

**The Relevance of a Cultural Adaptation for Aboriginals of the
Reintegration Potential Reassessment Scale (RPRS)**

Preliminary Study

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SUMMARY

Various studies conducted by the Correctional Service of Canada (CSC) have produced the *Reintegration Potential Reassessment Scale* (RPRS) that has proven to be an effective predictor of recidivism. As its name suggests, this scale should mainly be used to facilitate the offenders' reintegration and guide intervention accordingly.

However the RPRS has not undergone any validation in the Aboriginal environment and some workers question its suitability to this cultural context. As well, some studies (see Chapter 1: Literature Review – Summary of Earlier Approaches) have underscored the existence of appreciable differences between the profiles of Aboriginal and non-Aboriginal offenders, thus supporting the hypothesis of cultural bias. The main objective of this study is to go more deeply into this question of the cultural adaptation of the RPRS and the appropriateness of undertaking a validation for this purpose.

Offender profiles

Analyses have confirmed the existence of statistically significant differences between the profiles of federally sentenced Aboriginal and non-Aboriginal offenders. These differences suggest that Aboriginals, compared to non-Aboriginals:

- are younger, with an average age of 35.1 compared to 38.1;
- receive a lower percentage of day paroles at 58.6% compared to 66.4% and a higher percentage of statutory releases at 34.3% compared to 26.0%;
- are less frequently scored as low-risk on the RPRS at 13.2% compared to 33.2% and more often scored as high-risk at 41.6% compared to 22.6%
- are less frequently scored as low-need on the RPRS at 14.1% compared to 30.8% and more often scored as high-need at 41.1% compared to 26.0%;
- are less frequently scored as low-risk/low-need in terms of the interaction between the risk factor and level of need at 8.5% compared to 24% and more often as high-risk/high-need at 39.4% compared to 14.9%;
- are scored higher for each of the seven needs in the RPRS;
- reveal a higher number of high needs at an average of 4.0 compared to 3.3.

Relationships between certain variables and recidivism

This study also looked at the relationships between certain variables and the rate of recidivism among Aboriginals and non-Aboriginals. The results reveal numerous statistically significant differences between the two groups and all of these variables taken together seem to show a better relationship with recidivism among non-

Aboriginals. More specifically, these results indicate that the Aboriginals compared to non-Aboriginals:

- have a much higher recidivism rate at 18% compared to 11%;
- have a rate of recidivism with a more pronounced discrepancy for the younger offenders (who are the worst repeaters in both groups). This gap increases from 11.2% to make 31.6% compared to 20.4% for the 18 to 25 year olds and 10.3% to 25.5% compared to 15.2% for the 26 to 30 year olds;
- show a higher correlation between the age variable and recidivism;
- reoffend more on day parole (gap of 6.4%), full parole (gap of 12.2%) and statutory release (gap of 3.8%), though with a much more pronounced difference in the case of full parole with a recidivism rate of 21.1% or more than double the rate for non-Aboriginals at 8.9%;
- are more frequently the subjects of warrants of committal for criminal recidivism at 85% of cases compared to 80%;
- show a lower correlation between the risk factor variable and recidivism;
- show a lower correlation between the level of need variable and recidivism;
- show a major difference in the recidivism rate in the case of interaction between a low risk factor and a high level of need (gap of 25.1%) and between a high risk factor and a low level of need (gap of 28.6%), with a higher recidivism rate in both cases;
- show a lower correlation between the risk and need factors interaction variable and recidivism;
- show a lower correlation between all needs and recidivism except for the need for associations and social interaction, where this correlation is significantly higher, and the need regarding attitude, where it is comparable;
- have an especially low contingency coefficient for the personal and emotional life need;
- show a lower correlation between the high number of needs variable and recidivism.

Validity and relevance of a cultural adaptation of the RPRS¹

Analyses more directly tied to actual use of the RPRS, i.e. analyses of discriminatory and predictive validity, have also revealed the presence of statistically significant differences between the two groups being studied. These differences confirm more strongly than any others the relevance of looking at a cultural adaptation and provide

¹ Such a cultural adaptation, however, remains partial and ought to be completed by another form of adaptation more keyed to a painstaking scrutiny of the formulation of all scoring criteria to ensure that they point to appropriate cultural referents. The use of Aboriginals to do the scoring might also be a major factor to consider in view of improving the Scale's discriminatory capacity.

specific indications for this purpose. The main observations emerging from these analyses are the following:

- except for needs concerning associations, social interaction and attitude, which have the same discriminatory value in statistical terms, all other variables currently considered by the RPRS offer a better discriminatory capacity in non-Aboriginals;
- on the whole, the RPRS now offers a much better predictive capacity for non-Aboriginals;
- the two groups overlap to some extent but also reveal appreciable differences in the order of importance and number of best predictors;
- the addition of age to the other variables in the RPRS has the effect of increasing its predictive value in the two groups but much more markedly for the Aboriginal group;
- the Métis sub-group and the sub-group of Aboriginals minus the Métis and Inuit also reveal significant differences.

These analyses fully support the hypothesis that a weighting based on the standardized regression coefficients and taking into account the best predictors identified for Aboriginals could be very promising in terms of significantly improving the Scale's predictive capacity and adapting it to that population. Moreover it is highly desirable that any attempt in this direction not produce a tool causing extra work and increased difficulty for those using it (see Motiuk & Porporino, 1989b, pp. 5-6). This necessarily leads to the conclusion that we need a software program that can produce this weighting based on raw scores (see Motiuk & Brown, 1993, p. 6).

Special attention should be paid to the relevance of adding the age variable to enhance the predictive value of the RPRS for Aboriginals. At all events this addition must not have the secondary effect of lessening the importance attached to determining needs with this scale, but return this dimension to its primary objective which is to promote reintegration.

Finally, these analyses would have to take into account the feasibility and usefulness of producing a weighting and developing a software application that include the Aboriginal sub-groups. In some cases we would need more specific data on Aboriginal offenders' status, home communities and current places of residence if we want to look at all of these possibilities.

Analyses of variables specific to the Aboriginal environment

The data from Johnston's study (1997) have accommodated analyses of some variables that are more specific to the Aboriginal environment in view of exploring the possibility that they may have good potential for predicting and/or influencing the recidivism rate. These variables include attendance at boarding school, participation in cultural or spiritual activities, the use of services reserved for Aboriginals such as the Elders, the Aboriginal Liaison Officer and pairing, as well as participation in programs

reserved or not reserved for Aboriginals. Only analyses of simple correlations could be completed, however, for lack of enough data to conduct more sophisticated analyses. Obviously, before planning to include these variables in the RPRS or definitively conclude that they affect reintegration, the hypotheses expressed below would gain by confirmation in studies using larger amounts of data. The major hypotheses emerging from these preliminary analyses are as follows:

- Attendance at residential schools does not seem to be related to the recidivism rate, which may be due to the small sample and the impossibility of taking intergenerational influence into account.
- Participation in cultural activities reveals a strong correlation with a declining recidivism rate though a much less definite influence on reintegration, considering that those participating in these activities have lower levels of risk and need than those who do not take part.
- Participation in spiritual activities offers not only a good correlation with the recidivism rate but also a highly probable influence on reintegration, since those who take part in these activities show the same levels of risk and need as those who do not.
- The services of an Elder offer not only a good correlation with the recidivism rate but also a highly probable influence on reintegration, since those using these services show the same levels of risk and need as those who do not.
- In at least two cases, that of the employment needs program and that of the education needs program, participation has shown a good correlation with a falling recidivism rate only with programs reserved for Aboriginals.
- Participation in three programs, the one on social interaction needs, the one on community needs and the one on emotional needs, shows a good correlation with a falling recidivism rate whether or not the programs are reserved for Aboriginals.
- The paucity of Aboriginal participants in programs reserved for them, offset by the positive results associated with this participation, seems to confirm Johnston's comment (1997) that we cannot assume lack of motivation to participate but rather that these programs are still virtually inaccessible.

In general, we may conclude that certain services and programs reserved for Aboriginals seem promising as potential predictors of recidivism but possibly even more promising as ways of promoting reintegration. Accordingly, these services and programs fit perfectly into the mission framework of the Correctional Service of Canada. Inasmuch as some of them seem to be almost inaccessible thus far, these initial results, though preliminary, strongly encourage us to push their development, especially as they meet a demand from the prison population and are supported by other studies.

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CONTEXT OF THE STUDY

Starting in 1989, the Correctional Service of Canada (CSC) has conducted various studies to develop a scale based on both criminal history and needs. This process led to the adoption of the *Community Intervention Scale*, more recently known as the *Reintegration Potential Reassessment Scale* (RPRS). This tool has kept the overall score produced by the *Statistical Information on Recidivism Scale* (SIR Scale) for its criminal history component, while for its needs component it uses analysis of the seven areas of needs with a relatively simple scoring process that produces its second general score. The research shows that in fact the combination of these two general scores helps to generate a more accurate assessment of the risk of recidivism. It is also extremely obvious that the needs analysis is useful for improved tracking of an offender's progress and shaping treatment to promote his reintegration and reduce the risk of recidivism.

In 1997, the CSC Research Branch and Aboriginal Issues sponsored the first conference on research into correctional services provided to Aboriginals. The Aboriginal agencies and stakeholders invited to this meeting were mandated to help the CSC to identify some relevant issues for research on Aboriginal offenders. The lack of research on the validity of the RPRS for the Aboriginal population led them to consider that the estimated recidivism risk based on this scale might be skewed by a cultural context that was not being taken into account. This problem of the need to assess the validity of this scale for Aboriginal offenders and possibly adapt it for this group was then identified as a research priority. Meanwhile, the hypothesis of a cultural bias has been supported by a recent Manitoba study (Bonta, LaPrairie & Wallace-Capretta, 1998). Their research managed to identify significant differences, not only between Aboriginal and non-Aboriginal offender groups, but also between registered Aboriginal and Métis offender groups and even groups living on and off reserve.

This study, supervised by the CSC Research Branch and conducted by the Aboriginal firm *Amiskou Groupe Conseil*, is specifically interested in looking at the relevance of a cultural adaptation of the *Reintegration Potential Reassessment Scale* (RPRS) as a tool for evaluating the risk of recidivism and needs of offenders of Aboriginal ancestry. Beyond the variables weighed by the Scale, some conditions specific to the Aboriginal

experience are also considered as either liable to help significantly increase the Scale's predictive value for the risk of recidivism or else as representing conditions conducive to reintegration.

The analyses conducted to answer this question of the relevance of a cultural adaptation of the RPRS included:

- a summary of the main activities undertaken for this study;
- a comparison of the profiles of Aboriginal and non-Aboriginal offenders;
- analyses of the relationship between certain variables and the rate of recidivism that also attempted to determine which of the Aboriginal and non-Aboriginal groups showed the best correlation between these variables and recidivism;
- an analysis of discriminant validity to determine the discriminatory capacity of the RPRS variables among Aboriginals and non-Aboriginals;
- an analysis of predictive validity to determine which RPRS variables are the best predictors for Aboriginals and non-Aboriginals;
- an analysis of the predictive validity of adding the age variable to the variables currently used by the RPRS;
- an analysis of predictive validity for the possible presence of significant differences among Aboriginal sub-groups in terms of the best predictors;
- preliminary analyses based on simple correlations attempting to explore the possibility that other variables specific to Aboriginal culture may turn out to be good predictors or else appear as avenues for treatment favouring the reintegration of Aboriginal offenders.

Measurements of the effectiveness of Aboriginal healing strategies, despite the issues of validity and reliability that arise in intercultural applications, are probably more a matter of new or revised combinations of existing processes. One innovation that could be fairly lengthy would be to improve the data collection and reporting procedures and processes used in the Institution. In this sense it is illogical not to take cultural experiences and customs into account when establishing the histories of Aboriginal offenders.

Reconciliation plan
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CHAPTER 1

LITERATURE REVIEW: SUMMARY OF EARLIER APPROACHES

The literature review summary in this report focuses on the major conclusions that relate directly to the analytical strategy of this study, namely:

- the evolution in recent years of the instrument currently used to analyse offenders' recidivism risks and needs, i.e. the RPRS;
- the complex idea of recidivism;
- the problem of recidivism among Aboriginal offenders;
- the profile of the Aboriginal offender.

Risk and needs assessment

As part of its mandate the CSC, as part of the criminal justice system, contributes to the protection of society by actively encouraging and assisting offenders to become law-abiding citizens while exercising reasonable, safe, secure and humane control (Guidelines for the programs *Community Projects in CRCs – Work Release in CRCs*). Accordingly, the recidivism risk assessment is a necessity and in fact is one of the main concerns of the CSC and more particularly of the National Parole Board (NPB). In 1988 the Board adopted a risk scoring system based on an instrument developed by Nuffield (1982) and submitted for a second validation analysis by Hann and Harman (1988). This scoring system, the SIR Scale, formerly known as the *General Statistical Information on Recidivism Scale* (GSIR Scale), includes some fifteen indicators based on criminal history. The SIR Scale thus helps people having to conduct a recidivism risk assessment to come to grips with reality (Nuffield, 1989).

A number of researchers have shown the predictive effectiveness of the SIR Scale (Bonta, Harman, Hann & Cormier, 1996; Motiuk & Porporino, 1989a; Serin, 1996; Wormith & Goldstone, 1984). Nuffield (1989) did not challenge the point raised by some researchers about a potential application problem with Aboriginals, admitting that her tool had already been tested on that population without the expected success. However subsequent research with Aboriginal offenders revealed a close connection between

results on this Scale and recidivism (Hann & Harman, 1993). Even so, considering the limited number of studies based on the validity of the SIR Scale for predicting recidivism in Aboriginal offenders and the inadequacy of our knowledge about intercultural assessment, caution remains appropriate (Cormier, 1997). At present the SIR Scale is mandatory for all federal offenders beginning their sentences except for Aboriginal and female offenders (CSC, 1999).

Risk assessment using the SIR Scale is essentially based on tests of criminal backgrounds that are static factors. This problem has prompted a number of US researchers to develop assessment tools that take dynamic factors, i.e., needs, into account (Andrews, 1982; Baird, Heinz & Bemus, 1979; Clear & Gallagher, 1985; Clements, 1982; Duffee & Clark, 1985; Duffee & Duffee, 1981). As an example, Baird *et al.*, (1979) of Wisconsin have constructed a *Client Needs Assessment Scale* (CNAS) including a total of 12 needs categories: academic/vocational skills, employment pattern, financial management, marital/family relationship, companions/significant others, emotional stability, alcohol usage, drug usage, mental ability, health, sexual behaviour and a general client needs assessment.

Section 5 of the *Conditional Release Supervision Standards* (Correctional Service of Canada, 1989) stipulates that case management personnel must use a systematic method of assessing offenders' needs, risk of reoffending and any other factors that can influence their reintegration. The CSC takes a position that officially recognizes the importance of taking the needs analysis into account. The requirement to offer programs and services in the community that can effectively meet offenders' needs (Motiuk & Brown, 1993) has been incorporated into the overall correctional strategy and provides further support to the steps the CSC has taken since 1989 to acquire an appropriate assessment tool. The primary objective of this tool will be to provide a more accurate recidivism risk assessment so that supervision needs can be better defined and resources put to better use. It will also have to be able to facilitate the development of community programs and services based on dynamic needs factors in order to reduce the risk of recidivism while offering a way of objectively assessing its development.

In 1989, a preliminary study (Motiuk & Porporino, 1989a) looked at the existing relations between risk/needs factors and conditional release. This study assessed risk by criminal history based on information from inmate files and a final score weighted and standardized to reflect the model developed by Nuffield (1982). The needs assessment was based on eight factors from the CNAS of Baird *et al.* (1979). The aim of this study was to reconfirm the predictive validity of a so-called conventional risk assessment approach, identify the elements characterizing inmate needs and see how an assessment based on needs and risks could help to form a better forecast of the outcome of release. The results tend to confirm the ability of the SIR Scale to forecast the outcome of conditional release, though probably not the outcome of statutory release with mandatory supervision. These initial results also reveal a possible relationship between needs categories and types of release. Finally, according to the authors of this study, a reassessment that took both needs and criminal history into account would unquestionably be useful to community case management officers.

Given the results obtained in this preliminary study, it was decided to perfect and refine the assessment tool and move on to the implementation stage (Motiuk & Porporino, 1989b). The tool then tested, the *Community Risk/Needs Management Scale* (CRNMS), included criminal history and needs. The risk assessment based on criminal history was conducted with the SIR Scale (Nuffield, 1982), whereas the determination of the conditionally released inmate's needs was based on 12 need domains from the *Force-field Analysis of Needs* model used in the Case Management Strategies approach to individual needs assessment (Lerner, Arling & Baird, 1986). Only one field was eliminated from this model: sexual behaviour. Let us also emphasize that the operational definitions and scoring criteria for a number of these needs were slightly altered for this empirical research project. The decision to return to 12 need domains led to various consultations and exchanges with a number of people in charge of assessment at the CSC, with each stating his preferences and thus highlighting the importance at this stage of including the largest possible number of need domains.

The field trial (Motiuk & Porporino, 1989b) used four different types of assessments to obtain a score for level of need. Then the predictive value of these scoring methods was checked by the random enhancement process (Loeber & Dishion, 1983). The first

scoring method consisted in a general assessment by the case management officers based on three levels: low, moderate and high. The second method consisted in an addition of needs after a sort based on the absence or presence of the need. The third method was also a sum of needs, though calculated by each need measured on a graduated scale. The last method relied on the same graduated scale as the third with an added weighting of need domains by indices estimated according to a statistical technique based on a multiple regression model. Finally, the scores obtained for the last three assessment methods were reduced to a percentage scale. It was established that each of these scoring methods had good predictive value, although the researchers noted that the most elaborate method, i.e., the weighted score based on regression analysis, produced more accurate results and facilitated inmate classification. However this method has the drawback of requiring calculations that case management officers might see as too mechanical or too administrative. Therefore the third method was finally identified as the most appropriate in terms of efficiency.

All the results of the CRNMS field test (Motiuk & Porporino, 1989b) tended to confirm those of earlier studies of the predictive value of risk assessment by criminal history and needs. Classification based on this scale is invariably tied to the release outcome (Motiuk & Brunet, 1991). Generally speaking, the field test of this assessment tool showed beyond doubt that this objective assessment approach could potentially be used to develop guidelines or standards for various supervision levels. This scale could, it seems, be effectively used by case management officers to concentrate supervisory resources by capitalizing on the needs assessment of the conditionally released. Finally, according to the authors of this study, it may also be an excellent way of noting changes in behaviour, attitude and situation that are obviously related to the release outcome.

In 1991, however, an Ontario Region task force would conclude that the *Force-field Analysis of Needs* approach (Lerner, Arling & Baird, 1986) was not perfectly suited to the objectives of the *Correctional Strategy*, i.e., to establish the offender needs profile and identify the community correctional services (Motiuk & Brown, 1993). As a result, this task force, working closely with the CSC Research Branch, would instead use and adapt the *Case Needs Identification and Analysis* (CNIA) component of the *Offender Intake Assessment* process in use since 1990. The CNIA reorganized the 12 needs

domains of the CRNMS into seven target fields (Motiuk & Pisapio, 1991). As well, the Ontario group also enhanced the process by gathering additional information on occupational situation (such as, full-time or part-time employment), needed interventions, the offenders' level of motivation in light of the recommended interventions and special conditions that might be imposed by the NPB to facilitate interventions seen as necessary.

A reliability study of the CNIA (Motiuk & Brown, 1993) reached the conclusion that the results of this new protocol continued to play an important role in the community reintegration of offenders. For this study the 200 indicators associated with needs were reduced to 46 and only the ones identified as connected with community intervention (see Table 1) were kept. According to the authors, the automation of the assessment process would help to produce standardized risk and needs assessment reports, correctional plans, progress summaries and management information databases (Motiuk & Brown, 1993). The CNIA could then be seen as an improved strategy for managing offenders in the community instead of a simple needs assessment exercise as part of the correctional strategy. Finally, these results tend to confirm those already obtained in earlier research (Andrews, Bonta & Hoge, 1990) to the effect that if we correctly identify the needs of offenders and offer them appropriate programs we should be able to reduce the likelihood of recidivism.

Table 1. Indicators identified as linked to community intervention

Need domains (CNIA)	Indicators
Employment	<ol style="list-style-type: none"> 1. Fewer than 8 years of schooling 2. Stopped attending before obtaining the secondary diploma 3. Learning difficulties 4. Physical disability 5. Dissatisfaction with skill area, trade, occupation 6. Unstable work pattern 7. Lack of commitment in jobs held 8. Usually has problems finishing all duties 9. Problems with interpersonal relations at work
Marital and family relations	<ol style="list-style-type: none"> 1. 1.Victim of physical violence or sexual abuse in childhood 2. Regular problems or instability in marriage or common law union 3. Commission of acts of marital violence 4. Victim of marital violence 5. Problems from acts of sexual abuse of a child 6. Seems to be an inadequate parent 7. Seems to be from a dysfunctional family
Associations and social interaction	<ol style="list-style-type: none"> 1. Social isolation 2. Numerous friends or acquaintances in the criminal community 3. Associates with heavy drinkers or drug users 4. Tends to exploit people in relationships 5. Easily influenced by others 6. Lack of assurance in relationships
Substance abuse	<ol style="list-style-type: none"> 1. History indicating a risk of harmful effects from the use of alcohol in marital, occupational, legal, physical or financial contexts 2. History indicating a risk of harmful effects from drug use in marital, occupational, legal, physical or financial contexts
Community functioning	<ol style="list-style-type: none"> 1. Frequent changes of residence before incarceration 2. Poor presentation 3. Poor health 4. Problems with managing his finances 5. Few hobbies or interest in organized activities 6. Problems with making effective use of social services
Personal and emotional orientation	<ol style="list-style-type: none"> 1. Ability to solve his problems 2. Inability to set realistic long-term goals 3. Displays little empathy towards others 4. Impulsive behaviour 5. Problems with controlling his anger 6. Problems with facing stress and frustration 7. Has already shown illegal or wrongful sexual behaviour 8. Sexual disorders 9. Mentally backward 10. Has suffered or is suffering from mental illness 11. Has attempted suicide or self-mutilation 12. Dietary problems
Attitude	<ol style="list-style-type: none"> 1. Antisocial attitudes 2. Believes women are inferior to men, incapable of playing equally important roles and deserve to be sexually assaulted 3. Believes other ethnic groups are inferior to his own and encourages violence towards them 4. Incapable of pursuing basic goals

The CSC is currently using the RPRS at the time of the intake assessment and conditional release and every six months thereafter. Relatively simple to use in terms of scoring, it enables us to track the changing reintegration potential of offenders. This scale, which has not been used for specific analysis of the Aboriginal group, is the focus of this study. Table 2 summarizes the main processes by which the CSC came to use the RPRS.

To conclude, researchers have made immense progress in risk assessment both conceptually and methodologically in recent years. They are establishing a distinction between statistical and clinical forecasting and between static and dynamic factors (Motiuk & Serin, 1998). Most correctional services have developed strategies for offender recidivism risk assessment and needs analysis, a number of which are covered in a guide (Brown & Serin, in press). The choice of assessment tool remains a purely operational exercise, however, since none has proven significantly better than the others, and so a number of researchers advise using several methods rather than merely one (Leis, Motiuk & Ogloff, 1995).

Table 2. Major efforts by the Correctional Service of Canada to obtain an offender risks/needs assessment tool

Studies	Motiuk & Porporino (1989a) (Preliminary study)	Motiuk & Porporino (1989b) (Field test)	Task force (Ontario Region) Motiuk & Pisapio (1991) Motiuk & Brown (1993)
Objectives	To confirm the predictive value of a conventional risk assessment approach. To identify factors characterizing inmate needs and look at how an assessment taking needs and risks into account can help to forecast the release outcome more effectively.	Building on the results of the preliminary study, to perfect and refine an assessment tool and move on to put it into practice. Scale then called the <i>Community Risks/ Needs Management Scale</i> (CRNMS).	To adopt and adapt the CNIA from the Intake Assessment instead of the <i>Force-field Analysis of Needs</i> (Lerner, Arling & Baird, 1986) to provide a better response to the objectives of the correctional strategy to establish the profile of offenders' needs and identify community interventions.
References	<i>Client Needs Assessment Scale</i> (CNAS) (Baird <i>et al.</i> , 1979)	Twelve needs from the <i>Force-field Analysis of Needs</i> model (Lerner, Arling & Baird, 1986), sexual behaviour being the only factor eliminated in this strategy.	Adaptation of the Case Needs Identification and Analysis component from the Offender Intake Assessment process that reorganizes the 12 need domains into 7.
Need domains	<ol style="list-style-type: none"> 1. Employment pattern 2. Financial management 3. Marital and family relations 4. Companions 5. Emotional stability 6. Alcohol and other drug use – (7 and 8) 7. Sexual behaviour 8. General assessment 	<ol style="list-style-type: none"> 1. Academic/vocational skills 2. Employment pattern 3. Financial management 4. Marital and family relations 5. Associations 6. Housing 7. Emotional and behavioural stability 8. Alcohol use 9. Drug use 10. Intellectual ability 11. Health 12. Attitude 	<ol style="list-style-type: none"> 1. Employment (1 and 2) 2. Marital and family relations - (4) 3. Associations and social interaction - (5) 4. Substance abuse - (8 and 9) 5. Community functioning - (3 and 6) 6. Personal and emotional life - (7, 10 and 11) 7. Attitude - (12)
Results	Tend to confirm the ability of the SIR Scale to forecast the outcome of conditional release. Presume a relationship between need categories and types of release, and that an assessment taking into account both criminal histories and needs would unquestionably be useful to community case management officers.	The test proves that an objective assessment process could be used to develop guidelines for various levels of supervision and be used effectively to concentrate supervisory resources by capitalizing on offenders' needs. Such a scale is a way of observing changes in behaviour, attitude and situation related to the release outcome.	Produced the <i>Reintegration Potential Reassessment Scale</i> (RPRS) that meets the imperatives of the CSC's mandate and overall strategy. This scale, which enables us to forecast recidivism, also facilitates the planning of supervision and interventions in the community on the basis of specific needs. It promotes measures to reduce the risk of recidivism while enabling us to track its development.

Recidivism

The concept of recidivism in the prison environment is difficult to define. This is actually a critical dimension of the correctional field in addition to being one of the toughest issues to describe in an easily understandable way (Nouwens, Motiuk & Boe, 1993). To some extent it can be defined as what happens when conditional release is suspended or revoked for a violation of release conditions or a new offence or when someone is reincarcerated following a new offence after the original sentence has expired. However some feel this definition is still very general and not exclusive enough.

Seen as readmission to prison, recidivism can also be analysed in terms of the release system available to the offender at the time of his initial release. Conditional release is by definition a period of supervision enabling an inmate to gradually re-enter society while still serving his sentence. The *Corrections and Conditional Release Act (CCRA)* provides five categories of conditional release: temporary absence, work release, day parole, full parole and statutory release:

- *Temporary absences* are authorized for medical or administrative reasons or to enable an inmate to perform community service, establish or maintain family contacts or improve personally in a context of rehabilitation. They can be escorted or unescorted.
- *Work releases* are arranged for minimum- or medium-security inmates at low risk of recidivism. They are generally sent to perform paid or volunteer work under supervision in the community.
- *Day parole* enables the inmate to take part in community activities with a view to preparing for eventual full parole or statutory release.
- *Full parole* is available when an inmate has served a third of his sentence or seven years, whichever is the shorter.
- Lastly, *statutory release* is usually granted to inmates who have previously been refused parole and now have to be released by law.

Recidivism can also be defined in terms of elapsed time between the readmission of a conditionally released inmate to a federal correctional institution and his next conditional release. This generally involves classifying the recidivism as short-, medium-

or long-term depending on whether less than six months, from six to 12 months or more than a year has gone by between conditional release and reincarceration.

Table 3 shows the various ways of defining recidivism in terms of the three factors outlined above, namely cause of reincarceration, type of release and elapsed time between release and reoffence. This table gives us a better idea of the precise recidivism rate being calculated, and whether this is a ratio that takes all possibilities of recidivism into account or is only partial. According to some researchers (Nouwens, Motiuk & Boe, 1993), the total calculation of recidivism rates assumes, for example, that offenders on day parole are included, which does not seem always to be the case. We also have to remember that this rate can be underestimated due to lack of knowledge about a number of offenders who reoffend and are sentenced to imprisonment in provincial institutions.

Table 3. Types of recidivism by release system, period and reason

Release system	Period	Suspended		Revoked	
		Breach of conditions	New offence	Breach of conditions	New offence
Temporary absence	Short-term	•	•	•	•
Work release	Short-term	•	•	•	•
Day parole	Short-term	•	•	•	•
	Medium-term	•	•	•	•
	Long-term	•	•	•	•
Full parole	Short-term	•	•	•	•
	Medium-term	•	•	•	•
	Long-term	•	•	•	•
Statutory release	Short-term	•	•	•	•
	Medium-term	•	•	•	•
	Long-term	•	•	•	•
Expiry of sentence	Short-term			•	•
	Medium-term				
	Long-term		•		•

The Aboriginal offender and recidivism

Like the federal prison population as a whole, Aboriginal offenders are not evenly divided as regards day parole, full parole and statutory release. In 1998 half of them were under mandatory supervision, one third were on full parole and one sixth were on day parole (Motiuk & Nafekh, 2000). However Aboriginal inmates record higher levels of recidivism than those noted among the non-Aboriginals that are generally ascribed to the nature and seriousness of the offences committed (Welsh, 2000). Aboriginals are almost two times more likely to have their release revoked than non-Aboriginals (LaPrairie, 1996). Aboriginal inmates serving shorter sentences have still recorded higher recidivism rates than non-Aboriginals with comparable sentences. Moreover this recidivism rate seems to be one of the major reasons for their over-representation in prisons. Since the risk of recidivism will necessarily influence the decision to grant conditional release, it becomes all the more important to assess this risk for the Aboriginal population to avoid penalizing by generalization the members of this population that are still low-risk.

Various static (risk) and dynamic (needs) factors are also considered as excellent predictors of the risk of recidivism among both Aboriginals and non-Aboriginals, namely sex, age, employment, financial situation, substance abuse, peers and criminal history. Some researchers, after thorough analysis of the federal correctional population (Bonta & Motiuk, 1992), have noted specifically that type of offence, previous convictions, previous imprisonment, age at the time of first conviction and length of sentence were excellent predictors for Aboriginal offenders. However such other factors as family or marital relations, intellectual ability and education do not seem to be good indicators of risk of recidivism at all for this population (Bonta, LaPrairie & Wallace-Capretta, 1998).

A recent study tends to show that recidivism risk factors would be different for Aboriginals living on reserve and those living off reserve (Bonta, LaPrairie & Wallace-Capretta, 1998). The significantly high recidivism rate among Aboriginals living on reserves, especially in certain regions, could be accounted for by the environment found on these reserves, which seems to be consistent with various factors influencing

levels of criminality, including a high unemployment rate, poverty, dysfunctional families and reduced social and community control (LaPrairie, 1996). The results tend to demonstrate the existence of important needs. We should be meeting these needs if we want to reduce the risk of recidivism and have a tool that would help to identify them better in order to develop appropriate community programs and services.

According to the CCRA, Aboriginal communities can now help to develop parole plans. Several agreements have been signed since to let Aboriginal offenders serve the rest of their sentences (conditional release) in institutions located in Aboriginal communities. The relatively low recidivism rate of Aboriginal offenders who have stayed in these healing lodges compared to the national rate shows the positive influence of these community services (Bennet, 2000; Benson, Sloan & Laboucane, 2000; Saulis, Fiddler & Howse, 2000; Wilson, 2000). This perspective provides even more encouragement to follow the CSC's overall strategy, not forgetting the Aboriginals' specificity and the success achieved by these healing lodges.

Lastly, other results show the differences in recidivism among provincially sentenced Aboriginal and non-Aboriginal offenders as less glaring than at the federal level. Indeed one study (Bonta, 1989) failed to reveal any significant difference between rates of reincarceration among Aboriginals and non-Aboriginals, and the Aboriginals do not seem to be at higher risk, according to estimates based on the *Level of Supervision Inventory* (LSI) used in provincial jails. These results tend to confirm the importance of the seriousness of offences as a factor in recidivism.

Profile of the Aboriginal offender

A report that offers information collected in investigations and reviews of quantitative data and a literature review on the situation of correctional services for Aboriginals in Canada (LaPrairie, 1996) maintains that the attitudes, peer group pressure and personality traits that favour the commission of crimes are the same for Aboriginals and non-Aboriginals. These factors that favour crime as against the adoption of prosocial attitudes are conditioned by family history, poverty, school experience, exposure to violence, lack of outlets and other conditions of the life setting. Still according to this

report, the distinction between Aboriginal and non-Aboriginal offenders would stem precisely from a life setting with more intense conditions for producing these criminogenic factors. Geographic location and membership in a distinct culture exposed to a dominant society are apparently factors in this life setting that bear special responsibility for this increased intensity.

It must be stressed, however, that most studies and research reports published recently deal mainly with questions of the administration of justice in Aboriginal communities (see for example Faulkner, 1989; Pauktuutit, 1993; Correctional Service of Canada, 1993; University of Regina, 1994). However two recent studies by Johnston (2000) are the exceptions to this and emerge as valuable references for a better understanding of certain features of the Aboriginal offender profile. These are an initial study of Aboriginal offenders in the North (Johnston, 1994) and a second covering all Aboriginal offenders (Johnston, 1997). For these two studies researchers travelled to correctional institutions to review the files of some Aboriginal offenders and interview others.

The file review (Johnston, 1997) produced information on the childhood living conditions of Aboriginal offenders. This information tends to support the notion advanced by LaPrairie (1996) of a greater intensity in the Aboriginal setting of certain conditions conducive to the emergence of factors associated with the perpetration of crimes. Conditions frequently noted included juvenile alcohol and drug abuse, behavioural problems, physical or sexual violence, grinding poverty and parental absence and negligence. The author noted the same phenomenon in his survey of Aboriginal federal offenders in the north (Johnston, 1994), where these conditions were even more common especially where sexual abuse was concerned. This survey also suggests that there is a certain distinction to be established between Inuit and other Aboriginals. File reviews in these two research projects also revealed that the high-risk/high-need score occurs much more often with Aboriginal than with non-Aboriginal offenders, especially in the North. When it comes to needs, substance abuse and personal/emotional life obtain the highest scores while Aboriginal criminal histories are typified by the predominance of violent offences.

The information from interviews (Johnston, 1997) made it possible to identify other distinctive features of the Aboriginal offender profile that have more to do with their preferences for services offered in prison. It emerges that they place more trust in Aboriginal visitors, especially spiritual Chiefs and Elders, and that Aboriginal Liaison Officers are also seen as the best advisors to provide support in the institution. They also attach importance to Aboriginal spirituality, cultural activities and the existence of Aboriginal programs, though they find opportunities to use them lacking.

In conclusion, despite the paucity of research on this subject it is obvious that Aboriginal offenders make up a client group with high needs and cultural features that cannot be ignored (McDonnell, 1992). This evidence is corroborated by the present Act providing that Aboriginal inmates be afforded rapid access to spiritual and cultural support (Couture, 2000) along with the recommendations of a recent task force reviewing administrative segregation to the effect that measures be considered to offer Aboriginal inmates a chance to meet with spiritual Chiefs, Elders and Liaison Officers of Aboriginal ancestry, have access to sacred or symbolic objects and opportunities to participate in traditional practices (CSC, 1997)

CHAPTER 2

PROFILE OF THE SAMPLE

The results reported in this study arise from analysis of information taken from two separate data sources. The first data source involved information from the CSC's *Offender Management System* (OMS). The second source was based on a sample where only cases meeting certain conditions were used, namely:

- Being of the male sex with ethnic origin in the OMS;
- Offenders had to have been granted day parole, full parole or statutory release between January 1996 and June 2000 to allow for follow-up over a six-month period after release (except for the section on the time of recidivism on the page in this report where that period was modified to estimate medium- and long-term recidivism).
- Offenders who had been through the RPRS.

This initial sample includes 30,041 cases of release,² 25,222 releases for non-Aboriginal offenders (84%) and 4,819 releases for Aboriginal offenders (16%). This number of releases involves a total of 8,758 offenders, 7,632 non-Aboriginals (87%) and 1,133 of Aboriginal ancestry (13%).³ Of the Aboriginal offenders, 782 are members of First Nations (69%), 306 are Métis (27%) and 45 are Inuit (4%).

The second data source was information from Johnston's research (1997). This research dealt with 518 Aboriginal offenders who were randomly chosen with certain stratification criteria taken into account. These offenders represented about one third of all Aboriginal offenders in prison with files in the OMS at the time the study was conducted in 1996. This sample was also representative of all geographical regions and all security levels. This research was interesting for our study in that it afforded access to a kind of information (variables) that was not compiled in the OMS and allowed us to proceed with further

² Including day parole, full parole and statutory release.

³ Considering the structure of the OMS and the compilation system used, the results are shown in terms, not of the number of offenders but of the number of releases; a single offender could have been released more than once during the 53 months of the period studied.

analyses of significance for Aboriginal offenders. Of the 518 offenders, the only ones used were release cases meeting the three conditions already listed for the master sample. This second sample is thus made up of 257 releases who, unlike the master sample, correspond to offenders who also inevitably form part of the master sample.

Description of the master sample

The results outlined in this section describe the master sample in terms of certain conditions like age and release system as well as the score obtained on the static and dynamic factors in the RPRS. These results are compared depending on whether they involve releases of Aboriginal or non-Aboriginal offenders.

Age

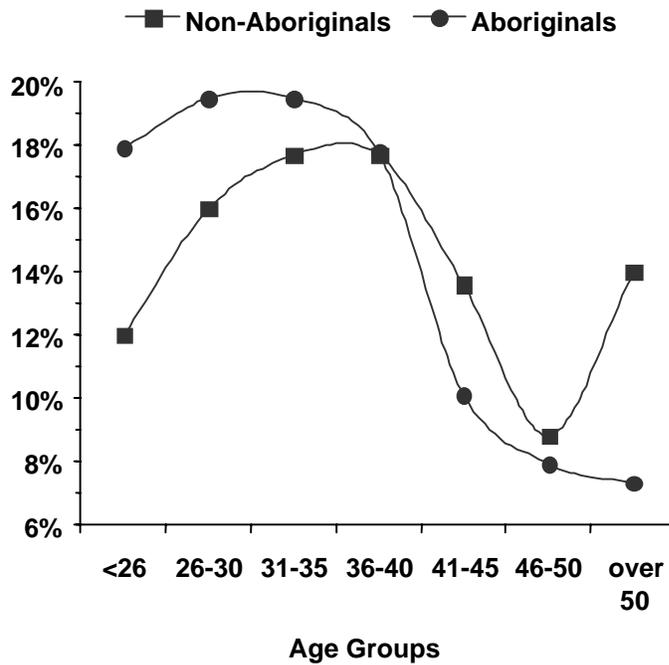
From the results shown in Table 4 we can see that the Aboriginals are younger on the whole than the non-Aboriginals. The average age is 35.1(s = 9.9) and 38.1 (s = 11.1) respectively. There are also significant differences for all age groups except the 36 to 40 year olds. In particular we see that the percentage of offenders released after age 50 becomes virtually half for the Aboriginals of what it is for the non-Aboriginals. These differences seem to clearly indicate that the Aboriginal population, as shown by several demographic studies, has generally seen more growth in recent decades than the non-Aboriginal population, which makes it a significantly younger population.

Table 4. Percentage of releases of Aboriginals and non-Aboriginals by age group

Age groups	Releases	
	Non-Aboriginals	Aboriginals
Age 25 and under	12.2%	17.9%
Age 26-30	16.0%	19.5%
Age 31-35	17.7%	19.5%
Age 36-40	17.7%	17.8%
Age 41-45	13.6%	10.1%
Age 46-50	8.8%	7.9%
Over 50	14.0%	7.3%

Figure 1 uses more evidence to show the difference in age profile between the two groups.

Figure 1. Percentage of releases of Aboriginals and non-Aboriginals by age group



Type of release

As shown by the results presented in Table 5, the sample indicated a significantly lower percentage of day parolees and a higher percentage of statutory releases among Aboriginal offenders than non-Aboriginals ($\chi^2 = 140.40; \alpha < 0.00$). And considering that the type of release is not taken into account when scoring the static and dynamic factors in the RPRS, it did not seem necessary for the purposes of this study to control that variable in the sample for subsequent analysis. This type of sample is more representative of actual releases occurring over a 53-month period for which the RPRS will be assessing each offender’s recidivism risk and needs regardless of the type of release involved.

Table 5. Percentage of releases of Aboriginals and non-Aboriginals by type of release

Type of release	Releases	
	Non-Aboriginals	Aboriginals
Day parole	66.4%	58.6%
Full parole	7.6%	7.1%
Statutory release	26.0%	34.3%

Risk level

As shown in Table 6, only 13.2% of Aboriginal releases were rated low-risk compared to 33.2% among non-Aboriginals. At the same time, 41.6% of the Aboriginals were rated high-risk compared to 22.6% of the non-Aboriginals ($\chi^2 = 1109.25; \alpha < 0.00$).

Table 6. Percentage of releases of Aboriginals and non-Aboriginals by risk level

Risk level	Releases	
	Non-Aboriginals	Aboriginals
Low	33.2%	13.2%
Moderate	44.2%	45.2%
High	22.6%	41.6%

Need level

Table 7 shows that Aboriginal offenders are generally seen as having significantly higher needs than non-Aboriginals ($\chi^2 = 718.41$; $\alpha < 0.00$), 41.1% and 26.0% respectively.

Table 7. Percentage of releases of Aboriginals and non-Aboriginals by need level

Need level	Releases	
	Non-Aboriginals	Aboriginals
Low	30.8%	14.1%
Moderate	43.2%	44.8%
High	26.0%	41.1%

Interaction between risk and need levels

The results in Table 8 show a significant correlation among both Aboriginals ($\chi^2 = 2\,707.48$; $\alpha < 0.00$) ($r = 0.66$; $\alpha < 0.00$) and non-Aboriginals ($\chi^2 = 1\,185.94$; $\alpha < 0.00$) ($r = 0.63$; $\alpha < 0.00$) between scores for risk level and scores for need level.

Some 24% of non-Aboriginal offenders are assessed as low-risk/low-need compared to 8.5% of Aboriginal offenders. When it comes to high-risk/high-need scores, these went to 30.4% of non-Aboriginal offenders and 14.9% of Aboriginal offenders ($\chi^2 = 14\,223.74$; $\alpha < 0.00$).

Table 8. Percentage of releases of Aboriginals and non-Aboriginals by risk and need levels

Risk levels	Releases					
	Non-Aboriginals			Aboriginals		
	Need levels			Need levels		
	Low	Moderate	High	Low	Moderate	High
Low	24.0	8.3	0.9	8.5	4.2	0.5
Moderate	6.1	27.8	10.3	4.9	30.1	10.2
High	0.6	7.1	14.9	0.7	10.5	30.4

Needs according to the RPRS

Table 9 shows descriptive statistics for RPRS scores on seven needs. Scores for each of these needs can vary from 1 to 4 with 1 representing no or low need and 4 standing for a high need. The mean values thus estimated are significantly higher for Aboriginal releases. The needs found to be highest among Aboriginals, those for substance abuse, emotional and personal life and employment, confirm the results obtained by Johnston (1997).

Table 9. Descriptive statistics (mean – standard error) calculated to reflect the RPRS needs of Aboriginal and non-Aboriginal releases

RPRS needs	Releases	
	Non-Aboriginals	Aboriginals
Employment	2.47 (0.90)	2.79 (0.80)
Marital and family relations	2.30 (0.86)	2.61 (0.83)
Associations and social interaction	2.47 (0.92)	2.61 (0.82)
Substance abuse	2.73 (0.83)	3.23 (0.81)
Community functioning	2.30 (0.81)	2.40 (0.73)
Personal and emotional orientation	2.99 (0.77)	3.22 (0.69)
Attitude	2.27 (0.96)	2.36 (0.85)

Number of high-need offenders (RPRS)

Another variable weighed by the RPRS to forecast recidivism looks at the number of high-need offenders. Initially, this strategy involves dichotomizing the scores obtained for each of the needs in order to consider a score of 3 or more as high-need and a score of 2 or less as low-need. The high-need total is obtained simply by adding up all the high needs.

According to the results shown in Table 10, 58.5% of released Aboriginals would have 4 to 7 high needs ($\chi^2 = 317.27$; $\alpha < 0.00$) ($c = 0.25$; $\alpha < 0.00$) compared to 43.4% of non-Aboriginals. Similarly, 40% of released non-Aboriginals had 0 to 2 high needs compared to 23% of Aboriginals ($\chi^2 = 2221.48$; $\alpha < 0.00$) ($c = 0.28$; $\alpha < 0.00$). Finally, the average number of high needs among Aboriginals was estimated at 4.0 ($s = 1.9$) compared to 3.3 ($s = 2.1$) for non-Aboriginals, the gap between these averages being significant in itself ($t = 25.39$; $\alpha < 0.00$).

Table 10. Percentage of Aboriginal and non-Aboriginal releases by RPRS high-need scores

Number of high needs	Releases	
	Non-Aboriginals	Aboriginals
0	11.5	3.8
1	12.2	6.0
2	16.3	13.4
3	16.6	18.3
4	13.4	18.3
5	11.2	12.5
6	10.5	13.4
7	8.3	14.3

To sum up, the results described in this chapter confirm the existence of numerous statistically significant differences between the profiles of federally sentenced Aboriginal and non-Aboriginal offenders.

CHAPTER 3

RELATIONSHIP BETWEEN CERTAIN VARIABLES AND RECIDIVISM

This chapter looks at the relationship between certain variables available in the OMS and the rate of recidivism. For example we will examine the existence of a good correlation, this being one of the two preconditions, though not sufficient, for a variable to become a good predictor in a measuring tool. Indeed even with a good correlation⁴ between a variable and recidivism, if the subjects overall show very little difference between them with regard to this variable it will lose its discriminatory and thus its predictive potential. Its value as a predictor in a tool like the RPRS, which uses a number of variables, will be reduced. This second condition of discriminatory capacity is studied in the next chapter.

The analyses are made to reflect short-term recidivism as is done in most studies, except in the section on the moment of recidivism, which deals with medium- and long-term recidivism rates. Short-term recidivism means all cases of recidivism without offences (breach of condition, risk reassessment or disorganization of the personality) or with new offences occurring within six months following release.

Aboriginal and non-Aboriginal groups

The study reached an estimate of 18% for the short-term recidivism rate among released Aboriginals compared to 11% for non-Aboriginals. This is an initial significant difference in the overall result ($\chi^2 = 183,06; \alpha < 0,00$).

⁴ “Correlation” refers to a reciprocal relationship between at least two variables or phenomena, and in statistics the correlation coefficient measures this degree of mutual reciprocity or dependence in at least two variables.

In as much as this estimate was likely to differ somewhat had the sample been controlled on the basis of an equal division of case numbers for each of the three types of release, we have weighted our calculations to take this into account. When we weight the results on this basis, then, the recidivism rate rises respectively from 11% to 13% for non-Aboriginals and from 18% to 20% for Aboriginals, with exactly the same gap between the two groups. One study (LaPrairie, 1996) mentions an Aboriginal recidivism rate that can become twice the non-Aboriginal rate, which actually happens in this study when we look only at the cases of full parole.

Age

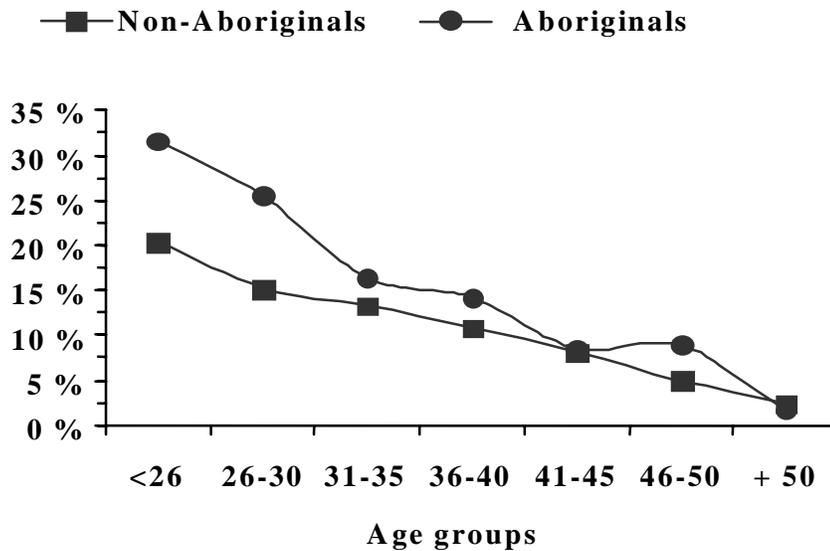
Certain highly significant findings emerge from Table 11 and the comparison of Aboriginal and non-Aboriginal recidivism rates by age group. This rate starts out being much higher among the youngest members of both groups. In addition, not only do the Aboriginals form a younger population, as we have seen in Table 4, but the younger these offenders are the wider the gap between the Aboriginal and non-Aboriginal recidivism rates becomes. These indications invite us to take note of the potential importance of this age variable and see whether it might make an excellent addition to the RPRS as a predictor, which is done in the next chapter. Finally, correlation analyses indicate the presence of a better relationship between this variable and the Aboriginal recidivism rate ($c = 0,23; \alpha < 0,00$) compared to the non-Aboriginals ($c = 0,17; \alpha < 0,00$).

Table 11. Percentage of recidivists among Aboriginals and non-Aboriginals by age group

Age group	Recidivists	
	Non-Aboriginals	Aboriginals
Age 25 and under	20.4	31.6
Age 26-30	15.2	25.5
Age 31-35	13.3	16.4
Age 36-40	10.8	14.2
Age 41-45	8.1	8.5
Age 46-50	5.0	8.9
Over age 50	2.4	1.7

Figure 2 brings out this variation in recidivist percentages among non-Aboriginals and Aboriginals by age group ($\chi^2 = 74.17; \alpha < 0.00$). We see a clear reduction in recidivist percentages and a narrowing of the gap between the two groups as they get older.

Figure 2. Percentage of recidivists among Aboriginals and non-Aboriginals by age group



Type of release

In Table 12 we can see the Aboriginals reoffending more on each of the three types of release, but the sharpest difference occurs with full parole, where Aboriginals produce more than twice as many recidivists and a gap that reaches 12.2%.

Table 12. Percentage of recidivists among Aboriginals and non-Aboriginals by type of release

Type of release	Recidivists	
	Non-Aboriginals	Aboriginals
Day parole	7.5	13.9
Full parole	8.9	21.1
Statutory release	20.8	24.6

Timing of reoffence

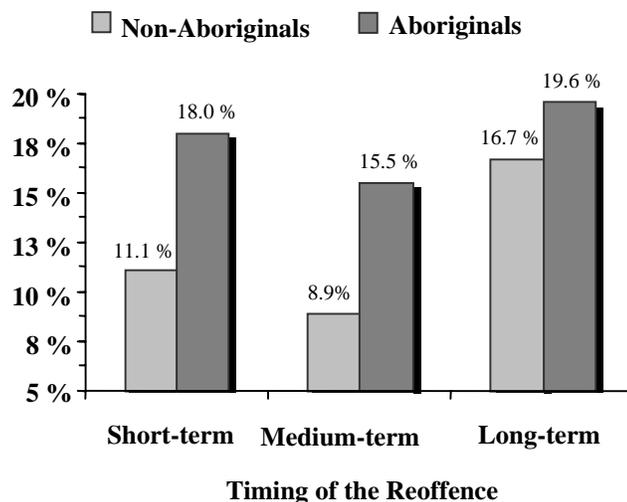
To provide complementary information, analyses were conducted to estimate the percentages of medium-term recidivism occurring six to 12 months after release and long-term recidivism occurring one to three years after release. To estimate the medium-term recidivism rate, only releases occurring between January 1996 and June 1999 were considered to ensure at least one year's follow-up in all cases, whereas for long-term recidivism we were able to keep only the releases occurring between January 1996 and December 1997 to ensure at least three years' follow-up in all cases.

According to the results presented in Table 13 and Figure 3, we see medium- and long-term recidivism rates remaining significantly higher among Aboriginals ($\chi^2 = 67,32$; $\alpha < 0,00$) than among non-Aboriginals ($\chi^2 = 168,01$; $\alpha < 0,00$).

Table 13. Percentage of recidivists among Aboriginals and non-Aboriginals by the timing of the reoffence

Timing of reoffence	Recidivists	
	Non-Aboriginals	Aboriginals
Short-term	11.1	18.0
Medium-term	8.9	15.5
Long-term	16.7	19.6

Figure 3. Percentage of recidivists among Aboriginals and non-Aboriginals by the timing of the reoffence



Type of recidivism

Table 14 shows the distribution of cases of recidivism as comparable among Aboriginals and non-Aboriginals ($\chi^2 = 0.17$; $\alpha = 0.68$) with or without an offence. So the type of recidivism does not differentiate Aboriginals from other offenders. However where the relapse was accompanied by an offence, a warrant of committal was issued in 85% of cases for Aboriginals compared to 80% for non-Aboriginals. Failing any other explanation, we may risk a guess that this significant difference ($\chi^2 = 8.39$; $\alpha < 0.00$) can be partly ascribed to greater difficulty with the supervision of Aboriginal offenders. The more problematical availability of appropriate resources for maintaining contact with Aboriginals living in remote regions or even in urban centres would make it all the more difficult to locate them and avoid issuing an arrest warrant.

Table 14. Percentage of recidivists among Aboriginals and non-Aboriginals by type of recidivism

Type of recidivism	Case of recidivism	
	Non-Aboriginals	Aboriginals
No offence	21.3	20.6
With offence	78.7	79.4

Risk level

The results in Table 15 indicate that percentages of recidivists among both Aboriginals ($\chi^2 = 127.56$; $\alpha < 0.00$) and non-Aboriginals ($\chi^2 = 1\ 255.70$; $\alpha < 0.00$) increase significantly in tandem with the risk level and therefore an obvious relationship exists. However correlation analyses show the presence of a better relationship of this variable with the recidivism rate among non-Aboriginals ($c = 0.22$; $\alpha < 0.00$) compared to Aboriginals ($c = 0.16$; $\alpha < 0.00$).

Table 15. Percentage of recidivists among Aboriginals and non-Aboriginals by risk level

Risk levels	Cases of recidivism	
	Non-Aboriginals	Aboriginals
Low	2.2	3.3
Moderate	12.7	17.7
High	20.9	23.0

Need level

We can see in Table 16 that at all scoring levels the Aboriginals are relapsing more than the non-Aboriginals ($\chi^2 = 10.57$; $\alpha = 0.01$). We also see, as with the risk level, that the relationship between the recidivism rate and need level is significant among both non-Aboriginals ($\chi^2 = 1772.93$; $\alpha < 0.00$) and Aboriginals ($\chi^2 = 217.33$; $\alpha < 0.00$). Finally, correlation analyses indicate the presence of a better relationship of this variable with the recidivism rate among non-Aboriginals ($c = 0.26$; $\alpha < 0.00$) compared to Aboriginals ($c = 0.21$; $\alpha < 0.00$).

Table 16. Percentage of recidivists among Aboriginals and non-Aboriginals by need level

Need levels	Cases of recidivism	
	Non-Aboriginals	Aboriginals
Low	1.6	5.0
Moderate	10.3	13.8
High	23.6	27.2

Interaction between risk and need levels

According to Table 17, the percentage of recidivists with high risk and need levels is appreciably the same for Aboriginal ($\chi^2 = 277.08$; $\alpha < 0.00$) ($r = 0.38$; $\alpha < 0.00$) and non-Aboriginal offenders ($\chi^2 = 1\,942.04$; $\alpha < 0.00$) ($r = 0.49$; $\alpha < 0.00$) at around 26%. The most significant variants between the cases of recidivism for the two groups in terms of interaction between risk and need levels concern two very specific situations, a low risk level coupled with a high need level on the one hand and a high risk level coupled with

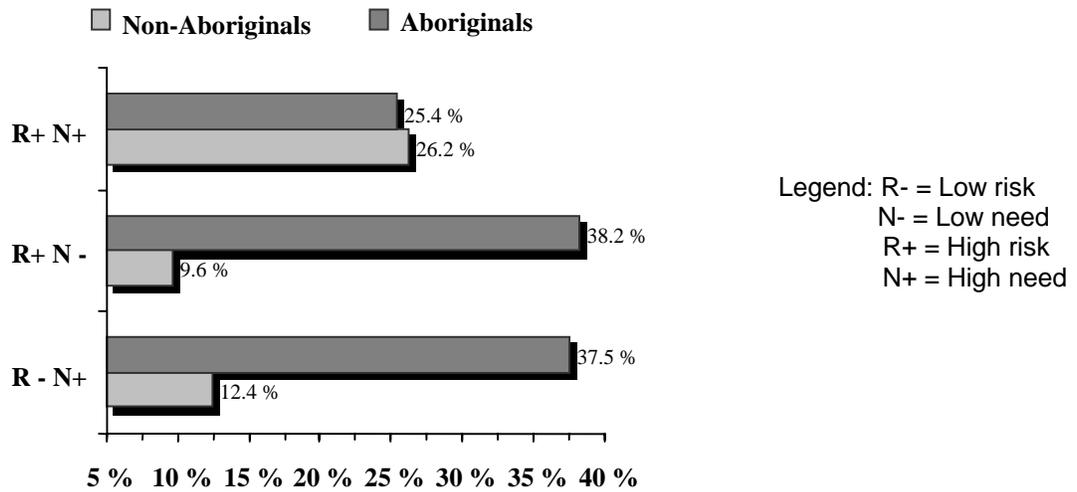
a low need level on the other ($\chi^2 = 54.88$; $\alpha < 0.00$). In both cases Aboriginals relapse much more at, respectively, 37.5% compared to 12.4% and 38.2% compared to 9.6%. Finally, correlation analyses indicate the presence of a better relationship between this interaction between risk and need levels and the recidivism rate among non-Aboriginals ($c = 0.27$; $\alpha < 0.00$) compared to Aboriginals ($c = 0.20$; $\alpha < 0.00$).

Table 17. Percentage of recidivists among Aboriginals and non-Aboriginals by risk and need levels

Risk levels	Cases of recidivism					
	Non-Aboriginals			Aboriginals		
	Need levels			Need levels		
	Low	Moderate	High	Low	Moderate	High
Low	0.8	5.1	12.4	1.7	2.5	37.5
Moderate	3.7	11.7	20.9	5.9	14.8	31.9
High	9.6	10.6	26.2	38.2	15.2	25.4

The biggest gaps are shown in Figure 4. These results are also very interesting at another level. They enable us to easily identify the Aboriginal offenders most likely to benefit from intervention, namely recidivists with high need levels, especially when coupled with low risk levels. Since needs are the dynamic element where intervention is possible, these results are somewhat promising insofar as efforts are made to effectively meet the needs identified.

Figure 4. Percentage of recidivists among Aboriginals and non-Aboriginals by the interaction between risk and need levels



Need level according to the RPRS

Table 18 displays descriptive statistics for the scores obtained on the seven needs of the RPRS by Aboriginal and non-Aboriginal recidivists. Except for needs concerned with associations and social interaction, all mean values shown in this table are statistically different in the two groups. We note that Aboriginal recidivists obtain a significantly higher need level than non-Aboriginals for three of these needs—employment, marital and family relations and substance abuse—and a lower need level on three others: community functioning, personal and emotional life and attitude.

Table 18. Descriptive statistics (mean – standard deviation) calculated from needs according to the RPRS of Aboriginal and non-Aboriginal recidivists

Needs according to the RPRS	Recidivists	
	Non-Aboriginals	Aboriginals
Employment	3.05 (0.78)	3.12 (0.72)
Marital and family relations	2.62 (0.85)	2.71 (0.75)
Associations and social interaction	3.01 (0.79)	3.03 (0.72)
Substance abuse	3.36 (0.77)	3.58 (0.64)
Community functioning	2.79 (0.79)	2.64 (0.69)
Personal and emotional life	3.43 (0.68)	3.26 (0.68)
Attitude	2.80 (0.94)	2.71 (0.89)

Table 19 shows the contingency coefficients (c) calculated between the scores of the seven RPRS needs and recidivism for the released inmates from both groups. Except for needs regarding associations and social interaction and attitude, these coefficients are significantly higher among non-Aboriginals, indicating a better relationship between most needs and recidivism in these subjects. Needs with regard to personal and emotional life have a particularly low contingency coefficient among Aboriginals.

Table 19. Contingency coefficients calculated between the scores for RPRS needs and recidivism among Aboriginals and non-Aboriginals

Needs according to the RPRS	Recidivists	
	Non-Aboriginals	Aboriginals
Employment	0.23	0.19
Marital and family relations	0.13	0.10
Associations and social interaction	0.21	0.24
Substance abuse	0.26	0.20
Community functioning	0.22	0.16
Personal and emotional life	0.20	0.03
Attitude	0.19	0.20

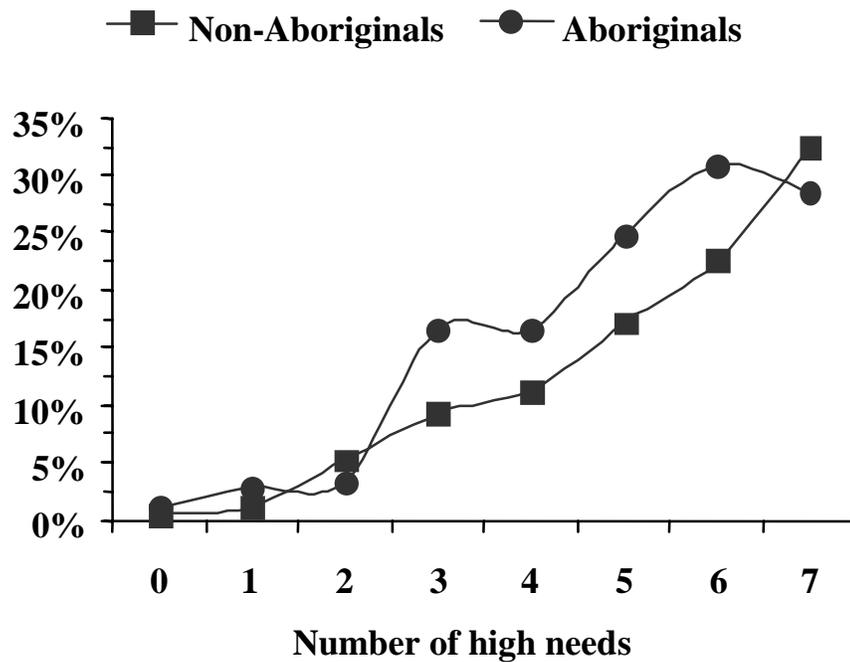
Number of high needs according to the RPRS

The results in Table 20 show a significant relationship between the recidivism rate and numbers of high needs in both groups ($\chi^2 = 37.78$; $\alpha < 0.00$). However we can see that this relationship is more linear among the non-Aboriginals ($c = 0.28$; $\alpha < 0.00$). As also shown by Figure 5, this reciprocal relation or correlation is a little less evident among Aboriginals ($c = 0.25$; $\alpha < 0.00$).

Table 20. Percentage of recidivists among Aboriginal and non-Aboriginals by number of high RPRS needs

Number of high needs	Recidivists	
	Non-Aboriginals	Aboriginals
0	0.5	1.1
1	1.1	2.8
2	5.2	3.4
3	9.3	16.6
4	11.3	16.6
5	17.1	24.8
6	22.6	30.9
7	32.4	28.4

Figure 5. Percentage of recidivists among Aboriginals and non-Aboriginals by number of high RPRS needs



CHAPTER 4

THE VALIDITY AND RELEVANCE OF A CULTURAL ADAPTATION OF THE RPRS

This chapter identifies the RPRS variables that are likeliest to discriminate between recidivists and non-recidivists and offer the best predictive value as Scale components, and then goes on to look at some significant differences in this respect between the Aboriginal and non-Aboriginal groups. Two distinct and complementary statistical approaches were used to conduct this validity review of the RPRS: discriminant analysis for discriminative validity and logistic regression analysis for predictive validity.

The discriminant analysis model enables us to verify whether certain RPRS variables—in this case the risk and need levels, each of the seven needs and the number of high needs—are able to discriminate to tell us whether offenders are relapsing or not. The logistic regression model used to assess the predictive validity of the same RPRS variables took the so-called stepwise approach based on Fisher's optimizing technique. In addition to the significance of the likelihood ratio chi square, this model identifies the percentage of matched and unmatched pairs between the values observed and those predicted by the model. Finally, a contingency coefficient (c) was estimated in the model to establish the relationship between the predicted variable and the predictors. This type of analysis enables us to identify, in order of importance, the best predictors of recidivism among both Aboriginals and non-Aboriginals.

Considering the strong correlation between age and recidivism (see Table 11), it was felt advisable to redo certain statistical analyses with the age variable added to the ones currently used in the RPRS. Finally, considering the possibility of differences between Aboriginal sub-groups as mentioned by some studies (Bonta, LaPrairie & Wallace-Capretta, 1998; LaPrairie, 1996), predictive validity analyses have also been completed for the First Nations as against the Métis sub-group. The data currently compiled in the OMS did not allow us to form other types of sub-groups. To this end it would be useful in future to compile more complete data in the CSC's OMS concerning Aboriginal status (such as, status, non-status or Métis), community of origin (such as, non-isolated, semi-

isolated or isolated Aboriginal communities or urban, rural or isolated non-Aboriginal environments) and current place of residence (such as, in or outside an Aboriginal community).

Potential for discrimination by RPRS variables

According to the results presented in Table 21, except for the associations/social interaction and attitude need variables, all variables currently considered by the RPRS offer significantly better discrimination capacity for non-Aboriginals than for Aboriginals. The most striking difference occurs in the need variable for personal and emotional life, which emerges as the least discriminant for Aboriginals, and it will be recalled that this is the very variable that also yielded the weakest contingency coefficient in Table 19 of the previous chapter. Also, number of high needs is one of the most discriminant variables for both groups while the marital and family relations need variable is among the least discriminant (Bonta, LaPrairie & Wallace-Capretta, 1998). This review of discriminant validity tends to confirm the assumption of an appreciable difference between the two groups in terms of the capacity for discrimination of the variables measured in the current RPRS application.

The age variable would correctly classify 56.6% of non-recidivist cases and 65.7% of recidivist cases among non-Aboriginals (result = 61.2%), while for Aboriginals these percentages would be respectively 55.9% and 72.5% (result = 64.2%). Where this age variable was added to the other RPRS variables, all these variables together would effectively identify 70.5% of non-recidivist cases and 78.3% of recidivist cases among non-Aboriginals (result = 74.4%) compared to 64.8% and 75.4% (result = 70.1%) among Aboriginals. We may conclude from this that adding the age variable to the model helps to significantly improve discrimination among recidivists for non-Aboriginals and to an even greater degree for Aboriginals.

Table 21. Percentage of correctly identified recidivists and non-recidivists among released Aboriginals and non-Aboriginals according to the RPRS

RPRS variables	Released non-Aboriginals			Released Aboriginals		
	Non-recidivists	Recidivists	Result	Non-recidivist	Recidivists	Result
Risk level	79.8	42.6	61.2	60.9	53.2	57.1
Need level	77.6	55.7	66.7	63.5	61.9	62.7
Employment	55.5	76.1	65.8	40.1	80.6	60.4
Marital and family relations	65.6	51.2	58.4	50.2	57.4	53.8
Associations and social interaction	53.8	73.8	63.8	52.0	77.6	64.8
Substance abuse	79.4	53.6	66.5	57.2	66.1	61.7
Community functioning	65.7	65.6	65.7	63.8	53.7	58.8
Personal and emotional life	73.8	54.0	63.9	62.9	39.2	51.1
Attitude	68.0	59.4	63.7	68.3	57.2	62.8
Number of high needs	74.2	62.9	68.6	64.7	62.7	63.7
All variables	70.4	74.9	72.7	64.1	70.0	67.1

Best predictors among the current RPRS variables

Table 22 indicates the best predictors of recidivism among non-Aboriginal offenders ($\chi^2 = 18\ 175.29$; $\alpha < 0.00$) ($c = 0.68$; $\alpha < 0.00$) and Aboriginal offenders ($\chi^2 = 1\ 989.43$; $\alpha < 0.00$) ($c = 0.53$; $\alpha < 0.00$). Number of high needs and the needs factor are the two best predictors of recidivism in both groups. For the other variables, however, appreciable differences are seen that again support the hypothesis of a difference between the two groups and invite us to take these into account when using the tool.

Table 22. Best predictors of recidivism among Aboriginals and non-Aboriginals

Predictors according to the RPRS	Non-Aboriginals		Aboriginals	
	Order	Odds-Ratio	Order	Odds-Ratio
Risk level			5	0.69
Need level	2	1.58	2	1.14
Employment	4	0.84		
Marital and family relations				
Associations and social interaction	5	0.69	3	0.88
Substance abuse	3	0.84	6	0.62
Community functioning	6	0.62		
Personal and emotional life	7	0.42		
Attitude			4	0.82
Number of high needs	1	2.13	1	1.45
Percentage of matching pairs	68.0		52.1	
Percentage of unmatched pairs	31.2		46.8	

The results shown in the above table come from regression models that do not take into account the interactions between the variables involved in the model. The introduction of single and double interactions in this model offers the advantage of sometimes considerably increasing the relationship with the variable to be predicted.

So in the case of the non-Aboriginals, the interactions between

- number of high needs (1) and the need level (2),
- the need level (2) and the need for personal and emotional life (7),
- and the need for personal and emotional life (7) and the need for community functioning (6), significantly increase the contingency coefficient (c) obtained by the percentage of matched pairs, from 68.0% to 79.0%.

This correlation index (c) improves even more for Aboriginals, from 52.1% to 73.0%, if we use the interactions between:

- number of high needs (1) and associations and social interaction (3),

- number of high needs (1) and substance abuse (6),
- and associations and social interaction (3) and need concerning substance abuse (6).

This type of analysis also tells us that risk level in interaction with another Scale variable does not seem to be the most promising formula for predicting recidivism for either group.

Best predictors with age added to current RPRS variables

Table 23 has added age to the current RPRS variables. At seven, the number of good predictors remains the same for non-Aboriginals, but their order of importance has changed ($\chi^2 = 19\,917,65$; $\alpha < 0,00$) ($c = 0,78$; $\alpha < 0,00$) with age ranked as fourth best predictor. For this group the presence of this variable in the model would significantly increase its predictive value for recidivism (Bonta & Motiuk, 1992), which goes from 0.68 to 0.78 according to the estimated values of the contingency coefficient (c). For Aboriginals, the presence of age in the model has had the effect of reducing the number of predictors retained by the validity analysis model from six to only four. We can see that age has eliminated the model's risk and need levels. This disappearance of two good predictors can be explained by the fact that these three variables are all strongly correlated with recidivism (see Tables 11, 15 and 16). For Aboriginals, the presence of age in this model has considerably increased the predictive value of the best retained predictors, from 0.52 to 0.74 according to the values of the contingency coefficient (c) ($\chi^2 = 2\,689,45$; $\alpha < 0,00$) ($c = 0,74$; $\alpha < 0,00$).

Table 23. Best predictors of recidivism among Aboriginals and non-Aboriginals with age added to the other RPRS variables

RPRS variables	Non-Aboriginals		Aboriginals	
	Order	Odds-ratio	Order	Odds-ratio
Risk level				
Need level	1	1.55		
Employment				
Marital and family relations				
Associations and social interaction	6	0.76		
Substance abuse	3	1.22	2	1.18
Community functioning	5	0.87		
Personal and emotional life	7	0.70		
Attitude			3	1.13
Number of high needs	2	1.50	1	1.23
Age	4	0.92	4	0.90
Percentage of matched pairs	78.0		74.0	
Percentage of unmatched pairs	21.6		25.6	

Best predictors for Aboriginal sub-groups

Table 24 shows that when the Aboriginal sample is broken down into two sub-groups,⁵ First Nations and Métis, number of high needs still remains the best predictor. For the First Nations, the need level is no longer used as a predictor, the order of the other predictors has changed (especially when it comes to substance abuse and attitude) and, finally, the model's predictions are not as good at 0.48 compared to 0.52 according to the value of the contingency coefficient (c) ($\chi^2 = 1\ 320.17$; $\alpha < 0.00$) ($c = 0.48$; $\alpha < 0.00$). For the Métis, only two variables predict recidivism: in order, number of high needs and substance abuse. Nonetheless, the prediction of Métis recidivism is significantly better using the estimated value of the contingency coefficient (c) ($\chi^2 = 392.78$; $\alpha < 0.00$) ($c = 0.58$; $\alpha < 0.00$).

⁵ The Inuit have been left out of these analyses due to the very small number of cases in the master sample.

Table 24. Best predictors of First Nations and Métis recidivism

RPRS predictors of recidivism	First Nations		Métis	
	Order	Odds-ratio	Order	Odds-ratio
Risk level	5	0.69		
Need level				
Employment				
Marital and family relations				
Associations and social interaction	4	0.76		
Substance abuse	3	0.77	2	0.42
Community functioning				
Personal and emotional life				
Attitude	2	0.78		
Number of high needs	1	1.44	1	1.47
Percentage of matched pairs	48.1		58.0	
Percentage of unmatched pairs	50.5		35.2	

Analysis

The analyses of discriminative and predictive validity conducted in this chapter have shown significant differences between the two groups of the study. They also tend to show differences between Métis and Aboriginals. The differences resulting from this type of analysis are the best evidence for the relevance of producing a cultural adaptation and provide us with specific indications in this regard.

These differences in terms of best predictors represent an initial avenue to explore for a cultural adaptation to enhance the RPRS for the Aboriginal group. It seems clear that a potential improvement of the Scale based on the best predictors identified in this exploratory study will necessarily involve the use of weighting. Only such an exercise can really enable us to assign greater importance to the best predictors identified for the Aboriginal group. Similarly, since it is highly advisable that any such attempt not produce a tool involving extra work and increased difficulty for those using it (Motiuk & Porporino, 1989b), this leads to the conclusion that a software application is needed (Motiuk & Brown, 1993) that can perform this weighting based on the input of raw scores.

As for the possibility of introducing the age variable into the RPRS to significantly increase its ability to predict, this addition must not have the effect of lessening the importance attached to needs. Indeed we must keep in mind that the Scale's primary function is to promote reintegration—hence the importance of fully identifying needs in order to guide intervention and the resulting implementation of programs and services. We may even go as far as to assume that the sooner these programs and services bring an effective response to the needs of Aboriginal offenders, the less this age variable should maintain its predictive value.

From the standpoint of a cultural adaptation of the RPRS and taking the statistical analyses in this study into account, a weighting based on standardized coefficients seems to represent an excellent avenue to explore for making significant improvements. However we should not neglect another aspect of cultural adaptation that involves revising the scoring criteria for needs. This other form of adaptation attempts to ensure that all criteria used for scoring RPRS variables find resonance in the Aboriginal cultural experience, i.e. are appropriate cultural referents. It may also be that a scoring bias is caused more by ignorance of the environment on the part of those assigning the scores than by inappropriate cultural referents.

CHAPTER 5

VARIABLES SPECIFIC TO THE ABORIGINAL EXPERIENCE

One of the contributions this study has tried to make from a statistical standpoint was to verify the possibility that other conditions or variables, more specific to the Aboriginal environment but not being considered by the RPRS at present, could prove to be good predictors for this population and/or have a positive impact on reintegration. Reference to data from Johnston's study (1997) and an opportunity to combine them with the information in the standard CSC file enabled us to conduct a few analyses of this type. Attendance at residential school, participation in cultural or spiritual activities, the use of services reserved for Aboriginals such as the Elders, the Aboriginal Liaison Officer and pairing, or participation in programs (whether reserved for Aboriginals or not), are variables we could analyse in this way.

However the only analyses that could be completed, for lack of data to substantiate validity analyses, were those establishing the rate of recidivism based on these variables and the presence of correlations. Accordingly, before considering the inclusion of such variables in the RPRS or reaching a final conclusion about their influence on reintegration, these hypotheses would obviously benefit from confirmation by studies with access to greater quantities of data.

Residential school and the recidivism rate

The results do not enable us to confirm a correlation between attendance at residential school and Aboriginal recidivism. Some 17% of recidivism cases refer to attendance at a residential school compared to 14% of the non-recidivists ($\chi^2 = 0,24$; $\alpha = 0,62$). Even after checking age to eliminate a possible influence on the results from the strong correlation between age and school attendance ($\chi^2 = 23,33$; $\alpha = 0,00$) and between age and recidivism, the results are not statistically significant as to a possible connection between the rate of recidivism and attendance at residential school ($r_{\text{partial}} = -0,09$; $\alpha = 0,17$). However these analyses do not take the intergenerational influence into account and are based on a limited number of cases. Therefore these results can still

be ascribed to the smallness of the sample and the impossibility of analyses taking the intergenerational factor into account.

Participation in cultural or spiritual activities and the recidivism rate

Table 25 shows the percentage of recidivists compared to participation or non-participation in cultural or spiritual activities provided specifically to Aboriginals. Looking at participation in cultural ($\chi^2 = 38.23$; $\alpha < 0.00$) ($c = -0.39$; $\alpha < 0.00$) and spiritual activities ($\chi^2 = 3.27$; $\alpha = 0.07$) ($c = -0.11$; $\alpha < 0.07$), we note a significant correlation between this participation and a reduction in the recidivism rate.

Other analyses enable us to state that those participating in cultural activities still exhibit risk and need levels that are relatively lower than those of non-participants, whereas this is not the case with participation in spiritual activities. We may thus suggest that the impact of spiritual activities on lowering the recidivism rate is more effective than that of cultural activities attended by offenders who are low-risk anyway.

Table 25. Percentage of recidivism reflecting participation or non-participation in cultural or spiritual activities

Activities	Participation		Number of participants
	No	Yes	
	Recidivism %	Recidivism %	
Cultural	32.5	3.6	140
Spiritual	24.2	14.4	195

Use of special services for Aboriginals and the recidivism rate

The services provided specifically to Aboriginal offenders involve meetings or contacts with other Aboriginals, Elders (or spiritual Chiefs), Aboriginal Liaison Officers, or other Aboriginal inmates or friends (like Big Brothers) in a pairing context. According to Johnston's study (1997) based on the perceptions of respondents, some 24% of Aboriginal offenders found the Aboriginal Liaison Officer to be the most supportive resource, 23% found this to be pairing and another 16% preferred the Elder or spiritual

Chief. These initial results are qualified by other results from the same study according to which the Elder or spiritual Chief was felt to be the best counsellor by 40% of Aboriginal offenders while 14% of them chose the Aboriginal Liaison Officer. More limited access to Elders might partly explain these results.

The results of this study shown in Table 26 help us to see a significant correlation between the service of an Elder and non-recidivism ($\chi^2 = 7.08$; $\alpha = 0.01$) ($c = -0.17$; $\alpha < 0.01$) that is not duplicated in the other two services. The services provided by Elders or spiritual Chiefs are thus very likely to have beneficial effects consistent with the positive perception expressed in Johnston’s study, especially since, as in the case of the spiritual activities, the offenders using them are not automatically low-risk/low-need. This variable might be a potentially good predictor of recidivism but mainly a measure to be encouraged to promote reintegration.

Table 26. Percentage of recidivism in terms of the use or non-use of services provided to Aboriginal offenders

Services	Use		Number of users
	No	Yes	
	Recidivism (%)	Recidivism (%)	
Elders	26.8	12.9	186
Liaison Officers	18.5	15.6	154
Pairing	14.7	18.1	155

Better correlations with recidivism

Table 27 summarizes the values calculated with the correlation coefficient phi between recidivism and three of the variables discussed above that may be considered as potential good predictors of Aboriginal recidivism. It seems obvious from these results that participation in cultural activities, according to the calculated correlation index ($r_{\text{phi}} = -0.39$), would offer the best potential as a predictor of recidivism by Aboriginal offenders. However as already mentioned, the impact of participation in these activities on reintegration is less effective than participation in spiritual activities. In this sense, use of the service provided by the Elders or spiritual Chiefs and participation in spiritual

activities seem to be the most promising avenues to consider, not only as good predictors but also as measures likely to promote reintegration.

Table 27. Estimated phi correlation coefficients between certain variables and recidivism among Aboriginals

Participation	Content	Calculated value	Level of significance	Order
Activities	Cultural	- 0.39	0.00	1
	Spiritual	- 0.11	0.07	3
Services	Elders	- 0.17	0.01	2

Participation in certain programs and the recidivism rate

Table 28 shows the percentage of recidivism cases among all participants in certain programs. As this type of data was available in Johnston’s study (1997), it was possible to establish a comparison between participation in non-Aboriginal and Aboriginal programs with a view to formulating some hypotheses about their respective effectiveness in promoting reintegration. Complementary analyses also enabled us to show that Aboriginal offenders participating in these programs had comparable profiles in terms of risk and need levels to those who had not participated, which eliminates a potential bias in results at this level. As to indications of the number of participants in these programs, these tell us that the hypotheses are based on a limited sample and would gain from eventual confirmation by studies with access to larger quantities of data. However we were able to detect a certain number of interesting and significant correlations between participation in some programs and recidivism that allow us to advance the following hypotheses:

- In at least two cases of programs related to employment and education, participation in Aboriginal programs revealed a good correlation with a falling recidivism rate, whereas this is not the case with participation in non-Aboriginal programs addressing the same problems.
- Had it not been for the small sample size, it is highly probable that the trend noted in terms of the advantage of participating in an Aboriginal substance abuse program compared to a non-Aboriginal program would also have proven to be statistically significant.

- Three other programs related to needs in social relations, the community and emotions offer a good correlation with the reduction of the recidivism rate, whether they are Aboriginal programs or not.

As for numbers of participants in Aboriginal programs, which are fairly low, Johnston (1997) comments in his study, which talked to over 500 Aboriginal offenders, that this poor participation in programs can be more accurately ascribed to lack of access than lack of motivation. The results shown below strongly support the hypothesis of the effectiveness of certain Aboriginal programs and point in exactly the same direction as Johnston's study. Indeed these programs would be highly unlikely to meet with any success in the absence of solid motivation for getting involved. The relatively higher number of participants in the Aboriginal substance abuse program merely reflects the known fact of a broader development of this type of program, motivated, as Johnston points out, by the fairly generalized presence of this problem.

Table 28. Percentage of recidivism in total participation in programs for Aboriginals or non-Aboriginals

Programs geared to certain needs	Non-Aboriginal programs			Aboriginal programs		
	Participation		Number of participants	Participation		Number of participants
	No	Yes		No	Yes	
	Recidivism %	Recidivism %		Recidivism %	Recidivism %	
Employment	13.2	24.1 ³	83	17.9	0.0 ⁴	17
Education	8.3	30.2 ¹	96	17.3	0.0	9
Marital/family	19.6	6.9 ³	58	17.0	14.3	28
Social relations	19.0	2.8 ³	36	17.8	0.0 ⁴	16
Substance abuse	11.3	20.5 ⁴	151	19.6	13.2	114
Without the community	21.1	1.7 ¹	58	18.4	0.0 ³	24
Emotional	20.7	12.3 ⁴	122	16.7	0.0 ²	34
Attitude	15.2	21.2	66	14.3	37.0 ¹	27

¹Significant to $\alpha < 0.00$; ²Significant to $\alpha < 0.01$; ³Significant to $\alpha < 0.05$; ⁴Significant to $\alpha < 0.10$

To sum up...

The initial results concerning the variables identified as potential good predictors remain rudimentary, suggesting that data on these variables should be compiled in the OMS. Only a compilation will potentially provide us with enough data to complete the validity analyses and decide whether or not it is appropriate to include them in the RPRS.

As for the potential impact of some services and programs promoting reintegration, the results presented here are fairly heartening about the appropriateness of providing the programs and services and adapting them to the culture. These results support the conclusions of Johnston's study (1997) based on the perceptions of Aboriginal respondents. We must note and deplore the inaccessibility of certain services and programs for Aboriginals and strongly encourage their development.

CONCLUSION

The main interest of this preliminary study is to provide statistical confirmation of a relatively generalized perception that the Aboriginal offender group is characterized by significant differences that must be taken into account if we want to optimize their reintegration potential. These differences pertain not only to reintegration potential but also to activities and programs to stimulate this potential.

These preliminary results provide strong encouragement for major efforts to make spiritual activities, Elders and culturally adapted programs more accessible for Aboriginals. They also urge us to continue our analyses in terms of adapting the assessment of reintegration potential and starting as quickly as possible to collect more discriminant data on Aboriginal sub-groups in anticipation of such studies.

Finally, even though essentially based on statistical analyses, this study confirms the importance of taking cultural differences into account, and thus forces us to recognize a certain distinction between the concepts of “signifier” and “signified.” Any procedure to adapt the RPRS would be well advised to review the tool’s wording and content to ensure that we are talking about valid cultural signifiers (referents) and thus avoid the pitfall of limiting ourselves to the quantitative dimension of measurement.

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