Feasibility of an Inuit Specific
Violence Risk Assessment Instrument

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Feasibility of an Inuit Specific Violence Risk Assessment Instrument

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EXECUTIVE SUMMARY

The National Joint Board of Investigation (NJBOI) into the Release and Supervision of an Offender on Full Parole Convicted of First-degree Murder of his Parole Officer on February 22, 2006 in Yellowknife, Northwest Territories (Correctional Service of Canada, 2005) recommended that the Correctional Service of Canada (CSC) and the National Parole Board “develop an appropriate statistical risk assessment tool specifically for Inuit offenders” (Recommendation 58, p. 162). A review was completed to assess the feasibility of undertaking this task with the conclusion that such an instrument would not add to the predictive capabilities of the Service. Reviewing selected characteristics of the Inuit population within the CSC, this analysis concludes that it would take more than 20 years to accumulate enough cases of violent (including sexual) release failure to meet minimal standards for the development of such an instrument. With the violent (and sexual) release failure rate being less than 2% (Public Safety Canada, 2008), we would expect less than one new violent (or sexual) offence per year, on average among released Inuit offenders. This extremely low base rate makes prediction ineffective (Mossman, 2008). A review of the research literature on structured risk assessment also indicated that current prediction tools, designed on much larger samples, may be as valid for Inuit offenders as for other offenders. Having addressed the specific question of the NJBOI there remains the need to explore how assessment of Inuit offenders could be improved. A consultative process is proposed for this work.
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Feasibility of an Inuit Specific Violence Risk Assessment Instrument

The National Joint Board of Investigation (NJBOI) into the Release and Supervision of an Offender on Full Parole Convicted of First-degree Murder of his Parole Officer on February 22, 2006 in Yellowknife, Northwest Territories (Correctional Service of Canada, 2005) made a total of 71 recommendations resulting from their investigations and findings. Among others, the Research Branch was tasked with recommendation number 58. This recommendation stated that the Correctional Service of Canada (CSC) and the National Parole Board (NPB) “should develop an appropriate statistical risk assessment tool specifically for Inuit offenders” (p. 162).

This paper responds to that recommendation by first outlining some characteristics of the Inuit population currently being held within CSC institutions and the frequency of violent recidivism for offenders while on community supervision. This paper provides a tabular presentation of the various established risk assessment instruments that have been shown by research to be reliable and valid with Aboriginal samples, provides suggestions on the acceleration of efforts to provide culturally appropriate interventions, and concludes with some suggestions for further research.

Inuit Offenders

Inuit offenders are overrepresented in the Canadian criminal justice system relative to their numbers in the Canadian population. Inuit people make up only 0.16% (one-sixth of one percent) of the Canadian population (Statistics Canada, 2008) while Inuit offenders make up 0.95% (just less than one percent) of the incarcerated federal offender population. Inuit offenders are present in the federal correctional system at a rate almost six times greater than their representation in the general Canadian population.
Table 1:  
**Characteristics of Inuit offenders in comparison to other groups**

<table>
<thead>
<tr>
<th>Number of offenders self-describing ethnic identity</th>
<th>First Nations</th>
<th>Inuit</th>
<th>Other</th>
<th>Caucasian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Number of offenders</td>
<td>2,490</td>
<td>125</td>
<td>2,006</td>
<td>8,533</td>
</tr>
<tr>
<td>Percentage of incarcerated federal correctional population</td>
<td>2,335</td>
<td>155</td>
<td>1,933</td>
<td>73</td>
</tr>
<tr>
<td>Average age in years (SD)</td>
<td>36.0</td>
<td>34.0</td>
<td>37.3</td>
<td>31.2</td>
</tr>
<tr>
<td>Married or Common-law status</td>
<td>37.8%</td>
<td>36.8%</td>
<td>24.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Percentage with less than grade 8</td>
<td>22.9%</td>
<td>27.6%</td>
<td>44.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>- Percentage with less than grade 10</td>
<td>60.1%</td>
<td>58.0%</td>
<td>76.4%</td>
<td>33.3%</td>
</tr>
<tr>
<td>- Percentage - no high school Diploma</td>
<td>88.0%</td>
<td>84.6%</td>
<td>91.5%</td>
<td>66.7%</td>
</tr>
</tbody>
</table>

Offender characteristics as of March 1, 2009, Institutional count = 13,154
As can be seen in Table 1, Inuit offenders, both male and female, comprise just less than 1% of the federal incarcerated population. Inuit offenders appear disadvantaged in relation to other ethnic and cultural groups, having fewer social supports (as shown by marital or common-law status) and having lower educational attainment.

As of March 1, 2009 there were 13,154 offenders within CSC institutions and 125 of these offenders were Inuit (121 males and 4 females). Of this 125, 90 (72%) have a violent offence on their record, 62 (50%) have a sexual offence, 34 (27%) have both a violent and a sexual offence on their record and 17 (14%) have histories of incarceration for offences other than sexual or violent. Of these same 125 offenders, 77 (62%) are currently serving a sentence for a violent offence, 55 (44%) for a sexual offence, 17 (14%) for both a violent and a sexual offence, and 7 (6%) are serving sentences for crimes other than sexual or violent.

With these low numbers of Inuit offenders within the system these data indicate that any Inuit specific risk assessment would be used, on average, only eight times for every thousand male offenders admitted to the CSC, or about 40 times a year (Public Safety Canada, 2008).

The Frequency of Violent Recidivism

A fundamental problem of violence prediction resides in the relatively low frequency of violent or sexual recidivism in criminal offenders (Bonta, Harmann, Hann, & Cormier, 1996; Hanson & Bussière, 1998; Harris & Hanson, 2004; Mossman, 2008; Wakefield & Underwager, 1998). By definition, low frequency events are difficult to predict (Mossman, 2008); just as rare physical events such as tsunamis and lightning strikes are difficult to predict. Both common sense and mathematical probability indicate that these events will happen, but not when and never exactly where. Data from 2007-08 indicate that less than 2% of offenders on conditional release committed another violent offence (including sexual offences). The violent reoffence rates were 1.9% of offenders on Statutory Release, less than half of one percent (0.4%) of offenders on Day Parole, and less than one percent (0.9%) of those on Full Parole (Public Safety Canada, 2008).

\footnote{Categories of offence in the above two sentences are not exclusive.}
Mathematically, the ability to accurately predict outcomes decreases as the behaviour or event becomes less frequent. The most reliable prediction occurs when the probability of the behaviour of interest happening is 50%. As the likelihood of a behaviour actually occurring varies from 50%, our mathematical ability to predict that behaviour lessens (Wakefield & Underwager, 1998).

The low number of Inuit offenders within the Canadian federal system combined with the low base-rate for violent or sexual re-offence means that predicting the behaviour would be difficult if not impossible. In addition, these factors (low base rate and low incidence) dictate many years of data to test and validate a scale. For example, if there were 50 Inuit releases per year exhibiting a base rate of 2% for violent and sexual re-offence you would anticipate only one violent or sexual release failure each year. To test any sort of recidivism scale would require, at absolute minimum, 20 violent reoffences and as a result, it would take 20 years to gather enough data to validate a scale.

It so happens that this estimation is quite close to the objective numbers. In Table 2, the release statistics are given for the years 2004 through 2008 for male offenders by self-identified ethnic identity. As can be seen, an average of 41 Inuit offenders were released each year over this 5 year period. Given the known base-rate and this average number of releases, it is anticipated that it would take over 24 years of data to accumulate 20 violent reoffences. This in turn precludes the possibility of having a sufficient number of Inuit offenders to complete the validation of a separate risk assessment tool that would pass accepted scientific minimum standards for the development of predictive instruments.
Table 2:
Male releases from the CSC by selected race groupings over a 5 year period

<table>
<thead>
<tr>
<th></th>
<th>Male Releases from the CSC 2004 - 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Nations and Métis</td>
</tr>
<tr>
<td>2004</td>
<td>1,540</td>
</tr>
<tr>
<td>2005</td>
<td>1,017</td>
</tr>
<tr>
<td>2006</td>
<td>871</td>
</tr>
<tr>
<td>2007</td>
<td>854</td>
</tr>
<tr>
<td>2008</td>
<td>710</td>
</tr>
<tr>
<td>5 year average</td>
<td>998</td>
</tr>
</tbody>
</table>

Risk Assessment in other Indigenous Populations

Correctional officials in two countries with indigenous populations, Australia and New Zealand, have examined the feasibility of developing culturally specific risk assessment instruments.

Allen and Dawson (2004) attempted to identify culturally unique risk factors for the Australian Aboriginal population, different from, or in addition to, those that predict for non-Aboriginal Australians. These researchers, however, met with no success, being unable to find any separate risk factors that predicted sexual or violent recidivism specifically for Australian Aboriginal male sexual or violent offenders. These authors described their results as “disappointing”.

The New Zealand Department of Corrections has recently instituted a computerized risk assessment system for sexual offenders called the STATIC-AS (after Hanson & Thornton, 1999). This risk assessment methodology is working relatively well, producing Receiver Operating Characteristic (ROC) statistics (Swets, Dawes, & Monahan, 2000) between 0.70 and 0.78 (moderate to strong levels of prediction, Cohen, 1988). Analysis using a country-wide sample comprising 1,094 offenders, of which approximately 40% were of Maori heritage, revealed that
this risk assessment did not report differential risk profiles for Maori offenders. As a result, New Zealand continues to use the STATIC-AS with Caucasians, Maori, and Pacific Islander offender groups (Skelton, Riley, Wales, & Vess, 2006).

**Risk Instruments that Work for Aboriginal and Non-Aboriginal Offenders**

In her paper on risk assessment of Aboriginal males, Rugge (2006) acknowledged that most risk assessment instruments presently in use in the western world were originally validated on non-Aboriginal offenders. As can be seen in Table 3, by pulling together the findings of relevant research (Harris et al., 2009; Rugge, 2006) we observe a wide range of validated risk assessment tools that reliably assess risk in Aboriginal offenders. There is limited theoretical or practical reason why these risk assessments would not apply equally well to Inuit offenders.

**If we choose not to use actuarial tools with offenders from different cultural groups, how should we assess risk?**

Concerns about cultural differences in the assessment and treatment of various racial, ethnic, and cultural groups are not new (Anastasi, 1988; Weekes, Morison, Millson, & Fettig, 1995; Starr, 1978). The need for better risk prediction for violent behaviours and cultural sensitivity in the assessment and treatment of Aboriginal offenders has long been recognized by the CSC (Correctional Service Canada, 1989). Given these facts, it is not surprising that policy and decision makers question whether risk assessment technologies validated on non-Inuit samples are appropriate for Inuit offenders. This is critical given that the offenders’ risk levels should inform decisions impacting many areas including public safety and personal liberty. This is especially important in the Canadian context where sentencing guidelines as laid out in the Criminal Code of Canada (C.C.C.) dictate that all offenders be held in “the least restrictive placement” (C.C.C., S. 718.2 (d)).
Table 3:
*Risk assessment Instruments that have been shown to reliably predict risk of recidivism in Aboriginal offenders*

<table>
<thead>
<tr>
<th>Name of Risk Tool</th>
<th>What it assesses</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Service Inventory – Revised (LSI-R)</td>
<td>Risk of general recidivism using both static and dynamic factors</td>
<td>Andrews &amp; Bonta, 1995</td>
</tr>
<tr>
<td>SIR Scale</td>
<td>Risk of general recidivism</td>
<td>Nuffield, 1982</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nafekh &amp; Motiuk, 2002</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hann &amp; Harman, 1993</td>
</tr>
<tr>
<td>Dynamic Factors Intake Assessment (DFIA)</td>
<td>Dynamic risk factors that predict general recidivism</td>
<td>Brown &amp; Motiuk, 2005</td>
</tr>
<tr>
<td>Manitoba Risk Needs Scale</td>
<td>Risk of general recidivism and treatment/intervention needs</td>
<td>Bonta, LaPrairie, &amp; Wallace-Capretta, 1997</td>
</tr>
<tr>
<td>STATIC-99</td>
<td>Risk of sexual recidivism for sexual offenders</td>
<td>Nicholaichuk, 2001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dempsey, 2002</td>
</tr>
<tr>
<td>Sexual Violent Risk-20 (SVR-20)</td>
<td>Risk of sexual and violent recidivism</td>
<td>Dempsey, 2002</td>
</tr>
</tbody>
</table>

If formalized static and dynamic risk assessment for Inuit and other minority groups are not used, what are the options? The most likely result would be a return to the use of unstructured clinical judgement where someone “decides” how risky an Inuit offender is based upon idiographic characteristics using a process that is by its very nature non-replicable and non-verifiable. In short, judgement based upon “clinical experience”. As Grove and Meehl (1996) said,

>“*Clinical experience is only a prestigious synonym for anecdotal evidence* when the anecdotes are told by someone else with a professional degree and a license to practice a healing art” (p. 321).
There is no question that actuarial methods of risk prediction out-perform clinical methods (Douglas, Cox, & Webster, 1999; Grove & Meehl, 1996; Grove, Zald, Lebow, Snitz, & Nelson, 2000; Hanson & Morton-Bourgon, 2007). Indeed, not to use empirically-based risk assessment with Inuit offenders would deny that group the benefits of transparent, accountable, and independently reviewable risk assessment procedures.

Managing risk in the community

Risk assessment instruments provide guidance on the objective level of risk that an offender presents at release. Nonetheless, no instrument can provide 100% accuracy of prediction on when or where an event will occur. The difficulties in accurate prediction outlined in earlier sections of this paper underscore the need for high standards in the ongoing community management of high risk offenders. One thing that empirically-based risk assessment instruments do very well is to reliably rank offenders into nominal categories of risk (Hanson & Morton-Bourgon, 2007), such as high, low, and moderate based upon their risk of reoffence once released.

The scientific identification of high risk cases improves the correctional system’s chances of intervening before a catastrophic event occurs. Ongoing review of community status variables such as substance use, attitudes, employment, general self-regulation, family and intimate relationships and overall community functioning can help to identify those cases where problems are more likely to occur. Consistent monitoring of high risk cases once in the community is critical to the prevention of violent reoffence. However, not even this process can ensure that no cases of unexpected violence will occur, given the nature of the offender population monitored by the CSC.

Responding to Cultural Differences: Responsivity

The Responsivity Principle, as outlined by Andrews and Bonta (1994, 2006), states that treatment must be delivered to the offender in such a way that they can benefit from it, taking into account each offender's abilities, cultural needs, experiences, and learning style. For example, having an illiterate offender in a psycho-educational group that uses an approach based in an exercise book with written homework is neither efficient, effective, nor fair to the offender.
It is at this level that cultural differences and sensitivities must be carefully taken into account.

Instead of developing new “culturally dependent” psychometric measures of risk, it may well be more effective to strengthen the existing trend towards suitable therapeutic interventions for Inuit offenders, that take into account their individual experiences, insights, culture, and heritage. An example of this approach is the Tupic program (Trevethan, Moore, & Naqitarvik, 2004) which provides culturally appropriate treatment for Inuit sex offenders incarcerated in federal custody using the skills of Inuit facilitators and healers.

The primary avenue of access to developing culturally relevant and effective intervention programs resides in the Risk-Needs-Responsivity (RNR) model of offender rehabilitation (Andrews & Bonta, 2006). This rehabilitation model has been used in recent years to guide interventions in the field of corrections throughout the world and has resulted in reduction of recidivism rates and safer communities (Ward, Melser, & Yates, 2007). The Responsivity Principle requires that accommodations be made to present treatment materials in a way that is understandable and culturally relevant to the participant. Resulting interventions and supervision must be responsive to the needs of the individual regardless of culture. For Inuit offenders this might well include consultations with Elders, taking into account special responsivity factors such as the increased incidence of Foetal Alcohol Spectrum Disorders, and generally placing greater emphasis upon group adhesion and traditional values.

There is no question that accommodation should be made for Inuit culture and experience, indeed, *R. v. Gladue* (1999), clearly states that the nature and context of Aboriginal life and the cultural experiences of Aboriginal people must be taken into consideration when reviewing criminal sanctions and interventions. But the place for these differences to be explored and used to promote healing and safe reintegration to society is in the intervention, supervision, and treatment programs tailored for the Inuit experience using the Responsivity Principle (Andrews & Bonta, 2006). This would ensure that programs and other correctional interventions take into account Inuit culture and experience; using examples and references that are reflective of their cultural background. A key element in developing culturally relevant interventions is to engage people of Inuit heritage in all stages of correctional intervention, but
most importantly at the treatment and release stages. Research on factors that are related to the successful reintegration of Aboriginal offenders has been taken in partnership with Aboriginal communities (Heckbert & Turkington, 2001) and this path may be one of the most promising.
SUMMARY

To date, the research shows that the majority of risk factors apply as well to Inuit offenders and offenders from other cultures, as they do to the general population of Caucasian offenders. The types of factors that are used to estimate risk are not determined by culture but reflect personal history. There is no scientific reason to assume that an Inuit offender would demonstrate a different risk pattern given the same risk markers as a non-Inuit offender (Andrews & Bonta, 1994, 2006).

Research studies have demonstrated little empirical support for the development of culture specific risk assessment tools (Allen & Dawson, 2004; Skelton et al., 2006) and research has had no success in distinguishing differential risk factors based upon cultural groups. This is due to the high degree of similarity in offenders’ responses and characteristics regardless of culture (Bonta, Laprairie, & Wallace-Capretta, 1997; Cooke, Kosson, & Michie, 2001; Weekes et al., 1995).

As Rugge (2006) emphasizes in her paper, it is important that we do not try to “re-invent the wheel”. Future research on risk assessment should be built upon the firm foundation of what is already known. Should some theoretical or empirical variable that enhances the accuracy, validity, or reliability of an Inuit risk assessment eventually be found, this variable should be thoroughly explored by research and tested empirically. To date, no such variable has come to light.

The National Joint Board of Investigation (NJBOI) into the Release and Supervision of an Offender on Full Parole Convicted of First-degree Murder of his Parole Officer on February 22, 2006 in Yellowknife, Northwest Territories (Correctional Service of Canada, 2005) in recommendation number 58 stated that the CSC and the NPB “should develop an appropriate statistical risk assessment tool specifically for Inuit offenders” (p. 162). It is recommended that the Service not develop an Inuit specific risk tool. Current assessment tools are effective for this population and a specialized tool would not add to the accuracy of prediction. In addition, developing such a tool would be extremely difficult given the low rate of recidivism for violent
offending and the total number of Inuit offenders within the CSC. As shown in Table 3, the scientific literature provides a list of widely used and accepted actuarial and dynamic risk assessment tools that are appropriate and should be used with all male offenders regardless of cultural background.

Having addressed the specific question of the NJBOI, and demonstrated that current risk assessment tools are appropriate, there remains a broader issue of assessment for Inuit people. It may not be possible to develop a statistically-based (actuarial) risk assessment tool for Inuit people, but a better understanding of factors affecting Inuit people would assist with the application of appropriate risk tools. Such exploration could identify alternative approaches that would better meet the needs of Inuit people, the National Parole Board and the Correctional Service of Canada.
REFERENCES


