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**ABORIGINAL PEOPLES AND THE CRIMINAL JUSTICE SYSTEM:
DIFFERENCES IN FULL PAROLE RELEASE RATES BETWEEN ABORIGINAL AND
NON-ABORIGINAL OFFENDERS**

by

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Abstract

Aboriginal people comprise 3% of Canada's general population, yet they account for approximately 12% of all federal offenders (Solicitor General of Canada, 1998). This over-representation of Aboriginals in corrections has been attributed, in part, to racial disparities in the granting of full parole. To date, studies of full parole and Aboriginal offenders have been descriptive and controls for other causal factors besides race have not been introduced. The purpose of the present study was to investigate the extent to which race group differences accounted for differences in the granting of full parole in comparison to factors normally considered in evaluating release potential. All male federal offenders who reached their full parole eligibility date in 1996 ($N = 2479$) were followed across four stages of the parole process as provided for by the Corrections and Conditional Release Act (1992). Results indicated that Aboriginal offenders were significantly less likely to apply for and be granted full parole as compared to non-Aboriginal offenders. Logistic regression analyses, however, found that race group differences did not predict either full parole application rates or Parole Board decisions.

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**Aboriginal Peoples and the Criminal Justice System:
Differences in Full Parole Release Rates Between Aboriginal and Non-Aboriginal Offenders**

Aboriginal Representation in Correctional Institutions

Currently, Aboriginal issues in Canada are a major focus of correctional research. In the last two years there have been two Supreme Court of Canada rulings that have acknowledged the circumstances of Aboriginal peoples and the existence of widespread prejudice against them (R. v. Williams, 1998; R. v. Gladue, 1999). In addition, there has been an alarming growth in the activity of Aboriginal gangs in the Prairie provinces (Nafekh & Welsh, *in press*). Another continuing concern is the high numbers of Aboriginal people incarcerated in Canada. Aboriginal people account for a much higher proportion of Canada's federal offender population than would be expected by looking only at their relative proportion in the general population. Although Aboriginal people comprise only about 3% of Canada's population, they account for approximately 12% of all federal offenders (Solicitor General of Canada, 1998).

The purpose of the present study was to investigate the extent to which differences in the parole process for Aboriginal and non-Aboriginal offenders account for the disproportionate representation of Aboriginal offenders in the federal prison population. As recent research has suggested that Aboriginal offenders may actually stay longer in correctional institutions because of lower full parole release rates (e.g., Cawsey, 1991), the present study focused on racial disparities in the granting of full parole between Aboriginal and non-Aboriginal offenders. To provide a sufficient background of parole and the Aboriginal experience, several issues were examined including: (1) existing hypotheses regarding Aboriginal over-representation; (2) a brief review of existing research regarding Aboriginal offenders' experiences at the different stages of

the criminal justice system; (3) a review of existing research on Aboriginal offenders and the conditional release process; and (4) a focus on research regarding Aboriginal offenders and full parole.

Explaining Aboriginal Over-representation

Over the past decade there has been a growing focus on Aboriginal peoples within the Canadian criminal justice system as evidenced by various government task forces (e.g., Solicitor General Canada, 1988), inquiries (e.g., Cawsey, 1991), reports (McCaskill, 1985), and the Royal Commission (1991) that have attempted to explain Aboriginal over-representation. Moreover, there have been recent developments in statutes and case law that reflect a growing concern over Aboriginal involvement in the justice system. Revisions to the sentencing principles codified under section 718.2(e) of Part XXIII of the Criminal Code (1985), as enacted in 1998, require sentencing judges to consider all available sanctions other than imprisonment and to pay particular attention to the circumstances of Aboriginal offenders. Moreover, the Supreme Court of Canada decision in R. v. Williams (1998) granted an Aboriginal accused the right to challenge prospective jurors for cause on the basis of widespread prejudice against Aboriginal peoples.

Not surprisingly, the explanations for over-representation are numerous, complex, and defy easy categorization. Based on her research, LaPrairie (1990, 1992a, 1992b, 1996) has identified three possible explanations for Aboriginal over-representation: (1) differential criminal justice system processing as a result of racial discrimination; (2) higher Aboriginal offending rates; and (3) the commission by Aboriginal people of the type of offences that are more likely to result in prison sentences (more serious and/or more visible). While the possibility of racism on the part of the criminal justice system is a major issue, available data suggest that the over-

representation of Aboriginal people in correctional systems cannot be attributed to racial bias alone (LaPrairie, 1996). A growing body of research examining the poor living conditions, poverty, and general cultural and economic deprivation of Aboriginal groups has begun to emerge as factors to help explain the phenomenon of Aboriginal over-representation (e.g., Braithwaite, 1993). It is most likely that an examination of the socio-economic background of Aboriginal peoples would be necessary in order to address all three explanations, however, this falls outside the scope of the present paper (LaPrairie, 1996).

Criminal Justice System Processing

The criminal justice system consists of three main components – the police, the courts, and corrections. Aboriginal people in prison, as well as in various Aboriginal communities, have consistently reported that prejudice against Aboriginal peoples exists at all three of these levels (Cawsey, 1991; Morse & Lock, 1988). Bonta (1989) has also suggested that differential treatment of Aboriginal and non-Aboriginal peoples may occur at these different points in the criminal justice system. What follows is a brief examination of the separate components of the criminal justice system – the point of police contact and arrest, the availability of legal representation, sentencing, and the length of sentence actually served – to serve as a possible framework for understanding the influence of these factors in Aboriginal over-representation.

Police Contact and Arrest

Considerable information alludes to differential treatment of Aboriginal peoples by police. For example, 72% of Aboriginal respondents to a survey in Alberta believed that “Police treat natives differently than non-Natives and that non-Natives get better treatment” (Cawsey, 1991). Similarly, the Law Reform Commission of Canada (1991) concluded that “one

reasonable interpretation of the higher charge rate on reserves is that, in some respects, those communities are over-policed" (p. 45). Perhaps supporting the perception that Aboriginal communities are over-policed, Hylton (1981) found that police officers in Regina hold substantially more negative attitudes toward Aboriginal peoples than does the general public. For instance, a quarter of police officers surveyed in the Regina Police Department (N = 278) disagreed with the statement, "Most Natives respect the law."

Given the importance of discretionary decisions in police work, the question arises whether this negative stereotype translates into discriminatory treatment of Aboriginal peoples. Early studies by Hagan (1974) and Schmeiser (1974) suggested that Aboriginal people in fact were charged more often than non-Aboriginal people for minor offences. A study of arrest patterns in Winnipeg indicated that Aboriginal peoples are disproportionately arrested by the police (Bienvenue & Latif, 1974). A recent analysis of police data in one Western city, however, suggests little difference in charging levels for Aboriginal and non-Aboriginal peoples alike (Canadian Centre for Justice Statistic [CCJS], 1992). Comparisons between studies are difficult due to the use of different dependent variables (e.g., arrest vs. charging rates). Thus, it remains unclear whether police decision-making accounts for the disproportionate presence of Aboriginal people in the justice system.

Aboriginal Peoples and the Court System

The propensity of Aboriginal accused to plead guilty more often than non-Aboriginal accused and lack of legal representation often are presented as major factors in over-representation. There are limited data, however, to support these claims. Recent research suggests, for example, little difference in the proportion of guilty pleas for Cree accused in James

Bay, Quebec in comparison to overall rates elsewhere in the province (LaPrairie, 1991).

However, comparable data in other provinces and territories are not available.

The lack of adequate legal representation for Aboriginal offenders is raised in several reports as a possible factor in explaining the disproportionate representation of Aboriginal people in the criminal justice system (e.g., Law Reform Commission, 1991; Manitoba Aboriginal Justice Inquiry Report, 1991). Common criticisms of Legal Aid in these reports include deficiencies in the availability or awareness of the availability of legal aid, and cultural and language barriers between legal aid representatives and Aboriginal clients. On the other hand, some research suggests that Aboriginal people do receive adequate legal representation. The Alberta Cawsey Report, for example, noted that funded lawyers were readily available to those who were eligible for legal aid (Cawsey, 1991), and the James Bay research project found that virtually all adults and youth appearing in James Bay courts from 1986-1989 were represented by lawyers (LaPrairie, 1991).

Sentence Length

It has been argued that the differential impact of the justice system on Aboriginal persons may be most apparent at the sentencing stage. In a widely reported paper, Jackson (1988) concluded that "one reason why Native inmates are disproportionately represented in the prison population is that too many of them are being unnecessarily sentenced to terms of imprisonment" (p. 212). Some studies do indeed show an increased use of incarceration for Aboriginal in comparison to non-Aboriginal offenders (e.g., Cawsey, 1991; Hagan, 1977).

Nevertheless, most research does not support the existence of racial discrimination in sentencing practices in Canada. For instance, Hagan (1974) found that judicial reliance on a law

and order model of society explained more variance in sentencing than did race. Boldt, Hursh, Johnson, and Taylor's (1983) examination of pre-sentence reports did not reveal evidence of harsher recommendations for sentence on the basis of ethnic background. In fact, differences in sentence recommendations were largely accounted for by offence severity and the number of prior convictions. Comparative dispositions for Aboriginal and non-Aboriginal people accused of homicide have revealed that Aboriginal offenders are less likely to be convicted of first- or second-degree murder and more likely to be convicted of manslaughter than are non-Aboriginal offenders (Moyer, 1987). In addition, Bonta (1989) found no significant differences between average sentence lengths for Aboriginal compared to non-Aboriginal provincial offenders when controlling for criminal history.

There also is some evidence to suggest that Aboriginal accused may receive shorter sentence lengths. Recent data show that on July 2, 1995, non-Aboriginal federal offenders had a mean sentence length of 5.2 years as compared to 4.2 years for Aboriginal offenders. Comparing sentence length by type of offence for federal offenders indicates that Aboriginal offenders still receive significantly shorter sentences (LaPrairie, 1996). If Aboriginal offenders receive, on average, shorter sentences, why do they still constitute such a large proportion of the correctional population? One possibility is that Aboriginal offenders are incarcerated more often than non-Aboriginal offenders for minor offences for which they receive relatively short sentences. Alternatively, Aboriginal offenders may serve a greater portion of their sentence due to lower parole release rates.

Aboriginal Offenders and Conditional Release

Most of Canada's federal offenders serve only part of their sentences in prison.

Conditional release programs make it possible for offenders to be released from prison to serve a portion of their sentence in the community under certain conditions of parole (Grant, Motiuk, Brunet, Lefebvre, & Couturier, 1996). Although Aboriginal offenders, overall, may receive somewhat shorter sentences there is evidence that they may actually stay longer in institutions because of lower conditional release rates (e.g., Cawsey, 1991). In 1987, fully 11% more non-Aboriginal than Aboriginal offenders, relative to their proportions in the offender population, were serving sentences in the community (Solicitor General of Canada, 1988). Comparatively, in 1995, 76% of Aboriginal and 62% of non-Aboriginal offenders were incarcerated, while nearly 38% of non-Aboriginal offenders were under some form of community supervision in comparison to only 24% of Aboriginal offenders – a difference of 14% (LaPrairie, 1996).

Before proceeding, it is necessary to briefly define the forms of community supervision. Under the Corrections and Conditional Release Act (CCRA; 1992), several types of conditional release are available to offenders, including:

- 1) **Temporary absences** (TA's) are granted to offenders so they may leave the institution for periods ranging from a few hours to several days. Generally, TA's are granted so offenders may receive medical treatment, contact their family, undergo personal development and/or counselling, and participate in community service work projects (CCRA, s.115-116, 1992).
- 2) **Day parole** is granted to offenders so they may leave the institution during the day in order to participate in community-based activities and to prepare for release on full parole or statutory release. Generally, offenders must return nightly to an institution or a halfway

house unless otherwise authorized by the National Parole Board (NPB) (CCRA, s. 119-122, 1992).

- 3) **Full parole** is granted to offenders so they may serve the remainder of their sentence under supervision in the community (CCRA, s. 123-124, 1992).
- 4) **Statutory release** is automatically granted to most federal inmates after serving two-thirds of their sentence if they have not already been released on parole. Offenders serving life or indeterminate sentences are not eligible for statutory release, and the CSC may recommend an offender be denied statutory release if it is determined that the offender is likely to commit an offence causing harm or death, a sexual offence, or a serious drug offence (CCRA, s. 127, 1992).
- 5) Release on expiry of sentence or **warrant expiry** is not a conditional release but the full release required when someone has served the entire sentence. It applies to offenders who were considered too dangerous to return to the community under statutory release. In addition, some offenders eligible for conditional release choose to stay in prison until the end of their sentences (CCRA, 1992).

To date, there is little empirical research investigating racial disparities in the granting of conditional release. One element of the recent Alberta Cawsey Report (1991) was a review of the treatment of Aboriginal offenders in respect to the temporary absence program in Alberta correctional centres. Statistics gathered from 1989 indicated that at the earliest opportunity, fewer temporary absences were granted to Aboriginal inmates (30.5%) than to non-Aboriginal inmates (69.5%). Contrary to this report, Grant and Porporino (1992), in the only study of the granting of TA's, found that Aboriginal offenders received more than the expected number of

compassionate and family and community contact TA's given their proportion of the inmate population. These findings, controlling for violence and criminal history variables, suggest that Aboriginal offenders are not being given more negative treatment in the granting of TA's, and may even be receiving preferential treatment.

Two recent investigations (Grant et al., 1996; Grant & Gillis, 1998) of offenders released on day parole have examined factors associated with day parole releases. The results of both studies indicate that Aboriginal offenders are slightly less likely to receive day parole than other offenders. Specifically, although Aboriginal offenders account for approximately 12% of the on-register offender population, they only account for 9% of the day parole population. In addition, both studies revealed that day parole use has declined for Aboriginal offenders at a rate slightly higher than for non-Aboriginal offenders.

Aboriginal Offenders and Full Parole

The only specific legislative reference in the CCRA (1992) relating to Aboriginal offenders with respect to the National Parole Board is section 151(3) which states that Parole Board decisions "must respect gender, ethnic, cultural, and linguistic differences and must be responsive to the special needs of women and Aboriginal peoples". The overall intent of this section was to legislatively recognize the unique circumstances of Aboriginal offenders. Nonetheless, lower full parole release rates for Aboriginal inmates have long been cited as a major contributor to the disproportionate levels of Aboriginal incarceration.

Comparatively, in 1996/1997, the federal full parole grant rate for Aboriginal offenders was 34%, while it was 41% for non-Aboriginal offenders – a 7% difference. Aboriginal offenders are also more likely to be released on statutory release than on full parole. Of the 609

Aboriginal people who were on federal day, full, or statutory release supervision in 1996/1997, 48% ($n = 292$) were statutorily released in comparison to 29% ($n = 1826$) of non-Aboriginal offenders. Furthermore, Aboriginal offenders are more likely to be released at their warrant expiry date (12% of Aboriginal offenders compared to 6% of non-Aboriginal offenders). When released on full parole, Aboriginal offenders are granted parole later in their sentences than non-Aboriginal offenders. Sixty-percent (60%) of non-Aboriginal full parolees were released within one month of their parole eligibility date (PED) compared to 51% of Aboriginal offenders. Almost twice as many Aboriginal (20.7%) as non-Aboriginal (11.5%) full parolees served between six months and one year beyond their PED (Solicitor General of Canada, 1998).

Over one-third (35.7%) of federal full parole pre-release decisions are Accelerated Parole Reviews (APR). The APR process was designed to ensure that low risk, non-violent offenders would be released from prison at the earliest possible date to serve the remainder of their sentence in the community. All offenders serving their first federal sentence who have not been convicted of a violent or serious drug offence must have their parole eligibility reviewed by the NPB using the APR process and criteria. Federal offenders who qualify for an APR review and who are granted full parole are released earlier than most regular full parole releases (CCRA, s. 125-126, 1992). Not surprisingly, fewer full parole pre-release reviews in 1996/97 for Aboriginal offenders (31.6%) were APR than those for non-Aboriginal offenders (36.1%). In addition, Aboriginal offenders are least likely to have full parole granted when they are reviewed by the APR criteria. Only 58% of Aboriginal offenders are directed for release, while 84% of non-Aboriginal offenders are directed (Grant, 1998a).

Further, data indicate that Aboriginal offenders released on full parole are less likely to successfully complete their supervision period in the community and are more likely to have their parole revoked than are non-Aboriginal offenders. Twenty-three percent (23%) of Aboriginal day parolees were revoked compared to 17% of non-Aboriginal day parolees, and 46% of Aboriginal offenders on full parole were revoked compared to 32% of non-Aboriginal full parolees. Although similar proportions of Aboriginal (12%) and non-Aboriginal offenders (11%) were revoked for a new offence, Aboriginal offenders (33%) were more likely to be returned to prison for a technical violation of release conditions in comparison to non-Aboriginal offenders (21%) (Solicitor General of Canada, 1998).

In short, these data demonstrate that Aboriginal offenders are serving a greater portion of their sentence due to lower day and full parole release rates. However, the extent to which race group differences alone explain the proportionately larger Aboriginal institutional population and the greater non-Aboriginal supervision population is still unclear. Simply put, several other factors are taken into consideration during parole reviews that could also account for the observed disparities. First, the higher proportion of Aboriginal offenders on statutory release and/or held until warrant expiry may partially account for the greater numbers incarcerated as these offenders remain incarcerated for a larger percentage of their sentence.

Another factor that could, in part, account for some of the variations in full parole grant rates and term served past PED found between Aboriginal and non-Aboriginal offenders is the higher rate at which Aboriginal offenders (49%) waive their full parole hearing compared to non-Aboriginal offenders (30%) (Solicitor General of Canada, 1998). It is possible that a lack of knowledge or misconceptions about the conditional release process may contribute to these

higher waiving rates. In fact, Johnston (1994) reported that among northern Aboriginal offenders in federal custody ($N = 64$), 51.6% reported having “no knowledge of federal institutions.”

In addition, interview data demonstrate that there exists a significant apprehension on the part of Aboriginal offenders to deal directly with correctional staff. More specifically, almost two-thirds of Aboriginal offenders indicated perceiving anti-Native prejudices in their institutions, with the bulk of these offenders feeling these negative sentiments stemmed from correctional staff (Johnston, 1997). Self-report rates of contact with both Case Management Officers (CMOs) and other Correctional Officers (COs) are also low, with the most cited reasons for minimal contact being a dislike or mistrust of correctional staff (Johnston, 1997). Negative perceptions of correctional staff and the correctional system on the part of Aboriginal offenders may influence Aboriginal offenders’ likelihood to apply for conditional release, or to adhere to correctional plans in a way that would be conducive toward obtaining conditional release.

Criminal history could also explain some of the existing variation in full parole release grant rates. Past research has shown that the single best predictor of a recommendation for incarceration is prior convictions (Boldt et al., 1983), and similar to NPB decisions, CMO recommendations are mandated to be based primarily upon an offender’s estimated risk of re-offending (CCRA, 1992; CSC, 1996). There is growing body of research that suggests that there are substantial differences in the criminal history of Aboriginal and non-Aboriginal offenders. First, Aboriginal offenders appear to be disproportionately involved in the criminal justice system. Current data suggest that Aboriginal offenders have contact with the justice system at a much younger age (Nafekh & Welsh, in press) and are more likely to have served a prior federal sentence. For example, fewer Aboriginal (59.2%) than non-Aboriginal (65.6%) incarcerated

offenders were serving their first federal term, while twice as many Aboriginal (7.6%) as non-Aboriginal (3.8%) offenders had three or more prior federal terms (Solicitor General of Canada, 1998).

Some offenders also are more of a potential danger than others, and one of the most striking differences between Aboriginal and non-Aboriginal crime in Canada is the preponderance of violent offences committed by Aboriginal offenders. Studies across time have consistently shown that Aboriginal offenders are more likely to be incarcerated for violent crimes in comparison to non-Aboriginal offenders. The Alberta Cawsey Report (1991) revealed that between 1985 and 1987, 55.5% of the offences for which Aboriginal males, and 65% of those for which Aboriginal females were incarcerated in Alberta federal institutions, were crimes against the person and violent offences, as compared to 39.9% and 31%, respectively, for male and female non-Aboriginal offenders. In a parole decision-making and release risk project, Hann and Harman (1993) discovered the most likely admitting offence for non-Aboriginal offenders was property-related; by contrast, the most likely admitting offence for the Aboriginal group was against the person, and break and enter. Moreover, Aboriginal offenders are somewhat over-represented in the sex offender category. Aboriginal sex offenders comprise 17% of all sex offenders in federal institutions, and 28% of all Aboriginal offenders are incarcerated for a sex-related offence (Johnston, 1994, 1997; LaPrairie, 1996).

Furthermore, a larger proportion of incarcerated Aboriginal offenders in comparison to non-Aboriginal offenders have been convicted of assault causing injury (28% vs. 20%, respectively) and manslaughter (10% vs. 6%) (Solicitor General of Canada, 1998). Aboriginal people in Canada, as in the United States, also have been more likely to be suspects in homicide

cases than are non-Aboriginal people. In its reports on homicides, for example, CCJS (1989) reported that Aboriginal people were estimated to make up 2.8% of Canada's population but constituted 22.2% of Canada's homicide suspects in 1988. More recently, Doob, Grossman, and Auger (1994) examined homicides involving Aboriginal people in Ontario from 1980 through 1990 and reported that Aboriginals comprised 9.8% of known suspects in homicides despite only constituting about 2% of Ontario's population.

In Boldt and colleagues' (1983) examination of pre-sentence reports, offence severity was the second best predictor of a recommendation for incarceration after the number of prior convictions. In addition, criteria for release under section 132 of the CCRA (1992) states that an offender may be detained until their WED in those circumstances where the offender has demonstrated a pattern of violent behaviour, committed a number of offences causing physical or psychological harm, or had violence present in their current offence. Thus, it is not unreasonable to suggest that by virtue of the nature of their offences, Aboriginal offenders are considered to present an increased risk of re-offending and are, as a result, serving a greater portion of their sentences in comparison to non-Aboriginal offenders. When parole rates are re-examined by analysing release by offence type, offences involving violence were found to be responsible for the difference in lower levels of full and day parole for Aboriginal offenders. For example, Aboriginal offenders charged with drug-related offences had a similar full parole rate (78%) as blacks (80%) and Caucasians (78%) who were also convicted of drug offences. In contrast, the full parole release rate for Aboriginal offenders charged with offences involving violence was only 35% in comparison to blacks (39%) and Caucasians (44%) (LaPrairie, 1996).

Aboriginal offenders also present higher risks with respect to recidivism. There is a growing body of data that shows Aboriginal recidivism levels to be higher than those for non-Aboriginal offenders. In Canada, the likelihood of a male Aboriginal having his parole revoked is almost twice that of a male non-Aboriginal (51% vs. 28%) (LaPrairie, 1996). In addition, Bonta, Lipinski, and Martin (1992) found that for a sample of 282 Aboriginal offenders only 8% of those incarcerated were first offenders, and the overall recidivism rate was 66%. Under section 102(a) of the CCRA (1992), the NPB may grant parole to an offender if “the offender will not, by re-offending, present an undue risk to society”; thus, it is possible that by the nature of their extensive criminal history, some Aboriginal offenders will be less likely to be granted full parole.

Classification comprises an integral component of the corrections process as it forms the basis for security level placements, program priority, and conditional release decisions. This activity requires an assessment of offender risk and needs, and the prediction of future criminal behaviour (Bonta, LaPrairie, & Wallace-Capretta, 1997). Not surprisingly, in light of the findings regarding the criminal history of Aboriginal offenders, studies have consistently revealed that more Aboriginal than non-Aboriginal offenders are rated in the high- or medium-risk categories and have multiple needs (e.g., Hann & Harman, 1993; Johnston, 1994, 1997). For example, 27.8% of Aboriginal offenders released on full parole in comparison to 15.5% of non-Aboriginal offenders were classified in the high- or medium-risk categories. The same trend is evident for offenders on statutory release – 10.7% more of Aboriginal offenders are classified as high risk in comparison to the non-Aboriginal group. It is possible that the under-representation of Aboriginal offenders under community supervision is related to risk/need factors (Solicitor

General of Canada, 1998).

An important issue for Aboriginal corrections is the suitability of classification and risk prediction instruments for Aboriginal offenders. Relatively little research has been conducted into the risk classification and prediction of recidivism for Aboriginal offenders. Some (Dana, 1986, 1996; Hann & Harman, 1993) have suggested that culture-specific classification and assessment instruments are required for this group of offenders. On the other hand, there is some evidence that many of the criminal history and offence variables that predict recidivism among non-Aboriginal offenders are the same variables that predict recidivism among Aboriginal offenders. For example, in a study of federal offenders, the predictors of Aboriginal recidivism were virtually identical to that found with non-Aboriginal offenders (Bonta et al., 1992). Thus, the little evidence that does exist on standardized classification instruments suggests that they may be equally valid for Aboriginal offenders.

Summary and Present Study

Parole release data reveal that federal Aboriginal offenders are less likely than non-Aboriginal offenders to receive full parole. Many public inquiries (e.g., Cawsey, 1991) and reports have attributed these differences to the existence of racism on the part of criminal justice system decision-makers. However, the empirical research in this area is limited at best. Studies of parole and Aboriginal offenders have been descriptive in nature and controls for other causal factors besides race have not been introduced. That is, the poor parole release rate for Aboriginal offenders may reflect other factors (e.g., criminal history) correlated with race and not race itself. Seriousness of offences appears to explain, in part, the differential release rates. Aboriginal offenders also have higher recidivism levels. As a result of prior offences and seriousness of

offences, Aboriginal offenders may be considered a higher risk for re-offending which, in turn, might influence parole decision-making.

To date, no study has employed a predictive methodology examining parole decision-making in relation to Aboriginal and non-Aboriginal offenders. The purpose of the present study was to investigate the extent to which race group differences account for observed differences in the granting of full parole in comparison to those factors normally weighed in evaluating release potential (criminal history, offence severity, sentence length, risk and need factors, program participation). Full parole was the focus of the present study because of the availability and accessibility of information and because it is the most significant discretionary early release program available in Canada. Briefly, the full parole outcomes of federal male offenders who reached their PED in 1996 were examined across several stages of the parole process outlined by the CCRA (1992). These stages included: (1) Parole Eligibility Date (Apply/Do not Apply); (2) Parole Review Decision (Grant/Deny); (3) APR Process (Direct/Do Not Direct); and (4) Parole Outcome (Successful/Unsuccessful). Four primary hypotheses were tested:

- 1) Based on prior research which has shown differential waiver rates (Solicitor General of Canada, 1998) and a mistrust of correctional staff on the behalf of Aboriginal inmates (Johnston, 1997), it was expected that race group differences (Aboriginal/non-Aboriginal) would predict differences in the rate of offenders who applied for full parole upon their PED.
- 2) Due to the disproportionate number of prior federal convictions and convictions for violent offences experienced by Aboriginal offenders, it was expected that race group differences would not predict parole review decisions (Grant/Deny).

- 3) Due to the disproportionate number of prior federal convictions and convictions for violent offences experienced by Aboriginal offenders, it was expected that race group differences would not predict APR outcomes (Direct/Do Not Direct).
- 4) Based on past research that has shown that Aboriginal full parolees are more likely to have their parole revoked due to technical violations of their conditional release (Solicitor General of Canada, 1998), it was expected that race group differences would not predict full parole release outcomes (Successful/Unsuccessful).

Method

Participants

The population was selected, retrospectively, from the correctional files of individuals who reached their full parole eligibility date (PED) in 1996. A total of 2479 male federal offenders reached full parole eligibility in 1996. Of these male federal offenders, 11.5% ($n = 285$) were Aboriginal offenders and 88.5% ($n = 2194$) were non-Aboriginal offenders. The Aboriginal offender group was comprised of Inuit, Metis, and North American Indian offenders (status/non-status). All other offenders comprised the non-Aboriginal offender group. Due to their small numbers in federal institutions and issues with statistical power, female offenders were not included in this study. Although the present study used a population of federal offenders who reached their PED in 1996, sample statistics were still used since this offender group could either be considered a one-year eligibility sample of federal offenders or a sample drawn from all federal offenders in Canada currently incarcerated in Canada.

The population used in this study was obtained from the Offender Management System (OMS), a computer database maintained by the Correctional Service of Canada (CSC). The

OMS stores information relating to each federal offender currently (or previously) incarcerated in Canada. Factors extracted from the OMS include admission and release dates and related information, demographic information, offence history, sentence length, risk and need variables, and institutional incidents and program information. A limitation of the OMS is that it only contains information on offences for which offenders received a term in a federal prison, normally a sentence of two years or more.

Materials

Offender Intake Assessment

The Offender Intake Assessment (OIA) process is a comprehensive and integrated evaluation of the offender at the time of admission to the federal system that was initiated by CSC in 1994. Information is obtained from various internal and external sources, including the courts, police, probation officers, victims, family members, employers, and the offender. The OIA is comprised of two core components: (1) the Criminal Risk Assessment, and (2) the Case Needs Identification Analysis. The Criminal Risk Assessment (CRA) is based on the Criminal History Record, the Offence Severity Record, and the Sex Offence History checklist. These three instruments are research-derived assessment tools that measure the risk of re-offending. Each tool requires the rater to provide either a “yes,” “no,” or “unknown” response to a series of questions about the offender’s criminal involvement. The Criminal History Record is based on significant factors related to the offender’s involvement with the criminal justice system (e.g., Has the offender ever served a prior federal term?). The Offence Severity Record measures the nature and degree to which an offender has inflicted harm on society in general, and on victims in particular (e.g., Was violence used in the current offence?). Finally, the Sex Offence History

measures the nature and extent of sex offending, and the amount of harm inflicted on victims (e.g., Does the offender have a previous conviction for a sex offence?). The higher the number of positive responses, the greater the criminal risk. Based on these three measures, a global risk rating of either “high,” “medium,” or “low” is assigned to each offender.

The Case Needs Identification Analysis (CNIA) involves the identification of the offender’s criminogenic needs. The identification and analysis of needs is based on a systematic assessment of indicators related to each of the following seven domains: Employment, Marital Family, Associates/Social Interaction, Substance Abuse, Community Functioning, Personal/Emotional Orientation, and Attitude (See the CSC Case Management Manual [1996] for a complete listing of individual domain indicators). Each domain is comprised of a number of “yes” and “no” indicators that relate to the presence or absence of specific skills (e.g., Has the offender completed Grade 8?). The objective of this assessment is to gain a detailed understanding of both strengths and problems related to each domain. Based on the responses to each indicator, domains are rated as either “Seen as an asset,” “No immediate need for improvement,” “Some need for improvement,” or “Considerable Need for Improvement”. An overall need rating of “low,” “medium,” or “high” is then assigned to each offender based on their ratings across the seven need domains.

The CRA and CNIA components of the OIA have been founded to have predictive ability of performance on conditional release. A six-month follow-up of a release sample of male federal offenders found that 116 (21%) male offenders were issued suspension warrants. By combining assessments of criminal risk (low, medium, high) with global ratings of need (low, medium, high), approximately 37% of male offenders assessed as high-risk, high-need cases had

suspension warrants issued within six months of being released. In contrast substantially fewer offenders assessed as low-risk, low-need cases were issued suspension warrants (9%) (Motiuk & Brown, 1993).

Criminal History

Four variables were used to measure criminal history. First, an indicator from the Youth Court Record component of the CRA was used as a measure of an offender's involvement with the criminal justice system as a young offender – Youth Court Conviction (yes/no). Three variables were used from the Adult Criminal Court Record component of the Criminal Risk Assessment as measures of an offender's involvement with the criminal justice system as an adult – Prior Provincial Term (yes/no), Prior Federal Term (yes/no), and Prior Failure on Conditional Release (yes/no).

Characteristics of the Index Offence

An Offence History database is maintained on the OMS that contains information on an offender's past and current criminal convictions. Since offenders are often convicted of several offences on a current sentence, the OMS has multiple records for each offender corresponding to each offence. For the purpose of the present study, twelve dichotomous variables were created to reflect the index (current) offence by flagging for the following offences in each offender's current criminal convictions: (1) homicide-related offence (first-, second-degree, manslaughter); (2) sex offence; (3) assault offence; (4) robbery offence; (5) theft; (6) utter threats; (7) drug offence (possession and trafficking); (8) kidnapping; (9) weapons offence; (10) escape; (11) fraud; and (12) break and enter. Briefly, if an offender was serving his current sentence for three break and enter convictions, a sexual assault conviction, and a drug possession conviction, the

variables Drug Offence, Sex-related offence, and Break and Enter offence would be coded as 1, while the remaining index offence variables would be coded as 0. As a result, offenders could be in more than one offence category.

Three other variables were coded to reflect circumstances of the index offence for each offender. To obtain a measure of the severity of the current offence, an indicator from the Offence Severity Record component of the CRA was used to indicate the presence or absence of violence in the current offence (Violence Used in the Current Offence). The level of violence involved in the index offence was measured by using three indicators from the Offence Severity Record - (1) Caused Death, (2) Serious Injury (Wound/Maim/Disfigure), and (3) Minor Injury (Hit/Slap/Strike).

Institutional Behaviour

Several variables were used from the OMS to reflect an offender's behaviour while incarcerated in a federal institution. First, 10 variables were flagged from the Incident database to measure an offender's disciplinary behaviour in prison. The following variables reflected institutional incidents for which the offender had been charged and found guilty by a disciplinary committee: (1) Murder, (2) Sexual assault, (3) Possession or dealing of contraband, (4) Damage property, (5) Assault, (6) Stealing, (7) Drug use, (8) Disciplinary charge, (9) Causing a disturbance, and (10) Escape or escape attempt. In addition, seven variables were flagged from the Correctional Program database to measure an offender's participation in rehabilitative programs. The following variables reflected whether an offender had successfully completed at least one program in the following areas: (1) Employment program, (2) Education program, (3) Community re-integration program, (4) Personality program, (5) Attitude program, (6) Sex

offender program, and (7) Family program. Similar with the index offence variables, these variables were not mutually exclusive. An offender could be in more than one category for both institutional incidents and program variables.

Custody Rating Scale (CRS)

The Custody Rating Scale (CRS) is a research-based tool which was developed to assist the CMO in determining the most appropriate level of security for the initial placement of the offender in accordance of sections 17 and 18 of the CCRA (1992). CMOs review the offender's criminal history and institutional behaviour and the scale is completed by assigning scores on two independent sub-scales. Five items pertaining to the Institutional Adjustment Scale include: (1) History of Involvement in Institutional Incidents, (2) Escape History, (3) Street Stability, (4) Alcohol/Drug Use, and (5) Age at Time of Sentencing. The seven items that comprise the Security Risk Scale are as follows: (1) Number of Prior Convictions, (2) Most Serious Outstanding Charge, (3) Severity of Current Offence, (4) Sentence Length, (5) Street Stability, (6) Prior Parole and/or Statutory Release, and (7) Age at time of Admission. Potential scores range from 0 to 186 points on the Institutional Adjustment scale, and from 17 to 190 points on the Security Risk scale. Security classification is based on the total sub-scale scores, in accordance with predetermined decision rules that specify cut-off values for security ratings.

Procedure

Four stages of the full parole review process, outlined by the CCRA (1992), were examined: (1) Parole Eligibility; (2) Parole Board Decision; (3) the APR process; and (4) Parole Outcome. At the first stage, a review of the Decision Hearing Review database of the OMS was conducted to determine the number of male federal offenders who applied for full parole upon

reaching their PED in 1996. Most offenders are eligible to apply for full parole after serving either one-third of their sentence or seven years. Offenders serving life sentences for first-degree murder are eligible only after serving 25 years¹. Eligibility dates for offenders serving life sentences for second-degree murder are set between 10 to 25 years by the court. An offender may waive his or her right to full parole review upon eligibility (CCRA, s. 120, 1992).

Therefore, the outcome of this stage was coded such that eligible offenders either Applied (coded as 1) or Did Not Apply (coded as 0). The number of offenders who Applied and the number of offenders who Did Not Apply were aggregated. Moreover, files were coded to indicate whether an offender had ever waived a full parole hearing (coded as 1) or had never waived a hearing on his current sentence (coded as 0).

The next stage of the parole process is the Parole Board decision. At this stage, the Parole Board may either Grant or Deny parole to the offender (CCRA, s. 123, 1992). Of those cases where an application for full parole was submitted upon PED, the number of offenders who were Granted full parole (coded as 1) and the number of offenders who were Denied full parole (coded as 0) was aggregated. In some cases, an offender may have more than one full parole hearing on his current sentence. To account for those cases, the Parole Board decision was coded (grant/deny) separately for the first hearing, the second hearing, and all subsequent hearings.

Another stage of the parole process is the Accelerated Parole Review (APR). Offenders who are serving their first federal sentence and who have not committed either a Schedule I or Schedule II offence must be reviewed by APR criteria (see the CCRA [1992] for a complete

¹ FAINT HOPE CLAUSE PROCEDURE. UNDER SECTION 745 OF THE CRIMINAL CODE AN OFFENDER SERVING A SENTENCE FOR FIRST-DEGREE MURDER OR TREASON WHO HAS SERVED AT LEAST 15 YEARS OF HIS SENTENCE MAY APPLY FOR REDUCTION IN THE NUMBER OF YEARS OF IMPRISONMENT WITHOUT ELIGIBILITY FOR FULL PAROLE.

listing of Schedule I and Schedule II offences). Subsequently, these offenders are either Directed or Not Directed for full parole release (CCRA, s. 125-126, 1992). The number of APR-eligible inmates was identified using the OMS. Of those offenders identified as APR-eligible, the number of offenders Directed for full parole (coded as 1) versus Not Directed for full parole release (coded as 0) was aggregated.

Finally, the fourth stage of the parole process is Parole Outcome. Before release is granted, offenders must agree to abide by certain conditions. These conditions place restrictions on the offender. Under Section 124(3) of the CCRA (1992), the National Parole Board has the authority to revoke release if those conditions are breached. Among those offenders identified as having been granted full parole, the number of cases where parole was successfully completed (coded as 1) and the number of cases where full parole had been revoked due to either a technical violation or commission of a new offence (coded as 0) was aggregated. Offenders who were released on full parole but were still under supervision in the community were not included in the analyses ($n = 283$).

Results

Initial comparisons between Aboriginal and non-Aboriginal offenders in the proceeding sections focus on demographic characteristics, variables pertaining to the index offence and criminal history, risk and need factors as measured by the OIA, and institutional behaviour. Analyses are then reported in sections reflecting the four primary hypotheses of the current study. The ordering of the sections follows the order of the full parole process as outlined by the Corrections and Conditional Release Act (CCRA; 1992).

Profile of Male Federal Offenders Eligible for Full Parole in 1996

Sample Demographics

The demographic characteristics of the Aboriginal offender group ($n = 285$) and the non-Aboriginal offender group ($n = 2194$) are presented in Table 1. Both groups were around 36 years of age at their full parole eligibility date. Over half of both Aboriginal and non-Aboriginal offenders were unemployed at the time of arrest for their current sentence (64.9% and 58.9%, respectively). Moreover, a large percentage of Aboriginal and non-Aboriginal offenders were single at the time of their current offence (42.2% and 38.7%, respectively). However, Aboriginal offenders had a significantly shorter sentence length ($M = 1377.91$, $SD = 571.28$) than non-Aboriginal offenders ($M = 1531.56$, $SD = 933.66$), $t(2477) = 2.71$, $p < .01$. Noticeable differences also arose in the regional distribution of offenders with a higher percentage of Aboriginal offenders incarcerated in the Prairie (67.3%) and Pacific (15.1%) regions as compared to non-Aboriginal offenders (20.1% and 8.5%, respectively). In addition, a higher percentage of Aboriginal offenders had less than Grade 10 education (63.9%) as compared to non-Aboriginal offenders (48.1%). Aside from sentence length, no significance tests were conducted.

Criminal History Record

Table 2 depicts comparisons between Aboriginal and non-Aboriginal offenders on those variables pertaining to the index offence, level of violence, and criminal history-related variables. A Bonferroni correction was used to adjust for the multiple dependent variables. An initial level of significance of .05 was chosen and divided by the number of dependent variables describing Index Offence Characteristics (10). This resulted in a critical value of .005 that was applied in determining statistical significance for chi-square analyses. For the Criminal History Variables,

a further Bonferroni correction was made, where an initial .05 level of significance was divided by the number of dependent variables (4), resulting in a critical value of .01.

With respect to the index offence, Aboriginal offenders were convicted of more serious offences overall than non-Aboriginal offenders. As illustrated in Table 2, Aboriginal offenders were nearly three times as likely to have been convicted of a homicide-related offence in the current sentence as compared to non-Aboriginal offenders (9.1% vs. 3.5%, respectively), $\chi^2 (1, \underline{N} = 2479) = 20.47, p < .001$. Moreover, Aboriginal offenders were twice as likely as non-Aboriginal offenders to have been convicted of an assault-related offence (35.8% vs. 17.7%), $\chi^2 (1, \underline{N} = 2479) = 51.79, p < .001$, and a sex-related offence (37.5% vs. 18.7%), $\chi^2 (1, \underline{N} = 2479) = 55.34, p < .001$. Interestingly, Aboriginal offenders were less likely to have been convicted of a drug offence as compared to non-Aboriginal offenders (11.2% vs. 33.1%), $\chi^2 (1, \underline{N} = 2479) = 57.0, p < .001$.

As might be expected based on their offence history, Aboriginal offenders' offences were more likely to be characterized by violence as compared to non-Aboriginal offenders (58.6% vs. 25.3%), $\chi^2 (1) = 122.16, p < .001$. The level of violence at the index offence (amount of harm incurred by the victim), as measured by the Offence Severity Record, was significantly higher for Aboriginal offenders as compared to non-Aboriginal offenders, $\chi^2 (2, \underline{N} = 1670) = 60.726, p < .001$. That is, a higher percentage of Aboriginal than non-Aboriginal offenders caused death (9.1% vs. 3.3%) or serious injury in the index offence (27.3% vs. 8.6%).

In terms of criminal history record, Aboriginal offenders were significantly more likely to have been exposed to the criminal justice system as young offenders as compared to non-Aboriginal offenders (42.8% vs. 28.8%), $\chi^2 (1, \underline{N} = 1806) = 21.6, p < .001$. An overwhelming

proportion of all offenders in the study sample had prior involvement in the adult provincial correctional system. Aboriginal offenders, however, were more likely to have served a prior provincial term of incarceration as compared to non-Aboriginal offenders (71.6% vs. 59.0%), χ^2 (1, N = 1815) = 15.79, $p < .001$. In terms of prior incarcerations in the federal correctional system, the rates of incarceration were quite similar between Aboriginal and non-Aboriginal offenders (21.2% vs. 20.7%).

Table 1

Demographic Characteristics of Aboriginal and Non-Aboriginal Offenders

Demographic Variable	Aboriginal (<u>n</u> = 285)	Non-Aboriginal (<u>n</u> = 2194)
Age at full parole eligibility	<u>M</u> = 36.38 (<u>SD</u> = 10.48)	<u>M</u> 35.58= (<u>SD</u> = 10.75)
Sentence Length (in days)*	<u>M</u> = 1377.91 (<u>SD</u> = 571.29)	<u>M</u> = 1531.56 (<u>SD</u> = 933.66)
Region		
Atlantic	2.8%	12.3%
Quebec	5.6%	31.1%
Ontario	9.2%	28.0%
Prairie	67.3%	20.1%
Pacific	15.1%	8.5%
Single	42.2%	38.7%
Unemployed at time of arrest	64.9%	58.9%
Less than Grade 10 Education	63.9%	48.1%

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

Table 2

Comparison of Aboriginal and Non-Aboriginal Offenders on Offence Variables

Offence Variable	Aboriginal	Non-Aboriginal	Test
<i>Index Offence Characteristics</i>			
Type of most serious offence (%)			
Homicide	9.1	3.5	$\chi^2(1) = 20.47***$
Sex offences	37.5	18.7	$\chi^2(1) = 54.34***$
Robbery	27.7	26.9	$\chi^2(1) = 0.01$
Assault offences	35.8	17.7	$\chi^2(1) = 51.79***$
Break and enter	30.9	24.4	$\chi^2(1) = 5.57$
Theft	21.1	20.3	$\chi^2(1) = 0.09$
Drug offences	11.2	33.1	$\chi^2(1) = 57.0***$
Weapons offences	14.0	19.9	$\chi^2(1) = 5.4*$
Escape	5.3	6.3	$\chi^2(1) = 0.46$
Violence in Current Offence (%)	58.6	25.3	$\chi^2(1) = 122.16***$
Level of Violence at Index Offence (%)			$\chi^2(2) = 60.726***$
Causes Death	9.1	3.3	
Serious (Wound, Disfigure)	27.3	8.6	
Minor (Hit, Slap, Strike)	39.9	17.7	
<i>Criminal History Variables (%)</i>			
Prior Youth Record	42.8	28.8	$\chi^2(1) = 21.6***$

Table 2

Comparison of Aboriginal and Non-Aboriginal Offenders on Offence Variables

Offence Variable	Aboriginal	Non-Aboriginal	Test
<i>Criminal History Variables (%)</i>			
Prior Provincial Term	71.6	59.0	$\chi^2 (1) = 15.79***$
Prior Federal Term	21.2	20.7	$\chi^2 (1) = 0.04$
Failure on Conditional Release	32.1	26.5	$\chi^2 (1) = 3.79$

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

Offender Intake Assessment (OIA) Variables

Table 3 depicts comparisons between Aboriginal and non-Aboriginal offenders on the OIA variables pertaining to criminal risk and need. Because pairwise comparisons were conducted, the Bonferroni correction was taken to correct for family-wise error rates. An initial level of significance of .05 was chosen and divided by the number of dependent variables (9). This resulted in a critical value of .006 that was applied in determining statistical significance.

With respect to the global risk rating, a significantly higher percentage of Aboriginal offenders were designated as either high- or medium-risk (27.7% and 34.7%, respectively) as compared to non-Aboriginal offenders (20.3% and 24.1%, respectively), χ^2 (2, N = 2443) = 32.81, $p < .001$. This may be attributable to the larger proportion of Aboriginal offenders who were convicted of a homicide or sex offence. Offenders who are currently serving sentences for offences that caused death or serious harm must be given a high-risk rating. In addition, an overall rating of high criminal risk is given to offenders assessed as having a criminal history record that reflects considerable sex offending (Correctional Service of Canada, 1996). A significantly higher percentage of Aboriginal offenders were rated as high- and medium-need cases (32.3% and 47.0%, respectively) as compared to non-Aboriginal offenders (21.3% and 38.3%, respectively), χ^2 (2, N = 2443) = 43.65, $p < .001$.

As indicated in Table 3, offenders in the current study presented difficulties in multiple need domains as measured by the CNIA. Notably, Aboriginal offenders were identified as having considerable difficulties in the areas of substance abuse (92.2%), personal/emotional orientation (90.0%), and employment (73.7%). Chi-square analyses revealed only two differences between Aboriginal and non-Aboriginal offenders on the CNIA. That is, a

significantly higher percentage of Aboriginal offenders were identified as requiring considerable need for improvement in the areas of substance abuse (92.2% vs. 63.9%), $\chi^2 (1, \underline{N} = 2089) = 88.98, p < .001$, and marital/family (68.7% vs. 55.1%), $\chi^2 (1, \underline{N} = 2089) = 18.19, p < .001$.

Institutional-Related Variables

Comparisons between Aboriginal and non-Aboriginal offenders on the Custody Rating Scale, initial security level, institutional incidents, and program completion information are presented in Table 4. Because pairwise comparisons were conducted without the use of an omnibus test, the Bonferroni correction was used. With respect to security ratings and incident history, an initial .05 level of significance was chosen and divided by the number of dependent variables (9). This resulted in a critical value of .006 that was applied in determining statistical significance for the chi-square analyses. An additional Bonferroni correction was conducted for program information where an initial .05 level of significance was divided by the number of dependent variables (7), resulting in a critical value of .007.

As illustrated in Table 4, a higher percentage of Aboriginal offenders were rated as high and medium (4.6% and 70.6%, respectively) on the Custody Rating Scale as compared to non-Aboriginal offenders (2.1% and 60.2%, respectively), $\chi^2 (2, \underline{N} = 1883) = 17.34, p < .001$. Despite differences in security ratings on the Custody Rating Scale, there were no statistically significant differences between Aboriginal and non-Aboriginal offenders with respect to the initial security level in federal institutions. The only statistically significant difference in incident history was with respect to fighting in prison; a higher percentage of Aboriginal offenders were charged with fighting as compared to non-Aboriginal offenders (27.2% vs. 19.0%), $\chi^2 (1, \underline{N} = 2479) = 11.23, p < .001$. The results in Table 4 indicate that Aboriginal

offenders were significantly more likely to have completed a family program (24.9% vs. 16.8%), a personality program (42.5% vs. 27.8%), an attitude program (38.6% vs. 27.0%), and a sex offender program (21.1% vs. 11.8%).

Table 3

Comparison of Aboriginal Offenders and Non-Aboriginal Offenders on OIA Variables

OIA Variables	Aboriginal	Non-Aboriginal	Test
<i>Offender Intake Assessment</i>			
Global Risk Rating (%)			$\chi^2 (2) = 32.81***$
Low	37.5	55.5	
Medium	34.7	24.1	
High	27.7	20.3	
Global Need Rating (%)			$\chi^2 (2) = 43.65***$
Low	20.7	40.3	
Medium	47.0	38.3	
High	32.3	21.3	
CNIA (%)			
Employment	73.7	66.5	$\chi^2 (1) = 5.63$
Marital/Family	68.7	55.1	$\chi^2 (1) = 18.19***$
Associates	67.3	66.7	$\chi^2 (1) = 0.4$
Substance Abuse	92.2	63.9	$\chi^2 (1) = 88.98***$
Community Functioning	52.7	58.1	$\chi^2 (1) = 2.91$
Personal/Emotional	90.0	86.5	$\chi^2 (1) = 2.75$
Attitude	53.9	53.7	$\chi^2 (1) = 0.05$

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

Table 4

Comparisons of Aboriginal Offenders and Non-Aboriginal Offenders on Institutional Variables

Institutional Variables	Aboriginal	Non-Aboriginal	Test
<i>Custody Rating Scale (%)</i>			$\chi^2(2) = 17.34^{***}$
Low	24.8	37.7	
Medium	70.6	60.2	
High	4.6	2.1	
<i>Initial Security Level (%)</i>			$\chi^2(2) = 4.13$
Minimum	21.0	26.9	
Medium	65.5	59.2	
Maximum	13.5	13.9	
<i>Institutional Incidents</i>			
Assault in prison	27.2	19.0	$\chi^2(1) = 11.23^{**}$
Escape or escape attempt	5.6	5.3	$\chi^2(1) = 0.08$
Drug offence in prison	9.3	6.5	$\chi^2(1) = 3.28$
Contraband	23.2	22.0	$\chi^2(1) = 0.22$
Damage property	5.0	2.9	$\chi^2(1) = 4.00$
Causing a disturbance	9.6	6.7	$\chi^2(1) = 3.44$
Disciplinary	13.3	15.6	$\chi^2(1) = 1.13$
<i>Program Completion (%)</i>			
Employment program	47.7	44.0	$\chi^2(1) = 1.39$

Table 4

Comparisons of Aboriginal Offenders and Non-Aboriginal Offenders on Institutional Variables

Institutional Variables	Aboriginal	Non-Aboriginal	Test
<i>Program Completion (%)</i>			
Family program	24.9	16.8	$\chi^2 (1) = 11.32***$
Personality program	42.5	27.8	$\chi^2 (1) = 26.05***$
Sex offender program	21.1	11.8	$\chi^2 (1) = 19.24***$
Education program	29.8	23.7	$\chi^2 (1) = 5.13$
Community reintegration	20.4	16.3	$\chi^2 (1) = 3.01$
Attitude program	38.6	27.0	$\chi^2 (1) = 15.76***$

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

Hypothesis 1: Factors Predicting Full Parole Application

Full Parole Application Status

It was hypothesized that race group differences (Aboriginal/non-Aboriginal) would predict differences in the rate of offenders who apply for full parole upon their PED. To examine this hypothesis, the decision review files of all offenders in the this sample were reviewed and coded as to whether each offender had not applied for full parole (coded 0) or had applied for full parole at least once on his current sentence (coded as 1). The full parole application status of Aboriginal and non-Aboriginal offenders is presented in Table 5. Because pairwise comparisons were conducted without the use of an omnibus test, a conservative approach, the Bonferroni correction, was taken to correct for family-wise error rates. With respect to full parole application and waivers, an initial level of significance of .05 was chosen and divided by the number of dependent variables (2). This resulted in a critical value of .025 that was applied in determining statistical significance for the chi-square analyses. An additional Bonferroni correction was conducted for chi-square analyses controlling for risk/need levels and offence types. An initial level of significance of .05 was divided by the number of dependent variables (6), resulting in a critical value of .008.

As indicated in Table 5, Aboriginal offenders were significantly less likely to apply for full parole (47.7%) as compared to non-Aboriginal offenders (73.5%), $\chi^2 (1, \underline{N} = 2479) = 80.81$, $p < .001$. Aboriginal offenders were also more likely to waive a full parole hearing (58.8%) as compared to non-Aboriginal offenders (33.1%), $\chi^2 (1, \underline{N} = 2479) = 72.174$, $p < .001$. Controlling for risk and need level revealed no statistically significant differences in who applied for full parole. However, controlling for the index offence illustrated that Aboriginal offenders were still

less likely to apply for full parole regardless of the seriousness of the offence committed on the current sentence. For example, Aboriginal offenders who committed a homicide-related offence were still less likely to apply for full parole (42.3%) as were non-Aboriginal offenders who committed a homicide-related offence (72.4%), $\chi^2 (1, \underline{N} = 102) = 7.665, p < .001$.

Factors Predicting Full Parole Application

Logistic regressions were used to determine the proportion of variance accounted for by race group differences, over the criminal history record, risk and need, and institutional behaviour of offenders. The logistic regression procedure allows one to predict a dichotomous outcome such as group membership by estimating the probability of an event occurring given the status of a set of predictor variables that may be continuous, discrete, or dichotomous. Since the logistic regression has no assumptions about the distribution of the predictor variables, this particular procedure is advantageous for dichotomous data (Noursis, 1993). Multivariate normality was an issue in the current study as many of the dichotomous variables had skewed distributions².

2 Variables reflecting more serious offences would be more likely to have skewed distributions. For example, few offenders in the current study were convicted of homicide-related offences and an even smaller proportion of offenders granted full parole would have a homicide offence in their criminal record.

Table 5

Full Parole Application Status of Aboriginal and Non-Aboriginal Offenders

Variable	Aboriginal	Non-Aboriginal	Test
<i>Full Parole Application Status (%):</i>			
Applied for full parole	47.7	73.5	$\chi^2 (1) = 80.81***$
Waived full parole hearing	58.8	33.1	$\chi^2 (1) = 72.174***$
<i>FP Application by Risk/Need Level:</i>			
High risk cases	47.4	59.0	$\chi^2 (1) = 0.057$
High need cases	53.3	59.1	$\chi^2 (1) = 1.04$
<i>FP Application by Index Offence (%):</i>			
Homicide-related offence	42.3	72.4	$\chi^2 (1) = 7.665**$
Sex-related offence	41.1	55.1	$\chi^2 (1) = 6.666**$
Assault-related offence	41.2	63.5	$\chi^2 (1) = 16.625***$
Robbery-related offence	44.3	61.3	$\chi^2 (1) = 8.327**$

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

However, logistic regression is sensitive to multicollinearity. Multicollinearity is a problem that arises when independent variables are highly correlated with one another, resulting in unstable coefficients and high standard errors (Menard, 1992). To detect for multicollinearity, a multiple linear regression was calculated using the same dependent and independent variables as used in the logistic model to obtain tolerance values. Because the concern is with the relationship among the independent variables, the functional form of the model for the dependent variable is irrelevant to the estimation of multicollinearity. The tolerance value for an independent variable is simply $1 - R_j^2$ which represents the variance accounted for by all of the other independent variables. As R_j^2 increases, the tolerance approaches zero, thus a tolerance of less than .10 indicates a serious multicollinearity problem. The tolerance values for all predictors used in the logistic regression analyses are presented in Table 6. No tolerance values approached .10, thus multicollinearity is not an issue in the current study.

Four logistic regressions were calculated with respect to full parole application, so a Bonferroni correction was used to correct for family-wise error rate. An initial level of significance of .05 was chosen and divided by the number of logistic regressions calculated (4), resulting in a critical value of .0125. First, a hierarchical logistic regression was used to determine the extent to which race group differences accounted for variance in full parole application in addition to other factors. Thirty-nine variables were used to predict the dichotomous dependent variable: (1) Did not apply (coded 0); and (2) Applied (coded 1). Table 7 reports the regression coefficients (B), their standard errors (SE), the odds ratio ($[Exp]B$), and the Wald statistics (significance test of the regression coefficients) for each predictor variable as each block was entered into the equation.

Table 6**Tolerance Values for Predictor Variables**

Variable	Tolerance Value
Age at full parole eligibility	.969
Sentence length	.930
Aboriginal offender (yes/no)	.831
Homicide-related offence in current sentence	.866
Sex-related offence in current sentence	.399
Assault-related offence in current sentence	.694
Robbery-related offence in current sentence	.696
Drug-related offence in current sentence	.755
Break and Enter offence in current sentence	.711
Violence used in the current offence	.639
Prior Youth Record	.769
Prior Provincial Term	.676
Prior Federal Term	.642
Prior Failure on Conditional Release	.623
OIA Risk Level	.511
OIA Need Level	.485
CNIA: Employment Domain	.556
CNIA: Marital/Family Domain	.711

Table 6

Tolerance Values for Predictor Variables

Variable	Tolerance Value
CNIA: Associates/Social Interaction Domain	.561
CNIA: Substance Abuse Domain	.716
CNIA: Community Functioning Domain	.649
CNIA: Personal/Emotional Orientation Domain	.652
CNIA: Attitude Domain	.757
Fighting in prison	.795
Drug charge in prison	.769
Contraband charge in prison	.701
Damage property in prison	.864
Disciplinary charge in prison	.857
Causing a disturbance in prison	.748
Escape or escape attempt	.739
Completed an employment program	.889
Completed a family program	.917
Completed a personality program	.849
Completed a sex offender program	.550
Completed an education program	.921
Completed a community reintegration program	.933

Variables were entered into two blocks. In the first block, thirty-eight variables describing factors related to criminal history, risk and need ratings, and institutional performance were entered. In the second block, the variable Aboriginal offender (yes/no) was added in order to investigate the amount of variance for which race group differences would account in addition to the other predictors. All categorical predictor variables were re-coded using the deviation procedure prior to their entry. OIA risk and need ratings were collapsed into two categories (1 = Low or medium, and 2 = High), and the seven need domains of the CNIA were collapsed into three categories (1 = An asset or no need for improvement, 2 = Some need for improvement, and 3 = Considerable need for improvement).

As expected, those variables pertaining to the index offence, criminal history, risk and need factors, and institutional behaviour entered in Block 1 alone were strong predictors of full parole application, correctly classifying offenders as either applying or not applying for full parole in 74.89% of cases, $\chi^2 (52) = 497.092$, $p < .001$. In particular, several criminal history variables were significant predictors. Regression coefficients indicate that being convicted of a homicide-related, sex-related, or robbery-related offence, having used violence in the current offence, and having a prior federal term decrease the likelihood of applying for full parole, while being convicted of a drug-related offence increases the likelihood of applying. Surprisingly, only two risk and need factors as measured by the OIA were significant predictors in Block 1. Being rated as having considerable difficulties in the marital/family and personal/emotional domains decrease the likelihood of applying for full parole. Contrary to expectation, institutional variables (e.g., incidents, program completion) were not strong predictors of full parole application. Interestingly, having successfully completed an education program during an

offender's most recent incarceration *decreases* the likelihood of applying for full parole.

The Aboriginal offender (yes/no) variable was entered in Block 2. The final model correctly classified 75.51% of the cases as having applied or not applied for full parole, $\chi^2 (53) = 506.738$, $p < .001$. The Aboriginal offender variable only increased the classification ability of the model by 0.62% over that which was classified by criminal history variables, risk and need factors, and institutional performance, ($\chi^2 [1] = 9.646$, $p < .01$). To investigate the magnitude of the effect of the Aboriginal variable, the phi-coefficient was calculated by taking the square root of the chi-square value for the second block divided by the sample size ($n = 1605$). This resulted in a phi-coefficient value of only 0.077, demonstrating that little of the variability in full parole application is related to race group differences. Once the Aboriginal offender variable was added to the equation in Block 2, having committed a homicide-related offence was no longer a significant predictor of full parole application. The only new predictors to achieve significance were institutional escape/escape attempts and sex offender programming. Regression coefficients indicate that being charged with an escape or escape attempt increases the likelihood of applying for full parole, while having successfully completed a sex offender program decreases the likelihood of applying for full parole.

Table 7

Hierarchical Logistic Regression Predicting Full Parole Application

Variables	B	SE	Exp(B)	Wald
<i>Block 1:</i>				
Age at full parole eligibility	-.007	.006	.993	1.339
Sentence length	.0004	.000	1.000	6.869**
Homicide offence in current sentence	-.438	.216	.645	4.102*
Sex offences in current sentence	-.461	.111	.630	17.223***
Assaults in current sentence	.011	.089	1.011	.015
Robbery offences in current sentence	-.341	.082	.712	17.182***
Drug offences in current sentence	.357	.086	1.120	17.087***
Escape offence in current sentence	-.253	.170	1.429	2.217
Break and enter in current sentence	.113	.084	.776	1.830
Violence used in current offence	-.389	.079	.678	23.971***
Unemployed at time of offence	-.142	.074	.868	3.644
Youth record	.029	.075	1.029	.147
Prior provincial term	.010	.081	1.010	.015
Prior federal term	-.584	.093	.558	39.202***
Prior failure on conditional release	-.083	.087	.920	.912
Global risk level				
Medium risk	-.171	.010	.843	2.931
High risk	-.231	.127	.793	3.332
Global need level				
Medium need	-.123	.089	.884	1.911
High need	-.106	.132	.890	.644
CNIA: Employment Domain				
No need for improvement	.075	.134	1.077	.307
Some need for improvement	-.181	.111	.835	2.646
Considerable need for imp.	-.216	.138	.806	2.452
CNIA: Marital/Family Domain				
No need for improvement	-.216	.118	.806	3.374
Some need for improvement	.001	.106	1.010	.009
Considerable need for imp.	-.247	.121	.781	4.149*
CNIA: Associates/Social Interaction				
No need for improvement	.035	.126	1.036	.076
Some need for improvement	.199	.112	1.220	3.148
Considerable need for imp.	.027	.139	1.027	.037
CNIA: Substance Abuse				
Some need for improvement	.033	.102	1.033	.103
Considerable need for imp.	-.075	.096	.927	.623

Table 7

Hierarchical Logistic Regression Predicting Full Parole Application

Variables	B	SE	Exp(B)	Wald Statistic
CNIA: Community Functioning				
No need for improvement	-.011	.112	.989	.008
Some need for improvement	.147	.120	1.158	1.801
Considerable need for imp.	.216	.162	1.241	1.778
CNIA: Personal/Emotional				
Some need for improvement	.073	.112	1.076	.433
Considerable need for imp.	-.295	.116	.745	6.408*
CNIA: Attitude				
No need for improvement	-.048	.110	.953	.189
Some need for improvement	-.141	.117	.869	1.452
Considerable need for imp.	.134	.121	1.143	1.221
Fighting charge in prison	.003	.088	1.003	.001
Escape or escape attempt from prison	.362	.190	1.437	3.646
Drug charge in prison	.001	.155	1.001	.0001
Damage property in prison	.390	.231	.873	2.859
Contraband charge in prison	-.136	.092	1.477	2.21
Disciplinary charge in prison	-.144	.102	.995	2.001
Causing a disturbance in prison	-.005	.140	.866	.001
Completed an employment program	-.095	.066	.909	2.062
Completed an education program	-.145	.074	.865	3.870*
Completed a sex offender program	-.218	.111	.804	3.835
Completed a personality program	.072	.073	1.074	.962
Completed an attitude program	-.143	.072	.867	3.977
Completed a community program	-.127	.084	.881	2.253
Block 2				
Aboriginal offender (yes/no)	-.298	.096	.742	9.561**
Age at full parole eligibility	.006	.006	.994	1.057
Sentence length	.0004	.000	1.000	6.973**
Homicide offence in current sentence	-.348	.221	.706	2.489
Sex offences in current sentence	-.416	.112	.659	13.718***
Assaults in current sentence	.037	.090	1.038	.168
Robbery offences in current sentence	-.350	.083	.705	18.02***
Drug offences in current sentence	.337	.089	1.230	15.167***
Escape offence in current sentence	-.270	.172	1.401	2.469
Break and enter in current sentence	.122	.084	.764	2.113
Violence used in current offence	-.387	.08	.679	23.478***
Unemployed at time of offence	-.134	.074	.875	3.248

Table 7

Hierarchical Logistic Regression Predicting Full Parole Application

Variables	B	SE	Exp(B)	Wald Statistic
Youth record	.046	.076	1.047	.36
Prior provincial term	.011	.081	1.011	.018
Prior federal term	-.606	.094	.546	41.625***
Prior failure on conditional release	-.081	.087	.922	.866
Global risk level				
Medium risk	-.172	.100	.842	2.917
High risk	-.227	.127	.797	3.182
Global need level				
Medium need	-.110	.089	.896	1.525
High need	-.099	.132	.906	.559
CNIA: Employment Domain				
No need for improvement	.068	.135	1.070	.251
Some need for improvement	-.176	.112	.839	2.488
Considerable need for imp.	-.191	.139	.827	1.884
CNIA: Marital/Family Domain				
No need for improvement	-.210	.118	.811	3.157
Some need for improvement	.014	.107	1.014	.018
Considerable need for imp.	-.246	.122	.782	4.074*
CNIA: Associates/Social Interaction				
No need for improvement	.047	.127	1.048	.138
Some need for improvement	.216	.113	1.241	3.667
Considerable need for imp.	.025	.139	1.025	.032
CNIA: Substance Abuse				
Some need for improvement	.018	.103	1.073	.029
Considerable need for imp.	-.015	.098	.724	.022
CNIA: Community Functioning				
No need for improvement	.002	.120	.962	.0003
Some need for improvement	.119	.111	.879	1.152
Considerable need for imp.	.187	.163	1.132	1.322
CNIA: Personal/Emotional				
Some need for improvement	.071	.112	1.073	.395
Considerable need for imp.	-.323	.117	.724	7.576**
CNIA: Attitude				
No need for improvement	-.039	.111	.962	.123
Some need for improvement	-.129	.118	.879	1.209
Considerable need for imp.	.124	.122	1.132	1.040
Fighting charge in prison	.014	.088	1.014	.024
Escape or escape attempt from prison	.380	.191	1.463	3.968*

Table 7

Hierarchical Logistic Regression Predicting Full Parole Application

Variables	B	SE	Exp(B)	Wald Statistic
Drug charge in prison	-.005	.155	.995	.001
Damage property in prison	.427	.229	1.533	3.464
Contraband charge in prison	-.136	.092	.873	2.12
Disciplinary charge in prison	-.167	.102	.846	2.682
Causing a disturbance in prison	-.003	.141	.997	.001
Completed an employment program	-.101	.067	.904	2.319
Completed an education program	-.151	.074	.860	4.118*
Completed a sex offender program	-.220	.111	.802	3.905*
Completed a personality program	.079	.074	1.082	1.148
Completed an attitude program	-.128	.072	.879	3.169
Completed a community reintegration program	-.131	.085	.877	2.4

Note. Block 1 - $\chi^2(52) = 497.092***$; Block 2 - $\chi^2(1) = 9.646**$. Final - $\chi^2(53) = 506.738***$.

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

A second logistic regression, using the backward elimination procedure, was conducted in an effort to further explore what factors are theoretically linked to full parole application. Backward elimination rather than forward inclusion was selected as the method of stepwise regression because there is less risk of failing to find a relationship. In some cases, a variable may appear to have a statistically significant effect only when another variable is held constant. This is called a suppressor effect. One disadvantage to forward inclusion as a method for stepwise regression is the possible exclusion of variables involved in suppressor effects. With backward elimination, because all variables will already be in the model, there is less risk of failing to find a relationship when one exists (Menard, 1992).

The results of the final equation are given in Table 8. As found in the hierarchical logistic regression, being Aboriginal decreased the likelihood of applying for full parole. Looking at the odds ration [Exp(B)], as the Aboriginal variable increased from 0 to 1, the odds of applying for full parole decreased by 17%. The results, however, indicate that the most important variables for predicting whether an offender in this sample will apply for full parole or not (classification at 74.64%) pertain to criminal history variables. Regression coefficients indicate that having committed either a homicide, sex, or robbery offence and having used violence in the index offence decreased the likelihood of applying for full parole, while having committed a drug-related offence increased the likelihood of applying for full parole. In addition, regression coefficients demonstrated that being unemployed at the time of the offence and having served a prior federal sentence decreased the likelihood of applying for full parole. Only three of the OIA risk and need factors were significant predictors. Being rated as medium or high risk and as requiring considerable need for improvement in the marital/family and

personal/emotional orientation domains decreased the likelihood of applying for full parole. Contrary to expectation, institutional variables (e.g., incidents, program completion) did not have much impact on full parole applications. Being charged with a disciplinary incident decreased the likelihood of applying for full parole. Interestingly, having completed either a sex offender program or an education program also decreased the likelihood of applying for full parole.

Factors Predicting Full Parole Application for Aboriginal Offenders

To determine whether there were differences between those Aboriginal offenders who applied for full parole and those Aboriginal offenders who did not apply, a series of chi-square analyses were performed on selected index offence and OIA variables. The Bonferroni correction was used to correct for family-wise error rates. An initial level of significance of .05 was divided by the number of dependent variables (8), resulting in a critical value of .006.

Table 9 presents the chi-square analyses comparing the application rates among Aboriginal offenders controlling for selected index offence and OIA variables. Contrary to expectation, there were not many statistically significant differences between those Aboriginal offenders who applied for full parole and those who did not apply. Aboriginal offenders who applied for full parole were significantly less likely to have used violence in the index offence as compared to those Aboriginal offenders who did not apply (32.4% vs. 67.6%), $\chi^2 (1, \underline{N} = 210) = 9.543, p < .001$. However, a higher percentage of Aboriginal offenders classified as high-need cases applied in comparison to those Aboriginal offenders classified as low-need cases (35.3% vs. 27.1%). Nonetheless, Aboriginal offenders who applied were more likely to have been rated as low-need as compared to those Aboriginal offenders who did not apply (27.1% vs. 15.5%).

Table 8

Backward Elimination Procedure Predicting Full Parole Application

Variable	B	SE	Exp(B)	Wald Statistic
Aboriginal offender (yes/no)	-.292	.089	.830	10.843***
Sentence length	.001	.0002	1.001	8.291**
Homicide offence in current sentence	-.432	.210	.649	4.261*
Sex offences in current sentence	-.455	.101	.634	20.296***
Robbery offences in current sentence	-.392	.077	.676	26.097***
Drug offences in current sentence	.335	.083	1.398	16.437***
Violence used in current offence	-.370	.069	.691	28.428***
Unemployed at time of offence	-.176	.067	.838	7.029**
Prior federal term	-.590	.079	.555	55.584***
Global risk level				
Medium risk	-.203	.096	.816	4.527*
High risk	-.215	.102	.806	4.430*
CNIA: Marital/Family Domain				
No need for improvement	-.207	.112	.813	3.414
Some need for improvement	.003	.102	1.003	.001
Considerable need for imp.	-.243	.115	.784	4.468*
CNIA: Personal/Emotional Orientation				
Some need for improvement	.091	.109	1.096	.706

Table 8

Backward Elimination Procedure Predicting Full Parole Application

Variable	B	SE	Exp(B)	Wald Statistic
CNIA: Personal/Emotional Orientation				
Considerable need for imp.	-.293	.109	.746	7.173**
Disciplinary charge in prison	-.182	.090	.834	4.074*
Completed an education program	-.186	.071	.786	6.812**
Completed a sex offender program	-.241	.109	.830	4.897*

Note. $\chi^2(19) = 469.087***$

p < .05, ** p < .01, *** p < .001

Table 9

Full Parole Application Status for Aboriginal Offenders

Variable	Applied	Did Not Apply	Test
<i>FP Application by Index Offence:</i>			
Homicide-related offence	42.3	57.7	$\chi^2 (1) = .336$
Sex-related offence	47.1	58.9	$\chi^2 (1) = 2.989$
Assault-related offence	41.2	58.8	$\chi^2 (1) = 2.726$
Robbery-related offence	44.3	55.7	$\chi^2 (1) = .511$
Violence in current offence	32.4	67.6	$\chi^2 (1) = 9.543$
Prior Federal Term	34.1	65.9	$\chi^2 (1) = 1.514$
<i>FP Application by Risk/Need Levels:</i>			
Global Risk Rating			$\chi^2 (2) = 2.97$
Low risk	42.9	33.9	
Medium risk	30.1	38.5	
High risk	27.1	27.7	
Global Need Rating			$\chi^2 (2) = 10.563***$
Low need	27.1	15.5	
Medium need	37.6	56.1	
High need	35.3	28.4	

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

In addition, a third logistic regression, using the backward elimination procedure, was used to examine whether a unique set of factors predicted the likelihood of applying for full parole for Aboriginal offenders. The final equation correctly classified 71.78% of cases, $\chi^2 (8) = 42.061$, $p < .001$. As shown in Table 10, only six variables were included in the final equation: failure on a prior conditional release, the presence of violence in the index offence, global need rating, personal/emotional orientation, and having completed a sex offender and education program. Not surprisingly, having failed on conditional release on a prior sentence, having used violence in the index offence, and being assessed as requiring considerable improvement in the personal/emotional orientation decreased the likelihood of applying for full parole for Aboriginal offenders. Interestingly, having completed either a sex offender program or an education program also decreased the likelihood of applying for full parole for Aboriginal offenders.

Factors Predicting Full Parole Application for Non-Aboriginal Offenders

A fourth logistic regression was conducted to examine those factors associated with full parole application for non-Aboriginal offenders. The final equation correctly classified 74.84% of cases as applying or not applying for full parole, $\chi^2 (13) = 386.537$, $p < .001$. As shown in Table 11, criminal history variables were the most important predictors. Having committed a sex or robbery offence, using violence in the index offence, being unemployed at the time of arrest, and having served a prior federal term decrease the likelihood of applying for full parole, and having a drug offence increases the likelihood of applying. Being assessed as high risk and as requiring considerable need for improvement in the personal/emotional orientation domain decreased the likelihood of applying for full parole.

Table 10

Backward Elimination Procedure Predicting Full Parole Application for Aboriginal Offenders

Variables	B	S.E.	Exp(B)	Wald Statistic
Previous failure on conditional release	-.483	.181	.617	7.10**
Violence used in current offence	-.456	.162	.634	7.984**
Global need level				
Medium need	-.543	.220	.581	6.122*
High need	.176	.244	1.193	.532
CNA: Personal/Emotional Orientation				
Some need for improvement	-.261	.290	.770	.810
Considerable need for imp.	-.686	.260	.504	6.939**
Completed a sex offender program	-.516	.210	.597	6.016*
Completed an education program	-.432	.189	.649	5.241*

Note. $\chi^2(8) = 42.061***$

p < .05. ** p < .01, *** p < .001

Table 11

Backward Elimination Predicting Full Parole Application for Non-Aboriginal Offenders

Variables	B	S.E.	Exp(B)	Wald Statistic
Sentence Length	.001	.0002	1.001	9.577**
Sex offences in current sentence	-.662	.094	.516	49.654***
Robbery in current sentence	-.387	.083	.679	21.661***
Drug offences in current sentence	.317	.088	1.373	13.152***
Violence used in current offence	-.347	.077	.783	20.384***
Unemployed at time of offence	-.244	.073	.539	11.133***
Prior federal term	-.619	.085	.707	53.598***
Global risk level				
Medium risk	-.188	.105	.829	3.189
High risk	-.315	.112	.730	7.939**
CNIA: Personal/Emotional				
Some need for improvement	.151	.117	1.163	1.665
Considerable need for imp.	-.286	.115	.752	6.20*
Contraband charge in prison	-.187	.087	.830	4.556*
Completed an employment program	-.185	.069	.831	7.261**
Completed an attitude program	-.174	.075	.840	5.334*

Note. $\chi^2 (13) = 386.537***$

p < .05, ** p < .01, *** p < .001

Hypothesis 2: Factors Predicting Full Parole Hearing Outcomes

Conditional Release Status

An overview of the conditional release status of offenders in this sample is presented in Table 12. Although a roughly equal proportion of Aboriginal and non-Aboriginal offenders were released on day parole (4.8% and 6.3%, respectively), only 18.3% ($n = 52$) of Aboriginal offenders were granted full parole at least once during their current sentence, as compared to 44.7% ($n = 980$) of non-Aboriginal offenders. Comparatively, a larger proportion of Aboriginal offenders was statutorily released on their current sentence as compared to non-Aboriginal offenders (74.4% vs. 50.2%). These differences in conditional release status were statistically significant, $\chi^2 (4, N = 2479) = 75.608, p < .001$.

Full Parole Hearing Decision Status

It was expected that race group differences would not predict Parole Board decisions. To examine this hypothesis, the decision review files of all offenders in this sample were coded as to whether each offender had been denied (coded 0) or granted full parole at least once on his current sentence (coded as 1). Federal offenders, however, may have more than one full parole hearing on a sentence. As a result, hearing decisions (grant/deny) were coded for the first, second, and third hearings. Since so few Aboriginal offenders in the current study had a second or third parole full parole hearing on their current sentence ($n = 30$ and $n = 0$, respectively), analyses focused only on the first full parole hearing decision. The full parole hearing decision status of Aboriginal and non-Aboriginal offenders is presented in Table 13. A Bonferroni correction was conducted resulting in a critical value of .01.

Table 12

Overview of Conditional Release Status

Form of Conditional Release (%)	Aboriginal	Non-Aboriginal
Day parole	6.3	4.8
Full parole	18.3	44.7
Statutory release	74.4	50.2
Warrant expiry	0.7	0.1
Deceased	0.4	0.2

As illustrated in Table 13, a smaller proportion of Aboriginal offenders were granted full parole at their first full parole hearing as compared to non-Aboriginal offenders (29.3% vs. 38.7%), $\chi^2 (1, \underline{N} = 1174) = 3.888, p < .05$. Controlling for risk and need level revealed no statistically significant differences in who was granted full parole. That is, high-risk Aboriginal offenders were as likely to be granted full parole as high-risk non-Aboriginal offenders (15.2% vs. 16.1%). Controlling for the type of index offence also revealed no statistically significant differences in the number of offenders granted full parole. For instance, a similar percentage of Aboriginal offenders who committed an assault-related offence were granted full parole as non-Aboriginal offenders also convicted of an assault-related offence (24.4% vs. 26.9%). Although a smaller percentage of Aboriginal offenders convicted of sex- and robbery-related offences were granted full parole (31.0% and 14.7%, respectively) as compared to non-Aboriginal offenders (40.0% and 24.0%, respectively), the differences were not statistically significant. However, it is possible that failure to achieve the probability level for statistical significance may be due to the smaller sample of offenders who committed these offences and applied for full parole.

Table 13

Full Parole Hearing Decision Status of Aboriginal and Non-Aboriginal Offenders

Variable	Aboriginal	Non-Aboriginal	Test
<i>Full Parole Hearing Decision (%):</i>			
Granted on first hearing	29.3	38.7	$\chi^2 (1) = 3.888$
Granted on second hearing	33.3	49.8	
<i>FP Decision by Risk/Need Level (%):</i>			
High risk cases	15.2	16.1	$\chi^2 (1) = .02$
High need cases	21.9	17.1	$\chi^2 (1) = .474$
<i>FP Application by Index Offence (%):</i>			
Sex-related offence	31.1	40.0	$\chi^2 (1) = 1.251$
Assault-related offence	24.4	26.9	$\chi^2 (1) = .115$
Robbery-related offence	14.7	24.0	$\chi^2 (1) = 1.503$

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

To determine the proportion of variance accounted for by race group differences, over the criminal history record, risk and need, and institutional behaviour of offenders, four logistic regressions were calculated. An initial level of significance of .05 was chosen and divided by the number of logistic regressions calculated (4). This resulted in a critical value of .0125 that was applied in determining statistical significance. First, a hierarchical logistic regression was conducted. Thirty-nine variables were used to predict the dichotomous dependent variable: (1) Denied (coded 0); and (2) Granted (coded 1). Table 14 reports the regression coefficients (B), their standard errors (SE), the odds ratio ([Exp]B), and the Wald statistics (significance test of the regression coefficients) for each predictor variable as each block was entered into the equation. Variables were entered into two blocks. In the first block, thirty-eight variables describing factors related to criminal history, risk and need ratings, and institutional performance were entered. In the second block, the variable Aboriginal offender (yes/no) was added in order to investigate the amount of variance for which race group differences would account in addition to the other predictors. All categorical predictor variables were re-coded using the deviation procedure prior to their entry. OIA risk and need ratings were collapsed into two categories (1 = Low or medium, and 2 = High), and the seven need domains of the CNIA were collapsed into three categories (1 = An asset or no need for improvement, 2 = Some need for improvement, and 3 = Considerable need for improvement).

As hypothesized, criminal history, risk and need, and institutional variables were strong predictors of full parole hearing outcome, correctly classifying offenders as either being granted or denied full parole in 76.4% of cases, $\chi^2 (52) = 246.096, p < .001$. In particular, several criminal history variables were significant predictors. Regression coefficients indicate that being

convicted of a robbery offence and having a prior provincial or federal term decrease the likelihood of being granted full parole. Interestingly, having a youth record increases the likelihood of being granted full parole. Several risk and need variables as measured by the OIA were significant predictors in Block 1. Being rated as high risk and having considerable difficulties in the attitude and community functioning domains decrease the likelihood of being granted full parole, while having no difficulties in the employment domain increases the likelihood of being granted full parole. Contrary to expectation, most institutional variables (e.g., incidents, program completion) were not strong predictors of full parole decisions. Only being charged with fighting in prison decreases the likelihood of being granted full parole.

The race group differences variable, Aboriginal offender (yes/no), was entered in Block 2. The final model correctly classified 76.55% of the cases as either being granted or denied full parole, $\chi^2 (53) = 246.622$, $p < .001$. As hypothesized, the improvement to the classification ability added by the Aboriginal offender variable was not statistically significant. Thus, the Aboriginal offender variable was not a significant predictor of the full parole decision outcome. Once the Aboriginal offender variable was added to the equation at Block 2, prior federal term was no longer a significant predictor. No new variables achieved significance at Block 2.

Table 14

Hierarchical Logistic Regression Predicting Full Parole Hearing Outcome

Variables	B	SE	Exp(B)	Wald Statistic
<i>Block I:</i>				
Age at full parole eligibility	.008	.010	1.008	.727
Sentence length	.001	.000	1.001	8.124**
		2		
Homicide offence in current sentence	.183	.407	1.201	.203
Sex offences in current sentence	-.347	.186	.707	3.491
Assaults in current sentence	-.300	.158	.741	3.619
Robbery offences in current sentence	-.494	.143	.610	12.026***
Drug offences in current sentence	.176	.136	.801	1.676
Escape offence in current sentence	-.409	.414	1.192	.977
Break and enter in current sentence	-.223	.141	.664	2.508
Violence used in current offence	-.195	.138	1.030	1.996
Unemployed at time of offence	.030	.121	1.328	.060
Youth record	.284	.131	.777	4.668*
Prior provincial term	-.253	.123	.625	4.248*
Prior federal term	-.470	.166	1.155	8.025*
Prior failure on conditional release	.144	.158	.823	.834
Global risk level				
Medium risk	-.121	.270	.886	.341
High risk	-.662	.285	.516	5.418*
Global need level				
Medium need	-.573	.164	.564	12.201***
High need	.290	.260	1.337	1.252
CNIA: Employment Domain				
No need for improvement	.427	.196	1.533	4.740*
Some need for improvement	.004	.175	1.004	.001
Considerable need for imp.	-.217	.238	.805	.833
CNIA: Marital/Family Domain				
No need for improvement	.068	.18	1.070	.135
Some need for improvement	.069	.166	1.071	.170
Considerable need for imp.	-.157	.220	.855	.509
CNIA: Associates/Social Interaction				
No need for improvement	-.025	.197	.975	.016
Some need for improvement	.004	.176	1.004	.001
Considerable need for imp.	.038	.230	1.039	.027
CNIA: Substance Abuse				
Some need for improvement	.181	.162	1.120	1.251
Considerable need for imp.	.049	.152	1.050	.102

Table 14

Hierarchical Logistic Regression Predicting Full Parole Hearing Outcome

Variables	B	SE	Exp(B)	Wald Statistic
CNIA: Community Functioning				
No need for improvement	.11	.191	1.124	.371
Some need for improvement	.215	.183	1.240	1.381
Considerable need for imp.	-.639	.302	.528	4.481*
CNIA: Personal/Emotional				
Some need for improvement	-.155	.156	.857	.981
Considerable need for imp.	.140	.183	1.150	.584
CNIA: Attitude				
No need for improvement	.209	.169	1.232	1.526
Some need for improvement	-.158	.189	.854	.697
Considerable need for imp.	-.534	.204	.586	6.878**
Fighting charge in prison	-.485	.172	.616	8.004**
Escape or escape attempt from prison	.123	.458	1.131	.073
Drug charge in prison	.253	.318	1.288	.637
Damage property in prison	.123	.446	.762	.077
Contraband charge in prison	-.272	.171	1.131	2.527
Disciplinary charge in prison	-.022	.189	.565	.014
Causing a disturbance in prison	-.570	.309	.978	3.396
Completed an employment program	-.020	.107	.981	.033
Completed an education program	-.007	.131	.806	.002
Completed a sex offender program	-.129	.187	.916	.478
Completed a personality program	-.088	.121	.878	.533
Completed an attitude program	.079	.116	.994	.466
Completed a community program	.149	.136	1.161	1.210
Block 2				
Aboriginal offender (yes/no)	.133	.182	1.142	.530
Age at full parole eligibility	.008	.010	1.008	.684
Sentence length	.001	.002	1.001	8.087**
Homicide offence in current sentence	.143	.404	1.154	.125
Sex offences in current sentence	-.363	.187	.696	3.763
Assaults in current sentence	-.306	.158	.736	3.739
Robbery offences in current sentence	-.490	.143	.613	11.787***
Drug offences in current sentence	.180	.136	.798	1.746
Escape offence in current sentence	-.406	.415	1.197	.958
Break and enter in current sentence	-.226	.141	.666	2.572
Violence used in current offence	-.200	.138	.820	2.078
Unemployed at time of offence	.029	.121	1.029	.056
Youth record	.281	.132	1.324	4.544*

Table 14

Hierarchical Logistic Regression Predicting Full Parole Hearing Outcome

Variables	B	SE	Exp(B)	Wald Statistic
Prior provincial term	-.253	.123	.776	4.265*
Prior federal term	-.467	.166	.627	7.928
Prior failure on conditional release	.144	.158	1.155	.829
Global risk level				
Medium risk	-.116	.208	.891	.312
High risk	-.670	.285		5.529*
Global need level				
Medium need	-.565	.165	.568	11.802***
High need	.272	.261	1.312	1.084
CNIA: Employment Domain				
No need for improvement	.431	.196	1.539	4.831*
Some need for improvement	.002	.175	1.002	.0001
Considerable need for imp.	-.224	.238	.799	.888
CNIA: Marital/Family Domain				
No need for improvement	.070	.184	1.072	.143
Some need for improvement	.068	.166	1.070	.165
Considerable need for imp.	-.163	.220	.850	.547
CNIA: Associates/Social Interaction				
No need for improvement	-.031	.197	.970	.024
Some need for improvement	.002	.176	1.002	.0002
Considerable need for imp.	.037	.230	1.038	.026
CNIA: Substance Abuse				
Some need for improvement	.195	.163	1.216	1.43
Considerable need for imp.	.022	.156	1.023	.021
CNIA: Community Functioning				
No need for improvement	.106	.192	1.112	.304
Some need for improvement	.227	.184	1.255	1.528
Considerable need for imp.	-.631	.302	.532	4.369*
CNIA: Personal/Emotional				
Some need for improvement	-.157	.157	.854	1.011
Considerable need for imp.	.149	.183	1.160	.657
CNIA: Attitude				
No need for improvement	.198	.170	1.220	1.368
Some need for improvement	-.163	.190	.850	.736
Considerable need for imp.	-.538	.203	.590	6.750**
Fighting charge in prison	-.489	.172	.613	8.111**
Escape or escape attempt from prison	.128	.458	1.134	.078
Drug charge in prison	.265	.318	1.304	.694

Table 14

Hierarchical Logistic Regression Predicting Full Parole Hearing Outcome

Variables	B	SE	Exp(B)	Wald Statistic
Damage property in prison	.120	.446	.758	.072
Contraband charge in prison	-.278	.172	1.127	2.617
Disciplinary charge in prison	-.009	.190	.561	.002
Causing a disturbance in prison	-.578	.310	.991	3.471
Completed an employment program	-.022	.107	.978	.042
Completed an education program	.037	.129	1.000	.080
Completed a sex offender program	-.122	.188	.885	.423
Completed a personality program	-.090	.121	.914	.558
Completed an attitude program	.076	.116	1.079	.432
Completed a community program	.152	.136	1.164	1.244

Note. Block 1 - $\chi^2(52) = 246.096^{***}$; Block 2 - $\chi^2(1) = .527$. Final - $\chi^2(53) = 246.622^{***}$.

p < .05, ** p < .01, *** p < .001

A second logistic regression, using the backward elimination procedure, was conducted. The results of the final equation are given in Table 15. The results indicate that the most important variables for predicting whether a case in this sample will be denied or granted full parole (classification at 73.98%) pertain to criminal history variables and risk/need factors assessed by the OIA. Regression coefficients indicate that being charged with either an assault, sex, or robbery offence in the current sentence decreases the likelihood of being granted full parole. Having served a prior provincial or federal term of incarceration also decreases the likelihood of being granted full parole. Offenders classified as medium-need cases were less likely to be granted full parole, while being identified as requiring considerable need for improvement in the attitude domain also decreases the likelihood of being granted full parole. As in the hierarchical logistic regression analysis, the only institutional variable included in the final equation was fighting such that those offenders charged with fighting in prison were less likely to be granted full parole.

Factors Predicting Full Parole Hearing Decision for Aboriginal Offenders

In an effort to determine whether there were differences between those Aboriginal offenders who were granted full parole and those Aboriginal offenders who were denied full parole, a series of chi-square analyses were performed on selected index offence and OIA variables. Because pairwise comparisons were conducted without the use of an omnibus test, a conservative approach, the Bonferroni correction, was taken to correct for family-wise error rates. An initial level of significance of .05 was chosen and divided by the number of dependent variables (7). This resulted in a critical value of .007 that was applied in determining statistical significance for the chi-square analyses.

Table 15

Backward Elimination Procedure Predicting Full Parole Hearing Outcome

Variable	B	SE	Exp(B)	Wald Statistic
Sentence length	.001	.0002	1.001	8.107**
Sex offences in current sentence	-.517	.126	.596	16.765***
Assaults in current sentence	-.378	.128	.685	8.742**
Robbery offence in current sentence	-.544	.125	.580	18.870***
Prior provincial term	-.230	.107	.795	4.650*
Prior federal term	-.399	.140	.671	8.109**
Global need level				
Medium need	-.492	.152	.612	10.482**
High need	.119	.231	1.126	.265
CNIA: Attitude				
No need for improvement	.295	.150	1.343	3.860*
Some need for improvement	-.228	.172	.796	1.766
Considerable need for imp.	-.532	.181	.587	8.698**
Fighting charge in prison	-.406	.155	.666	6.908**

Note. $\chi^2(13) = 205.850***$ $p < .05$, ** $p < .01$, *** $p < .001$

Table 16 presents the chi-square analyses comparing the full parole decision rates among Aboriginal offenders controlling for selected index offence and OIA variables. Contrary to expectation, there were no statistically significant differences between those Aboriginal offenders who were granted full parole and those who were denied full parole. Not surprisingly, Aboriginal offenders who were denied full parole were statistically more likely to be classified as high-need cases as compared to those Aboriginal offenders who were granted full parole (40.7% vs. 21.2%). Similarly, Aboriginal offenders who were granted full parole were more likely to be assessed as low-need cases in comparison to Aboriginal offenders who were denied full parole (48.5% vs. 19.8%).

In addition, a third logistic regression, using the backward elimination procedure, was used to examine whether a unique set of factors predicted the likelihood of being granted full parole for Aboriginal offenders. The results of the final equation are presented in Table 17. Only five variables were significant predictors including age at full parole eligibility, a robbery offence in the current sentence, global need rating, and having completed either a personality or attitude program. The final equation correctly classified 81.43% of cases as either being denied or granted full parole, $\chi^2 (5) = 26.421$, $p < .001$. Being charged with a robbery offence or classified as a high-need case decreases the likelihood of being granted full parole for Aboriginal offenders. Interestingly, having completed a personality program decreases the likelihood of being granted full parole, while having completed an attitude program increases the likelihood of being released on full parole.

Table 16

Full Parole Hearing Decision Status for Aboriginal Offenders

Variable	Granted	Denied	Test
<i>FP Application by Index Offence:</i>			
Sex-related offence	41.2	37.8	$\chi^2 (1) = .115$
Assault-related offence	29.4	37.8	$\chi^2 (1) = .741$
Robbery-related offence	14.7	35.4	$\chi^2 (1) = 4.951$
Violence in current offence	43.5	52.0	$\chi^2 (1) = 0.458$
Prior Federal Term	8.7	25.5	$\chi^2 (1) = 2.766$
<i>FP Application by Risk/Need Levels:</i>			
Global Risk Rating			$\chi^2 (2) = 7.623$
Low risk	60.6	33.3	
Medium risk	24.2	33.3	
High risk	15.2	33.3	
Global Need Rating			$\chi^2 (2) = 9.983$
Low need	48.5	19.8	
Medium need	30.3	39.5	
High need	21.2	40.7	

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

Table 17

Backward Elimination Procedure Predicting Full Parole Hearing Outcome for Aboriginal Offenders

Variable	B	SE	Exp(B)	Wald Statistic
Age at full parole eligibility	.064	.032	1.066	4.127*
Robbery offences in current sentence	-.947	.452	.388	4.392*
Global need level				
Medium need	-.834	.462	.434	3.266
High need	-1.222	.494	.295	6.129*
Completed a personality program	-1.106	.438	.331	6.381*
Completed an attitude program	.814	.428	2.257	3.609*

Note. $\chi^2 (5) = 26.421***$

p < .05. ** p < .01, *** p < .001

Factors Predicting Full Parole Hearing Decisions for Non-Aboriginal Offenders

A fourth logistic regression, using the backward elimination procedure, was conducted to derive a prediction model for non-Aboriginal offenders. The results of the final equation are presented in Table 18. Based on the final equation, 73.94% of cases were correctly classified as either being denied or granted full parole, $\chi^2 (13) = 187.372$, $p < .001$. Consistent with previous regression analyses, criminal history and OIA variables are the most important variables for predicting who will be released on full parole. Non-Aboriginal offenders charged with either an assault, sex, or robbery offence in their current sentence were less likely to be granted full parole. As expected, being classified as having considerable difficulties in the attitude domain decreases the likelihood of being granted full parole. Interestingly, being classified as a medium-need case by the OIA decreases the likelihood of being granted full parole.

Hypothesis 3: Factors Predicting Accelerated Full Parole Hearings

It was expected that race group differences would not predict APR outcomes (Direct/Do Not Direct). A chi-square analysis revealed that substantially fewer Aboriginal offenders were eligible for an accelerated parole review hearing (6.0%) as compared to non-Aboriginal offenders (26.1%), $\chi^2 (1, N = 2479) = 56.481$, $p < .001$. Due to the small number of Aboriginal offenders who were eligible for an APR hearing ($n = 17$), no further analyses could be conducted to examine those factors which predict APR outcomes.

Table 18

Backward Elimination Predicting Parole Board Decision for Non-Aboriginal Offenders

Variable	B	SE	Exp(B)	Wald Statistic
Sentence length	.001	.000	1.001	10.471**
Sex offences in current sentence	-.541	.136	.582	15.842***
Assaults in current sentence	-.436	.139	.647	9.844**
Robbery offences in current sentence	-.584	.132	.558	19.501***
Prior provincial term	-.234	.113	.791	4.276*
Prior federal term	-.427	.147	.652	8.488*
Global risk level				
Medium risk	-.212	.211	.809	1.008
High risk	-.533	.289	.587	3.417
Global need level				
Medium need	-.501	.164	.606	9.309**
High need	.181	.254	1.199	.512
CNIA: Attitude				
No need for improvement	.311	.161	1.365	3.757
Some need for improvement	-.285	.182	.752	2.449
Considerable need for improvement	-.441	.188	.644	5.478*
Fighting charge in prison	-.430	.168	.651	6.531*

Note. $\chi^2(13) = 187.372***$ $p < .05$, ** $p < .01$, *** $p < .001$

Hypothesis 4: Factors Predicting Full Parole Release Outcome

It was expected that race group differences would not predict full parole release outcomes (Successful/Unsuccessful). A total of 48 Aboriginal offenders in the current sample were released on full parole, while 707 non-Aboriginal offenders were in the community under full parole. Chi-square analyses revealed no statistically significant differences between Aboriginal and non-Aboriginal offenders with respect to success on conditional release. $\chi^2 (2, \underline{N} = 755) = 2.951, p = .229$. A similar percentage of Aboriginal offenders as non-Aboriginal offenders successfully completed their full parole release (77.1% vs. 81.1%). Furthermore, only four Aboriginal offenders (8.3%) re-offended on full parole, while seven Aboriginal offenders (14.6%) were re-admitted into federal custody due to a technical violation of the conditions of release. Comparatively, 79 non-Aboriginal offenders (11.2%) were re-admitted into federal custody with a new offence, while 55 non-Aboriginal offenders (7.8%) were revoked with a technical violation of their conditional release. Due to the small number of Aboriginal offenders who failed on conditional release, no further analyses were conducted to determine the factors that predict the outcome of full parole.

Discussion

This study was conducted to evaluate factors contributing to disparities in full parole grant rates between Aboriginal offenders and non-Aboriginal offenders. As such, this section begins with a summary of the findings from the comparisons on the predictor variables between Aboriginal and non-Aboriginal offenders followed by a review of the findings related to each of the specific hypotheses with respect to previous research: (1) Factors predicting full parole applications; (2) Factors predicting accelerated full parole review decision; (3) Factors predicting

full parole hearing decisions; and (4) Factors predicting outcome on full parole. Since those factors that are associated with applying for full parole are most likely tied to the factors that influence a parole board's decision to grant release, all findings are interpreted under one section. Finally, this discussion concludes with the policy implications of these findings, the limitations of this study, and directions for future research.

Summary of Current Findings

Profile of Federal Offenders Who Reached Full Parole Eligibility in 1996

Consistent with previous research (Cawsey Report, 1991; Hann & Harman, 1993; Solicitor General of Canada, 1998), the criminal history record of Aboriginal offenders differed markedly from non-Aboriginal offenders. Similar to recent research that has shown that Aboriginal offenders become involved in the criminal justice system at a young age (Nafekh & Welsh, in press), nearly half of the Aboriginal offenders (42.8%) in the current sample had a previous conviction as a young offender. In addition to becoming involved in the criminal justice system at a younger age, a large body of research suggests that Aboriginal offenders are more likely to have a history of prior convictions in the criminal justice system (Bonta et al., 1992, 1997; Hann & Harman, 1993; LaPrairie, 1996). Aboriginal offenders in the current study were more extensively involved in the provincial system as adult offenders. Nearly three-quarters of Aboriginal offenders had served at least one prior provincial term of incarceration (71.58%) as compared to only 59.0% of non-Aboriginal offenders.

Contrary to findings reported in the Solicitor General's report (1998), Aboriginal offenders in the current sample were not more likely to have served a prior federal term of incarceration than non-Aboriginal offenders. There were also no significant differences between

Aboriginal and non-Aboriginal offenders with respect to failing on conditional release during a prior federal sentence. Consistent with other research in this area, however, a high percentage of Aboriginal offenders in the current sample had used violence in their index offence (59%) as compared to non-Aboriginal offenders (25%). Similar to Doob et al.'s (1994) findings, approximately 10% of Aboriginal offenders here were serving their current sentence for a homicide offence. However, the most common offence for Aboriginal offenders in the current sample was a sex-related offence as opposed to homicide. Approximately 38% of Aboriginal offenders were convicted of a sex offence as compared to only 18.7% of non-Aboriginal offenders, as was found in the past (Johnston, 1994, 1997; LaPrairie, 1996). Consistent with findings reported in both the Alberta Cawsey Report (1991) and the Solicitor General Report (1998), a large proportion of Aboriginal offenders were convicted of an assault (35.8%) or robbery offence (27.7%). In contrast, Aboriginal offenders were not as likely to be serving their current sentence for a drug-related offence as compared to non-Aboriginal offenders (11.2% vs. 33.1%). Past research (Nafekh & Welsh, *in press*) has shown that Aboriginal offenders are less involved in drug trafficking and are more likely to be charged with drug possession. However, such comparisons were not possible in the current study as drug offences were grouped into one general variable.

Findings in the current study with respect to risk and need factors as measured by the OIA reflect those found in prior research with respect to Aboriginal offenders (Hann & Harman, 1993; Johnston, 1994, 1997; Solicitor General of Canada, 1998). In general, Aboriginal offenders were significantly more likely to be classified by Case Management Officers (CMOs) as both high risk (27.7%) and high need (32.3%). Moreover, a larger proportion of Aboriginal

offenders were classified as medium risk and medium need cases (34.7% and 47%, respectively) as opposed to non-Aboriginal offenders (24.1% and 38.3%, respectively). With respect to the seven need domains measured by the CNIA, Aboriginal offenders evidenced problems in all seven areas. In particular, Aboriginal offenders were more likely to have considerable difficulties in the marital/family and substance abuse domains as compared to non-Aboriginal offenders. Nearly the entire sample of Aboriginal offenders (92.2%) was identified as having a substance abuse problem.

To date, little research has addressed the institutional behaviour of Aboriginal offenders. Past reports have suggested that the “existence of a noticeably large racial minority from a different and underprivileged background within a prison system has traditionally been a source of tension and security risk” (Newby, 1981, p. 39). Some reports also indicate that Aboriginal inmates perceive correctional policies as being made by non-Aborigines for non-Aborigines (Morse & Lock, 1988). This particular component is an important issue to address when discussing the full parole process as it is very likely that an inmate’s behaviour and participation in rehabilitative programming while incarcerated will significantly influence a parole board’s decision. Not surprisingly, given their criminal history record and socioeconomic status, Aboriginal offenders were significantly more likely to be rated as High and Medium security concern (4.6% and 70.6%, respectively) as compared to non-Aboriginal offenders (2.1% and 60.2%, respectively). There were no differences, however, in the initial penitentiary placements between the two groups. A similar percentage of Aboriginal and non-Aboriginal offenders were placed in maximum, medium, or minimum security.

Past research has shown that Aboriginal offenders are more likely to be involved in incidents of prison violence as compared to non-Aboriginal offenders (Campbell, Porporino, & Wevrick, 1985). An examination of the overall rates of institutional incidents in the current study revealed that Aboriginal offenders were in fact more likely to be charged with fighting while incarcerated. There were no other differences in the rates of incidents noted between Aboriginal and non-Aboriginal offenders. Recent research on Aboriginal gangs has found that these offenders are disproportionately involved in institutional misconduct (Welsh & Nafekh, in press). However, there are reasons to expect that the behaviour of offenders affiliated with gangs would differ from other offenders, thus there is little base for comparison with the current findings. Contrary to expectation, Aboriginal offenders did not evidence any difficulties in program participation in institutions. It has been suggested that current correctional rehabilitative programming does not address the unique cultural needs of Aboriginal offenders (Solicitor General of Canada, 1998). In the current sample, only a small percentage of Aboriginal offender either refused to participate in a program (10.3%) or were unsuccessful in a program (i.e., suspended) (8.2%). In fact, a larger percentage of Aboriginal offenders had successfully completed a number of programs as compared to non-Aboriginal offenders including family programs (24.9% vs. 16.8%), personality programs (42.5% vs. 27.8%), and sex offender programs (21.1% vs. 11.8%).

Conditional Release Status

Previous research has shown that although Aboriginal offenders receive somewhat shorter sentences they may actually stay longer in institutions because of lower conditional release rates (e.g., Cawsey, 1991). The Solicitor General report (1998) stated that the federal full

parole grant rate in 1996/1997 for Aboriginal offenders was 34% as compared to 41% for non-Aboriginal offenders. Moreover, a larger percentage of Aboriginal offenders were on statutory release in 1996/1997 as compared to non-Aboriginal offenders (48% vs. 29%). As these studies have pointed out, Aboriginal offenders in the current study were less likely to be on full parole and more likely to be on statutory release. Only 18.3% of Aboriginal offenders were released on full parole during their current sentence as compared to 44.7% of non-Aboriginal offenders – a difference of 26.4%. With respect to statutory release, approximately two-thirds of Aboriginal offenders (74.4%) in the current sample served the remaining portion of their sentence in the community on statutory release as compared to approximately half of non-Aboriginal offenders (50.2%).

Although consistent with what others have observed, the difference in full parole rates found in the current study is much larger when compared to other research in Canada (e.g., Solicitor General, 1998). The difference is most likely attributable to the way in which full parole grant rates were examined. The Solicitor General report looked at a snapshot of offenders on conditional release for a designated one-year period. In contrast, the current study selected a sample of offenders who reached full parole eligibility for a one-year period and subsequently followed those offenders across the duration of their sentence to determine whether they were ever granted full parole on their current sentence.

Hypothesis 1: Factors Predicting Full Parole Application

As hypothesized, Aboriginal offenders were significantly less likely to apply for full parole as compared to non-Aboriginal offenders. Over half of Aboriginal offenders (52.3%) in the current sample did not apply for full parole, while only a quarter of non-Aboriginal offenders

(26.5%) did not apply. Consistent with the Solicitor General's (1998) report which found that 49% of Aboriginal offenders waived their full parole hearing in 1996/1997, approximately 59% of Aboriginal offenders in this sample waived a full parole hearing on their current sentence. Controlling for the type of offence committed did not reduce differences in application rates. That is, Aboriginal offenders were still less likely to apply for full parole even when controlling for the type of index offence committed. For example, Aboriginal offenders charged with assault were still less likely to apply for full parole as compared to non-Aboriginal offenders charged with a similar offence.

As postulated, race group differences were a significant predictor of full parole application, with Aboriginal offenders being less likely to apply for full parole. While race group differences were statistically significant, the variable was most likely *theoretically* meaningless as it only increased the prediction model's classification ability by 0.62% and its effects, in large part, were probably attributable to the large sample size. It was found, however, that variables associated with the index offence and criminal history were important predictors of full parole application. Those offenders most likely not to apply for full parole were those with a prior federal term of incarceration and those for whom there was evidence of violence during their index offence. Consistent with the presence of violence as an important contributor, offenders who committed crimes against the person (e.g., robbery, homicide, sex offence) were less likely to apply for full parole. In contrast, offenders convicted of offences where there was no visible victim (e.g., drug-related offences) were more likely to apply.

Those offenders seen as presenting more of a risk, as measured by the Criminal Risk Assessment portion of the OIA, and as having considerable difficulties in particular need

domains, as measured by the CNIA, were less likely to apply for full parole. In particular, offenders classified as medium- or high-risk cases were less likely to apply for full parole, implying that CMOs were not supporting early release for this group of inmates. Moreover, there is some indication that case management officers are paying special attention to dynamic factors that may affect one's integration into the community. Offenders who were unemployed at the time of the index offence were less likely to apply for full parole, as were offenders who were identified as needing considerable improvement in the marital/family and personal/emotional orientation domains.

In an effort to draw distinctions among those Aboriginal offenders who applied for full parole and those who did not, comparisons between these two groups were made on several variables pertaining to the index offence and risk/need factors measured by the OIA. Although few differences existed, the presence of violence in the index offence was an important mediator of full parole application rates. A larger percentage of Aboriginal offenders who used violence did not apply for full parole as compared to those Aboriginal offenders who did not use violence (67.6% vs. 32.4%). Interestingly, Aboriginal offenders classified as medium-need cases (56.1%) were less likely to apply as compared to Aboriginal offenders who were classified as either low-need (15.5%) or high-need (28.4%). In general, it appears as though need factors contribute strongly to Aboriginal offenders' likelihood of applying for full parole. Aboriginal offenders who were classified as *medium-need* cases and having considerable difficulty in the personal/emotional orientation domain were less likely to apply for full parole. Given their criminal history record, however, it was not surprising that Aboriginal offenders who used violence in the current offence were also less likely to apply. Comparatively, static risk factors

appeared to be more important predictors for non-Aboriginal offenders. That is, non-Aboriginal offenders who committed an offence against the person (e.g., robbery, sex offence), used violence in the current offence, had a prior federal term, and were classified as medium- or high-risk were less likely to apply for full parole.

Hypothesis 2: Factors Predicting Full Parole Hearing Outcomes

Aboriginal offenders who applied for full parole were less likely to be granted early release as compared to non-Aboriginal offenders (29.3% vs. 38.7%). However, when full parole decisions by offence type and risk/need level were analysed, there were no longer any statistically significant differences with respect to who was granted full parole. That is, an equivalent percentage of Aboriginal offenders who were classified as high-risk and high-need cases (15.2% and 21.9%, respectively) were granted full parole as high-risk and high-need non-Aboriginal offenders (16.1% and 17.1%, respectively). Interestingly, a smaller percentage of Aboriginal offenders convicted of either a sex or robbery offence were granted full parole as compared to non-Aboriginal offenders convicted of the same offences, however, the differences were not statistically significant. Failure to reach significance may be attributable to the smaller number of sex and violent offenders who applied for full parole.

As hypothesized, race group differences did not predict who was granted or denied full parole. Specifically, it was found that variables pertaining to the index offence, criminal history, and risk and need factors transcended race group differences. The offenders most likely to be denied full parole were those who committed offences against the person (e.g., assault, robbery, sex offence) and those with an extensive criminal history (e.g., prior provincial or federal term). Contrary to expectation, offenders who became involved in the criminal justice system at a

young age (e.g., prior youth record) were more likely to be granted full parole.

Consistent with the mandates of the CCRA (1992), the overall assessment of risk and criminogenic needs contributed to Board decisions. As expected, high-risk offenders, as measured by the Criminal Risk Assessment portion of the OIA, were more likely to be denied full parole. In addition, offenders identified as having considerable difficulties in the community functioning and attitude domains were less likely to be granted full parole, while those offenders whose employment skills were seen as an asset were more likely to be granted full parole. Surprisingly, institutional variables (e.g., incidents, program participation) did not predict the decision of parole boards. The only exception was the institutional incident category, fighting, which includes assaults on staff, inmates, and prison visitors. As might be expected, those inmates charged with fighting in prison were less likely to be granted full parole.

Of particular interest, the global need ratings, as measured by the OIA, mediated differences in the release rates among Aboriginal offenders. That is, Aboriginal offenders who were classified as high-need cases were significantly less likely to be granted full parole as compared to those Aboriginal offenders who were classified as low-need. Although not statistically significant, a larger proportion of low-risk Aboriginal offenders was granted full parole as compared to those Aboriginal offenders who were classified as high-risk. The failure to reach statistical significance may be attributable to the smaller number of Aboriginal offenders who applied for full parole.

Interpretation of the Current Findings

The large difference in application rates in the current study is an important finding with respect to explaining differences in the proportion of offenders released into the community on

full parole. To date, no study has taken into consideration the rate of applications for a full parole hearing. Based on the current findings, a considerable proportion of the disparity in offenders granted full parole can be explained, in part, by the differences in applying for full parole. Race group differences (Aboriginal/non-Aboriginal) was a statistically significant predictor of full parole application, yet it did not increase the classification ability of the model enough to have any theoretical implications. Similarly, race group differences did not significantly predict Parole Board decisions with respect to full parole. In terms of the decision to either recommend an offender to apply for full parole or to conditionally release an offender on full parole, it appears that Case Management Officers and Parole Boards consider variables pertaining to the index offence (presence of violence, employment, sex offences), criminal history (prior provincial and federal terms), and risk and need factors. Thus, the results suggest that the gap in full parole release rates between Aboriginal and non-Aboriginal offenders is more related to differences in criminogenic variables as opposed to race group differences.

Based on these findings, it does not appear that Aboriginal offenders are systematically discriminated against with respect to full parole decisions. Nonetheless, this study represents an examination of differential decision-making at the end of the criminal justice system process, thus it can not be argued that no systematic discrimination exists against Aboriginal peoples in the criminal justice system. When interpreting the current findings, it is important to take into consideration the possibility that systematic discrimination has influenced decisions earlier in the criminal justice system which, in turn, would have an impact at the parole stage.

The Importance of Criminal History and Index Offence Variables

Not surprisingly, offenders with an extensive criminal background (e.g., prior provincial or federal term) were less likely to apply for or be granted full parole. Given the findings in the jurisdiction of risk assessment that have shown that the “probability of future crime increases with each prior criminal act” (Monahan, 1981, p. 184), it appears as though correctional staff are placing considerable emphasis on previous criminal behaviour as a marker for future risk of re-offending. This is consistent with findings in other areas of the criminal justice system. Research on the preparation of pre-sentence reports has shown that primary emphasis is placed on the number of prior convictions when making recommendations for incarceration (Boldt et al., 1983). Given that the criminal history of Aboriginal offenders (e.g., prior provincial term) are, on average, more extensive than non-Aboriginal offenders, it is not unreasonable to suggest that Aboriginal offenders are seen to present a higher risk to re-offend by CMOs and the Parole Board. Contrary to past research (Bonta et al., 1992; Solicitor General of Canada, 1998), however, Aboriginal offenders in this sample were not more likely to have served a prior federal sentence. Nonetheless, the variable, Prior Federal term, was coded as a dichotomous variable so as to indicate either the presence or absence of having served a prior federal term. Comparatively, other studies have looked at the number of prior federal terms served by an offender and found that Aboriginal offenders were more likely to be serving their second or third federal sentence.

Both National Parole Board (NPB) decisions and Case Management Officers’ (CMOs) recommendations are mandated to be based primarily upon an offender’s estimated risk of re-offending (CCRA, 1992; CSC, 1996). The criteria for granting parole under Section 102 (a) state that the Board may grant parole to an offender who “will not, by re-offending, present an undue

risk to society" (CCRA, 1992). Furthermore, an offender may be detained past his or her statutory release date under Section 132 of the CCRA (1992) if that offender has committed an offence causing the death or serious harm to another person, has committed a number of violent offences, or is serving a current sentence for a serious offence. This mandate reflects the development of risk assessment literature in the last two decades that has shown a strong link between past violent behaviour and re-offending (e.g., Borum, 1996; Douglas & Webster, 1999a; Klassen & O'Connor, 1994; Monahan & Steadman, 1994). As suggested by Monahan (1981, 1995), it is a well established principle that past violence is one of the best predictors of future violence.

Thus, it is not surprising that whether one is seen as a significant threat to the public weighs heavily on decisions for conditional release, as evidenced by the strength of prediction of the index offence, the presence of violence in the current offence, and the global risk rating as measured by the OIA. Consistent with correctional mandate, those individuals with offences against the person (e.g., homicide, sex offence, assault, robbery) or violence present in the offence were less likely to apply for full parole. With the exception of the homicide and violence in the current offence, these same factors influenced Board decisions such that these offenders were less likely to be granted full parole. Previous research has found that assessments of global risk on the Criminal Risk Assessment component of the OIA are predictive of outcome on conditional release for male releases with the suspension rate for low-risk cases being substantially lower than high-risk cases (12% vs. 31.3%) (Motiuk & Brown, 1993). Consistent with these findings, those offenders who were rated as medium- or high-risk cases were less likely to apply for full parole, and high-risk offenders were less likely to be granted full parole.

Based on the weight placed on the characteristics of the index offence and criminal risk assessment, it is possible that Aboriginal offenders are less likely to apply for full parole and less likely to be granted full parole as a result of the type of offences in which Aboriginal people are involved. Research has consistently demonstrated that Aboriginal offenders are disproportionately involved in crimes against the person. For example, Hann and Harman (1993) reported that the most likely admitting offence for non-Aboriginal offenders was property-related, whereas the most likely admitting offence for Aboriginal offenders was against the person, and break and enter. Similarly, the top five admitting offences for Aboriginal offenders in the current sample were (1) sex-related offences, (2) assault offences, (3) break and enter, (4) robbery, and (5) theft. In contrast, the top five offences for non-Aboriginal offenders were (1) drug offences, (2) robbery, (3) break and enter, (4) theft, and (5) weapons offences. Moreover, studies have consistently revealed that a larger percentage of Aboriginal offenders as compared to non-Aboriginal offenders are classified in the medium- or high-risk categories (e.g., Hann & Harman, 1993; Johnston, 1994, 1997; Nafekh & Latimer, 1999). Aboriginal offenders in the present study were also more likely to be classified in medium- and high-risk categories.

Analyses looking at only Aboriginal offenders confirmed the importance of the presence of violence as a mediator of full parole outcomes. Those Aboriginal offenders who applied for full parole were less likely to have used violence in the current offence as compared to Aboriginal offenders who did not apply. Although not statistically significantly, Aboriginal offenders who were granted full parole were also less likely to have used violence in the current offence, whereas Aboriginal offenders who were denied full parole were more likely to have used violence. Measures of the level of violence in the Offence Severity Record confirmed past

research illustrating that the offences committed by Aboriginal offenders in the current sample were characterized by a higher level of violence.

The disproportionate involvement of Aboriginal offenders in sex-related offences (37.5%) would also negatively influence perceptions of future risk for re-offending. Correctional policy mandates that an overall rating of high criminal risk be given to offenders assessed as having a criminal history that reflects considerable sex offending (CSC, 1996). In general, sexual offenders are more likely to be subjected to discretionary decisions by the criminal justice system as compared to other offenders (Blanchette, 1996). For example, the Dangerous Offender legislation outlined in Part XXIV of the Canadian Criminal Code specifically cites sexual violence as one of the prerequisites for assigning an indeterminate sentence to an offender, and research has shown that a Crown attorney is more likely to initiate a DO application in the instance of a sexual offense or an offense against a child (Bonta et al., 1996). In addition, recent research pertaining to sexual recidivism has illustrated that sexual recidivists can be significantly differentiated by their previous record of sexual offenses (Quinsey, Rice, & Harris, 1995).

Interestingly, neither having committed a homicide-related offence nor having used violence in the current offence significantly predicted Board decisions with respect to full parole. A possible explanation for this finding is simply that very few homicide offenders applied for full parole ($n = 66$) and, as a result, there was not much power associated with this factor. This same explanation was put forth for the failure of the violence indicator to predict Board decisions, however, there was a large enough sample of violent offenders who did apply for full parole ($n = 221$). Nonetheless, it is possible that violent offenders waited longer into their sentence to apply for full parole and, as a result, were seen as less of a risk to re-offend violently.

The Importance of Need Factors

In addition to the importance of static or historical items with respect to the assessment of risk, there has been a growing emphasis on gaining a greater understanding of dynamic risk factors as evidenced by the Clinical and Risk Management scales of the HCR-20 (Webster, Douglas, Eaves, & Hart, 1997a) and the CNIA component of the OIA. Research conducted by CSC has revealed that offenders with substantial criminogenic needs are significantly more likely to fail on conditional release. Motiuk and Brown (1993) found that high-risk/high-need offenders were four times as likely to fail on conditional release as were low-risk/low-need offenders. Given the increasing importance of assessing criminogenic needs, it is not surprising that offenders with needs identified in certain domains were less likely to apply for full parole and less likely to be granted full parole. Need factors were particularly important factors for Aboriginal offenders in the parole process. Consistent with past research (e.g., Johnston, 1994, 1997), Aboriginal offenders in the current sample were more likely to be in the medium- and high-need categories, and a substantial proportion evidenced difficulties in all seven domains measured by the CNIA.

With respect to full parole applications, considerable difficulties in the marital/family and personal/emotional orientation domains were particularly important. An examination of the individual indicators in the marital/family domain of the CNIA reveal that Aboriginal offenders have a number of problems in this area. Over half of Aboriginal offenders had criminal family members (54%), and approximately 45% had parents who were spousal abusers while 43% were identified as being spousal abusers themselves. In addition, Aboriginal offenders evidenced a number of difficulties in the Personal/Emotional orientation domain. For instance,

approximately 58% of Aboriginal offenders were described as aggressive, 60% as showing poor regard for others, and 79% as having poor problem-solving skills. In general, all offenders with difficulties in these two areas were less likely to apply for full parole. Understandably, offenders with little family support in the community and poor personal/emotional skills may be viewed by CMOs as lacking the necessary coping skills to re-integrate successfully in the community. The end result may be that CMOs have few options from which to chose, particularly when dealing with Aboriginal offenders who have increased needs in these areas.

Criminogenic needs were also important factors in Parole Board decisions. It appears as though offenders who were seen as having skills that would potentially assist them in re-integrating into the community successfully were considered better candidates for conditional release. For instance, offenders who were assessed as having good employment skills were more likely to be granted full parole. This is consistent with research that shows that employment problems are related to general recidivism (Andrews & Bonta, 1995). Several widely used risk assessment measures including the Statistical Information on Recidivism Scale (SIR; Nuffield, 1982), the Violence Risk Appraisal Guide (VRAG; Harris, Rice, & Quinsey, 1993), and the HCR-20 (Webster, Douglas, K.S., Eaves, D., & Hart, 1997), take employment status into consideration. Upon examining ratings on the individual indicators in the Employment domain of the CNIA, it is clear that Aboriginal offenders are particularly lacking in both education and employment skills. Nearly a third of Aboriginal offenders had less than a grade eight education (31%), and almost two-thirds were rated as having no definitive skill area or trade (60.1%). Furthermore, approximately 16% of Aboriginal offenders had no legitimate employment history.

An interesting result that arose in the analyses examining predictors of full parole release decisions concerned global needs level as measured by the OIA. Specifically, medium-need offenders were less likely to be granted full parole; however, being classified as a high-need offender was not a significant predictor of Parole Board decisions. One potential explanation for this finding is that high-need offenders were less likely to apply for parole and, as a result, the sample of offenders in this category was too small to find a statistically significant effect. This was not the case, however, as an examination revealed that 127 high-need offenders applied for full parole which included 24 Aboriginal offenders. An alternative explanation concerns correctional programming and availability of programs for offenders. There are typically limited positions in programs for inmates, and admissions to programs are on a priority-basis. Perhaps high-need offenders are considered high priority cases for admission to programs. Thus, these offenders may receive more rehabilitative programming during the course of their incarceration as compared to medium-need offenders.

Limitations of the Current Study

There are several major limitations of the data used in the current study that may impact the conclusions and the generalizations that can be drawn from these results. First, the program participation data obtained from OMS was limited in the amount of information it could provide regarding Aboriginal offenders' rehabilitative programming. It has been suggested that Aboriginal offenders often do not participate in, complete, or benefit as much as non-Aboriginal offenders from rehabilitation program designed for non-Aboriginal offenders (Solicitor General of Canada, 1998). Thus, it was considered important to include any available program information in the current study. However, since offenders typically participate in several

programs there were multiple records for each offender. Due to the large sample size of the current study, offenders' records were simply flagged for completion of any program in each of the categories (e.g., education, employment). In other words, if an offender had successfully completed at least one education program, this would be coded as a success in the dichotomous variable - education program (Failed/Completed). All program variables were coded in this dichotomous fashion.

This provides only a gross estimation of the impact of correctional programming in the conditional release process. There are a number of limitations to looking at program participation in this fashion. Of primary concern, the current study's program information does not give an accurate assessment of the overall correctional plan designed for each offender. That is, an offender will typically have a series of programs recommended with respect to those needs identified at intake as contributing to his crime cycle. For example, a violent offender may have several programs identified as a necessary component of his rehabilitative process such as a personality program, anger management training, and a cognitive skills program. To address his correctional plan, an offender would need to enroll and successfully complete all those programs identified as addressing his needs. The data in the current study, however, do not provide this sort of examination of the stages of an offender's correctional plan. Second, by using a dichotomous system for coding program participation variables, there is no indication of an offender's level of performance in a particular program. In other words, an offender may have met the minimum requirements to complete the program and, as a result, was classified as a success. Yet it is possible that an offender may complete a program and, in the course of participating, have new problems or concerns identified. These problems might also explain why

offenders who successfully completed a sex offender and education program were less likely to apply for parole.

A second problem with respect to the current study's data concerns the categorizing of offenders into two categories – Aboriginal or non-Aboriginal. Recent research has shown that Aboriginal offenders are not a homogenous group. For example, Nafekh and Welsh (in press) found that Aboriginal offenders affiliated with gangs were younger, had more substance abuse problems, and were less likely to have committed a sex offence as compared to their non-gang member counterparts. Research has also suggested that potential differences exist between urban and non-urban Aboriginal offenders. To date, few studies have distinguished urban Aboriginal offenders in Canada from non-urban ones. However, we do know that a large number of Aboriginal people who are admitted to Canadian correctional institutions lived in urban areas at the time of the offence. For example, the Cawsey Inquiry (1991) found that only 5.7% of the Aboriginal persons charged with a criminal offence in Alberta were charged on the reserve. Moreover, LaPrairie (1995) identified three distinct sub-groups among inner city Aboriginal offenders based on in-depth interviews with 621 Aboriginal persons in four major Canadian urban centres.

In the current study, all Aboriginal offenders, including Inuit, Metis, and North American Indians, were examined as a single group. Due to the large sample size, it was not possible to identify and divide these offenders into sub-groups in order to draw comparisons. All comparisons among Aboriginal offenders here were based on offence types and risk and need levels as designated by the OIA process and were, as a result, superficial. Unfortunately, it was not possible in this study to compare rates of application and release among sub-groups of

Aboriginal offenders.

A third limitation of the current study was that the data were comprised solely of information collected at the point of entry into the federal correctional system and on characteristics of the offenders themselves. However, as pointed out by Douglas, Cox, and Webster (1999), there is a category of risk markers that relate to aspects of the situation or environment in which a person will be living upon release. For example, the availability of personal support from family and friends has been found to ameliorate the risk for re-offending (Estroff & Zimmer, 1994; Klassen & O'Connor, 1989). Moreover, the presence of stressors such as criminal friends may also have a negative impact on an offender's stability in the community.

Many Aboriginal communities are geographically isolated and are characterized by high unemployment, lack of resources, and high levels of crime and disorder (Solicitor General of Canada, 1998). It has been suggested that many Aboriginal offenders return to criminogenic conditions upon release. For example, Thompson (1993) found that more Aboriginal than non-Aboriginal young offenders in northern Ontario returned to a criminal neighbourhood (as defined by living with others who had problems with the law, sold drugs, etc.). These factors are likely to have a large impact on conditional release decisions as some offenders may have fewer resources available to them in the community and, as a result, may not be seen as likely to benefit from early release.

Suggestions for Future Research

Given the large percentage of Aboriginal offenders that do not apply for full parole, future research should move in the direction of uncovering those factors that contribute to this gap in application rates. The limitations of the present study highlight the importance of two

future directions of research. First, the lack of differences among those Aboriginal offenders who apply and those who did not apply allude to the need for researchers to better understand inmates' knowledge and attitudes toward conditional release. Data on knowledge and attitudes toward the legal system are limited, and data on knowledge of the conditional release system specifically are virtually non-existent. To date, there has been no comprehensive or systematic investigation of inmates' knowledge of conditional release criteria or, more specifically, inmates' knowledge regarding their own conditional release eligibility. As such, having an index of inmates' knowledge may be potentially useful for criminal justice policy-makers. As McNeece and Lusk (1979) suggest, the perceptions and reactions of individuals who are ultimately at the crux of criminal justice policies (i.e., inmates) may be important in terms of facilitating the implementation of these policies. Given that a larger proportion of Aboriginal offenders waive their full parole hearings, and there are increased reports of negative perceptions with respect to correctional staff among Aboriginal inmates (Johnston, 1997), it is not unreasonable to suggest that there may be some differences in knowledge of and attitudes toward conditional release procedures between Aboriginal and non-Aboriginal offenders.

The current study also highlights the importance of examining the community re-integration potential of Aboriginal offenders. Without measures of re-integration potential it is difficult to conclude that the smaller number of Aboriginal offenders on full parole is associated solely with criminal history variables and risk to re-offend, as the results imply. The association between criminal history variables and risk/need factors as measured by the OIA with application rates and release decisions does provide strong evidence that CMOs and Parole Boards are not recommending those offenders who represent a significant threat of re-offending for early

release. Given that a growing body of research suggests that Aboriginal communities are characterized by high levels of social disorganization and, as a result, provide a less stable environment for offenders upon release, it would be interesting to examine what role community variables play in CMO and Parole Board decisions. To date, little empirical attention has been paid to risk management factors in the community with respect to Aboriginal offenders.

Implications and Conclusions

A number of criminal justice initiatives have been enacted in the last several years to address the over-representation of Aboriginal offenders in the federal correctional system. Among these initiatives, the recently enacted section 718.2(e) of Part XXIII of the Criminal Code (1985) is of particular interest as it addresses sentencing alternatives to incarceration with respect to Aboriginal peoples. Consistent with past research, however, the current study found that a large proportion of federal Aboriginal offenders was convicted of serious offences involving the use of violence. Consequently, it is unlikely that alternatives to incarceration would be enacted for a large number of Aboriginal offenders in the federal system. In the R. v. Gladue (1999) decision, the Supreme Court of Canada noted that there were no special circumstances arising from the Aboriginal status of the accused. Further, it was argued that section 718.2(3) does not alter the fundamental duty of the sentencing judge to impose a sentence that is a fit for the offence and the offender. As such, it was stated in the body of the decision it would generally be the case that particularly violent and serious offences would result in imprisonment for Aboriginal offenders as for non-Aboriginal offenders.

In terms of offence patterns, this study did not examine whether any differences existed between offenders' original charges and their subsequent convictions. To date, only LaPrairie

(1991) has looked at the propensity of Aboriginal accused to plead guilty more often than non-Aboriginal accused. Perhaps non-Aboriginal offenders are more likely to have serious offences plead down during the trial procedure. Although LaPrairie found no differences in the likelihood to plead guilty between Aboriginal and non-Aboriginal offenders, it is plausible that the quality of legal representation may differ between Aboriginal and non-Aboriginal offenders that, in turn, may affect the likelihood of obtaining a plea bargain. Consequently, caution should be adopted when discussing differences in criminal history records between Aboriginal and non-Aboriginal offenders.

When discussing the involvement of Aboriginal peoples in the criminal justice system and the type of offences in which Aboriginal people are involved it is also important to discuss their personal and background characteristics given that some researchers have suggested that socio-economic factors are more important than race in identifying Aboriginal correctional populations (e.g., Muirhead, 1982). The relationship between socio-economic status and involvement in the criminal justice system has been well documented and will not be discussed in much detail. Hsieh and Pugh (1991) found evidence for positive relationships between income inequality and poverty and the commission of assault, homicide, rape, and robbery offences. Moreover, a large body of research has found a relationship between the quality of early family life (child abuse, separated from parents before the age of 16, witnessing parental physical abuse) and future violence (e.g., Klassen & O'Connor, 1989).

Aboriginal people have frequently been described as marginalized in Canadian society. Many contemporary reserves are characterized by geographic isolation, small size, poor land, lack of education, employment and other resources, differential access to community options and

opportunities, and domestic abuse (For a more thorough review of socio-economic conditions of Aboriginal communities, see LaPraire, 1996). A 1989 study by the Ontario Native Women's Association reported that 8 out of 10 Aboriginal women were abused, while a 1987 report by the Child Protection Centre of Winnipeg reported an epidemic of child sexual abuse on reserves (LaRoque, 1993). Moreover, it has been reported that registered Indians are over-represented in inmate populations and inner cities as compared to non-Status and Metis groups. For example, 78% of the Aboriginal inmates in Saskatchewan institutions were status Indians as compared to 12% Metis and 10% non-status (LaPrairie, 1996). In short, the characteristics and conditions of many reserves are also important factors in determining Aboriginal involvement in the criminal justice system.

Finally, with respect to correctional policy, the findings of the current study are preliminary and, as such, recommendations drawn here will be tentative. First and foremost, the goal of future correctional policy should be a continuation of research into Aboriginal justice issues with a more narrow focus on the factors underlying Aboriginal offenders' propensity to apply for full parole. In addition, the current data imply that intervention strategies and diversion programs should focus on Aboriginal youth. Consistent with past research (e.g., Nafekh & Welsh, in press), Aboriginal offenders in the current sample had extensive involvement with the criminal justice system at a young age. Consequently, successful intervention with Aboriginal youth could have a large impact on the over-representation of Aboriginal peoples in the adult federal correctional system.

References

- Andrews, D.A., & Bonta, J. (1995). The psychology of criminal conduct. Cincinnati: Anderson Publishing.
- Auger, D. L., Doob, A. N., Auger, R. P., & Driben, P. (1992). Crime and control in three Nishnawbe-Aski nation communities: An exploratory investigation. Canadian Journal of Criminology, 34 (3-4), 281-298.
- Bienvenue, P., & Latif, A. H. (1974). Arrests, dispositions, and recidivism: A comparison of Indians and whites. Canadian Journal of Criminology and Corrections, 16, 105-116.
- Blanchette, K. (1996). Sex offender assessment, treatment, and recidivism: A literature review. Research Report R-48. Ottawa: Correctional Service Canada.
- Boldt, E. D., Hursh, L. E., Johnson, S. D., & Taylor, K. W. (1983). Presentence reports and the incarceration of natives. Canadian Journal of Criminology, 269-276.
- Bonta, J. (1989). Native inmates: Institutional response, risk, and needs. Canadian Journal of Criminology, 31, 49-62.
- Bonta, J., Lipinski, S., & Martin, M. (1992). The characteristics of aboriginal recidivists. Canadian Journal of Criminology, 34 (3-4), 517-521.
- Bonta, J., Harris, A., Zinger, I., & Carriere, D. (1996). The crown files research project: A study of dangerous offenders. Ottawa, Ontario: Canada. Ministry of the Solicitor General.
- Bonta, J., & Motiuk, L.L. (1996). High-risk violent offenders in Canada. Paper presented at the 104th Annual Convention of the American Psychological Association in Toronto, Canada, August, 1996.

- Borum, R. (1996). Improving the clinical practice of violence risk assessment. American Psychologist, 51, 945-956.
- Braithwaite, J. (1993). Shame and modernity. The British Journal of Criminology, 33(1), 1-18.
- Broadhurst, R.G. (1996). Aboriginality and crime in Australia: Estimates of differential risk of penal involvement and explanations of Aboriginal crime. In M. Tonry, Race crime and ethnicity crime and justice, Chicago: Chicago University Press.
- Campbell, G., Porporino, F.J., & Wevrick, L. (1985). Characteristics of inmates involved in prison incidents, phase 1. Ottawa: Solicitor General Canada.
- Canadian Centre for Justice Statistics. (1989). Homicide in Canada, 1988: A statistical perspective. Ottawa, Canada: Canadian Centre for Justice Statistics, Statistics Canada.
- Canadian Centre for Justice Statistics. (1992). Crime in Aboriginal communities, Saskatchewan, 1989. Statistics Canada.
- Cawsey, R. A. (1991). Justice on trial: Task force on the criminal justice system and its impact on the Indian and Metis people of Alberta. Edmonton: Province of Alberta.
- Correctional Service of Canada. (1996). Case Management Manual. Ottawa: Correctional Service of Canada.
- Correctional Service of Canada. (1997). Basic facts about corrections Canada, CSC Communications Branch booklet, Ministry of the Solicitor General, Ottawa.
- Corrections and Conditional Release Act, RSC, 1992, c. 20.
- Criminal Code, (1985), R.S.C., c. C-46.

Dana, R. H. (1986). Personality assessment and native americans. Journal of Personality Assessment, 50 (3), 480-500.

Dana, R. H. (1996). Culturally competent assessment practice in the United States. . Journal of Personality Assessment, 66 (3), 472-487.

Doob, A. N., Grossman, M. G., & Auger, R. P. Aboriginal homicides in Ontario. Canadian Journal of Criminology. 36 (1), 29-62.

Douglas, K.S., & Webster, C.D. (1999a). Predicting violence in mentally and personality disordered individuals. In R. Roesch, S.D. Hart, & J.R.P. Ogloff (Eds), Psychology and law: The state of the discipline, pp.175-239. New York: Plenum.

Estroff, S.E., & Zimmer, C. (1994). Social networks, social support, and violence among persons with severe, persistent mental illness. In J. Monahan & H.J. Steadman (Eds), Violence and mental disorder: Developments in risk assessment, pp. 259-295. Chicago, IL: University of Chicago Press.

Grant, B. A. (1998a). Accelerated parole review: Were the objectives met. (Report No. R-), Ottawa: Research Branch, Correctional Services Canada.

Grant, B. A. (1998b). Day parole: Effects of Corrections and Conditional Release Act (Report No. R-62), Ottawa: Research Branch, Correctional Service of Canada.

Grant, B. A., & Gillis, C. A. (1998). Day parole outcome, criminal history, and other predictors of successful sentence completion (Report No. R-59), Ottawa: Research Branch, Correctional Service of Canada.

Grant, B. A., Motiuk, L., Brunet, L, Lefebvre, L., & Couturier, P. (1996). Day parole program review: Case management predictors of outcome (Report R-57) Ottawa: Correctional

Service of Canada.

Grant, B., & Porporino, F. (1992). Are native offenders treated differently in the granting of temporary absences from federal correctional institutions? Canadian Journal of Criminology, July-October, 525-532.

Hagan, J. (1974). Criminal justice and native people: A study of incarceration in a Canadian province. Canadian Review of Sociology and Anthropology Special Issue, 220-236.

Hagan, J. (1977). Criminal justice in rural and northern communities: A study of the bureaucratization of justice. Social Forces, 55, 597-612.

Hann, R. G., & Harman, W. G. (1993). Predicting release risk for aboriginal penitentiary inmates. Ottawa, Ontario: Canada. Ministry of the Solicitor General.

Harding, J., Kly, Y., & MacDonald, D. (1992). Overcoming systematic discrimination against aboriginal people in Saskatchewan: Brief to the Indian justice review committee. November 1991. University of Regina.

Harris, G.T., Rice, M.E., Quinsey, V.L. (1993). Violent recidivism of mentally disordered offenders: The development of a statistical prediction instrument. Criminal Justice and Behavior, 20, 315-335.

Hsieh, C., & Pugh, M.D. (1991). Inequality and violent crime: Another ten years of inconclusive research. Paper presented at the American Society of Criminology meetings, San Francisco.

Hyde, M. (1992). Servicing Indian reserves: The Amerindian police. Canadian Journal of Criminology, 34 (3-4), 369-386.

Hylton, J. H. (1981). Some attitudes toward natives in a prairie city. Canadian Journal of Criminology, 23 (3), 357-363.

Jackson, M. (1988). Locking up natives in Canada. Ottawa: A Report of the Canadian Bar Association Committee on Imprisonment and Release.

Johnston, J. C. (1994). Northern aboriginal offenders in federal custody: A profile (Report R-36) Ottawa: Correctional Service of Canada.

Johnston, J. C. (1997). Aboriginal offender survey: Case files and interview sample (Report R-61) Ottawa: Correctional Service of Canada.

Klassen, D., & O'Connor, W.A. (1989). Assessing the risk of violence in released mental patients: A cross validation study. Psychological Assessment: A Journal of Consulting and Clinical Psychology, 1, 75-81.

Klassen, D., & O'Connor, W.A. (1994). Demographic and case history variables in risk assessment. In J. Monahan & H.J. Steadman (Eds), Violence and mental disorder: Developments in risk assessment, pp. 229-258. Chicago, IL: University of Illinois Press.

Kueneman, R., Linden, R., & Kosmick, R. (1992). Juvenile justice in rural and northern Manitoba. Canadian Journal of Criminology, 34 (3-4), 435-460.

LaPrairie, C. (1990). The role of sentencing in the over-representation of aboriginal people in correctional institutions. Canadian Journal of Criminology, 32, 429-440.

LaPrairie, C. (1991). Justice for the Cree: Communities, crime, and order. Cree Regional Authority, Nemaska, Quebec.

LaPrairie, C. (1992a). Aboriginal crime and justice: Explaining the present, exploring the future. Canadian Journal of Criminology, 34 (3-4), 281-298.

LaPrairie, C. (1992b). Dimensions of Aboriginal over-representation in correctional institutions and implications for crime prevention. Ottawa, Ontario: Canada. Ministry of the Solicitor General.

LaPrairie, C. (1996). Examining Aboriginal corrections in Canada. Ottawa, Ontario: Canada. Ministry of the Solicitor General.

LaPrairie, C., & Diamond, E. (1992). Who owns the problem? Crime and disorder in James Bay Cree communities. Canadian Journal of Criminology, 34 (3-4), 281-298.

Lariviere, M., & Robinson, D. (1996). Attitudes of federal correctional officers towards offenders (Report R-44) Ottawa: Correctional Service of Canada.

LaRocque, E.D. (1993). Violence in Aboriginal communities. Department of Native Studies: Univeristy of Manitoba.

Law Reform Commission of Canada. (1991). Aboriginal peoples and criminal justice: Equality, respect, and the search for Justice (Report R-34) Ottawa: Minister's Reference.

McCaskill, D. (1985). Patterns of criminality and corrections among Native offenders in Manitoba. Correctional Service of Canada, Department of the Solicitor General.

McNeece, C. A., & Lusk, M. W. (1979). A consumer's view of correctional policy: Inmate attitudes regarding determinate sentencing. Criminal Justice and Behavior, 6(4), 383-389.

Menard, S. (1992). Applied logistic regression analysis. University of Colorado, Boulder: Sage Publications.

Monahan, J. (1981). Predicting violent behavior: An assessment of clinical techniques. Beverly Hills, CA: Sage.

Monahan, J. (1996). Violence prediction: The last 20 and the next 20 years. Criminal Justice and Behavior, 23, 107-120.

Monahan, J., & Steadman, H.J. (1994b). Toward a rejuvenation of risk assessment research. In J. Monahan & H.J. Steadman (Eds), Violence and mental disorder: Developments in risk assessment, pp. 1-17. Chicago, IL: University of Chicago Press.

Morse, B., & Lock, L. (1988). Native offenders' perception of the criminal justice system. Ottawa: Department of Justice.

Motiuk, L.L., & Brown, S.L. (1993). The validity of the offender needs identification and analysis in community corrections.

Moyer, S. (1987). Homicides involving adult suspects 1962-1984: A comparison of natives and non-natives. Ottawa: Ministry of the Solicitor General.

Muirhead, G.K. (1982). An analysis of Native over-representation in correctional institutions in B.C. Ministry of the Attorney General, Corrections Branch.

Nafekh, M., & Latimer, J. (1999). Risk and need among federally sentenced offenders: A comparison of Aboriginal, Asian, traditional, and motorcycle gangs. Ottawa: Research Branch, Correctional Service of Canada.

Nafekh, M., & Welsh, A. (in press). An examination of gang membership within the federally sentenced Aboriginal population. (Research report), Ottawa: Research Branch, Correctional Service of Canada.

Newby, L. (1981). Native people of Canada and the federal corrections system. Development of a national policy – A preliminary issues report. Ottawa: Correctional Service of Canada.

Noursis, M.J. (1993). SPSS for windows advanced statistics release 6.0. Chicago: SPSS, Inc.

Nuffield, J. (1982). Parole decision-making in Canada: Research towards decision guidelines. Ottawa, Ontario: Supply and Services Canada.

Petersillia, J. (1985). Racial disparities in the criminal justice system: A summary. Crime and Delinquency, 31, 15-34.

Quinsey, V.L., Rice, M.E., & Harris, G.T. (1995). Actuarial prediction of sexual recidivism. Journal of Interpersonal Violence, 10, 85-105.

R. v. Gladue, [1999] 1 S.C.R. 688.

R. v. Williams, [1998] 1 S.C.R. 1128.

Schmeiser, D. (1974). The Native offender and the law. Ottawa: Law Reform Commission of Canada.

Solicitor General Canada. (1988). Final report Task Force on Aboriginal Peoples in Federal Corrections, Ottawa: Minister of Supply and Services.

Solicitor General of Canada. (1998). CCRA 5 Year Review: Aboriginal offenders. Ottawa: Minister of Supply and Services.

Thompson, A. (1993). A comparison of native and non-native young offenders serving secure custody in northern Ontario youth centres. Thunder Bay: Lakehead University.

Webster, C.D., Douglas, K.S., Eaves, D., & Hart, S.D. (1997). HCR-20 Assessing Risk for Violence: Version 2. Burnaby, B.C.: Mental Health, Law, and Policy Institute, Simon Fraser University.

Webster, C.D., Douglas, K.S., Eaves, D., & Hart, S.D. (1997a). Assessing risk of violence to others. In C.D. Webster & M.A. Jackson (Eds), Impulsivity: Theory, assessment, and treatment, pp. 251-277. New York: Guilford.