailed reviews of the research literature on risk/need and effective intervention as well as the development of a risk/need assessment instrument and a survey of young offender programs. The products of the OMCSS projects have impacted on the present project (the products were authored by Robert Hoge, Allan Leschied, and DAA.).

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The present project, the most recent of related projects sponsored by the Ontario government, explored the value of a revised LSI in view of a decade of application with Ontario probationers and inmates. LSI-OR, as described herein, represents a response to a series of consultations with Ontario correctional professionals as well as research and theoretical developments of the last decade. The LSI/Classification consultation committee, chaired by Paul Fleury, was crucial to the development of LSI-OR. Special thanks to Frances McKeague for her extraordinary efforts, and to Steve Small and to classification and psychology staff at RCTC who appear to have successfully integrated LSI-OR with institutional classification documents. We thank Robert Hoge, Steven Zikopolous, and the many students whose interest in the LSI was crucial to continued development.

The draft version of LSI-OR was subjected to further examination in a series of additional consultations with Ontario correctional professionals once the draft was available. The Eastern Ontario region, institutional and community, participated in a pilot study. Additionally, a group of regional trainers were trained by JSW, Jerry Ravensdale (Bell Cairn) and, sometimes, DAA. The additional consultations, the pilot work, and the training of trainers were sources of some important refinements to LSI-OR. We thank the regional trainers for their very real contributions. The regional trainers included, from Eastern Region: Malcom Ainalie, Vicki DeGrace, Claude Leger, Mike Shabinsky, Marcel Vachon, Dan Roy; from Northern Region: Aline Desormeaux, Brian North, Valerie Adams, Barbara Friday, Lois Rosine, Ghislaine Cote; from Southern Region: David Freedman, Allar Vlinamae, John Scarfo, Darrell Dodds, Susan Boucaud; from Western Region: Pam Bojeski, Julie Shepherd, Emelie Milloy, and Marion Evans.

DAA notes that the work of JSW on this project has been outstanding. His network of contacts within and outside of the Ministry, the depth of his research skill and knowledge, his patience and his gentle direction, his energy, and his professionalism are deeply appreciated.

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HISTORY AND FORWARD

LSI-6, from which the General Risk /Need Component of LSI-OR may be scored, was a quantitative survey of attributes of offenders and their situations relevant to level of supervision decisions. For probationers and parolees there were 58 items, while for inmates the LSI was composed of 54 items. Each item was in a "0 - 1" format and the total LSI score is the simple sum of checked items. The items were grouped into the following subcomponents (with number of items in brackets):

- Criminal History (10)
- Education/Employment (10)
- Financial (2)
- Family/Marital (4)
- Accommodation (3)
- Leisure/Recreation (2)
- Companions (5)
- Alcohol/Drug Problems (9)
- Emotional/Personal (5)
- Attitudes/Orientation (4)
- Probation Conditions (4) - for probation and parolees only

The LSI related in reasonable ways to the scores for each subcomponent and the sub-total scores were mildly and positively related. The inter-rater reliability estimates were satisfactory.

In research with probationers, LSI scores predicted all of the following above chance levels: officer judgements of appropriate levels of supervision at intake; officer judgements of appropriate levels of supervision while in progress; officer judgements of the success of supervision; actual amount of supervision activity as reflected in Casebook entries; early terminations versus regular terminations; early closures versus active supervision; any evidence of inprogram recidivism, including charges pending and reconviction; multiple reconvictions; incarceration; and, officially undetected self-reported criminal activity.

Research with incarcerated offenders revealed above-chance predictions of success in correctional halfway houses, institutional misconducts, parole outcome, and recidivism one year following release.

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The results were consistent with a number of other studies conducted by the Research Services division in Ontario. Given that background work, the reliable and valid assessment of risk and need was clearly possible. The approach taken emphasized the LSI as a decision-aid with professional judgements overriding the LSI guidelines.

The LSI format had a built-in flexibility which would encourage its refinement as experience warrants. With or without refinements, thinking at the time of implementation suggested that the use of the LSI should be monitored.

Over 10 years later (in 1994), a major review of LSI-6 was undertaken by the Ontario Ministry of the Solicitor General and Correctional Services. The review of the LSI, was intended a) to suggest revisions that might meet concerns of users and consumers, and b) to produce core training materials that located use of the LSI within the context of evidence-based principles of effective correctional practice. From the beginning of the project, there was an awareness of concerns regarding the ability to graphically profile needs with the LSI, and with the possibility of introducing special norms or procedures for particular populations such as young vs adult offenders, men vs women, and community vs institutions.

A feature of the process was consultations with users and consumers. Senior management directed that a broad consultation process be undertaken. Thus, following head office meetings with senior managers and representatives of community and institutional corrections and representatives of the research and training units, a small team was formed composed of DAA (the author of these notes), J. Stephen Wormith (Psychologist-in Chief) and Frances McKeague (Adult Community Services / Organizational Renewal Project).

These three met with representatives of community and institutional corrections from each region of the province and additionally with the Probation Officers Association of Ontario, the Ontario Board of Parole, the Commission on Systemic Racism, the Office of Youth Justice, and the Organizational Renewal Project. Each meeting included a brief introduction to the project, the floor then was turned over to participants, and finally members of the groups were invited to comment upon a variety of issues including LSI items and format, training, special populations, implications for decision-making, and case management within community and institutional settings. Details of the consultation are reviewed in the paper "Review of the LSI Project," one of the papers submitted to MSGCS by DAA for this project. The result of all this was LSI-OR.

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LSI-OR consists of eight sections plus an appendix for supplementary information. The sections incorporate the following:

- A. General Risk/Need Factors
- B. Specific Risk/Need Factors
- C. Prison Experience: Institutional Factors
- D. Risk/Need Summary
- E. Risk/Need Profile
- F. Other Client Issues
- G. Special Responsivity Considerations
- H. Program / Placement Decision
- Supplementary Information for Institutional Classification/Reclassification, Release Planning, or Community Supervision

The content and format of LSI-OR reflects the recommendations outlined in "Review of the LSI Project." In brief, the General Risk / Need Factors section of LSI-OR is as follows:

1) The name of the risk/need instrument has been changed to reflect the research findings regarding effective correctional practice (see Training Module on Evidence-Based Practice): Thus, the Level of Supervision Inventory (LSI-6) has become the Level of Service Inventory- Ontario Revision (LSI-OR);

2) Scoring has been changed so that the LSI-OR Total General Risk/Need score reflects the "big eight" risk/need factors revealed by research findings. Being among the best-validated of risk factors, not surprisingly these eight areas of risk/need are the same areas sampled on the MCSS Risk/Need instrument for young offenders. The eight subtotals of LSI-OR General Risk/Need Factors are as follows (with the order of subtotals reflecting the structure of the instrument rather than empirically-established predictive validity):

- 1) Criminal History (8 items)
- 2) Education/Employment (9 items)
- 3) Family/Marital (4 items)
- 4) Leisure/Recreation (2 items)
- 5) Companions (4 items)
- 6) Procriminal Attitude/Orientation (4 items)
- 7) Substance Abuse (8 items)
- 8) Antisocial Pattern (4 items)

3) Concrete quantitative guidelines for level of risk/need designations (low, medium, high) within each of the eight major areas are provided. At the same time, however, designations of low, moderate or high risk/need within each category will be formally declared to be in the realm of professional discretion. It is thereby recognized that the professional assessor may be employing a broader sampling of

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indicators than those scored on the LSI as well as the continuing recognition of the value placed on professional discretion. Additionally, this suggestion is consistent with practice in MCSS.

4) "Strength" notations are now possible for each of the eight risk/need areas on which offenders received a "very low" or "low" risk/need" score. This recommendation reflects the fact that some users and commentators continue to feel that the LSI is "too negative" and misses the importance of certain strengths as "protective" factors. It, thus, also reflects the possibility, for future research exploration, that "strength" notations may enhance predictive accuracy. This too, being consistent with current research issues, will be consistent with the new OMCSS practices. Strength notations on the LSI-OR are not yet introduced into the quantitative scoring of the LSI-OR.

5) The overall Total LSI-OR General Risk/Need score continues to be the sum of the checked items (albeit now only of the big eight), and the professional override remains in effect.

6) The remaining of the original LSI subtotals are now addressed in new sections of the LSI-OR (for example within "F. Other Client Issues" or within "B. Specific Risk/Need Factors"). The original four were: Financial, Accommodation, Probation/Parole Conditions, and Emotional / Personal.

7) The content of "B. Specific Risk/Need Factors" reflects consultations on this project, experience with the MCSS instrument, experience with the Young Offender Management System, and the research literature,

8) Section "G. Special Responsivity Considerations" samples some of the dominant responsivity considerations in clinical research and correctional opinion. Responsivity factors are considerations that may impact upon choice of the most appropriate style and mode of service.

9) Section "C. Prison Experience: Institutional Factors" samples items that institutional classification staff identified as crucial considerations over-and-above general risk/need level and the other subsections of LSI-OR.

10) Sections "D. Risk/Need Summary" and "E. Risk/Need Profile" provide summaries of risk/need scores including a graphic presentation in "E." Section "H. Program / Placement Decision" summarizes major classification decisions.

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11) "Supplementary Information" (pages 3 and 4) samples areas related to sections "A" through "H" but of special significance to institutional classification. With LSI-OR, including the Supplementary Information, the old institutional classification form may be replaced.

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INTRODUCTION TO SCORING LSI-OR Section A (General Risk/Need Factors)

Section A of LSI-OR requires a check mark for each item that applies to the client. When the answer to a given item is unknown, then the number of that item should be circled. As few items as possible should be circled.

The LSI-OR total score from section A is the simple sum of checked items; this score and the subcomponent scores will suggest a client's level and area of risk/need, and guide level and area of service decisions. Over the years, a number of guidelines have been suggested. The current guidelines are first and foremost dominated by the principle of professional discretion. The correctional professional, with access to a quantified risk/need assessment, makes recommendations consistent with the quantitative findings and with his/her assessment of the broader and unique aspects of the case, including the extent to which risk/need factors have been addressed through risk management or treatment.

With intake probationers, the following guidelines for level of supervision and service are proposed with LSI-OR General Risk/Need scores:

Risk Level	Section A Score	Level of Supervision	Recidivism: Probability of Incarceration
Very Low	00-04	Minimum. Consider admin. closure.	
Low	05-10	Minimum. Consider admin. closure.	001% (of 151)
Medium	11-19	Medium. Consider minimum with management and/or treatment of dynamic risk factors.	008% (of 169)
High	20-29	Maximum. Consider medium with management and/or treatment of dynamic risk factors.	023% (of 195)
Very High	30-	Maximum	044% (of 043) 100% (of 002)

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Within institutions, the following guidelines for risk of recidivism, are proposed with LSI-OR General Risk/Need scores. The guidelines, however, must be employed with the other matters of institutional concern sampled by LSI-OR. Most cases scoring high on risk/need in terms of chances of recidivism may be safely assigned to medium levels of custody as their prison experience may demonstrate.

Risk Level	Section A Score	Level of Custody	Recidivism: Probability of Incarceration
Very Low	00-04	Minimum. Consider early release.	000% (of 024)
Low	05-10	Minimum. Consider early release.	006% (of 071)
Medium	11-19	Minimum. Consider early release with short-term treatment	028% (of 205)
High	20-29	Medium. Consider minimum and/or early release with management/ treatment of dynamic risk factors.	045% (of 399)
Very High	30+	Medium or Maximum. Consider medium when prison experience acceptable. Consider early release <u>only</u> with management/treatment of risk factors	061% (of 224)

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Rated Items

Some items have parentheses "()" following them. Each of these items requires a rating from "3" to "0".

"3": A satisfactory situation with little opportunity or need for improvement;

"2": A relatively satisfactory situation, with some room for improvement evident;

"1": A relatively unsatisfactory situation with a need for improvement.

"0": A very unsatisfactory situation with a very clear and strong need for improvement.

When these ratings apply, the manual gives examples of questions and scoring criteria.

Whenever a "0" or "1" rating is given, a check must be placed next to that item. A check is not to be given if a "2" or a "3" rating is given.

Always consider: "Could I provide one or two illustrative examples as the basis for my rating?"

STRENGTH NOTATION: Each of the eight general risk/need subsections now requests a check mark if the assessor judges an area as one of "strength." This innovation within the LSI is a response to the opinions of many of the correctional professionals consulted. More than a decade ago with LSI-6, many professionals called for the opportunity to record exceptionally positive circumstances. This innovation also is a response to the expanding (although not yet convincingly established) research evidence that some conditions, by virtue of their presence, actively reduce the chances of antisocial conduct.

Checking "strength" for any of the general risk/need subsets will reflect a judgment of the following type:

a) Assessment within a particular subtotal area indicates a circumstance or level of functioning that is utterly incompatible with a reasonable expectation of antisocial conduct. For example: antisocial associates may be scored present but the degree of influence of anticriminal associates is so positive that it is unlikely that the influence of procriminal associates would ever be stronger than the influence of anticriminal associates. For example: the family conditions are not only low risk but

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exceptionally antirriminal in the quality of familial supervision and strength of ties to family.

b) The assessment of a particular subtotal area indicates not only low risk but in addition a circumstance or level of functioning so positive that it may reduce the risk amplification implications of other risk factors found to be present. For example: Companions may be assessed as a risk factor but personal attitudes are so antirriminal that the effects of companions may be discounted.

2. EDUCATION/EMPLOYMENT

When in the labour market (that is, when in the community or long term imprisonment with work opportunities):

The employment portion of this subcomponent is relatively straightforward when interviewing probationers and parolees. However, extra care is needed when administering the LSI to inmates who are, strictly speaking, unemployed. When doing an LSI with an incarcerated client it is helpful to view his/her incarceration as a type of "leave without pay". If he/she is serving a relatively brief sentence (under two years as are Ontario inmates) consider if he/she will be able to return to this job. If the answer is yes, then assess on items 215, 216 and 217 according to the employment conditions prior to incarceration. If the answer is no, then the client is assessed as unemployed.

If a client is being paid to participate in a training program and there is a work component then he/she is assessed as employed.

209. Currently unemployed. Certain "unemployed" clients are not checked on this item. For example, clients who have never entered the labour market because they are still in school; who became homemakers without first entering the labour market, who were unemployable following school; who are currently homemakers or pensioners.

If this item is checked, then items 215, 216 and 217 are each rated as "0" and also checked.

210. Frequently unemployed. Client has been employed less than 50% of the last twelve months, or the twelve months prior to incarceration.

All clients who were in the labour market for at least 12 continuous months are eligible for scoring of items 210 and 211.

211. Never employed for full year. Client has never been employed in the community for a continuous twelve months.

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In school or when in school:

Items 212 and 213 refer to achievement in education through a regular academic or technical high school program. Upgrading, equivalency and correspondence programs are considered as regular high school programs if the upgrading is recognized in a formal manner by educational authorities such as the Ministry of Education. If, however, the client is presently attending an alternative program of education do assess his/her reward ratings for school in items 215, 216 and 217.

If a young age precludes completion of grade 10 and/or grade 12, then item 212 and/or 213 should not be checked.

212. Less than regular grade 10 completed. Client has not achieved a grade 10 education during attendance at an academic or technical high school. If this item is checked, then item 213 must also be checked. Recall, however, the age considerations noted above.

213. Less than regular grade 12 completed. Client has not achieved a grade 12 education during attendance at an academic or technical high school. Recall, however, the age considerations noted above.

214. Suspended or expelled from school at least once.

For homemakers and pensioners, only item 215 applies. Items 216 and 217 do not apply to homemakers or pensioners.

215. Participation/performance ().

216. Peer interactions ().

217. Authority interactions ().

Reward Ratings for School or Work:

If the client is not working, or not attending school, the rating on each of the indices is "0", i.e., deprivation or low levels of reward.

If the incarcerated client was not in school and was in the labour market, but was not employed at the time of his/her incarceration, then check each of items 215, 216 and 217.

Rate the working client on the Employment Scales. Rate the student client on the School Scales. If the client is both working and attending school, then rate on each scale and the best rating should be used on the LSI.

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Reward Ratings for Education:

215. Participation/PerformanceHighest Level (3)

High interest in school work and school-related activities. Does homework, readings, assignments promptly and reliably. Average to above average grades (C or higher). Regular attendance.

Lowest Level (0)

Active dislike for school work and activities. Homework late or not completed. Truancy, skipping classes. Wants to quit. Below average grade (D or F).

216. Peer InteractionsHighest Level (3)

Gets along with fellow students. Talk together, lunch together. Spend time together outside of school. Best friends are at same school.

Lowest Level (0)

Significant and continuous problems or virtually no contact. Isolated, fighting, arguing. Best friends are not in school.

217. Authority InteractionsHighest Level (3)

Talks to teachers in and out of class. Has (or would) seek opinion of teacher regarding a personal, interpersonal problem or accomplishment. Respects teacher. Values the opinion of teacher.

Lowest Level (0)

Avoids teacher. Hates teacher. Heckles in class Arguments. Detention. Sent to office for displays of disrespect.

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Reward Ratings for Employment:

215. Participation/Performance
Highest Level (3)

Expresses a strong interest in job. Expresses pride in abilities/performance. Has received positive strokes from boss (for performance). Attendance is reliable. Willing to work overtime. Wants to stay in same line of work.

Lowest Level (0)

"I hate it." Boring/dangerous/unpleasant/can't perform well. A means of earning a living only and not even satisfactory on those terms. Unreliable attendance. Often late. Wants to change jobs. May quit even if another job is not yet available.

216. Peer Interaction
Highest Level (3)

Gets along with fellow workers. Talk together, take breaks together, lunch together, leisure pursuits together. Help each other on the job. Cooperative. Friendly atmosphere.

Lowest Level (0)

Continuous problems. Fighting, arguing, isolated.

217. Authority Interactions
Highest Level (3)

Respect, if not liking, for supervisor. Talks with boss, even regarding non-job matters. Would approach boss with problems. Follows orders willingly.

Lowest Level (0)

Significant and continuing problems/conflicts. Won't follow orders. Arguments. Others are treated better by the boss.

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3. FAMILY / MARITAL

This subcomponent is dynamic and is assessed on current family/marital interactions. There may well be historical issues from family/marital relationships that are present needs. Such needs may be noted in other sections of LSI-OR.

318. Dissatisfaction with marital or equivalent situation ().

Check if reward rating is "0" or "1" for client's situation.

Highest Level (3)

Highly rewarding/caring relationship, or satisfaction with "single" relationship.

Lowest Level (0)

Unpleasant/uncaring/hostile/indifferent. Intimate violence. Unsatisfied with "single" status.

Note: You may consider the following points in assessing the above reward rating for client's situation.

- .frequent arguments
- .sexual dissatisfaction
- .infidelity
- .unwanted pregnancy
- .conflict re: child rearing
- .conflict re: in-laws/parents
- .conflict re: money
- .conflict re: companions/friends
- .conflict re: leisure time
- .conflict associated with ex-partners
- .stress for individual problems of partners
- .difficulty re: openness/warmth/intimacy
- .communication problems
- .excessive dependence
- .contemplating separation/divorce
- .implementing separation/divorce
- .accepting separation/divorce
- .child access and custody issues
- .harassment from ex-partner
- .physical, psychological, and/or sexual abuse

319. Non-rewarding, parental ().

Check if reward rating is "0" or "1" for client's interaction with parents.

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Reward Rating for Interaction with Parents:

"3" indicates a highly rewarding, satisfying relationship.
 "0" indicates a punishing, unpleasant, uncaring, hostile, indifferent relationship; OR that both parents are deceased; OR that one parent is deceased or absent from home and there is a negative relationship with the one seen most often.

Highest Level (3)

See or write each other often. Hug or kiss when greeting. Liking/loving. Open and warm. Talk about important matters. Care about what parents think, expect, feel.

Lowest Level (0)

Arguments when together. See or write each other rarely. Dislike. Hate. Don't care what parents think, feel or expect.

320. Non-rewarding, other relatives ().

Reward Rating for Interaction with Other Relatives:

Record one of "3", "2", "1", or "0". A "3" indicates a highly rewarding relationship and "0" indicates no positive relationships with others such as siblings, grandparents, aunts, uncles, cousins, or in-laws, who are seen or contacted regularly.

321. Criminal family/spouse:

Check if parent, sibling, spouse or close (with contact) relative has a criminal record.

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4. LEISURE/RECREATION

When in Community:

422. No recent participation in an organized activity.

Check if the client has not participated or been involved in a formal organization during the last twelve months, or in the year prior to incarceration; e.g., union, service club, sports club or team, church.

Concerning the client who is participating in an Anonymous group, (e.g., A.A., N.A., C.A.) consider the motivation or incentives for attending and the degree of involvement. Is the client participating in the group's social activities (e.g., dances, weekend BBQs)? Is the client getting social rewards from participation?

423. Could make better use of time ().

Check if the reward rating is "0" or "1" based on the following criteria:

Reward Ratings for Leisure/Recreation:

Highest Level (3)

Involved in highly rewarding/satisfying activities; e.g., stamp collecting, weight lifting, martial arts, car repairs.

Lowest Level (0)

No leisure activities/bored/a lot of idle time.

Explicit criminogenic activities.

At the risk of making a value judgement, discover in what ways a client's activities are rewarding for him/her. How is his/her use of time possibly impacting on, or relating to, other need areas; e.g., education/employment, alcohol/drug.

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6. PROCRIMINAL ATTITUDES/ORIENTATION

This need area is concerned with what and how a person thinks and feels about him/herself, others in regard to violations of the law and alternatives to law violations. Are his/her attitudes, values, beliefs, thinking and feeling procriminal, antisocial or anticriminal, prosocial?

628. Supportive of crime ().
Check if rating is "0" or "1" for client's procriminal, antisocial orientation:

Highest Level (3)

Emphasis on negative consequences of law violation offender, the victim and the community. Acceptance of responsibility for actions and the consequences. Rejection of, or placing more realistic limits on rationalizations or justifications for law violations. Sensitivity to other people's needs and feelings. Identification with the victim(s) of a crime. Expressions of the risks involved in associating with criminal others or accepting their values.

Easy-going, calm, not angry.

Lowest Level (0)

Emphasis on usefulness of criminal activity. for the Motives are more readily served by crime than by noncrime. Acceptance of the common rationalizations or justifications for law violations (e.g., "It wasn't my fault." "No one was hurt." "The victim had it coming to him." "The cops were always on me for something." Denial or minimization of responsibility for actions and the consequences. Outright rejection of, or failure to empathize or be sensitive to the feelings, wishes and expectations of others including the victim(s) of criminal behaviour. Acceptance of criminal others and their values and activities.

Expressed hostility toward the criminal justice system.

Angry, hostile, resentful, defiant. Prone to "what the hell," "I give up /don't give a damn."

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629. Unfavourable toward convention ().
 Here, "convention" means an alternative to crime and criminal lifestyle. Check if rating is "0" or "1" for client's anticriminal, prosocial orientation:

Highest Level (3)

Supportive of society's institutions (government, business, labour, service systems, home and family, school and work, spiritual institutions, recreational and social organizations) and their underlying values (order, peace, justice, material satisfaction, love and affection, security, interpersonal satisfactions, monetary and other satisfactions of achievements). Positive attitudes and feelings toward conventional/noncriminal others (peers, parents, siblings, spouse, teachers, employers). Valued interactions with these others. Indicated positive functions of conventional activities (working, studying, playing sports, controlled drinking...) and emphasis on rewards of such activities. Sense of accomplishment and feelings of self-worth based on achievement in conventional pursuits and activities.

Lowest Level (0)

Generalized disregard for convention/noncrime alternatives. Non-supportive, hostile, rejection of the underlying values. Weak ties to conventional settings such as home and family, and school and work. Negative, hostile, rejecting of non-criminal others; "I don't care what they think." Invalidation or rejection of noncriminal activities and their rewards. Tolerance for deviance in general.

Negative, hostile
toward authority

630. Poor, toward sentence/offence .
 Check if client denies the fairness/appropriateness of his/her sentence. Denies / minimizes injury, denies / minimizes responsibility for current offence. Client views himself/herself in regard to the offence/sentence as the victim of circumstances, misunderstandings, unworthy others, an unfair system.

631. Poor toward supervision and treatment.
 Check if client objects to his/her classification or placement, and/or there is an unwillingness to comply or cooperate, or to seek assistance for significant problems. Weak motivation to address criminogenic factors.

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7. SUBSTANCE ABUSE

This subcomponent excludes abuse of nicotine and caffeine.

The focus of this subcomponent is substance abuse rather than substance-related offences. As indicated in item 736, convictions for possession, trafficking or importation are not sufficient for indicating a substance abuse problem.

732. Alcohol problem ever.

If item 734 is checked, then this item must be checked. Some clients will report heavy alcohol consumption but also claim it is no problem. Assessment of alcohol "problem" depends upon the interviewer's assessment and not the client's evaluation.

733. Drug problem ever.

If item 735 is checked, then this item must be checked.

734. Alcohol problem, currently ().

Check if rating is "0" or "1" for client's alcohol abuse, or if client perceives him/herself as having a problem with alcohol. Current refers to the past year. When assessing an incarcerated client consider his/her drinking behaviour during the year prior to incarceration. Consider also any drinking behaviour while incarcerated.

735. Drug problem, currently ().

Check if rating is "0" or "1" for client's drug abuse, or if client perceives him/herself as having a problem with drugs. Specify the problem drug(s) in the space provided. Current refers to the past year. When assessing an incarcerated client consider his/her drug-taking behaviour during the year prior to incarceration. Consider also any drug-taking behaviour while incarcerated.

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Substance Abuse Ratings:

Highest Level (3)

No evidence of current problems. An abstainer or controlled recreational user.

Lowest Level (0)

At least one of items 736 through 739 checked on basis of current use.

Items 736 - 739 are evaluated based on current use. If the client has stopped alcohol/drug abuse for more than a year, then these items are not covered.

In the last year:

736. Law violation.

Check if the use (not only the possession, trafficking, importation) of drugs or alcohol contributed, is contributing or could contribute to violation of law, based on client's official record or your knowledge of client's situation. Examples: trafficking in drugs to support a habit; B & Es and thefts of property to fence for money for drugs; parole violations; driving while impaired.

737. Marital/Family. Check if the use of drugs or alcohol contributed to problems with marital or family situation, or significant others have had complaints about client's drug use or drinking.

738. School/Work.

Check if the use of drugs or alcohol contributed to problems with school or employment. Examples: hangover prevented going to school or work; asked to leave school because of drug use; loss of employment because of intoxication.

739. Medical / Other indicators.

Check if the use of drugs or alcohol has contributed to physical complaints, or a medical doctor has warned the client about drug/alcohol use: there is frequent use and a high quantity of consumption; drinking to unconsciousness; difficulty reducing intake; financial difficulties due to use; use of substance to avoid hangover or withdrawal; D.T.s; use of the substance first thing in the morning; sneaking drinks or "fixes"; blackouts.

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8. ANTISOCIAL PATTERN

840. Specialized assessment for antisocial pattern and/or other aspects of a criminal personality pattern.

The primary purpose of this item is to set the occasion for the identification of very high risk/need cases characterized by extreme egocentricism and a pattern of violations of trust and responsibility.

Check if you suspect the applicability of a diagnosis of "antisocial personality," "psychopathy," or some other psychiatric or forensic label with significant and clear links to risk of criminal activity (for example: "pedophile" with deviant sexual arousal pattern; delusional thinking with potential for violence, for example, "people out to get me").

Emotional problems and even psychosis without clear criminogenic potential are not sufficient for a check here (although such problems would be checked in other sections of the LSI-OR).

If the client has been assessed within the past year and the interviewer has knowledge of the problems the assessment indicated, then check this item and note what that assessment indicated in the Summary of Findings.

If the client has never been assessed, or if it is unknown whether the client has been assessed, but there are indicators of problems, check this item and note the problems in the Summary of Findings. Sample problems include:

- * hostility; anger; potential for assaultive behaviour; over-assertion/aggression
- * disregard for feelings of others; possibility of reduced ability or inability to experience guilt/shame; may be superficially "charming" but appears to repeatedly disregard rules and feelings of others, impulsivity
- * other (specify)

841. Early and diverse antisocial behavior.

Arrested or charged under age 16 (item 105) plus at least one of:

- a) Official record of assault/violence: any prior or current assaultive/violent offences , including violent misconducts. Refers to both adult and young offender/juvenile delinquent. An assaultive/violent offence is one in which there was harm, potential harm, or threat of harm; an element of coercion or force, be it physical or psychological; the preence of a weapon. In a case where there is an official record but not a conviction for an assaultive/violent offence, consider whether the act could be seen as serious assaultive/violent behavior.
- b) Escape history - institution: Any history of escape or attempted escape from a youth or adult correctional facility, including institutional or residential.
- c) Charge laid, probation breached, parole suspended during prior community supervision (item 108).

842. Criminal attitudes (at least one of 628, 629, 631)

843. A pattern of generalized trouble.

At least four of 211, 212, 214, 319, 423, 527, financial problems, 3 or more address changes in the last 12 months.

Financial problems. Check if reward rating is "0" or "1", however, the reward rating is not recorded:

Reward Rating for Financial Situation:

"3"	"2"	"1"	"0"
Longstanding pattern of effective management	No current difficulties	Situational or minor difficulties or need to explore situation further	Severe difficulties or no visible means of support

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Note: You may use the following questions as a guide for marking the above rating. It is appropriate to involve the client in this process.

Example Questionsa. Source of Income

With reference to the household in which you are now living (or were living at the time of your incarceration), what is the estimated total annual income from all sources? Sources other than income from employment might include Unemployment Insurance, Welfare, etc.

Does the household sometimes receive Welfare, or other forms of assistance?

Worried about having sufficient money to pay debts?

Spouse/parents have complained about you spending too much on nonessentials?

b. Use of Banking Services

Do you have a bank account (savings or checking)?

Have one or more personal cheques "bounced" or been returned "NSF"?

c. Use of Credit

Credit card? Credit with any major department stores?

Have you been denied credit because of poor credit rating?

Phone calls, letters, personal visits from creditors requesting payment of past due accounts?

d. Financial Management Skills

Personal budget?

Do you follow your budget? Or can't follow?

Worried about sufficient income to meet basic needs (housing, food)?

Declaration of personal bankruptcy has been advised, or suggested, or has occurred?

Wages have been threatened with garnishment?

The dictionary definition of "difficulty" is something which cannot easily be done; an obstacle or a hindrance; trouble. Therefore, debts (e.g., mortgage, student loan) are not necessarily difficulties if they are manageable. As a general consideration, is the client's financial situation a current stressor, regardless of the source of income (including criminal activities)?

Three or more address changes/number. Number of address changes within the last twelve months, or in the year prior to incarceration. Do not include a period of incarceration as an address change unless the client does not return to prior address upon release.

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SPECIFIC RISK / NEED FACTORS**B1. PERSONAL PROBLEMS WITH CRIMINOGENIC POTENTIAL**

01. Clear problems of compliance (specific conditions). Behaviour / circumstances in regard to one or more conditions of probation or conditional release are judged problematic and in need of being addressed.
02. Diagnosis of "psychopathy". The files or other reliable sources reveal an official diagnosis of "antisocial personality disorder" or "psychopathy" by a mental health professional. (Particular attention is paid to "psychopathy" rather than a pure behavioural definition of "antisocial personality disorder").
03. Diagnosis of other personality disorder. The files or other reliable sources reveal an official diagnosis of "personality disorder" (other than "psychopathy") by a mental health professional. These other personality disorders (PDs) include the following: paranoid PD, Schizoid PD, Schizotypal PD, Borderline PD, Histrionic PD, Narcissistic PD, Dependent PD, Avoidant PD, Obsessive-Compulsive PD,
04. Threat from third party. Some group or person may be a source of serious problems (for example: the activities of an associate, friend or foe, may have negative implications for case management through threat of violence).
05. Problem-solving / self-management skill deficits. A pattern of nonreflective, impulsive action is present to a degree that skill training is indicated.
06. Anger management deficits. With or without an extensive history of assaultive behaviour, a pattern of readiness to anger and hostile interpretations of the actions of others suggests that the offender may be a candidate for anger management training.
07. Intimidating / Controlling. With or without an extensive history of assaultive / battering behaviour, and with or without a history of angry expressions, an intimidating / controlling style of interpersonal interaction is apparent (typically, perhaps, within intimate relationships). Some level of antibattering programming may be indicated.
08. Inappropriate sexual activity. This item is checked if there is a history of sexual assault (see B2 below), but it may also be checked if the assessor detects concerns, on the part of the case or others, in the domain of sexual activity.
09. Poor social skills. A specific deficit has been detected or suggested in the domains of personal and/or interpersonal living skills. (This item does not include the above-noted domains of self-management or anger management).
10. Peers outside age range. Association with significant others (younger or older) that contributes to risk and/or weakens ties to prosocial others.

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11. Racist / sexist behaviour. Racist / sexist expressions need not be such as to directly promote criminal activity, but at a minimum are weakening the quality of ties to home, school, work, and antiracist others.

12. Underachievement. Academic and or vocational functioning is way below where the person could be functioning.

13. Outstanding charges (specify).

14. Other (specify).

B2. HISTORY OF PERPETRATION

- 01. Sexual assault (extrafamilial)
- 02. Sexual assault (intrafamilial)
- 03. Physical assault (extrafamilial)
- 04. Physical assault (intrafamilial)
- 05. Assault on an authority figure
- 06. Weapon use
- 07. Fire setting
- 08. Escapes / UAL
- 09. Impaired driving

Please note that the above items refer to history and not simply to the current offence. The items have implications in terms of risk, need, placement, case management, and treatment.

PRISON EXPERIENCE: INSTITUTIONAL FACTORS

- 01. Last classification maximum
- 02. Last classification medium
- 03. Last classification minimum
- 04. Protective custody
- 05. Treatment recommended / ordered
- 06. Misconduct/ behaviour report current incarceration (number ____)
- 07. Administrative segregation
- 08. Security management concerns
- 09. Past federal penitentiary

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RISK / NEED SUMMARY

Total LSI-OR Score (A). This refers to the sum of checked items in Section A (minimum = 0, maximum = 43).

Total Strengths (A). This refers to the sum of strength notations checked in Section A (minimum = 0, maximum = 8). This total score is an addition to the LSI, and norms and validity data are not yet available.

Summary of strengths (Positives: reasons for lowering security / supervision or releasing clients). A brief narrative, when judged to be of value, that highlights positive conditions with implications for case management.

Summary of added concerns (Negatives: reasons for increasing security / supervision or not releasing clients). A brief narrative, when judged to be of value, that highlights negative conditions with implications for case management.

RISK / NEED PROFILE

The purpose of the graphic profile is to promote identification of particular patterns of overall risk and criminogenic need. Some cases may present problems in the areas of employment and leisure while others may present with problems in the areas of family and associates.

The "override" portion is an opportunity for the assessor to show that he/she views the overall risk/need level of the case differently than the Section A overall score indicates. For example, the case may score in the Medium range overall, but in the override portion the assessor may score the case as Low. On the other hand a case scoring low on the overall summary may be judged to be better represented as a medium risk case.

Generally, overrides of the overall risk/need score level should be supportable by logical argument and reasonable evidence. In most cases, the rationale will have been recorded in Section "D. Risk/Need Summary."

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OTHER CLIENT ISSUES**1. SOCIAL, HEALTH, AND MENTAL HEALTH**

01. Financial problems. See "financial problems" on page 26.
02. Homeless or transient. No fixed address, no regular accommodation.
03. Accommodation problems. Personal dissatisfaction with accommodation and/or accommodation conditions may promote association with criminal others.
04. Health problems. Health problems that have implications for case management concerns (for example: access to medical resources, limits on employment).
05. Depressed. Feelings of depression so serious that participation in rewarding antirriminal activities is limited.
06. Physical disability. Physical conditions that have implications for case management (for example: gaining access to resources).
07. Low self-esteem. Personal distress levels so high that participation in rewarding antirriminal activities is limited.
08. Shy / withdrawn. Shyness interferes with participation in rewarding antirriminal activities.
09. Diagnosis of psychosis. A mental disorder, diagnosed by a mental health professional, which is not explicitly criminogenic (recall items in "B"), but which has implications for case management (for example: medication, psychiatric involvement).
10. Suicide attempts / threats. A history of suicide attempts suggests that the input of mental health professionals will be sought in case management planning.
11. Learning disability. Assessment reveals that the issue of a specific learning disability has been suggested to be present by a mental health or educational professional.
12. Other evidence of emotional distress (specify)
13. Immigration issues. Immigration issues are unresolved or a deportation decision has been made.
14. Victim: family violence. Case management plans may include victim-oriented services.
15. Victim: physical assault. Case management plans may include victim-oriented services.
16. Victim: sexual assault. Case management plans may include victim-oriented services.
17. Victim: emotional abuse. Case management plans may include victim-oriented services.
18. Victim of neglect. Case management plans may include victim-oriented services.
19. Other (specify).

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2. BARRIER TO RELEASE

01. Community supervision inappropriate (specify reason).
This item would be checked only where specific barriers to release are identified.

Items checked in Section F may also be noted in "B, item 14 (other)" where it is judged that, for this case, the criminogenic potential is clear and present.

SPECIFIC RESPONSIVITY CONSIDERATIONS

Items in this section refer to specific issues that influence the style and/or mode of service / supervision.

01. Motivation as a barrier. Motivation to participate actively and meaningfully in a correctional plan may require preparatory programming.

02. Engages in denial / minimization. Minimization of problems or circumstances may require preparatory programming.

03. Interpersonally anxious. The interpersonally anxious client may require low confrontation types of programming.

04. Cultural issues. "Way of life" considerations may suggest culturally-specific programming. For example: involvement of elders in some first nation programs.

05. Ethnicity issues. Strong identifications along ethnic or racial lines may suggest ethnic-sensitive programming. For example: direct attention to dealing with racism.

06. Low intelligence. Below average verbal intelligence may preclude high-level verbal programming, and may require involvement of specific community-based support groups such as those for the intellectually challenged.

07. Communication barriers. Language issues and other barriers to communication may have implications for case management.

08. Other (specify).

PROGRAM/PLACEMENT DECISION

This section provides checkoff for the recording of recommendations and decisions as well as brief comments and signatures.

Appendix E

Survey of Female Offenders

Clients Under Community Supervision

Can we start by talking a little about your background...

1. What country were you born in? _____

2. a) If not born in Canada, how old were you when you first came to Canada?

b) If born in Canada, where were you born?

Province _____ City _____

Community/Reserve _____

3. a) Mother's country of birth? _____

b) Father's country of birth? _____

4. Do you feel that you are part of a distinct cultural group? _____

1) White

2) Native/Aboriginal

Registered (Status)

Non-registered (Non-status)

Inuit

Metis

3) Black

4) East Asian

5) South Asian

6) Other (Specify) _____

5. If Native/Aboriginal, what First Nation do you belong to? _____

6. What language do you feel most comfortable with?

1) English

2) French

3) Native language (write in) _____

4) Other (write in) _____

7. What is your marital status at present?

- 1) single - never married
- 2) married
- 3) common-law
- 4) separated
- 5) divorced
- 6) widowed

8. Have you been married more than once or lived with a previous common-law partner?

- 1) No
- 2) Yes

9. a) Where are you living at the moment?

b) How long had you been there? _____

c) Who are you living with? Check all that apply.

- 1) alone
- 2) with husband
- 3) with common-law or boyfriend
- 4) with your children ex-children
- 5) with parents or in-laws
- 6) with friends
- 7) other (where) _____

10. Are you settled there, or do you think need help finding somewhere else to live?

(e.g., sheltered housing, low-cost housing ...)

Children

Can we talk about children now - this is something which is very important because in the past people have tended to forget about children when women end up in court.

11. Do you have any children? If Yes, how many children do you have?

a) Your own children _____

b) Step/adopted children _____

If no children please go to question number 19.

12. How old are they: (write in age of each child)

1) under 2 years _____

2) 2-5 years _____

3) 6-10 years _____

4) 11-16 years _____

5) 17-18 years _____

6) 19 or more _____

13. a) How many of your children are living with you now?

1) all of them

2) some of them (how many) _____

3) none of them

b) If some are not - who are they living with? Check all that apply

1) husband or common-law

2) ex-husband or common-law

3) your mother

4) other relatives

5) friends

6) foster home/CAS/wardship

7) living on their own

8) other _____

9) not applicable (all with you)

c) If some are not - can you say why this is? Check all that apply

1) all grown up/adult

2) adopted etc at birth or early age

3) more recently taken into care because of offending/addiction etc...

4) own choice because of addiction/not being able to cope etc...

5) other _____

6) not applicable (all with you)

14. Who has had primary responsibility for bringing up your children up to now? Check all that apply

- 1) self alone
- 2) self and husband/common-law
- 3) ex-husband/common-law
- 4) your mother
- 5) other relatives _____
- 6) foster/adoptive parents etc...
- 7) other _____

15. Have you been a single parent for part or all of the time?

- 1) always
- 2) part of the time
- 3) never

16. What has been the most difficult problem for you and your children since your arrest/conviction?

17. Do you have any major worries about your children that you feel you need help with at present?

18. If yes, a) what about:

- 1) Day care
- 2) accommodation
- 3) financial support
- 4) emotional/coping with behavior
- 5) legal/advice access
- 6) dealing with the offence
- 7) visits _____
- 8) other _____
- 9) no problem/concerns

If yes, b) what do you think would help you deal/cope with these problems?

- 1) day-care _____
- 2) better accommodation _____
- 3) job/financial support _____
- 4) therapy/counselling _____
- 5) legal advice/access _____
- 6) other _____
- 7) no problems/concerns _____

19. Do you have any major concerns about other members of your family apart from children which you feel you need help with? (e.g., elderly or sick dependents)

Education

Can we talk about work and school now?

20. What was the highest grade you completed in school?

- 1) under grade 8
- 2) 8
- 3) 9
- 4) 10
- 5) 11
- 6) 12
- 7) 13

21. a) Did you/do you like school, get on well with teachers, other students? _____

b) Did you get a high school diploma or equivalent? 1) No 2) Yes

22. Have you ever taken any course or training since then? If so, what kind ?

- 1) some commercial/college
- 2) finished commercial/college
- 3) some trade training
- 4) finished trade training
- 5) some university
- 6) finished university

23. Would you like to take more education or training now?

- 1) yes
- 2) already taking
- 3) no

24. What kind of courses would you like to take (or are already taking now):

- 1) basic education upgrading
- 2) college/university _____
- 3) trade training _____
- 4) other _____
- 5) don't want anymore

Work

25. Do you have a job at the moment?

- 1) working full-time
- 2) working part-time
- 3) working on and off
- 4) looking for work
- 5) not working or looking (why?) _____

26. a) If you are working now, what kind of job(s) do you have?

b) If you are not working now how long is it since you last worked?

Years _____ Months _____

27. Have you usually worked since leaving school?

- 1) yes
- 2) often unemployed when wanted to work
- 3) not wanted to work (e.g., homemaker/student)
- 4) other/illegal jobs only _____

28. a) What kinds of job do you usually do?

List the three jobs you have had for the longest time starting with the longest job:

- 1. _____ (how long? _____)
- 2. _____ (how long? _____)

3. _____ (how long? _____)

b) Do you usually get on well with people you work with? _____

29. About how much on average do you take home each month fromk your job?

30. What are your main sources of income unsually? Check all that apply.

- 1) wages from job
- 2) husband
- 3) common-law/boyfriend
- 4) ex-boyfriend (child support/alimony)
- 5) mother's allowance
- 6) welfare
- 7) unemployment benefits
- 8) disability payment
- 9) parents, relatives
- 10) other (what?) _____

31. Do you feel you need job-training or help finding a job now?

- 1) job-training
- 2) help finding a job
- 3) help keeping a job
- 4) don't need any(more)
- 5) don't want a job
- 6) other _____

32. What kinds of job training would you like to have? _____

33. What are the main things which stop you getting the job or education you would

like? Check all that apply

- 1) lack of child care
- 2) lack of transport
- 3) lack of right job skills
- 4) medical disability
- 5) other (what?) _____
- 6) don't want a job
- 7) already working

Juvenile History

These questions are about things that happened before you were 16

34. Before your 16th birthday, were you ever convicted for an offence?

- 1) Yes 2) No

If yes, how many times? _____

If you were convicted before you were 16 what is the most serious things that happened to you?

- 1) training school
- 2) secure custody/detention home
- 3) open custody/observation home
- 4) probation
- 5) other (what?) _____

35. Before your 16th birthday, were you ever taken into care for your own protection?

- 1) Yes 2) No

If yes, what happened

Young Offender/Adult History

36. How old were you when you were first convicted for an offence? _____

37. How many times have you been convicted before this time? _____

38. Have you ever been sentenced to custody as a young offender before?

- 1) never
- 2) yes to open custody
- 3) yes to closed custody

39. Have you ever been sentenced to prison before? Number? _____

40. Were any of these federal prison sentences?

- 1) Yes (write number) _____
- 2) No
- 3) Never been in prison

41. Have you ever ended up in prison just because you couldn't or didn't want to pay a fine?

- 1) Yes (write number of times) _____
- 2) No
- 3) Never been in prison

Current Sentence/Charges

42. a) Were you remanded in custody after your arrest? 1) No 2) Yes

b) If yes, about how long did you spend/have you spent on remand so far?

c) How long have you been in custody altogether (i.e., including on sentence)?

43. a) Was anybody else accused at the same time as you for this offence?

- 1) No 2) Yes

b) If yes, was it:

- 1) a male partner
- 2) another male other than a partner
- 3) a female
- 4) other (who?) _____

Can we talk now about some of the things that might have happened to you as you were growing up.

44. a) Do you think you had an easy time growing up, or were there lots of problems in your family (e.g., like moving about a lot, heavy drinking, people being seriously ill, or a lot of arguing and fighting)?

b) So would you say there were:

- 1) no real problems
- 2) some problems
- 3) a lot of problems

c) Has anyone in your family ever been in trouble with the law? _____

45. a) How old were you when you left home?

b) Where did you go/how did you live?

46. a) Do you feel you get a lot of emotional support now from your family and get on well with them?

b) What about support from friends, or people you know well ?

c) Have any of the friends you spend time with been in trouble with the law?

There's been a lot of talk in the last few years about women being knocked about and physically hurt. It's a very difficult thing to talk about, but we think it's very important to try to find out how common it is

47 a) As a child were you ever hit or beaten about in a way that caused injuries (like bruises or burns, cuts, scrapes, broken bones)?

- 1) No
- 2) Yes - mild
- 3) Yes - serious abuse

If Yes, b) how often did this happen? _____

If Yes, c) about how old were you? _____

If Yes, d) who was involved?

- 1) mother
- 2) father
- 3) brother
- 4) other relative _____
- 5) other (who?) _____

48. As a child were you ever sexually assaulted or forced to take part in sexual activities when you didn't want to?

- 1) No
- 2) Yes - mild
- 3) Yes - serious

If Yes, b) how often did this happen? _____

If Yes, c) about how old were you? _____

If Yes, d) who was involved?

- 1) mother
- 2) father
- 3) brother
- 4) other relative _____
- 5) other (who?) _____

49. As a child were you ever mentally abused or emotionally abused (like being threatened, insulted, locked in a closet etc...)?

- 1) No
- 2) Yes - mild
- 3) Yes - serious

If Yes, b) how often did this happen? _____

If Yes, c) about how old were you? _____

If Yes, d) who was involved?

- 1) mother
- 2) father
- 3) brother
- 4) other relative _____
- 5) other (who?) _____

As an adult

Have any of these kinds of things happened to you since then.....

50. a) Have you ever been physically abused in a relationship with a partner or by someone else (hit and beaten about...)

- 1) No
- 2) Yes - mild
- 3) Yes - seriously

b) About how often has this happened? _____

c) Can you say who was involved: _____

Husband/common-law/boyfriend

Other _____

51. a) Have you ever been sexually assaulted, or forced to take part in sexual activities, in a relationship with a partner or by someone else:

- 1) No
- 2) Yes - mild
- 3) Yes - seriously

b) About how often has this happened? _____

c) Can you say who was involved: _____

Husband/common-law/boyfriend

Other _____

52. a) Have you ever been emotionally abused in a relationship with a partner or by someone else (like being threatened, insulted...):

- 1) No
- 2) Yes - mild
- 3) Yes - seriously

b) About how often has this happened? _____

c) Can you say who was involved: _____

Husband/common-law/boyfriend

Other _____

53. Have you ever sought help about any of these events (e.g., did you call a helpline, go to a women's shelter, call the police.... And if yes, what happened?)

54. a) Do you feel now that you would like some kind of help in dealing with what has happened to you in the past, or to help prevent it happening in the future?

b) Would you want to:

- 1) talk to a psychologist or counsellor
- 2) take part in a support group on abuse
- 3) get help to take legal action
- 4) find new accommodation
- 5) other _____
- 6) don't need any help (why) _____
- 7) never been abused

Health

Can we talk now about any difficulties you might have with your health

55. a) Do you have any particular concerns about your physical at the moment (e.g., worries about bad headaches, backpains, stomach problems, menstruation, AIDS)

Can we talk about the ways people sometimes try to cope with problems in their lives...

60. Have you ever tried to hurt in some way, like slashing or cutting yourself?

- 1) no
- 2) once
- 3) more than once

61. Have you ever tried to commit suicide?

- 1) no
- 2) once
- 3) more than once

62. a) If you have ever tried to hurt yourself or tried to commit suicide, what would have helped you avoid it (e.g., friends, other people to talk to, counselling...)

b) Would you like to be involved in some counselling or a program now to help avoid this kind of behavior?

- 1) no - not interested
- 2) 2) no - already seen someone
- 3) yes (what kind?) _____

Alcohol and Drugs

Can we talk now about your experience with alcohol and drugs

63. a) How much have drugs and alcohol been involved in your getting into trouble with the law? (check all that apply)

- 1) convicted of drug offences(s) e.g., possession
- 2) convicted of alcohol offences
- 3) convicted of offences(s) to support drug or alcohol habit
- 4) offence(s) usually under the influence of drugs or alcohol
- 5) offence(s) not related to drug or alcohol use in any way
- 6) don't use alcohol
- 7) don't use drugs

b) If you weren't using drugs or alcohol before this arrest, did you use them a lot in the past? _____

64. Can you look at the following list of questions about taking alcohol and circle yes or no for each question.

Each question is about the 12 months before this conviction.

1. Do you feel you are a normal drinker
2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening before?
3. Does your partner (or parents) ever worry or complain about your drinking?
4. Can you stop drinking without a struggle after one or two drinks?
5. Do you ever feel bad about your drinking?
6. Do friends or relatives think you are a normal drinker?
7. Are you always able to stop drinking when you want to?
8. Have you ever attended a meeting of Alcoholics Anonymous (AA) because of your drinking?
9. Have you gotten into fights when drinking?
10. Has drinking ever created problems with you and your partner?
11. Has your partner (or other family member) ever gone to anyone for help about your drinking?
12. Have you ever lost friends, boyfriends or girlfriends because of your drinking?
13. Have you ever got into trouble at work because of drinking?
14. Have you ever lost a job because of drinking?
15. Have you ever neglected your obligations, your family or your work for two or more days in a row because you were drinking?
16. Do you ever drink before noon?
17. Have you ever been told you have liver trouble? Cirrohsis?
18. Have you ever had delirium tremens (DTs), severe shaking, heard viouces, or seen things that weren't there after heavy drinking?
19. Have you ever been arrested, even for a few hours, because of drunk behavior?
20. Have you ever been arrested for drunk driving or driving after drinking?

65. a) Have you ever had any professional help (e.g., at a hospital, clinic or alcohol treatment centre) because of an alcohol problem?

- 1) no
- 2) yes (where) _____

b) Do you think you need some help with drinking problems now?

If no, why is this? _____

If yes, what sort would you like to take? Check all that apply

- 1) Individual counselling
- 2) AA group
- 3) Other group with someone from your own background or culture
- 4) Long residential program for men and women
- 5) Long residential program with women only
- 6) Other _____

66. Now can you look at the following list of questions about using drugs and circle yes or no for each question.

Each question is about the 12 months before this conviction.

1. Have you used drugs other than those required for medical reasons?
2. Have you abused prescription drugs?
3. Do you abuse more than one drug at a time?
4. Can you get through the week without using drugs?
5. Are you always able to stop using drugs when you want to?
6. Have you had "blackouts" or "flashbacks" as a result of drug use?
7. Do you feel bad or guilty about your drug use?
8. Does your partner (or parents) complain about your involvement with drugs?
9. Has drug abuse created problems between you and your partner or your parents?
10. Have you lost friends because of your drug use?
11. Have you neglected your family because of your use of drugs?
12. Have you been in trouble at work because of drug abuse?
13. Have you lost a job because of drug use?
14. Have you got into fights when under the influence of drugs?
15. Have you engaged in illegal activities in order to obtain drugs?
16. Have you been arrested for possession of illegal drugs?
17. Have you experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
18. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding etc.)?
19. Have you gone to anyone for help for a drug problem?
20. Have you been involved in a treatment program specifically related to drug use?

67. Have you been on prescriptive drugs in the past five years (like valium, librium, seconal, Halcium, Elavil) given to you by your doctor for a long time (to help you sleep, or stop being depressed, anxious, etc.)?

68. a) Have you done any of the following in the past 5 years (check all that apply):

- 1) mixed drugs and alcohol
- 2) injected drugs
- 3) shared needles
- 4) sniffed glue or gas
- 5) none of these

b) Do you think you need some kind of help with drugs now?

If No, why is this? _____

If Yes, what kind? Check all that apply

- 1) Individual counselling
- 2) NA or Cocain Anonymous type of program
- 3) Other group program with someone from your own background or culture
- 4) Long residential program for men and women
- 5) Long residential program for women only
- 6) Other _____

69. What are the main things which stop you getting the kind of treatment or help with drinking or drugs that you would like:

- 1) lack of support from family or close friends
- 2) lack of child care
- 3) lack of transport
- 4) can't afford to stop working
- 5) other _____

Finally

We've covered a lot of things like work and jobs, health, alcohol and drugs, abuse, children and family ties...

70. What do you think are the most important things you need to deal with right now to help you stay out of trouble with the law?

Please write in what kind of help you need

- ___ a) Child-related _____
- ___ b) Family support _____
- ___ c) Housing/accommodation _____
- ___ d) Literacy/upgrading _____
- ___ e) Work-training/job skills _____
- ___ f) Employment _____
- ___ g) Substance abuse counselling _____
- ___ h) Physical/sexual abuse counselling _____
- ___ i) Health care _____
- ___ j) Help with emotional problems _____
- ___ k) Legal help/advice _____
- ___ l) Native or ethnic programs _____
- ___ m) Other, specify _____

Now can you rank them in order of importance for you (in the boxes on the left)

Finally, we may have missed out other things which are very important to you.....

Is there anything else you would like to say about your experience over this conviction,
or which would make it easier for you to cope in the future?

Thank you for your help.

Survey of Female Offenders
Clients In Correctional Institutions

Can we start by talking a little about your background...

1. What country were you born in? _____
2. a) If not born in Canada, how old were you when you first came to Canada?
b) If born in Canada, where were you born?
Province _____ City _____
Community/Reserve _____
3. a) Mother's country of birth? _____
b) Father's country of birth? _____
4. Do you feel that you are part of a distinct cultural group? _____
 - 1) White
 - 2) Native/Aboriginal
 - Registered (Status)
 - Non-registered (Non-status)
 - Inuit
 - Metis
 - 3) Black
 - 4) East Asian
 - 5) South Asian
 - 6) Other (Specify) _____
5. If Native/Aboriginal, what First Nation do you belong to? _____
6. What language do you feel most comfortable with?
 - 1) English
 - 2) French
 - 3) Native language (write in) _____
 - 4) Other (write in) _____

11. Do you have any children? If Yes, how many children do you have?

a) Your own children _____

b) Step/adopted children _____

If no children please go to question number 19.

12. a) How old are they: (write in age of each child)

1) under 2 years _____

2) 2-5 years _____

3) 6-10 years _____

4) 11-16 years _____

5) 17-18 years _____

6) 19 or more _____

b) How old were you when you had your first child? _____

13. a) Before your arrest, how many of your children were living with you?

1) all of them

2) some of them (how many) _____

3) none of them

b) If some are not - who were they living with? Check all that apply

1) husband or common-law

2) ex-husband or common-law

3) your mother

4) other relatives

5) friends

6) foster home/CAS/wardship

7) living on their own

8) other _____

9) not applicable (all with you)

c) If some were not - can you say why this was? Check all that apply

1) all grown up/adult

2) adopted etc at birth or early age

3) more recently taken into care because of offending/addiction etc...

4) own choice because of addiction/not being able to cope etc...

5) other _____

6) not applicable (all with you)

d) when you are released will you live with any of your children?

- 1) all of them
- 2) some of them (how many _____)
- 3) none of them

14. Who has had primary responsibility for bringing up your children up to now? Check

all that apply

- 1) self alone
- 2) self and husband/common-law
- 3) ex-husband/common-law
- 4) your mother
- 5) other relatives _____
- 6) foster/adoptive parents etc...
- 7) other _____

15. Have you been a single parent for part or all of the time?

- 1) always
- 2) part of the time
- 3) never

16. What has been the most difficult problem for you and your children since your arrest/conviction?

17. Do you have any major worries about your children that you feel you need help with at present?

If yes, a) what about:

- 1) Day care
- 2) accommodation
- 3) financial support
- 4) emotional/coping with behavior
- 5) legal/advice access
- 6) dealing with the offence
- 7) visits _____
- 8) other _____
- 9) no problem/concerns

If yes, b) what do you think would help you deal/cope with these problems?

- 1) day-care _____
- 2) better accommodation _____
- 3) job/financial support _____
- 4) therapy/counselling _____
- 5) legal advice/access _____
- 6) other _____
- 7) no problems/concerns _____

18. a) Have you had any contact with your children in here? If no, why not?

If Yes, b) how much contact?

- 1) daily or several times a week
- 2) about once a week
- 3) 2 or 3 times a month or less

If Yes, c) Has this been visits mainly or phone calls or letters?

- 1) visits and phone calls
- 2) phone calls and letters only

d) Would you like some/more contact - if so, what sort?

19. Do you have any major concerns about other members of your family apart from children which you feel you need help with? (e.g., elderly or sick dependents)

Education

Can we talk about work and school now?

20. What was the highest grade you completed in school?

- 1) under grade 8
- 2) 8
- 3) 9
- 4) 10
- 5) 11
- 6) 12
- 7) 13

21. a) Did you/do you like school, get on well with teachers, other students?

b) Did you get a high school diploma or equivalent? 1) No 2) Yes

22. Have you ever taken any course or training since then? If so, what kind ?

- 1) some commercial/college
- 2) finished commercial/college
- 3) some trade training
- 4) finished trade training
- 5) some university
- 6) finished university

23. Would you like to take more education or training now?

- 1) yes
- 2) already taking
- 3) no

24. What kind of courses would you like to take (or are already taking now):

- 1) basic education upgrading
- 2) college/university _____
- 3) trade training _____
- 4) other _____
- 5) don't want anymore

Work

25. Before you came here did you have a job?

- 1) working full-time
- 2) working part-time
- 3) working on and off
- 4) looking for work
- 5) not working or looking (why?) _____

26. a) If you were working then, what kind of job(s) did you have?

b) If you were not working how long iwa it since you last worked?

Years _____ Months _____

27. Have you usually worked since leaving school?

- 1) yes
- 2) often unemployed when wanted to work
- 3) not wanted to work (e.g., homemaker/student)
- 4) other/illegal jobs only _____

28. a) What kinds of job do you usually do?

List the three jobs you have had for the longest time starting with the longest job:

1. _____ (how long? _____)
2. _____ (how long? _____)
3. _____ (how long? _____)

b) Do you usually get on well with people you work with? _____

29. About how much on average do you take home each month fromk your job?

30. What are your main sources of income unsually? Check all that apply.

- 1) wages from job
- 2) husband
- 3) common-law/boyfriend
- 4) ex-boyfriend (child support/alimony)
- 5) mother's allowance
- 6) welfare
- 7) unemployment benefits
- 8) disability payment
- 9) parents, relatives
- 10) other (what?) _____

31. Do you feel you need job-training or help finding a job now?

- 1) job-training
- 2) help finding a job
- 3) help keeping a job
- 4) don't need any(more)
- 5) don't want a job
- 6) other _____

32. What kinds of job training would you like to have? _____

33. What are the main things which stop you getting the job or education you would

like? Check all that apply

- 1) lack of child care
- 2) lack of transport
- 3) lack of right job skills
- 4) medical disability
- 5) other (what?) _____
- 6) don't want a job
- 7) already working

Juvenile History

These questions are about things that happened before you were 16

34. Before your 16th birthday, were you ever convicted for an offence?

- 1) Yes 2) No

If Yes, how many times? _____

If you were convicted before you were 16 what is the most serious things that happened to you?

- 1) training school
- 2) secure custody/detention home
- 3) open custody/observation home
- 4) probation
- 5) other (what?) _____

35. Before your 16th birthday, were you ever taken into care for your own protection?

- 1) Yes 2) No

If yes, what happened

Young Offender/Adult History

36. How old were you when you were first convicted for an offence? _____

37. How many times have you been convicted before this time? _____

38. Have you ever been sentenced to custody as a young offender before?

- 1) never
- 2) yes to open custody
- 3) yes to closed custody

39. Have you ever been sentenced to prison before? Number? _____

40. Were any of these federal prison sentences?

- 1) Yes (write number) _____
- 2) No
- 3) Never been in prison

41. Have you ever ended up in prison just because you couldn't or didn't want to pay a fine?

- 1) Yes (write number of times) _____
- 2) No
- 3) Never been in prison

Current Sentence/Charges

42. a) Were you remanded in custody after your arrest? 1) No 2) Yes

b) If yes, about how long did you spend/have you spent on remand so far?

c) How long have you been in custody altogether (i.e., including on sentence)?

43. a) Was anybody else accused at the same time as you for this offence?

- 1) No 2) Yes

b) If yes, was it:

- 1) a male partner
- 2) another male other than a partner
- 3) a female
- 4) other (who?) _____

Family Background

Can we talk now about some of the things that might have happened to you as you were growing up.

44. a) Do you think you had an easy time growing up, or were there lots of problems in your family (e.g., like moving about a lot, heavy drinking, people being seriously ill, or a lot of arguing and fighting)?

b) So would you say there were:

- 1) no real problems
- 2) some problems
- 3) a lot of problems

c) Has anyone in your family ever been in trouble with the law? _____

45. a) How old were you when you left home?

b) Where did you go/how did you live?

46. a) Do you feel you get a lot of emotional support now from your family and get on well with them?

b) What about support from friends, or people you know well ?

c) Have any of the friends you spend time with been in trouble with the law?

There's been a lot of talk in the last few years about women being knocked about and physically hurt. It's a very difficult thing to talk about, but we think it's very important to try to find out how common it is

47 a) As a child were you ever hit or beaten about in a way that caused injuries (like bruises or burns, cuts, scrapes, broken bones)?

- 1) No
- 2) Yes - mild
- 3) Yes - serious abuse

If Yes, b) how often did this happen? _____

If Yes, c) about how old were you? _____

If Yes, d) who was involved?

- 1) mother
- 2) father
- 3) brother
- 4) other relative _____
- 5) other (who?) _____

48. As a child were you ever sexually assaulted or forced to take part in sexual activities when you didn't want to?

- 1) No
- 2) Yes - mild
- 3) Yes - serious

If Yes, b) how often did this happen? _____

If Yes, c) about how old were you? _____

If Yes, d) who was involved?

- 1) mother
- 2) father
- 3) brother
- 4) other relative _____
- 5) other (who?) _____

49. As a child were you ever mentally abused or emotionally abused (like being threatened, insulted, locked in a closet etc...)?

- 1) No
- 2) Yes - mild
- 3) Yes - serious

If Yes, b) how often did this happen? _____

If Yes, c) about how old were you? _____

If Yes, d) who was involved?

- 1) mother
- 2) father
- 3) brother
- 4) other relative _____
- 5) other (who?) _____

As an adult

Have any of these kinds of things happened to you since then.....

50. a) Have you ever been physically abused in a relationship with a partner or by someone else (hit and beaten about...)

- 1) No
- 2) Yes - mild
- 3) Yes - seriously

b) About how often has this happened? _____ c) Can you say who was involved: _____

Husband/common-law/boyfriend

Other _____

51. a) Have you ever been sexually assaulted, or forced to take part in sexual activities, in a relationship with a partner or by someone else:

- 1) No
- 2) Yes - mild
- 3) Yes - seriously

b) About how often has this happened? _____

c) Can you say who was involved: _____

Husband/common-law/boyfriend

Other _____

52. a) Have you ever been emotionally abused in a relationship with a partner or by someone else (like being threatened, insulted...):

- 1) No
- 2) Yes - mild
- 3) Yes - seriously

b) About how often has this happened? _____

c) Can you say who was involved: _____

Husband/common-law/boyfriend

Other _____

53. Have you ever sought help about any of these events (e.g., did you call a helpline, go to a women's shelter, call the police.... And if yes, what happened?)

54. a) Do you feel now that you would like some kind of help in dealing with what has happened to you in the past, or to help prevent it happening in the future?

b) Would you want to:

- 1) talk to a psychologist or counsellor
- 2) take part in a support group on abuse
- 3) get help to take legal action
- 4) find new accommodation
- 5) other _____
- 6) don't need any help (why) _____
- 7) never been abused

Health

Can we talk now about any difficulties you might have with your health

55. a) Do you have any particular concerns about your physical at the moment (e.g., worries about bad headaches, backpains, stomach problems, menstruation, AIDS)

56. a) Do you think you are getting the kind of physical health care you need at the moment? (and can make yourself understood...)?

b) If not what help do you think you need?

57. a) What about mental health ...are there any particular problems you are worried about?

b) Do you have difficulty with any of the following kinds of problems (check all that apply):

- 1) anxiety/nervousness
- 2) feeling depressed
- 3) difficulty sleeping
- 4) phobias or fears
- 5) getting very angry or violent with people
- 6) no real problems

58. Do you sometimes starve yourself for long periods of time, or make yourself vomit after eating?

- 1) no
- 2) occasionally
- 3) often do this

59. a) Have you ever had any treatment for any of the kinds of problems you've mentioned in questions 57 and 58?

b) Do you think you are getting the kind of help you now ?

c) Would you like to take a program on things like nutrition and health care?

Can we talk about the ways people sometimes try to cope with problems in their lives

60. Have you ever tried to hurt in some way, like slashing or cutting yourself?

- 1) no
- 2) once
- 3) more than once

61. Have you ever tried to commit suicide?

- 1) no
- 2) once
- 3) more than once

62. a) If you have ever tried to hurt yourself or tried to commit suicide, what would have helped you avoid it (e.g., friends, other people to talk to, counselling...)

b) Would you like to be involved in some counselling or a program now to help avoid this kind of behavior?

- 1) no - not interested
- 2) no - already seen someone
- 3) yes (what kind?) _____

Alcohol and Drugs

Can we talk now about your experience with alcohol and drugs

63. a) How much have drugs and alcohol been involved in your getting into trouble with the law? (check all that apply)

- 1) convicted of drug offences(s) e.g., possession
- 2) convicted of alcohol offences
- 3) convicted of offences(s) to support drug or alcohol habit
- 4) offence(s) usually under the influence of drugs or alcohol
- 5) offence(s) not related to drug or alcohol use in any way
- 6) don't use alcohol
- 7) don't use drugs

b) If you weren't using drugs or alcohol before this arrest, did you use them a lot in the past?

64. Can you look at the following list of questions about taking alcohol and circle yes or no for each question.

Each question is about the 12 months before this conviction.

1. Do you feel you are a normal drinker
2. Have you ever awakened the morning after some drinking the night before and found that you could not remember a part of the evening before?
3. Does your partner (or parents) ever worry or complain about your drinking?
4. Can you stop drinking without a struggle after one or two drinks?
5. Do you ever feel bad about your drinking?
6. Do friends or relatives think you are a normal drinker?
7. Are you always able to stop drinking when you want to?
8. Have you ever attended a meeting of Alcoholics Anonymous (AA) because of your drinking?
9. Have you gotten into fights when drinking?
10. Has drinking ever created problems with you and your partner?
11. Has your partner (or other family member) ever gone to anyone for help about your drinking?
12. Have you ever lost friends, boyfriends or girlfriends because of your drinking?
13. Have you ever got into trouble at work because of drinking?
14. Have you ever lost a job because of drinking?
15. Have you ever neglected your obligations, your family or your work for two or more days in a row because you were drinking?
16. Do you ever drink before noon?
17. Have you ever been told you have liver trouble? Cirrohsis?
18. Have you ever had delirium tremens (DTs), severe shaking, heard viouces, or seen things that weren't there after heavy drinking?
19. Have you ever been arrested, even for a few hours, because of drunk behavior?
20. Have you ever been arrested for drunk driving or driving after drinking?

65. a) Have you ever had any professional help (e.g., at a hospital, clinic or alcohol treatment centre) because of an alcohol problem?

- 1) no
- 2) yes (where) _____

b) Do you think you need some help with drinking problems now?

If no, why is this? _____

If yes, what sort would you like to take? Check all that apply

- 1) Individual counselling
- 2) AA group
- 3) Other group with someone from your own background or culture
- 4) Long residential program for men and women
- 5) Long residential program with women only
- 6) Other _____

66. Now can you look at the following list of questions about using drugs and circle yes or no for each question.

Each question is about the 12 months before this conviction.

1. Have you used drugs other than those required for medical reasons?
2. Have you abused prescription drugs?
3. Do you abuse more than one drug at a time?
4. Can you get through the week without using drugs?
5. Are you always able to stop using drugs when you want to?
6. Have you had "blackouts" or "flashbacks" as a result of drug use?
7. Do you feel bad or guilty about your drug use?
8. Does your partner (or parents) complain about your involvement with drugs?
9. Has drug abuse created problems between you and your partner or your parents?
10. Have you lost friends because of your drug use?
11. Have you neglected your family because of your use of drugs?
12. Have you been in trouble at work because of drug abuse?
13. Have you lost a job because of drug use?
14. Have you got into fights when under the influence of drugs?
15. Have you engaged in illegal activities in order to obtain drugs?
16. Have you been arrested for possession of illegal drugs?
17. Have you experienced withdrawal symptoms (felt sick) when you stopped taking drugs?
18. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding etc.)?
19. Have you gone to anyone for help for a drug problem?
20. Have you been involved in a treatment program specifically related to drug use?

67. Have you been on prescriptive drugs in the past five years (like valium, librium, seconal, Halcium, Elavil) given to you by your doctor for a long time (to help you sleep, or stop being depressed, anxious, etc.)?

68. a) Have you done any of the following in the past 5 years (check all that apply):

- 1) mixed drugs and alcohol
- 2) injected drugs
- 3) shared needles
- 4) sniffed glue or gas
- 5) none of these

b) Do you think you need some kind of help with drugs now?

If No, why is this? _____

If Yes, what kind? Check all that apply

- 1) Individual counselling
- 2) NA or Cocain Anonymous type of program
- 3) Other group program with someone from your own background or culture
- 4) Long residential program for men and women
- 5) Long residential program for women only
- 6) Other _____

69. What are the main things which stop you getting the kind of treatment or help with drinking or drugs that you would like:

- 1) lack of support from family or close friends
- 2) lack of child care
- 3) lack of transport
- 4) can't afford to stop working
- 5) other _____

We've covered a lot of things like work and jobs, health, alcohol and drugs, abuse, children and family ties...

70. What do you think are the most important things you need to deal with right now to help you stay out of trouble with the law?

Please write in what kind of help you need

- ___ a) Child-related _____
- ___ b) Family support _____
- ___ c) Housing/accommodation _____
- ___ d) Literacy/upgrading _____
- ___ e) Work-training/job skills _____
- ___ f) Employment _____
- ___ g) Substance abuse counselling _____
- ___ h) Physical/sexual abuse counselling _____
- ___ i) Health care _____
- ___ j) Help with emotional problems _____
- ___ k) Legal help/advice _____
- ___ l) Native or ethnic programs _____
- ___ m) Other, specify _____

Now can you rank them in order of importance for you (in the boxes on the left)

Finally, we may have missed out other things which are very important to you.....

Is there anything else you would like to say about your experience over this conviction,
or which would make it easier for you to cope in the future?

Appendix F

Data Collection Form for Institution Files

OMS _____

Institution _____

INSTRUCTIONS Complete questions below using all records and information available, including staff impressions, a woman's self-report, information or request slips, pre-release plans, etc...

"Missing" should be checked off when there is no reference to the item, or the item-area that is, it is unknown whether the item applies or not, as the area is not mentioned in the file documents. For example, if there is no information recorded at all about a woman's family involvement, then the family items would be considered missing. An item within a section can also be considered missing if it is not specifically addressed.

CRIMINAL HISTORY VARIABLES

1. Prior convictions as adult:: Yes _____ Number _____ No _____
2. Prior convictions as juvenile: Yes _____ Number _____ No _____
3. Number of separate prior convictions: _____
4. Number of current offences: _____
5. Any outstanding charges? Yes _____ No _____
6. Arrested under 16? Yes _____ No _____
7. Ever incarcerated upon conviction? Yes _____ No _____

8. Escape or attempted escape from institution\facility\prison\residential centre?

Yes _____ No _____ No Information _____

9. Any record of misconduct\behavior report? Yes _____ No _____ Number _____

10. Ever punished for misbehavior? Yes _____ No _____

Number of times _____

11. Type of misconducts? Check all that apply with number of times for each in bracket.

_____ Contraband ()

_____ Violent (assault, sexual assault, hostage taking) - with inmates ()

_____ Violent (assault, sexual assault, hostage taking) - with staff ()

_____ Escape

_____ Behavioral ()

_____ Other _____, _____, _____

12. Charges laid, probation breached or parole violated while on community supervision? Yes _____ No _____

13. Violence in current offence? Yes _____ No _____

14. Violence in past offence(s)? Yes _____ No _____

If YES, number of violent offences _____

15. Violent misconducts - past or current? Yes _____ No _____

If YES, number of violent offences _____

16. Official record of violence but no conviction? Yes _____ No _____

17. Any use of weapon in offence(s), past or current?

Yes _____ No _____ Number of times _____

18. Official record of the following (check all that apply and indicate if convicted of the offence):`

- a) Sexual assault (extrafamilial) _____ Convicted? Yes ___ No ___
- b) Sexual assault (intrafamilial) _____ Convicted? Yes ___ No ___
- c) Physical assault (extrafamilial) _____ Convicted? Yes ___ No ___
- d) Physical assault (intrafamilial) _____ Convicted? Yes ___ No ___
- e) Assault on authority figure _____ Convicted? Yes ___ No ___
- f) Fire setting _____ Convicted? Yes ___ No ___
- g) Impaired driving _____ Convicted? Yes ___ No ___

EMPLOYMENT

19. Employed at time of incarceration? Yes ___ No ___
Missing ___

20. Able to return to employment? Yes ___ No ___ Missing ___

21. Employed less than 50% of last year in community?
Yes ___ No ___ Missing ___

22. Ever employed for full year? Yes ___ No ___ Missing ___

23. Ever been fired? Yes ___ No ___ Missing ___

If Employed in last year and is able to return to work after release, assess item 26-35?:

24. Likes job? Yes ___ No ___ Missing ___

25. Plans to return to job\same line of work?

Yes ___ No ___ Missing ___

26. Respects employer? Yes ___ No ___ Missing ___

27. Good attendance? Yes ___ No ___ Missing ___

28. Any letters of support from employer or indication that she is welcome back?

Yes ___ No ___ Missing ___

29. Any letter or indication of non-support from employer?

Yes ____ No ____ Missing ____

30. Any special recognition\awards from work?

Yes ____ No ____ Missing ____

31. Has friends in work setting? Yes ____ No ____ Missing ____

32. Finds work setting enjoyable Yes ____ No ____ Missing ____

33. Any problems with co-workers? Yes ____ No ____ Missing ____

With Boss? Yes ____ No ____ Missing ____

EDUCATION

34. Highest grade completed? ____ Missing ____

35. Ever suspended or expelled from school? Yes ____ No ____ Missing ____

36. Currently in school? Yes ____ No ____ Missing ____

If in school prior to incarceration, answer questions 39 - 47:

37. High interest and motivation in school work? Yes ____ No ____ Missing ____

38. Attendance regular? Yes ____ No ____ Missing ____

39. Average grades achieved? Yes ____ No ____ Missing ____

40. Has friends at school who she spends time with at lunch and other?

Yes ____ No ____ Missing ____

41. Fights with peers? Yes ____ No ____ Missing ____

42. Evidences respect for teacher? Yes ____ No ____ Missing ____

43. Obedient in class? Yes ____ No ____ Missing ____

44. Argumentative with teacher? Yes ____ No ____ Missing ____

45. Believes teacher is "stupid", unworthy, "bad"?

Yes ____ No ____ Missing ____

FINANCES

46. Current household income _____ Missing _____

47. On social assistance? Yes ____ No ____ Missing ____

48. Fixed income from unemployment insurance or disability pension?

Yes ____ No ____ Missing ____

49. Any debts? Yes ____ No ____ Missing ____

50. Any reference to financial problems? Yes ____ No ____

If yes, Specify _____

51. Has a bank account? Yes ____ No ____ Missing ____

52. Are requests for canteen money transfers denied because of NSF in bank account?

Yes ____ No ____

53. Any calls, letters, from creditors requesting payment? Yes ____ No ____

54. Worried about having money to meet basic needs, (e.g., feed and cloth children and self, pay rent etc...?) Yes ____ No ____ Missing ____

55. Ever borrow money from friends/family to meet basic needs?

Yes ____ No ____ Missing ____

56. Declared of personal bankruptcy? Yes ____ No ____ Missing ____

FAMILY\MARITAL

If woman has a spouse, answer items 57-63.

57. Indication of supportive relationship? Yes ____ No ____ Missing ____

58. Visits from spouse? Yes ____ No ____ Missing ____

59. Calls from spouse? Yes ____ No ____ Missing ____

60. Conflict with spouse? Yes ____ No ____ Missing ____

61. Abuse (physical, emotional, sexual) in relationship?

Yes ____ No ____ Missing ____

62. Considering divorce\separation

Yes ____ No ____ Missing ____

63. Implementing divorce\separation

Yes ____ No ____ Missing ____

If Single, divorced, widowed, or other:

64. Happy with marital status?

Yes ____ No ____ Missing ____

65. Desires change in marital status?

Yes ____ No ____ Missing ____

66. Mother deceased?

Yes ____ No ____ Missing ____

67. Father deceased?

Yes ____ No ____ Missing ____

68. mother present in life?

Yes ____ No ____ Missing ____

69. Father present in life?

Yes ____ No ____ Missing ____

70. Indication of support from mother\father (circle which parent applies)?

Yes ____ No ____

71. Visits and/or phone calls from mother\father? Yes ____ No ____ Missing ____

72. Phone calls to mother\ father? Yes ____ No ____ Missing ____

73. Temporary absences\passes\day parole to mother\father's residence?

Yes ____ No ____ Missing ____

74. Letters from mother\father?

Yes ____ No ____ Missing ____

75. Problems with mother indicated?

Yes ____ No ____ Missing ____

76. Problems with father indicated?

Yes ____ No ____ Missing ____

77. Release plans include mother\father support? Yes ____ No ____ Missing ____

78. Mother willing to have inmate released to her home?

Yes ____ No ____ Missing ____

79. Father willing to have inmate released to her home?

Yes ____ No ____ Missing ____

80. Visits\calls\letters from family member other than parents?

Yes ____ No ____ Missing ____

81. Mention of closeness to family member other than parents? Yes ____ No ____

82. Making phone calls to family members other than parents?

Yes ____ No ____ Missing ____

83. Release plans include support from family member other than parents?

Yes ____ No ____ Missing ____

84. Criminal family member? parents? Yes ____ No ____ Missing ____

If Yes, specify who, _____

85. Spouse has a criminal record? Yes ____ No ____ Missing ____ N/A ____

ACCOMMODATION

86. Has a residence upon release? Yes ____ No ____ Missing ____

87. Number of address changes in last year? _____

88. Indication that residence location is unsuitable?

Yes ____ No ____ Missing ____

89. Plans to move away because of crime opportunity in neighborhood?

Yes ____ No ____ Missing ____

LEISURE\RECREATION

90. Any participation in organized activity? Yes ____ No ____ Missing ____

91. Regular attendance at AA\NA\GA with participation in social activities?

Yes ____ No ____ Missing ____

92. Any hobbies noted?

Yes ____ No ____ Missing ____

If yes, Specify _____

93. Mention of isolation? Yes ____ No ____
94. Does client get along with other inmates? Yes ____ No ____ Missing ____
95. How does she fill her time? _____

FRIENDS\ASSOCIATES

96. Any close friends? Yes ____ No ____ Missing ____
97. Record of being withdrawn, shy? Yes ____ No ____ Missing ____
98. Record of poor social skills? Yes ____ No ____ Missing ____
99. Does client have criminal associates? Yes ____ No ____ Missing ____
100. Was crime committed with accomplice(s)? Yes ____ No ____
101. Any letters\visits\phone calls from others with criminal records?
Yes ____ No ____ Missing ____
102. Any release plans that involving staying with or being employed by people with criminal records? Yes ____ No ____ Missing ____
103. Any criminal friends? Yes ____ No ____ Missing ____
104. Any record of no anti-criminal friends? Yes ____ No ____ Missing ____
105. Are all woman's' friends\associates criminal? Yes ____ No ____ Missing ____
106. Any record of release difficulties\concerns because of criminal friends\associates?
e.g., desire to move to a new area because of fear of re-involvement with criminal friends? Peer pressure to get re-involved in crime?
Yes ____ No ____ Missing ____

ATTITUDES

107. Denies responsibility for crime? Yes ____ No ____ Missing ____
108. Record mentions bad attitude? Yes ____ No ____ Missing ____
109. Rationalizes crime or makes excuses? Yes ____ No ____ Missing ____

110. Hostile toward staff, criminal justice system? Yes ____ No ____ Missing ____

111. Accepting of criminal lifestyle of friends, relatives, etc..?

Yes ____ No ____ Missing ____ N/A ____

112. Client objects to classification\placement? Yes ____ No ____ Missing ____

113. Uncooperative, unwilling to participate in programs, recommendations?

Yes ____ No ____ Missing ____

114. Record mentions positive attitude? Yes ____ No ____ Missing ____

115. Record mentions effort to be pleasant, cooperative, etc..?

Yes ____ No ____ Missing ____

116. Expressed desire and/or effort to change offending lifestyle?

Yes ____ No ____ Missing ____

117. Good relationship and respect for noncriminal relatives, friends?

Yes ____ No ____ Missing ____

118. Expressed concern for criminal lifestyle of relative(s) and friends?

Yes ____ No ____ Missing ____ N/A ____

119. Expressed acceptance of prosocial lifestyle of friends and family?

Yes ____ No ____ Missing ____

120. Expressed shame or remorse for offence? Yes ____ No ____ Missing ____

SUBSTANCE USE|ABUSE

121. Admits to current alcohol problem? Yes ____ No ____ Missing ____

122. Professional record of current alcohol problem?

Yes ____ No ____ Missing ____

123. Professional record of suspected alcohol problem?

Yes ___ No ___ Missing ___

124. Admits to past alcohol problem?

Yes ___ No ___ Missing ___

125. Professional record of past alcohol problem?

Yes ___ No ___ Missing ___

126. Attends or referral to AA?

Yes ___ No ___ Missing ___

127. Drunk upon admit to institution?

Yes ___ No ___ Missing ___

128. High upon admit to institution?

Yes ___ No ___ Missing ___

129. Drug withdrawal upon admit to institution?

Yes ___ No ___ Missing ___

130. Alcohol withdrawal upon admit?

Yes ___ No ___ Missing ___

131. Any misconducts for drinking or making brew, or suspected of being drunk?

Yes ___ No ___ Missing ___

132. Any misconducts for drug, possession, or suspected use during incarceration?

Yes ___ No ___ Missing ___

133. Attends or referral to NA?

Yes ___ No ___ Missing ___

134. Admits to past drug problem?

Yes ___ No ___ Missing ___

If Yes, Specify type of drug _____.

135. Admits to current drug problem?

Yes ___ No ___ Missing ___

If Yes, Specify type of drug _____.

136. Substance use has caused family\marital problems?

Yes ___ No ___ Missing ___

137. Substance use has caused education\employment problems?

Yes ___ No ___ Missing ___

138. Lost job because of substance use?

Yes ___ No ___ Missing ___

139. Left school because of substance use? Yes ____ No ____ Missing ____

140. Drugs\alcohol has contributed to offending (not just possession)?

Yes ____ No ____ Missing ____

141. Supports substance use through proceeds from crime?

Yes ____ No ____ Missing ____

142. Arrested for drug\alcohol-related offence, other than possession?

Yes ____ No ____ If Yes, Specify _____

143. Family members indicate problems with substance?

Yes ____ No ____ Missing ____

144. Blackouts?

Yes ____ No ____ Missing ____

145. Any substance use-related illness or medical problem?

Yes ____ No ____ Missing ____

EMOTIONAL

146. Record of insomnia, worrying, anxiety, or depression (withdrawn, quiet)?

Yes ____ No ____ Missing ____

147. On medication for sleeping, stress (i.e, sedatives, Prozac)?

Yes ____ No ____ Missing ____

148. Request to see doctor for depression, anxiety, mental health issue?

Yes ____ No ____ Missing ____

149. Mention of crying, distress?

Yes ____ No ____ Missing ____

150. Expressed concern for emotional stability? Yes ____ No ____ Missing ____

151. Referral to psychiatrist\psychologist? Yes ____ No ____ Missing ____

152. Suicide risk? Yes ____ No ____ Missing ____

153. Suicide threats? Yes ____ No ____ Missing ____

154. Past suicide attempts? Yes ___ No ___ Missing ___
155. Current self-injury? Yes ___ No ___ Missing ___
156. Past self-injury? Yes ___ No ___ Missing ___
157. Ever committed to psychiatric institution? Yes ___ No ___ Missing ___
158. Reports of auditory, visual hallucinations? Yes ___ No ___ Missing ___
159. Current mental health treatment? Yes ___ No ___ Missing ___
160. Past mental health treatment? Yes ___ No ___ Missing ___
161. Any psychological assessment in past year? Yes ___ No ___ Missing ___

If Yes, specify problem area. _____

162. Intellectual deficits? Yes ___ No ___ Missing ___
163. Low self-esteem? Yes ___ No ___ Missing ___
164. Record of lying and/or manipulation? Yes ___ No ___ Missing ___
165. Poor impulse control, self-management deficits? Yes ___ No ___ Missing ___
166. Anger management deficits/referral for anger management treatment? Yes ___ No ___ Missing ___
167. Record of antisocial behavior? Yes ___ No ___ Missing ___
168. Disregard for others? Yes ___ No ___ Missing ___
169. Sexually abused as child? Yes ___ No ___ Missing ___

If Yes, list perpetrator(s) and indicate if abuse was ongoing

a) _____: Ongoing? Yes ___ No ___

b) _____: Ongoing? Yes ___ No ___

c) _____: Ongoing? Yes ___ No ___

b) _____: Ongoing? Yes ____ No ____

c) _____: Ongoing? Yes ____ No ____

175. Desire for treatment to help deal with issues of abuse?

Yes ____ No ____ Missing ____

176. Record of "antisocial personality"? Yes ____ No ____

177. Diagnosis of personality disorder? Yes ____ No ____ Missing ____

If Yes, Specify, _____.

OTHER

178. Non-compliance with requests, authority and conditions of parole\probation?

Yes ____ No ____ Missing ____

179. Concern about sexuality, or inappropriate sexual activity?

Yes ____ No ____ Missing ____

180. Intimidating or controlling behavior? Yes ____ No ____ Missing ____

181. Racist or sexist behavior? Yes ____ No ____ Missing ____

182. Any gang involvement? Yes ____ No ____ Missing ____

183. Does woman have children for whom she is responsible?

Yes ____ No ____ Missing ____

Number of dependent children ____

If Yes, is woman a single mother? Yes ____ No ____ Missing ____

184. Use of administrative segregation? Yes ____ No ____ Missing ____

185. Use of protective custody? Yes ____ No ____ Missing ____

186. Security management concern? Yes ____ No ____ Missing ____

187. Treatment requested? Specify area\type.

Yes ____ No ____ Missing ____ Type. _____

Appendix G

Recidivism Follow-up Form

OMS # _____

Follow-Up Date (dd\mm\yy) _____

A. Background

miscon1 Number of misconducts, during Shaw-period incarceration:_(#)
miscon2 Number of misconducts, during follow-up:____ (#)

Code as 88 if never incarcerated during follow-up

iadmdate Initial admit date: _____(dd\mm\yy)

Date admitted to system, may be probation start date for probation sample, or remand date, or sentence date for institutional sample

ireldate Initial release date (or date on which offender was in the community) _____ (dd\mm\yy)**iprobdate** initial probation start date _____ (dd\mm\yy)**probend** probation expiry date _____ (dd\mm\yy)**findate** Final supervision date: _____ (dd\mm\yy)Release type: **reltyp**

1. ____ time expired (WED)
2. ____ pre-release/early release
3. ____ parole
4. ____ appeal
5. ____ release to C.R.C
6. ____ not convicted
7. ____ transfer to federal prison
8. ____ transfer to other province
9. ____ deported
10. ____ not convicted - deported
11. ____ fine paid
12. ____ released on bail/not convicted
13. ____ intermittent sentence

12. ____ Incarcerated for 1 year to 2 years less a day, and probation term
 13. ____ Incarcerated for 2 years or more

Days1-Days?? Aggregate sentence for sanctions of reincarceration. ____

Totrecon Total number of reconvictions from release to follow-up: ____

Type of new offence(s) during entire follow-up. Check off all that apply, and

indicate the number of times each occurred in the brackets (**new#1-new#14**)

newoff1	____	Against person ()
newoff2	____	Fraud under ()
newoff3	____	Fraud over ()
newoff4	____	Theft/possession over/robbery ()
newoff5	____	Theft/possession under/B&E ()
newoff6	____	Public morals and decency ()
newoff7	____	Against public order and peace ()
newoff8	____	Drug offence ()
newoff9	____	Liquor offence ()
newoff10	____	Impaired offence ()
newof 11	____	Other traffick offence ()
newoff12	____	Weapons offence ()
newoff13	____	Failure to comply/Failure to Appear/Obstruct ()
newoff14	____	Probation breach/parole violated/UAL ()
newoff15	____	Other

Violany Any violence involved in any of new offences?

0. ____ No 1. ____ Yes

UAL Ever unlawfully at large during follow-up?

0. ____ No 1. ____ Yes

Msoever List most serious offence: _____

Comp In comparison to index offence, is new offence - use Ontario

Ministry numerical codes to determine ranking

0. ____ Same
 1. ____ Less severe
 2. ____ More severe

rem1 - rem7 Remanded into custody within first year through 7th year of follow-up?

0. ____ No 1. ____ Yes

rem1#-rem7# Number of times remanded to custody during 1st through 7th year of follow-up.

incar1- incar7 Incarcerated within first year of release, through 7th year, for new offence?

0. ____ No 1. ____ Yes

incar1#- incar7# Total number incarcerations for each year during follow-up: ____

Totremand Total number of remands during follow-up

Totincar Total number of incarcerations during follow-up

Totdays Total number of days sentenced to prison during follow-up

Totprob Total number of probation sentences during follow-up

Comdays Total number of days in community before sentenced to reincarceration

Appendix H

Table H4

LSI Subtotal-Total Intercorrelations and Internal Reliability Estimates

LSI Scale	Crim.	Educ.	Fin.	Fam.	Acc.	Peers	Alc.	Emot.	Att.	Tot.
Crim.	(.82)									
Educ.	.42	(.79)								
Fin.	.08	.18	(.02)							
Fam.	.22	.11	.20	(.24)						
Acc.	.32	.22	.27	.28	(.36)					
Peers	.54	.32	.12	.22	.32	(.75)				
Alc.	.53	.39	.04	.17	.20	.42	(.82)			
Emot.	.12	.08	.14	.13	.11	.08	.16	(.45)		
Att.	.50	.28	.09	.22	.39	.36	.29	.08	(.60)	
Total	.80	.69	.27	.39	.49	.67	.73	.30	.58	(.89)

Note. Crim. refers to Criminal History, Educ. refers to Education/Employment,

Fin. refers to Financial, Fam. refers to Family/Marital, Acc. refers to

Accommodation, Peers refers to Companions, Alc. refers to Alcohol/Drug

Problem, Emot. refers to Emotional/Personal, Attit. refers to

Attitudes/Orientation, and Total and Tot. refer to LSI total score.

Coefficient alphas are shown in parentheses.

Appendix I

Table I5

Inter-rater Correlations for LSI Subscales and Total Score

LSI Subscales	<i>r</i>
Criminal History	.96
Education/Employment	.95
Financial	.65
Family/Marital	.68
Accommodation	.79
Companions	.84
Alcohol/Drug Problems	.82
Emotional/Personal	.84
Attitudes/Orientation	.73
Total	.92

Note. Based on *N* = 136.

All correlations are significant at the .000 level.

Appendix J

Table J6

Most Serious Offence During Follow-up by Group Type

Current Offence	Institution		Community		Total	
	<u>n</u>	%	<u>n</u>	%	<u>N</u>	%
Homicide/manslaughter	1	0.7	—		1	0.5
Serious violent ¹	12	8.5	2	3.2	14	6.8
Sexual/mischief property	3	2.1	2	3.2	5	2.4
Break and Enter	4	2.8	1	1.6	5	2.4
Non-violent sexual	14	9.9	1	1.6	15	7.3
Traffick/import drugs	16	11.3	4	6.3	20	9.8
Weapons	7	4.9	—		7	3.4
Fraud	18	12.7	19	30.2	37	18.0
Misc. against person	1	0.7	—		1	0.5
Theft/possession	32	22.5	15	23.8	47	22.9
Assault	14	9.9	7	11.1	21	10.2
Property damage/arson	—		1	1.6	1	0.5
Soliciting	5	3.5	2	3.2	7	3.4
Obstruct justice	2	1.4	—		2	1.0
Drug possession	4	2.8	1	1.6	5	2.4
Federal statute	1	0.7	2	3.2	3	1.5

Note. ¹ This category includes offences of robbery, abduction, utter threats.

Table J6 Continued

Most Serious Offence During Follow-up by Group Type

Current Offence	Institution		Community		Total	
	<u>n</u>	%	<u>n</u>	%	<u>N</u>	%
Traffic code	1	0.7	1	1.6	2	1.0
Breach order/escape	3	2.1	4	6.3	7	3.4
Impaired driving	1	1.6	4	2.8	5	2.4

Appendix K

Table K7

Mean Values of LSI-OR Total Score by Group Type and Recidivism Status

	Group Type		Recidivism Status	
Source	Community	Institution	Non-recidivist	Recidivist
LSI-OR total Score				
<u>M</u>	11.04	20.74	10.42	21.31
<u>SD</u>	6.88	7.58	6.52	7.04
<u>n</u>	239	202	236	205

Table K8

Means and Standard Deviations of LSI-OR Total Score by Group

	Community	Community	Institution	Institution
LSI-OR Total	Non- recidivist	Recidivist	Non-recidivist	Recidivist
	(<u>n</u> =176)	(<u>n</u> =63)	(<u>n</u> =60)	(<u>n</u> =142)
<u>M</u>	9.09	16.51	14.33	23.44
<u>SD</u>	5.57	7.28	7.49	5.79

Appendix L

Table L9

Correlations Between LSI and LSI-OR Risk Level Category and Violent and
General Recidivism by Group Type

	Recidivism		Violent Recidivism	
	r	p	r	p
LSI				
Institution	.54	.0000	.31	.0000
Community	.42	.0000	.24	.0001
Total Sample	.58	.0000	.34	.0000
LSI-OR				
Institution	.55	.0000	.37	.0000
Community	.40	.0000	.30	.0000
Total Sample	.59	.0000	.40	.0000

Appendix M

Table M10

Correlations Between LSI Total and Subscales and Recidivism Status: General and Violent

LSI Scale	General Recidivism			Violent Recidivism		
	Community	Institution	Total	Community	Institution	Total
Alcohol/Drug Problem	.32 ^{****}	.35 ^{****}	.44 ^{****}	.27 ^{****}	.21 ^{***}	.30 ^{****}
Accommodation	.28 ^{****}	.28 ^{***}	.36 ^{****}	.22 ^{****}	.13	.22 ^{****}
Attitudes/Orientation	.39 ^{****}	.29 ^{****}	.45 ^{****}	.25 ^{****}	.34 ^{****}	.38 ^{****}
Companions	.24 ^{****}	.38 ^{****}	.43 ^{****}	.27 ^{****}	.20 ^{***}	.30 ^{****}
Criminal History	.31 ^{****}	.57 ^{****}	.57 ^{****}	.23 ^{****}	.36 ^{****}	.39 ^{****}
Education/Employment	.29 ^{****}	.30 ^{****}	.39 ^{****}	.10	.27 ^{****}	.27 ^{****}
Financial	.25 ^{****}	.05	.13 ^{***}	.09	-.02	.02
Family/Marital	.24 ^{****}	.16 [*]	.22 ^{****}	.23 ^{****}	.13	.18 ^{****}
Emotional/Personal	.16 [*]	.13	.13 ^{***}	.09	.05	.07
Total Score	.49 ^{****}	.57 ^{****}	.63 ^{****}	.34 ^{****}	.40 ^{****}	.44 ^{****}

Note. ^{*} $p < .05$. ^{**} $p < 0.01$. ^{***} $p < 0.005$. ^{****} $p < 0.001$

The sample size for the community sample is 239, for the institution sample $n = 202$, and total $N = 441$.

Appendix N

Table N11

Mean Values for Measures by Group Type and Recidivism Status

Source	Group Type		Recidivism Status	
	Community (<u>n</u> = 230)	Institution (<u>n</u> = 185)	Non recidivist (<u>n</u> = 221)	Recidivist (<u>n</u> = 194)
Age at interview				
<u>M</u>	30.69	29.72	30.89	29.55
<u>SD</u>	9.53	7.58	9.43	7.78
Age at first conviction				
<u>M</u>	25.44	21.38	26.13	20.78
<u>SD</u>	9.62	7.92	9.68	7.49
LSI-OR Substance Abuse				
<u>M</u>	1.90	3.84	1.74	3.93
<u>SD</u>	2.28	2.35	2.20	2.31
LSI-OR Antisocial Pattern				
<u>M</u>	0.47	1.28	0.42	1.30
<u>SD</u>	0.74	0.94	0.66	0.96
LSI-OR Procriminal Attitudes				
<u>M</u>	0.25	1.10	0.21	1.11
<u>SD</u>	0.68	1.06	0.54	1.11

Table N12

Univariate F-test for the Main Effect Group Type

Source	MS	Ms _{error}	F
Age at interview	14.15	75.89	0.19
Age at first conviction	307.10	74.99	4.10*
LSI-OR Substance Abuse	108.91	4.81	22.65**
LSI-OR Antisocial Pattern	20.83	0.62	33.72**
LSI-OR Procriminal Attitudes	24.66	0.68	36.32**
LSI-OR Companions	51.77	1.60	32.32**
LSI-OR Criminal History	308.33	3.18	96.89**
LSI-OR Education/Employment	85.83	6.22	13.79**
LSI-OR Family/Marital	0.00	1.04	0.01

* $p < .05$. ** $p < 0.01$.

Table N13

Univariate F-test for the Main Effect Recidivism Status

Source	MS	Ms _{error}	F
Age at interview	117.29	75.89	1.54
Age at first conviction	1705.65	74.99	22.74**
LSI-OR Substance Abuse	224.60	4.81	46.71**
LSI-OR Antisocial Pattern	34.52	0.62	55.88**
LSI-OR Procriminal Attitudes	33.26	0.68	48.99**
LSI-OR Companions	58.97	1.60	36.82**
LSI-OR Criminal History	318.93	3.18	100.22**
LSI-OR Education/Employment	236.88	6.22	38.05**
LSI-OR Family/Marital	14.03	1.04	13.49**

* $p < .05$. ** $p < 0.01$.

Appendix O

Table O14

Correlations Between LSI-OR Total and Subscales and Recidivism Status:General and Violent

LSI-OR Scale	General Recidivism			Violent Recidivism		
	Community	Institution	Total	Community	Institution	Total
Substance Abuse	.32 ^{****}	.35 ^{****}	.44 ^{****}	.27 ^{****}	.22 ^{***}	.30 ^{****}
Procriminal Attitudes	.39 ^{****}	.29 ^{****}	.45 ^{****}	.25 ^{****}	.34 ^{****}	.38 ^{****}
Companions	.24 ^{****}	.37 ^{****}	.43 ^{****}	.28 ^{****}	.19 ^{**}	.30 ^{****}
Criminal History	.31 ^{****}	.57 ^{****}	.57 ^{****}	.19 ^{***}	.31 ^{****}	.35 ^{****}
Education/Employment	.28 ^{****}	.30 ^{****}	.39 ^{****}	.09	.28 ^{****}	.27 ^{****}
Antisocial Pattern	.38 ^{****}	.32 ^{****}	.47 ^{****}	.33 ^{****}	.37 ^{****}	.42 ^{****}
Family/Marital	.24 ^{****}	.16 [*]	.22 ^{****}	.23 ^{****}	.13	.18 ^{****}
Total Score	.48 ^{****}	.55 ^{****}	.63 ^{****}	.33 ^{****}	.41 ^{****}	.44 ^{****}

Note. * $p < .05$. ** $p < 0.01$. *** $p < 0.005$. **** $p < 0.001$

The sample size for the community sample is 239, for the institution sample $n = 202$, and total $N = 441$.

Appendix P

Table P15

Endorsement of Shaw Variables used in Principle Components Analysis byGroup

Shaw Variables	Institution		Community	
	<u>n</u>	%	<u>n</u>	%
Self-injury history				
Yes	58	28.7	71	29.7
No	144	71.3	167	69.9
Suicide attempt history				
Yes	69	34.2	82	34.3
No	133	65.8	155	64.9
Wants help for self-injury				
Yes	38	18.8	23	9.6
No	162	80.2	211	88.3
Eating disorder				
Yes	45	75.7	43	18.0
No	153	22.2	193	80.8
Low family support now				
Yes	133	65.8	156	65.3
No	68	33.7	80	33.5

Table P15 Continued

Endorsement of Shaw Variables used in Principle Components Analysis by
Group

Shaw Variables	Institution		Community	
	<u>n</u>	%	<u>n</u>	%
Abused as adult				
Yes	156	77.2	162	67.8
No	45	22.3	77	32.2
Abused as child				
Yes	124	61.4	135	56.5
No	77	38.1	104	43.5
Physical health concerns				
Yes	120	50.2	125	61.9
No	116	48.5	75	37.1
Problems growing up				
Yes	166	69.5	141	69.8
No	73	30.5	56	27.7
In protective care as child				
Yes	63	31.2	22	9.2
No	136	67.3	204	85.4

Note. The n for community sample is 239, n for institution group is 202.

Numbers in columns may not add to the group size due to missing data.

Table P15 Continued

Endorsement of Shaw Variables used in PCA by Group

Shaw Variables	Institution		Community	
	<u>n</u>	%	<u>n</u>	%
Mother				
Yes	146	72.3	165	69.0
No	56	27.7	73	30.5
Single parent ever				
Yes	118	80.8	132	80.0
No	26	17.8	32	19.4
Single parent now				
Yes	74	50.7	93	56.4
No	72	49.3	70	42.4
Child related concerns				
Yes	58	39.7	67	40.6
No	88	60.3	97	58.8
Child living with mother				
Yes	77	52.7	116	70.3
No	69	47.3	48	29.1

Note. Percentages are based on a n of 165 mothers for the community group, and 145 mothers for the institution group. Percentages may not add to 100% because of missing data.

Table P16

Phi Coefficients for Relationship Between Shaw Variables and General
Recidivism Status by Group

Shaw Variable	Community	Institution	Total
Self-injury history	.07	.10	.07
Suicide attempt history	.11	.15*	.11
Wants help for self-injury	.04	.14*	.14**
Eating disorder	.07	.06	.08
Low family support now	-.24***	-.14*	-.17***
Abused as adult	.15*	.04	.14**
Wants help for abuse	.27***	-.04	.12**
Abused as child	.18**	.09	.15**
Physical health concerns	.10	-.05	.08
Problems growing up	.15*	.04	.10*
In protective care as child	.01	.16*	.21***
Mother	-.01	.12	.06
Single parent ever	.12	-.04	.05
Single parent now	-.04	-.05	-.07
Child related concerns	.11	.03	.07
Child living with mother	.06	.15	.15**

Note. * $p < .05$. ** $p < 0.01$. *** $p < 0.001$

Appendix Q

A series of chi-square tests of independence were performed to examine the relationship between recidivism status and physical, emotional, and sexual abuse as an adult, and physical, sexual, and emotional abuse as a child. Given the number of tests being performed, it is prudent to control the overall alpha using the Bonferonni correction procedure. Thus, significance for each of these tests is judged at the .008 level (.05/6).

Examination of results revealed that all forms of child abuse were related to recidivism status, with women who had endured any form of child abuse demonstrating a greater likelihood of recidivism. Specifically, 57.9% of the women who had been sexually abused as a child recidivated, as opposed to 40.4% of those who had not been abused sexually ($\chi^2 = 12.18$, $df = 1$, $p = .000$, $N = 432$). Similarly, 55.6% of the women who had been physically abused as a child re-offended, compared to a recidivism rate of 40.1% for those who had not been so abused ($\chi^2 = 10.20$, $df = 1$, $p = .001$, $N = 437$). Lastly, although 54.7% of the women who had been mentally abused as a child re-offended, only 39.5% of those who had not been emotionally abused recidivated ($\chi^2 = 9.86$, $df = 1$, $p = .002$, $N = 432$).

The only form of adult abuse which showed a significant association with recidivism was physical abuse, with 52.1% of the women reporting physical abuse re-offending, compared to a recidivism rate of 37.2% for women who had not been physically abused ($\chi^2 = 9.28$, $df = 1$, $p = .002$, $N = 439$). However, it is

important to note that 47.9% of the women who had been abused physically as an adult did not recidivate. The occurrence of sexual abuse as an adult was marginally related to recidivism, though this effect was not significant at the stringent alpha set (53.3%. 43.0%, $\chi^2 = 3.97$, $df = 1$, $p = .046$, $N = 437$). The occurrence of emotional abuse as an adult was clearly unrelated to recidivism status ($\chi^2 = 1.02$, $df = 1$, $p = .313$, $N = 439$).

When the same analyses were performed to examine the relationship between abuse and violent recidivism status, none of the effects were significant at the .008 alpha level. Although only 11.8% of the women who had not been sexually abused recidivated, compared to 19.1% of those who were abused sexually, a further 80.9% of the abused women did not recidivate violently ($\chi^2 = 4.26$, $df = 1$, $p = .038$, $N = 432$). Similarly, although women who had been emotionally abused as a child were more likely to recidivate than women who had not been abused emotionally (19.1%. 10.5%, $\chi^2 = 6.38$, $df = 1$, $p = .011$, $N = 432$), the majority of women who had been abused did not recidivate. The same trend was shown for child physical abuse, with 16.1% of the abused women committing a violent offence, compared to 12.8% of the women who had not been abused physically ($\chi^2 = 0.93$, $df = 1$, $p = .335$, $N = 437$). Women who had and who had not been emotionally abused as adults had virtually identical chances of recidivating violently (14.0% vs. 14.2%, $\chi^2 = 0.01$, $df = 1$, $p = .938$, $N = 439$). The same pattern was shown for adult sexual abuse, with 13.2% of those who had not been sexually abused recidivating violently, compared to

15.6% of those who had been abused ($\chi^2 = 0.41$, $df = 1$, $p = .520$, $N = 437$).

Women who had been physically abused as an adult showed a slightly greater likelihood of violent recidivism than women who had not been physically abused (16.9% vs. 9.3%, $\chi^2 = 4.99$, $df = 1$, $p = .026$, $N = 439$), although the majority of physically abused women did not recidivate violently (83.1%).

Appendix R

Table R18

Mean Values for LSI-OR Subscales Group Type and Violent Recidivism Status:

Total Sample

Source	Violent Recidivism Status	
	No Violent	Violent
	Recidivism (<u>n</u> = 357)	Recidivism (<u>n</u> = 58)
<hr/> LSI-OR Substance Abuse		
<u>M</u>	2.46	4.66
<u>SD</u>	2.44	2.00
LSI-OR Antisocial Pattern		
<u>M</u>	0.66	1.86
<u>SD</u>	0.82	0.91
LSI-OR Procriminal Attitudes		
<u>M</u>	0.48	1.59
<u>SD</u>	0.85	1.09
LSI-OR Companions		
<u>M</u>	1.75	2.93
<u>SD</u>	1.41	1.24

Table R18 Continued

Mean Values for LSI-OR Subscales by Group Type and Violent RecidivismStatus: Total Sample

Source	Violent Recidivism Status	
	No Violent	Violent
	Recidivism (<u>n</u> = 357)	Recidivism (<u>n</u> = 58)
<hr/> LSI-OR Criminal History		
<u>M</u>	2.91	5.36
<u>SD</u>	2.37	1.79
LSI-OR Education/Employment		
<u>M</u>	3.50	5.64
<u>SD</u>	2.67	2.57
LSI-OR Family/Marital		
<u>M</u>	1.51	2.03
<u>SD</u>	1.02	1.09

Table R19

Univariate F-test for the Main Effect Violent Recidivism Status

Source	MS	Ms _{error}	F
LSI-OR Substance Abuse	127.49	5.04	25.30***
LSI-OR Antisocial Pattern	36.95	0.60	61.76***
LSI-OR Procriminal Attitudes	24.66	0.68	36.32***
LSI-OR Companions	37.88	1.65	22.91***
LSI-OR Criminal History	77.71	3.75	20.74***
LSI-OR Education/Employment	75.64	6.53	11.59***
LSI-OR Family/Marital	16.75	1.04	16.12***

* $p < .05$. ** $p < 0.01$. *** $p < .001$

Appendix S

Table S20

Univariate F-test for the LSI-OR Interaction Effects for Violent Recidivism Status
and Group Type: Total Sample

Source	MS	Ms _{error}	F
Age at interview	114.43	75.86	1.51
Age at first conviction	26.19	76.41	0.34
LSI-OR Substance Abuse	16.06	5.04	3.19
LSI-OR Antisocial Pattern	0.53	0.60	0.88
LSI-OR Procriminal Attitudes	0.04	0.68	0.06
LSI-OR Companions	9.99	1.65	6.04**
LSI-OR Criminal History	0.03	3.75	0.00
LSI-OR Education/Employment	1.61	6.53	0.25
LSI-OR Family/Marital	6.62	1.04	6.37**

* $p < .05$. ** $p < 0.01$. *** $p < .001$

Table S21

Mean Score for LSI-OR Companions by Group Type and Violent RecidivismStatus

	Violent	No Violent	Violent	No Violent
LSI-OR	Recidivism	Recidivism	Recidivism	Recidivism
Subscale	Community	Community	Institution	Institution
	(<u>n</u> =13)	(<u>n</u> =217)	(<u>n</u> =45)	(<u>n</u> =140)
<u>Companions</u>				
<u>M</u>	2.85	1.29	2.96	2.46
<u>SD</u>	1.07	1.24	1.30	1.36

Appendix T

Recidivist Subsample Analysis

Analyses were performed to examine differences between violent and non-violent recidivists within and across group type. The ANOVA with the LSI total score as the dependent measure yielded significant main effects for violent recidivism status, $F_{\text{exact}}(1,204) = 18.17$, $p = .000$, and group type, $F_{\text{exact}}(1,204) = 26.84$, $p = .000$, while the interaction did not reach the .05 significance level, $F_{\text{exact}}(1,204) = 0.28$, $p = .594$. Women who recidivated violently had higher LSI scores ($M = 28.76$, $SD = 6.44$, $n = 63$) than the non-violent recidivists ($M = 23.63$, $SD = 6.99$, $n = 142$). Similarly, the institution group recidivists scored higher on the LSI ($M = 27.21$, $SD = 6.14$, $n = 142$) than the community group recidivists ($M = 20.68$, $SD = 7.45$, $n = 63$). The effect sizes for the group type and violent recidivism main effects were .118 and .083, respectively. Power for the interaction was 0.039.

An ANOVA with the LSI-OR total score as the dependent variable and group type and violent recidivism status as the independent measures also demonstrated significant main effects of group type, $F_{\text{exact}}(1,204) = 35.92$, $p = .000$, and violent recidivism status, $F_{\text{exact}}(1,204) = 18.75$, $p = .000$, while the interaction effect was not significant, $F_{\text{exact}}(1,204) = 0.05$, $p = .828$. As with the LSI total score ANOVA, women who recidivated violently scored higher on the LSI-OR ($M = 24.92$, $SD = 6.30$, $n = 63$) than did women who did not recidivate violently ($M = 19.71$, $SD = 6.77$, $n = 142$).

The analyses of the relationship between risk categories and violent recidivism for the recidivist subsample could not be performed due to the small numbers and low expected frequency for most of the cells. However, examination of Tables T22 and T23, shows that the pattern of previous risk category analyses was replicated, with the greatest proportion of recidivists falling in the higher risk level categories, while no violent recidivists coming from the low risk categories.

Table T22

Violent Recidivism by LSI Risk Level Category: Recidivist Subsample

	Community		Institution		Total	
LSI Risk	%		%		%	
Level	<u>n</u> ^a	Reoffend (f)	<u>n</u>	Reoffend (f)	<u>n</u>	Reoffend (f)
0-7						
Low	2	0	0	0	2	0
8-11						
Medium	3	0	0	0	3	0
12-23						
High	29	19.4 (7)	31	13.9 (5)	72	16.7 (12)
>24						
Very High	15	31.8 (7)	62	41.5 (44)	128	39.8 (51)

Note. The sample size for the community group is 63, the sample size for the institution group is 142, and the total N = 205.

^aThe first n refers to the number of women who were classified into each risk category.

The f in parentheses refers to the number of women per risk category who re-offended.

Table T23

Violent Recidivism by LSI-OR Risk Level Category: Recidivist Subsample

	Community		Institution		Total	
LSI Risk	%		%		%	
Level	<u>n</u> ^a	Reoffend (f)	<u>n</u>	Reoffend (f)	<u>n</u>	Reoffend (f)
0-4						
Very Low	2	0	0	0	51	0
5-10						
Low	13	0	1	0	14	0
11-19						
Medium	29	24.1 (7)	35	17.1 (6)	64	20.3 (13)
20-29						
High	17	35.3 (6)	86	34.9 (30)	103	35.0 (36)
30+						
Very High	2	50.0 (1)	20	65.0 (13)	22	63.6 (14)

Note. The sample size for the community group is 63, the sample size for the institution group is 142, and the total N = 205.

^aThe first n refers to the number of women who were classified into each risk category.

The f in parentheses refers to the number of women per risk category who re-offended.

Next, a MANOVA was used to test the relationship between group type and violent recidivism status and the variables noted as having an empirical relationship with recidivism. This revealed significant main effects for both group type, $F_{\text{exact}}(11,180) = 6.79$, $p = .000$, and violent recidivism status, $F_{\text{exact}}(11,180) = 2.39$, $p = .009$. The effect size for the group type effect was .293; for violent recidivism status, it was .128. The interaction term was not significant $F_{\text{exact}}(11,180) = 1.28$, $p = .234$, although power to detect an effect was 0.68.

The results of the univariate tests of significance for the group type and violent recidivism status effects are provided in Tables T24 and T25 respectively. The means and standard deviations are shown in Table T26. These analyses revealed group type effects for the LSI subscales: Alcohol/Drug Problem, Attitudes/Orientation, Education/ Employment, Financial, Companions, and Criminal History. The significant effects revealed that women from the institution sample had greater psychosocial needs in these areas than the community sample recidivists. Recidivists from the institution group were also first convicted at a younger age than community group recidivists. The groups did not differ in terms of family/marital conflict, emotional/personal problems, or accommodation problems.

Table T24

Univariate F-test for the Main Effect Group Type: Recidivist Subsample

Source	MS	MS _{error}	F
Age at interview	0.18	60.32	0.00
Age at first conviction	240.84	51.04	4.72 [*]
LSI Alcohol/Drug Problem	28.86	5.15	5.61 [*]
LSI Accommodation	0.34	0.75	0.46
LSI Attitudes/Orientation	0.26	1.10	9.33 ^{**}
LSI Companions	2.05	1.69	7.14 ^{**}
LSI Criminal History	228.77	3.96	57.74 ^{**}
LSI Education/Employment	50.59	6.42	7.88 ^{**}
LSI Emotional/Personal	0.60	1.38	0.44
LSI Family/Marital	3.58	0.98	3.64
LSI Financial	2.74	0.43	6.38 ^{**}

^{*} $p < .05$. ^{**} $p < 0.01$.

Table T25

Univariate F-test for the Main Effect Violent Recidivism Status: Recidivist

Subsample

Source	MS	MS _{error}	F
Age at interview	82.34	60.32	1.36
Age at first conviction	492.12	51.04	9.64**
LSI Alcohol/Drug Problem	42.95	5.15	8.34**
LSI Accommodation	3.37	0.75	4.52*
LSI Attitudes/Orientation	8.73	1.10	7.94**
LSI Companions	13.52	1.69	8.01**
LSI Criminal History	28.97	4.00	7.31**
LSI Education/Employment	11.51	6.42	1.79
LSI Emotional/Personal	0.70	1.38	0.51
LSI Family/Marital	7.22	0.98	7.33**
LSI Financial	0.03	0.43	0.07

* $p < .05$. ** $p < 0.01$.

Table T26

Mean Values for LSI Measures by Violent Recidivism Status and Group Type:Recidivist Subsample

Source	Community recidivist (<u>n</u> =60)	Institution recidivist (<u>n</u> =134)	Non-violent recidivist (<u>n</u> =136)	Violent recidivist (<u>n</u> =58)
Age at interview				
<u>M</u>	30.35	29.19	29.74	29.10
<u>SD</u>	9.70	6.76	7.95	7.43
Age a first conviction				
<u>M</u>	23.45	19.59	21.93	18.10
<u>SD</u>	9.15	6.29	7.90	5.62
LSI Alcohol/Drug Problem				
<u>M</u>	3.07	4.45	3.71	4.76
<u>SD</u>	2.71	2.10	2.45	2.08
LSI Accommodation				
<u>M</u>	0.98	1.21	1.06	1.33
<u>SD</u>	0.87	0.87	0.85	0.91
LSI Education/Employment				
<u>M</u>	4.42	5.57	4.93	5.90
<u>SD</u>	2.70	2.49	2.56	2.60

Table T26 Continued

Mean Values for LSI Measures by Violent Recidivism Status and Group Type:Recidivist Subsample

Source	Community recidivist (<u>n</u> =60)	Institution recidivist (<u>n</u> =134)	Non-violent recidivist (<u>n</u> =136)	Violent recidivist (<u>n</u> =58)
LSI Companions				
<u>M</u>	1.93	2.87	2.42	2.95
<u>SD</u>	1.46	1.26	1.43	1.21
LSI Criminal History				
<u>M</u>	3.42	6.26	4.99	6.31
<u>SD</u>	2.35	1.88	2.42	2.15
LSI Attitudes/Orientation				
<u>M</u>	0.72	1.28	0.90	1.59
<u>SD</u>	1.11	1.07	1.06	1.09
LSI Emotional/Personal				
<u>M</u>	1.80	1.72	1.72	1.81
<u>SD</u>	1.09	1.20	1.11	1.30
LSI Family/Marital				
<u>M</u>	1.92	1.77	1.72	2.03
<u>SD</u>	1.18	0.92	0.96	1.09

Table T26 Continued

Mean Values for LSI Measures by Violent Recidivism Status and Group Type:Recidivist Subsample

	Community	Institution	Non-violent	Violent
Source	recidivist	recidivist	recidivist	recidivist
	(<u>n</u> =60)	(<u>n</u> =134)	(<u>n</u> =136)	(<u>n</u> =58)
LSI Financial				
<u>M</u>	1.53	1.25	1.36	1.28
<u>SD</u>	0.62	0.67	0.70	0.59

However, the effect of particular interest is that of violent recidivism status. The univariate analyses revealed main effects for age at first conviction and the LSI subscales of Criminal History, Accommodation, Family/Marital, Companions, Alcohol/Drug Problems, and Attitudes/Orientation. All significant effects were in the anticipated direction, with violent recidivists scoring higher on the LSI subscales and being younger at their first conviction than non-violent recidivists.

The MANOVA was also conducted with LSI-OR subscale scores replacing the LSI scales. As above, both the group type, $F_{\text{exact}}(9,182) = 8.18$, $p = .000$, and violent recidivism status effects, $F_{\text{exact}}(9,182) = 3.38$, $p = .001$, were significant, though the Group Type x Violent Recidivism Status interaction was not, $F_{\text{exact}}(9,182) = 1.49$, $p = .154$. The group type and recidivism status effect sizes were .288, .143, while the power to detect a significant interaction was

0.70. The means and standard deviations, by group and violent recidivism status can be found in T27. The results of the univariate tests of significance for the group type and violent recidivism status effects are provided in Tables T28 and T29, respectively.

Table T27

Mean Values for LSI-OR Subscales by Violent Recidivism Status and GroupType:Recidivist Subsample

	Community	Institution	Non- violent	Violent
LSI-OR Subscale	recidivist	recidivist	recidivist	recidivist
	(<u>n</u> = 60)	(<u>n</u> = 134)	(<u>n</u> = 136)	(<u>n</u> = 58)
LSI-OR Antisocial Pattern				
<u>M</u>	0.95	1.46	1.07	1.86
<u>SD</u>	0.93	0.94	0.89	0.91
LSI-OR Procriminal Attitudes				
<u>M</u>	0.72	1.28	0.90	1.59
<u>SD</u>	1.11	1.07	1.06	1.09
LSI-OR Companions				
<u>M</u>	1.92	2.85	2.40	2.93
<u>SD</u>	1.48	1.28	1.45	1.24
LSI-OR-Education/Employment				
<u>M</u>	4.13	5.33	4.67	5.64
<u>SD</u>	2.66	2.47	2.55	5.62

Table T27 Continued

Mean Values for Measures by Violent Recidivism Status: Recidivist Subsample

	Community	Institution	Non- violent	Violent
LSI-OR Subscale	recidivist	recidivist	recidivist	recidivist
	(<u>n</u> = 60)	(<u>n</u> = 134)	(<u>n</u> = 136)	(<u>n</u> = 58)
LSI-OR Criminal History				
<u>M</u>	3.03	5.54	4.51	5.36
<u>SD</u>	2.11	1.57	2.17	1.79
LSI-OR Substance Abuse				
<u>M</u>	3.02	4.34	3.62	4.66
<u>SD</u>	2.63	2.03	2.37	2.00

Table T28

Univariate F-test for the Main Effect Group Type for LSI-OR Subscales:

Recidivist Subsample

Source	MS	MS _{error}	F
LSI-OR Substance Abuse	28.09	4.82	5.83 [*]
LSI-OR Procriminal Attitudes	10.26	1.10	9.33 ^{**}
LSI-OR Antisocial Pattern	5.40	0.77	7.03 ^{**}
LSI-OR Companions	11.82	1.75	6.76 ^{**}
LSI-OR Criminal History	186.92	3.04	61.56 ^{**}
LSI-OR Education/Employment	57.03	6.29	9.06 ^{**}
LSI-OR Family/Marital	3.58	0.98	3.64

^{*} $p < .05$. ^{**} $p < 0.01$.

Table T29

Univariate F-test for the Main Effect Violent Recidivism Status for LSI-ORSubscales: Recidivist Subsample

Source	MS	MS _{error}	F
LSI-OR Substance Abuse	39.10	4.82	8.11**
LSI-OR Antisocial Pattern	16.94	0.77	22.05**
LSI-OR Procriminal Attitudes	8.73	1.10	7.94**
LSI-OR Companions	13.73	1.75	7.84**
LSI-OR Criminal History	8.11	3.04	2.67
LSI-OR Education/Employment	75.64	6.53	1.56
LSI-OR Family/Marital	7.22	0.98	7.33**

* $p < .05$. ** $p < 0.001$.

Analysis of the univariate effects for group type yielded similar results as the MANOVA with the LSI-OR subscales and general recidivism status - the institution recidivists scored higher than the community group recidivists on the LSI-OR scales of Antisocial Pattern, Procriminal Attitudes, Companions, Substance Abuse, Criminal History, and Education/Employment. Univariate analyses for the violent recidivism status effects demonstrated that violent recidivists differed from non-violent recidivists on the LSI-OR subscales Substance Abuse, Procriminal Attitudes, Antisocial Pattern, Companions, and Family/Marital. Examination of the means in Table T27 show that the violent

recidivists had higher scores on all these subscales. Interestingly, the violent recidivists did not differ from the general recidivists in terms of criminal history, as assessed by the LSI-OR, while the Criminal History subscale of the LSI was able to differentiate violent from non-violent recidivists. This finding indicates that the ability of the Criminal History subscale to distinguish between general recidivists and violent recidivists is likely due to the item assessing the occurrence of previous violence by the offender.

The PCA factor scores for the Childhood, Adult Problems and Self-harm factors were also entered into a MANOVA with the independent variables group type and violent recidivism status. Although the group type, $F_{\text{exact}}(3,186) = 1.844$, $p = .141$, and interaction effects were not significant, $F_{\text{exact}}(3,186) = 0.000$, $p = .990$, the violent recidivism status main effect was, $F_{\text{exact}}(3,186) = 3.32$, $p = .021$. The effect size for the significant effect was .051. The power to detect a significant main effect of group type was 0.33; to detect an interaction, power was 0.02.

The violent recidivism term provided a significant univariate effect for the Self-Harm factor, $F(1,188) = 7.78$, $\text{MSE} = 1.12$, $p = .006$. The violent recidivists scored higher on the factor score ($M = 0.44$, $SD = 1.17$, $n = 58$) than the women who did not recidivate violently ($M = -0.06$, $SD = 1.00$, $n = 134$), indicating that violent recidivists reported more self-injurious and personally harmful behavior than non-violent recidivists. The means and standard deviations for the factor scores, by group type and violent recidivism status, are shown in Table T30.

Table T30

Mean Scores and Standard Deviations for Factor Scores by Group and Violent Recidivism Status: Recidivist Subsample

	Community	Institution	Violent	Non-
Factors	recidivist	recidivist	recidivist	violent
	(<u>n</u> =59)	(<u>n</u> =133)	(<u>n</u> =58)	recidivist
				(<u>n</u> =134)
<hr/>				
Self-harm				
<u>M</u>	0.01	0.01	0.44	-0.06
<u>SD</u>	0.97	1.03	1.17	1.00
Childhood				
<u>M</u>	0.02	-0.05	0.19	0.10
<u>SD</u>	0.99	1.00	0.98	1.00
Adult Problems				
<u>M</u>	-0.12	0.17	-0.01	0.21
<u>SD</u>	1.00	0.95	1.05	0.87
<hr/>				

The last set of analyses was performed with the recidivist subset, predicting likelihood of violent recidivism using logistic regression analysis. The first two models assessed the ability of the LSI and LSI-OR total scores, respectively, to predict violent recidivism. Although the overall successful prediction rates were 71.7% and 72.2% for the LSI-OR and LSI, respectively, the

ability of the scales to identify the violent recidivists was poor. As shown in Table T31, the LSI total score correctly classified only 23.8% of the violent recidivists, while Table T32 shows the LSI-OR total score did slightly better, correctly classifying 27.0% of the violent recidivists. The R^2 for the both the LSI total score and the LSI-OR total score the R^2 was only 0.16. Consistent with the low R^2 s, the RIOC for these models were only 13.02% and 15.09%, respectively.

Table T31

Two-By-Two Table of Prediction of Violent Recidivism with LSI Total Score:

Recidivist Subsample

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	122	67.8	5	2.8
	Recidivated				
	Violently	42	23.3	11	6.1

Table T32

Two-By-Two Table of Prediction of Violent Recidivism with LSI-OR Total Score:
Recidivist Subsample

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	120	66.7	7	3.9%
	Recidivated	40	22.2	13	7.2

Interestingly, when the individual variables which showed a main effect for violent recidivism status were entered as predictors, the percentage of correctly classified violent recidivists increased somewhat. From the MANOVA results with the recidivist subsample, the dependent variables that revealed a main effect for violent recidivism status were; age at first conviction, the Self-harm factor score, MSO property, MSO violence, and the LSI subscales Attitudes/Orientation, Alcohol/Drug Problem, Accommodation, Criminal History, Companions, and Family/Marital.

The results from the Logistic Regression are provided in Table T33 ($R^2 = 0.2888$)

Table T33

Logistic Regression Model for the Prediction of Likelihood of ViolentlyRecidivating Using LSI Subscales and Shaw Variables: Recidivist Subsample

Factor	Estimate	SE
Intercept	-1.9105	1.2729
Age at first conviction	-0.0413	0.0361
LSI Alcohol/Drug Problem	0.0187	0.0912
LSI Attitudes/Orientation	0.2648	0.1843
LSI Criminal History	0.0969	0.1035
LSI Companions	0.0743	0.1589
LSI Accommodation	0.0729	0.2325
LSI Family/Marital	0.3762	0.1974
Self-harm	0.4907**	0.1785
MSO property	0.1861	0.2301
MSO violence	-0.5063*	0.2377

* $p < .05$. ** $p < 0.01$.

As shown in the table, the only variables that significantly contributed to the prediction of violent recidivism, independent of the effects of the other variables, were having a violent index offence, and the Self-harm factor score. None of the LSI subscales provided a unique contribution to the prediction of violent recidivism when the recidivist subsample was used. It is possible that the LSI subscales which did have predictive ability in the equation with the full sample

were impeded here due to a restriction of range among the recidivists. However, as shown in Table T34, by using only the variables associated with violent recidivism status, including the self-harm and MSO violence variables, the percentage of correctly classified recidivists rose to 45.2%, as opposed to the 23.8% attained with only the LSI total score. Furthermore, the RIOC for this model was 31.89%.

Table T34

Two-By-Two Table of Prediction of Violent Recidivism with LSI Subscales and Shaw Variables: Recidivist Subsample

		Predicted			
		Did Not Violently		Violently	
		Recidivate		Recidivated	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Violently				
	Recidivate	114	64.0	11	6.2
	Violently				
	Recidivated	29	16.3	24	13.5

Similar results as those noted above were found when the LSI-OR subscales were used in place of the LSI subscales. Specifically, the LSI-OR subscales of Substance Abuse, Procriminal Attitudes, Companions, Antisocial Pattern and Family/Marital were entered into the regression equation, along with age at first conviction, MSO violent, and Self-harm, were entered into the regression equation. As Table T35 shows, only the LSI-OR Antisocial Pattern, Self-harm and MSO violent variables made a unique contribution to the prediction of likelihood of violent recidivism, independent of the contribution made by the other variables. The R^2 for this model is 0.3212.

Table T35

Logistic Regression Model for the Prediction of Likelihood of Violently
Recidivating Using LSI-OR Subscales and Shaw Variables: Recidivist
Subsample

Factor	Estimate	<u>SE</u>
Intercept	-2.2303	1.1993
Age at first conviction	-0.0228	0.0360
LSI-OR Substance Abuse	0.0453	0.0951
LSI-OR Procriminal Attitudes	0.0708	0.2045
LSI-OR Companions	0.0481	0.1577
LSI-OR Antisocial Pattern	0.6865**	0.2787
LSI-OR Family/Marital	0.2700	0.1969
Self-harm	0.4761**	0.1804
MSO property	0.1743	0.2339
MSO violence	-.5411*	0.2429

* $p < .05$. ** $p < 0.01$.

The predictive validity of the “Big Four” predictors in relation to violent recidivism was also examined for the recidivist subsample. When the LSI variables of Criminal History, Companions, Attitudes/Orientation and Emotional/Personal were entered as predictors of likelihood of violent recidivism, the R^2 was 0.1283. Table T36 shows that only the Attitudes/Orientation scale contributed to the prediction of violent recidivism, when controlling for the effects of the other three scales.

Table T36

Logistic Regression Model for the Prediction of Likelihood of Violent Recidivating
Using the LSI “Big Four” Risk Factors: Recidivist Subsample

LSI Subscales	Estimate	<u>SE</u>
Intercept	-2.6771 [”]	0.4743
LSI Attitudes/Orientation	0.3362 [*]	0.1613
LSI Criminal History	0.1677	0.0887
LSI Companions	0.1197	0.1407
LSI Emotional/Personal	0.0744	0.1467

^{*} $p < .05$. [”] $p < 0.001$.

The same analysis was repeated entering LSI-OR Antisocial Attitudes, Antisocial Pattern, Companions, and Criminal History as the predictors of violent recidivism for the recidivist subsample. As Table T37 shows, only the Antisocial Pattern scale contributed uniquely to the prediction of violent recidivism in the presence of the other variables ($R^2 = 0.1930$).

Table T37

Logistic Regression Model for the Prediction of Likelihood of Violent Recidivating Using the LSI-OR "Big Four" Risk Factors: Recidivist Subsample

LSI Subscales	Estimate	<u>SE</u>
Intercept	-2.3465**	0.5339
LSI-OR Procriminal Attitudes	0.0584	0.1919
LSI-OR Criminal History	0.0138	0.1001
LSI-OR Companions	0.0292	0.1468
LSI-OR Antisocial Pattern	0.8656**	0.2569

* $p < .05$. ** $p < 0.001$.

The final logistic regression analysis examined the ability of the factor scores Adult Problems, Childhood and Self-harm to predict likelihood of violent recidivism within the recidivist subsample. As shown in Table T38, this analysis revealed that, like the analysis with the total sample, only the Self-harm factor score contributed significantly to the prediction of violent recidivism ($R^2 =$

0.1003). As displayed in Table T39, although the model correctly classified 70.8% of the women overall, outcome was accurately predicted for only 11.3% of the violent recidivists. Overall, in terms of predictive accuracy, the classification of women on the basis of the three factor scores was improved by only 5.48% over what would be expected by chance alone.

Table T38

Logistic Regression Model for the Prediction of Likelihood of Violently Recidivating Using Factor Scores: Recidivist Subsample

Factor	Estimate	<u>SE</u>
Intercept	-0.8989	0. 1686
Childhood	0.0800	0.1644
Adult Problems	-0.2806	0.1742
Self-harm	0.4399**	0.1479

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

Table T39

Two-by-Two Prediction Table of Violent Recidivism Using Factor Scores:RecidivistSubsample

		Predicted			
		Did Not Recidivate		Recidivated	
		Violently		Violently	
		<u>n</u>	%	<u>n</u>	%
Actual	Did Not Recidivate				
	Violently	120	67.4	5	2.8
	Recidivated				
	Violently	47	26.4	6	3.4

IMAGE EVALUATION TEST TARGET (QA-3)

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