Factors Related to Release Outcomes Among Canadian Federally Sentenced Offenders

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Introduction

The successful transition of offenders to the community is a top priority for correctional agencies. In addition to enhanced public safety, offender success in the community has the added benefit of reducing costs to the taxpayers. For example, in Canada, community supervision costs about one-quarter the cost of incarceration (Public Safety Canada, 2013). Thus, many researchers, correctional staff, and policymakers have focused on determining the readiness of offenders for supervised release to the community. In order to facilitate successful community outcomes, considerable attention has been paid to the characteristics of offenders likely to be unsuccessful on release, including their demographic-, risk- and sentence-related information, as well as other, release-related factors. Identifying at-risk offenders and targeting them for more intensive supervision and specific interventions are key correctional case management strategies.

Demographic Factors and Release Outcomes

Previous research has shown that a number of demographic characteristics such as age, gender, ethnicity, marital status, and educational attainment are associated with release outcomes. Age is one of the most consistently identified factors in predicting recidivism, with younger offenders more likely to reoffend (Bahr et al., 2010; Gendreau et al., 1996; Jung et al., 2010; Makarios et al., 2010; Piquero et al., 2015; Ryan, 1997; Sims & Jones, 1997; Zhang et al., 2014). Gender is another strong risk factor, with men much less likely to be successful on release than women (Cobbina et al., 2012; Cortoni et al., 2010; Gendreau et al., 1996; Mackenzie et al., 1999; Makarios et al., 2010; Morgan, 1994; Piquero et al., 2015; Public Safety, 2013; Ulmer, 2001). Patterns of reoffending linked with membership in ethnocultural groups vary, but in Canada, aboriginal offenders tend to reoffend at higher rates than non-aboriginal offenders (Gendreau et al., 1996; Gutierrez et al., 2013; Jung et al., 2010; Sims & Jones, 1997; Zhang et al., 2014). Research also indicates that offenders who are single have worse rates of success on release than those who are married or living with a spouse (see Collins, 2010; Mackenzie & De Li, 2002; Morgan, 1994; Paolucci et al., 2000; Sims & Jones, 1997). It has also been noted that individuals with lower levels of education are more likely to return to custody than those with higher levels of education (Blomberg et al., 2012; Fabelo, 2002; Harlow, 2003; Nally et al., 2012; Nuttall et al., 2003; Vacca, 2004; Wilson et al., 2000).

Sentence-Related and Risk-Related Factors

Factors related to offenders' sentences, institutional behavior, and offense types have been consistently associated with reintegration outcomes. Specifically, recidivism rates are lowest for offenders serving sentences for sex, homicide, and drug offenses, and highest for theft and property offenses (Cortoni et al., 2010; Holland et al., 2007; Jones et al., 2006; Liem, 2013; Thompson, 1995). Furthermore, some research has pointed to longer sentence length (Kronick et al., 1998; Sims & Jones, 1997; Zhang et al., 2014) and poor institutional behavior during incarceration (Hill, 1985; Ryan, 1997) as factors associated with an increased likelihood of recidivism, although this is not a consistent finding (Freiburger & Iaannacchione, 2011).

A key factor strongly associated with outcomes on community release is the extent of the offender's criminal history. The amount of past crime is one of the single best predictors of reoffending (Menzies & Webster, 1995). Both juvenile criminal behavior (Cooke & Michie, 1998; Morgan, 1994; Peersen et al., 2004) and previous adult convictions (Cooke & Michie, 1998; Peersen et al., 2004; Sims & Jones, 1997; Ulmer, 2001; Zhang et al., 2014) are linked to higher reoffending rates. In addition, offenders who violate probation orders tend to reoffend more quickly than those who do not (Jones et al., 2006).

Dynamic risk level, also referred to as "criminogenic need level," is significantly associated with community outcomes (Dowden & Andrews, 2000; Gendreau et al., 1996; Grant & Gillis, 1999; Jones et al., 2010; Latessa & Lowenkamp, 2006; Makarios et al., 2010). Offenders with higher rates of anti-social, anti-authority, and pro-criminal attitudes are at increased risk of recidivism (Gendreau et al., 1996; Lloyd & Serin, 2012; Mills, Anderson & Kroner, 2004; Mills & Kroner, 2006; Mills et al., 2002, Mills, Kroner, & Hemmati, 2004; Yessine & Kroner, 2004; Ryan, 1997). Association with criminal peers (Mills, Kroner & Hemmati, 2004; Nilsson, 2003) and the problematic consumption of alcohol and/or drugs are also consistently linked to poorer community outcomes (Cooke & Michie, 1998; Dowden & Brown, 2002; Mackenzie et al., 1999; Mackenzie & De Li, 2002; Makarios et al., 2010; Nilsson, 2003; Peersen et al., 2004; Shinkfield & Graffam, 2009).

Release-Related Factors

Past research has examined correctional outcomes based on the type of release and the number and types of parole conditions imposed (Grant & Gillis, 1999; Ostermann, 2013; Parole Board of Canada, 2013; Solomon et al., 2005; Steiner et al., 2012; Verbrugge et al., 2002). In Canada, offenders can receive three forms of conditional release: day parole, full parole, and statutory release. Day parole and full parole are both forms of discretionary release. Day parole provides the opportunity to participate in ongoing community-based activities while typically residing at a correctional institution or community residence (CSC, 2012a). On full parole, offenders must abide by conditions designed to reduce reoffending while reporting regularly to a parole supervisor (CSC, 2012a). Statutory release requires offenders with determinate sentences to serve the final third of their sentence in the community under supervision and conditions of release similar to those imposed

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on offenders released on full parole (CSC, 2012a). Lower risk offenders are more likely to be granted discretionary release, whereas higher risk offenders typically are not released until their statutory release. This may explain why offenders released on day and full parole are less likely to reoffend than offenders on statutory release (Parole Board of Canada, 2013). Consistent with this finding, Soloman et al. (2005) argued that success while under supervision depends on factors such as offense type, number of prior arrests, gender, and level of risk.

There is conflicting evidence for the effectiveness of parole conditions and post-release supervision in curbing recidivism. Ostermann (2013), for example, found that conditional release is associated with a lower likelihood of returning to custody. Delveaux et al. (2012) found that the likelihood of returning to custody decreased for each new condition type imposed, especially when these conditions corresponded with the offenders' criminogenic need (e.g., substance abuse). Nonetheless, some studies suggest that the nature and number of release conditions are unrelated to revocation rates for some populations (Delveaux et al., 2012) or even that increased supervision can result in higher rates of revocation for technical violations.

Overall, the understanding of factors associated with release outcomes can allow for the refinement of targeted interventions and policies to promote criminal desistance; however, there is inconsistency in the way in which successful outcomes are defined. For example, a release may be considered successful if an offender avoids breaching release conditions or committing a new offense. In the Canadian context, there are several reasons for which parole (i.e., conditional release) can be revoked. Some of these include the violation of one or more release conditions or a termination of conditional release due to the assessment of increased risk. Aside from these revocations for technical violations, another reason for revocation, and a principle outcome of interest in this study, is revocation because of a new offense. Although a body of literature exists examining general recidivism in Canada, there is very little research specifically focused on examining the relationship between key risk factors and revocation of conditional release. Given the priorities of enhancing public safety and reducing costs to taxpayers, identifying which risk factors are associated with revocation is a key factor in reducing unsuccessful releases. Moreover, although rates of revocation vary considerably based on aboriginal ancestry and gender, no research was identified that explicitly examined whether the impact of various risk factors varied across these groups.

The current study aims to address these gaps in the literature by addressing the following questions:

1. What are the rates of revocation of conditional release for non-aboriginal and aboriginal men and non-aboriginal and aboriginal women?
2. What demographic characteristics, risk- and sentence-related information, and release-related factors are associated with revocation of conditional release for non-aboriginal and aboriginal men and non-aboriginal and aboriginal women?
3. What are the rates of first revocation of conditional release for a new offense for non-aboriginal and aboriginal men and non-aboriginal and aboriginal women?
4. What demographic characteristics, risk- and sentence-related information, and release-related factors are associated with the likelihood of revocation for a new offense among aboriginal and non-aboriginal men?

Study Method: Data and Population

Information for this study was obtained from the Offender Management System (OMS) database of the Correctional Service of Canada. This electronic database holds all information pertinent to the management of federally sentenced offenders. Information was retrieved on all 12,690 federal offenders who were granted their first discretionary (i.e., day or full parole) or statutory release between April 1, 2010 and March 31, 2013. Non-aboriginal men accounted for 76% of the population; aboriginal men, non-aboriginal women, and aboriginal women accounted for the remaining 18%, 5%, and 2%, respectively. Aboriginal offenders self-report that they are of Inuit, Métis, or First Nations ancestry, and non-aboriginal offenders included all other offenders.

As noted in Table 1, the groups of offenders varied in the composition of their profiles at intake. Overall, men and women offenders of aboriginal ancestry were younger and had considerably higher ratings of dynamic risk than non-aboriginal men and women.

Study Measures

Profile Information From the Offender Management System (OMS). Background and demographic information on the participants, as well as sentence information, criminal history, criminogenic needs, substance abuse, institutional charges, admissions to segregation, correctional program participation, and releases from custody were drawn from the OMS, a comprehensive electronic record on all federal offenders. Descriptions of key measures included in the analyses follow.

Dynamic Factors Identification and Analysis (DFIA). The DFIA component of the Offender Intake Assessment (OIA) is conducted on all offenders upon admission to the Correctional Service of Canada (CSC). It assesses a variety of dynamic criminogenic needs (i.e., dynamic risk) grouped into seven domains including substance abuse, associates, attitudes, employment/education, marital/family, community functioning, and personal/emotional. Each domain consists of multiple indicators. The DFIA yields yes-or-no responses on each of the indicators and need ratings for each domain, as well as an overall rating of criminogenic need of low, moderate, or high (CSC, 2012b).

Static Factor Assessment (SFA). The SFA portion of the OIA provides comprehensive information on the criminal history and static risk factors of each offender. Based on analysis of the SFA, parole officers provide a structured professional judgment of a low, moderate, or high overall risk rating (CSC, 2012b). Several items assessed offenders' ability to fulfill their correctional plans, including their level of motivation, potential for successful reintegration, accountability for their actions, responsivity issues related to their orientation for interventions, and their level of engagement in the correctional process.

Computerized Substance Abuse Assessment (CASA). The CASA is the part of the intake assessment that evaluates the extent of substance misuse and its relationship to offending (Kunic, 2006). This assessment procedure includes the results of several well-validated measures of substance misuse, including the 20-item Drug Abuse Screening Test (DAST; Skinner, 1982) and the Alcohol Dependency Scale (ADS; Skinner & Horn, 1984). These tools are used to derive overall substance abuse scores and program referral recommendations.

Institutional Charges and Placement in Segregation. One measure of institutional adjustment used in the study is whether the offenders had been found guilty of an infraction during incarceration. The OMS database includes charges classified as minor, such as disobeying rules; being in a prohibited area; threatening the security of the institution, the staff, and other offenders with assaults

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Table 1: Intake Profile of Offenders by Gender and Aboriginal Ancestry (Percentages)

	Non-Aboriginal Men (N = 9,622)	Aboriginal Men (N = 2,246)	Non-Aboriginal Women (N = 587)	Aboriginal Women (N = 235)
Demographic				
Age in years (Mean and standard deviation)	38 (12)	34 (10)	37 (11)	33 (9)
Has partner	41	35	29	31
Has at least high school	76	68	78	58
Sentence				
Aggregate sentence				
Indeterminate	1	1	1	1
Three years or less	60	63	72	73
More than three years	39	36	26	26
Offense type				
Violent	49	64	34	60
Nonviolent	51	36	66	40
Risk assessment				
Static risk				
High	42	58	23	43
Medium	44	37	49	42
Low	14	5	28	15
Dynamic risk				
High	51	70	36	65
Medium	38	27	40	31
Low	11	2	24	3
Has needs in criminogenic domain				
Associates	74	77	75	86
Attitude	76	74	45	46
Community functioning	26	42	49	49
Employment needs	74	90	73	91
Marital or family needs	33	58	58	76
Personal or emotional	72	88	87	95
Substance abuse	64	90	60	93
Reintegration potential				
High	39	15	42	17
Medium	37	39	47	57
Low	24	47	11	26
Motivation				
High	20	14	62	54
Medium	68	73	36	43
Low	12	12	3	3
Accountability				
High	20	16	46	42
Medium	63	68	48	53
Low	16	17	6	6
Has a responsivity need	14	23	22	29
Engaged in correctional plan	80	79	94	93
First security level				
Maximum	5	6	2	5
Medium	62	77	37	67
Minimum	33	16	61	28

Note: Percentages are based on cases with available information. With the exception of the criminogenic needs based on the DFIA-R for aboriginal and non-aboriginal men, missing data did not account for more than 20% of the total.

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and fights; or possession of contraband. Data on whether an offender had ever been transferred to segregation (administrative or disciplinary) were also taken from the administrative database of the OMS.

Release Decisions and Assessment of Risk Factors. Finally, factors related to release decisions were considered. These factors include whether the release was discretionary or statutory, the type of parole conditions on the conditional release, whether any suspensions of conditional release occurred, the reasons for suspensions, as well as the results of the assessment of risk factors conducted closest to the time of release.

Measures of Outcomes on Release. Two measures of the first revocation of conditional release were examined. The first considered whether a revocation occurred for any reason (e.g., revocation with or without an offense or a termination of conditional release). The second measure specifically considered whether the first revocation was for an offense. Time to experiencing these events, measured in days, was examined to assess the factors associated with revocations.

Analytic Approach

Initial analyses were completed to examine differences in the demographic-, sentence-, and risk-related characteristics between the groups as well as to calculate an overall rate of revocation for those included in the study. Moreover, analyses examined the amount of time during which an offender could be under community supervision before his/her sentence expired or the study ended. This analysis suggested that offenders granted discretionary release had the possibility of much longer follow-up periods than those who were on statutory release. In fact, more than 50% of those on statutory release had less than one year of possible follow-up before the end of their sentence. Given these differences, it was necessary to control for follow-up time. Therefore, Cox regression provided an alternative way to account for these variations in time-at-risk and to assess the factors associated with risk of revocation. In the current study, time-at-risk was calculated from the date of release to the earliest of three dates: first revocation, end of sentence, or end of the follow-up period. If an individual reached the end of his/her sentence or the end of the study period without being revoked, he/she was considered to be censored.

Cox regression considers the risk (i.e., hazard) of an event occurring (e.g., revocation of conditional release) as a function of time and predictor variables. A hazard ratio of 1 would indicate no difference in the impact of a particular factor on revocation. A ratio greater than 1 would indicate an increased risk for revocation, and a ratio of less than 1 would suggest a decreased risk of revocation (for further detail, see Allison, 1995).

All analyses were conducted separately for each of the groups. Analyses included an initial examination of the bivariate relationships of factors to the outcomes of interest. The relationships between demographic characteristics, risk- and sentence-related information, and release-related factors and outcome (whether an offender had a first revocation of their conditional release) were assessed for each group before constructing a model that included all the factors together. Those variables that the first analysis indicated contributed either no or trivial associations with outcome were excluded from the model combining multiple factors. The variables with the largest relationships with revocation were entered into each of the models first. In some cases, when variables were highly correlated, only the variable that contributed the most to the outcome was retained.

A final model containing only the strongest factors is presented for each group. This method has the advantage of reflecting the impact of a factor when many are considered and more accurately reflects the complexity of the offenders' experience on release and the myriad factors affecting their outcomes.

Study Results

First Revocation of Conditional Release. The percentage of each group revoked on a conditional release varied across groups from a low of 24% among non-aboriginal women to a high of 56% among aboriginal men (see Table 2). Generally, men and aboriginal offenders are more likely to experience a revocation than women or non-aboriginal offenders. For those who are revoked, the majority (more than 80%) will be revoked within one year of release. For virtually all offenders who are revoked, their first revocation occurs within the first two years of release. A much smaller percentage of offenders, however, have a first revocation because they have reoffended. Across groups, 4% to 12% are revoked for a new offense. Rates of violent and sexual offenders are lower still; only 1% (78) of offenders returned with either a violent or a sexual offense. Given these low numbers, we restricted our analyses to examination of first revocation for any reason and first revocation for any new offense.

Factors Associated With First Revocation for Any Reason. The factors varied in their impact on the likelihood of revocation for each of the groups examined.

Table 2: Percentage of Each Group Experiencing First Revocation During Conditional Release, by Type of First Return and Timing of Return

	Non-Aboriginal Men (N = 9,622)	Aboriginal Men (N = 2,246)	Non-Aboriginal Women (N = 587)	Aboriginal Women (N = 235)
First revocation for any reason				
Any period of time	36	56	24	54
Revocation occurred within 6 months of conditional release	46	52	38	43
Revocation occurred within 1 year of conditional release	83	89	80	87
Revocation occurred within 2 years of conditional release	98	99	97	98
First revocation for an offense				
Any period of time	6	12	4	12
Revocation occurred within 6 months of conditional release	39	46	27	39
Revocation occurred within 1 year of conditional release	79	87	73	86
Revocation occurred within 2 years of conditional release	98	98	96	96

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Notably, only three factors were consistently related to experiencing a revocation across all groups, namely, having had an institutional offense before release, being released from a security level higher than minimum security, and being released on statutory release. Each of these factors increased the likelihood of revocation across the groups; however, the effect size associated with the measures varied. The remainder of the risk factors explored were unique to each group (see Table 3). For example, among women only, the impact of having a substance abuse problem is reflected in the finding that those who were recommended for substance abuse interventions were 2.6 times more likely to experience a revocation than those not being recommended. Static risk was only associated for revocations among aboriginal men, whereas dynamic risk was more important for non-aboriginal men. Notably, only one factor was associated with a decrease in the likelihood of revocation. Among non-aboriginal men, having an "other" condition reduced the risk of return by approximately 8%. (Several types of conditions were collapsed into an "other" category, given the small number of individuals who receive these conditions and the imperfect conceptual mapping of these categories into other larger categories of conditions. The "other" types of conditions may include, for example: reporting to police, abstaining from driving, abstaining from gambling, avoiding certain places, deportation (voluntary or not), or avoiding a gambling establishment.)

Although information that could assist case managers in mitigating the general risk of revocations is important, the focus of supervision, and the primary public safety goal, is to reduce reoffending. Analyses examining factors related to revocations for a new offense follow below.

Factors Related to First Revocation of Conditional Release Is for a New Offense. Given smaller numbers of offenders who returned on a first revocation involving an offense, it was not possible to conduct analyses separately for each group. In fact, only 54 women (aboriginal and non-aboriginal combined) experienced a first revocation due to reoffending. This outcome, therefore, was examined separately for aboriginal and non-aboriginal men only.

Among both aboriginal and non-aboriginal men, many of the demographic-, sentence-, risk-, and release-related factors we examined were associated with revocation for a new offense (see Table 4). Although there were similar factors associated with this type of revocation between both groups of men, fewer factors were associated with the revocations of aboriginal men. The majority of factors were associated with the increased likelihood of revocation such as having certain reasons for first suspensions, having needs related to community functioning, or having a drug- or alcohol-related condition. Three factors—having an "other" type of condition, having a residency condition, and having a condition to follow mental health treatment or correctional programming—were associated with decreased likelihood of revocation with an offense.

Discussion

The current study identified factors associated with the revocation of conditional release for four groups: aboriginal and non-aboriginal men and aboriginal and non-aboriginal women. Identifying and understanding the impact of these factors can be helpful in planning and developing more effective community supervision strategies—first, by identifying profiles of offenders who will require closer supervision and more intensive interventions (consistent with the risk principle in the effective corrections literature), and second, by identifying which dynamic factors are empirically related to poor outcomes and should therefore be the target for change during community supervision (the need principle).

First Revocation of Conditional Release for Any Reason. Between 24% and 56% of offenders were revoked for any reason after their release. Consistent with previous literature, we found that non-aboriginal women offenders had the lowest rates of return among the four groups examined (e.g., Cobbina et al., 2012; Cortoni et al., 2010; Gendreau et al., 1996; Mackenzie et al. 1999; Makarios et al., 2010; Morgan, 1994; Piquero et al., 2015; Ulmer, 2001). Notably, the rate of return for non-aboriginal women was lower than estimates provided in Gobeil and Barrett (2008); however, their study used a broader definition of returns to custody, which could account for the difference. Both men and women aboriginal offenders had rates of return higher than those of non-aboriginal men and women, a finding consistent with previous literature (e.g., Gendreau et al., 1996; Gutierrez et al., 2013; Jung et al., 2010; Sims & Jones, 1997; Zhang et al., 2009).

Many of our findings related to factors associated with release outcomes are consistent with previous research. Among others, being younger, being single, previous criminal history, incurring misconducts during incarceration, and higher assessed levels of dynamic risk (criminogenic need) factors were all related to the likelihood of revocation, although which dynamic factors were most important depended on the group examined.

Of interest is the finding that the relationship of specific factors with revocation varied across groups. Other studies have previously shown that the importance of risk factors can differ across samples (e.g., Broadhurst & Loh, 1995; Johnson, 2005). Gutierrez et al. (2013), for example, found that while many factors predicted recidivism for both aboriginal and non-aboriginal offenders, some factors were relatively more important for one group than for the other. This suggests that interventions aimed at reducing the likelihood of revocation of conditional release could be more effective if group-specific factors were considered. The finding suggesting that having an "other" type of condition while on release reduced the likelihood of return was unique. Although not central to the scope of the study, this could reflect that those who receive less standard conditions on release may in fact also belong to lower risk groups, such as sexual offenders. Future research could allow for insight to this finding.

Although many of the factors identified are static and, therefore, cannot be changed through interventions, knowing which offenders have factors related to elevated risk allows parole officers to identify offenders requiring more intensive supervision. Several dynamic factors, however, were identified that could be targeted for change through focused interventions. Having needs in the areas of employment, substance abuse, and community functioning suggests that a focus on job training and job readiness, on the monitoring and treatment for substance abuse problems, and on the provision of assistance with accommodation and access to community services would be worthwhile targets during community supervision for offenders with needs in these areas.

First Revocation of Conditional Release Is for a New Offense. The rate at which the first revocation of conditional release was for an offense was much lower than general rates of return, ranging from 4% to 12% across groups examined. Non-aboriginal men and women had the lowest rates of revocation for a new offense. Because of small numbers, we were unable to examine factors associated with revocation with an offense among women. Many of the factors related to returns to custody for any reason were also related to revocation with an offense. These include statutory release, being younger, and having been

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Table 3: Association Between Demographic-, Sentence-, Risk-, and Release-Related Indicators and First Revocation for Any Reason, by Group (Hazard Ratios)

Factors	Non-Aboriginal Men	Aboriginal Men	Non-Aboriginal Women	Aboriginal Women
Intake factors				
Substance Abuse Intervention—W-CASA recommended			1.87*	2.61***
No partner vs. has a partner	1.46***	1.23**		
Sentence-related factors				
Sentence of 3 years or less vs. more than 3 years	1.26***			
Had an institutional offense	1.44***	1.40***	1.96*	1.75*
Last security level before release				
Medium vs. minimum	1.36***	1.17	1.37	2.25***
Maximum vs. minimum	1.78***	1.54***	3.35**	1.40
Release-related factors				
Age	0.98***	0.98***		
Statutory release	1.17**	1.69***	1.74*	1.54*
Conditions				
Drug- and alcohol-related	1.70***	1.86**	3.72**	
Other	0.92*	0.84**		
Overall static risk rating				
Medium vs. low		1.61**		
High vs. low		1.81*		
Overall dynamic risk rating				
Medium vs. low	1.47***			
High vs. low	1.68***			
Reintegration potential rating				
Low vs. high	2.88***			
Medium vs. high	1.70***			
Has need in criminogenic domain at release				
Employment	1.17**	1.44**	2.18**	
Marital or family needs			1.56*	
Attitude		1.24**		
Substance abuse	1.26***			
Community functioning	1.21***			
Model fit statistics				
Wald chi-square	2054.40***	402.83***	121.46***	48.41***
Degrees of freedom	16	14	8	5
Total N	8,431	1,922	519	218
N of events	2,962	1,098	128	120

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

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Table 4: Multivariate Relationship between Demographic-, Sentence-, Risk-, and Release-Related Indicators and First Revocation of Conditional Release for an Offense, by Group (Hazard Ratios)

Factors	Non-Aboriginal Men	Aboriginal Men
Sentence-related factors		
Had an institutional offense	1.28*	1.55**
Release-related factors		
Age	0.97***	0.96***
Statutory release	1.65***	2.33***
Conditions		
Drug-related and alcohol-related	2.28***	
Residency	0.51***	
Follow treatment or programming		0.59***
Other	0.79*	
Motivation to participating in correctional plan rating		
Low vs. high	1.45*	
Medium vs. high	0.98	
Reintegration potential rating		
Low vs. high	3.63***	
Medium vs. high	2.20***	
Has need in criminogenic domain at release		
Community functioning	1.42***	1.56**
Suspended for a failure to report	6.92***	4.54***
Suspended for breach of condition	1.78***	
Suspended for deteriorating or at-risk behavior	1.70***	
Model fit statistics		
Wald chi-square	661.59***	257.92***
Degrees of freedom	14	6
Total N	8,590	2,026
N of events	465	230

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

found guilty of institutional offenses. Our research was able to examine important factors related to revocation for an offense that had not been previously noted in the literature. For example, we determined that having a first suspension for a failure to report was strongly related to a first return with an offense for both aboriginal and non-aboriginal men, as was having a need in the community functioning domain. Additionally, for non-aboriginal men, having a residency condition decreased the likelihood of revocation for an offense by almost half. Thus, imposing a residency condition for those who meet the Corrections and Conditional Release Act requirements for residency appears to be an effective tool in reducing revocations with an offense. For aboriginal men, having a condition to follow treatment appeared to be protective. This may be because receiving treatment while under supervision in the community is beneficial; however, it is important to note that the current research examined only whether the condition was applied and not whether offenders actually participated.

What These Findings Mean for Case Management. First, it is important to note that our findings show that the risk factors having the largest impact on likelihood of revocation vary among the groups examined. They also vary depending on whether the revocation is for a new offense or for any reason. The following general observations summarize the results of risk factors by group and the implications for community supervision and interventions.

For non-aboriginal men, those who had the poorest outcomes were young, had indicators of poor institutional adjustment, were released on statutory release, and had low or medium reintegration potential. This group requires the greatest resources and the closest supervision. Interventions that could mitigate the risk of revocation for these men would be those that address substance abuse, employment needs, and areas related to community functioning. Problems related to community functioning are

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particularly important in increasing risk for revocations with a reoffense. Interventions that identify supports that would serve to decrease relapses into substance use (e.g., community programs, AA/NA, urinalysis, avoidance of areas of the community where drug and alcohol abuse is more frequent), that promote access to community services, and that provide assistance in finding stable, affordable accommodation could be beneficial components of an evidence-based case management strategy.

For aboriginal men, those most likely to have their conditional release revoked were young, had poor institutional adjustment, were on statutory release, and had a medium or high static risk rating. Individuals with these characteristics may benefit from more intensive supervision and interventions. Interventions targeting dynamic needs relating to employment and attitude could reduce the risk associated with any revocation, whereas focusing on areas related to community functioning might benefit those at risk for revocation for a reoffense.

The risk of revocation among women offenders was highest among those with a recommendation for substance abuse treatment, those who had an institutional offense, those released from security levels higher than minimum, and those on statutory release. These women require the greatest resources and the closest supervision. With respect to interventions, for non-aboriginal women, given that those with dynamic needs related to employment or relationships and the family were the most likely to return, interventions targeting these areas could reduce their risk. No dynamic factors were identified that distinguished aboriginal women who failed on release from those who did not. It is possible this is related to the relatively small number of women in our sample, or because risk factors were prevalent among almost all aboriginal women, making it difficult to distinguish those at greatest risk of revocation.

A word about our finding on the impact of substance abuse on revocation for these groups is warranted. Substance abuse as an independent risk factor was related to revocation for any reason for all groups; however, when risk factors were considered together, substance abuse was no longer associated with failure for aboriginal men. This should not be interpreted to mean that substance abuse is not a factor that needs to be monitored and mitigated to reduce risk for aboriginal men offenders. Rather, substance abuse was prevalent among both aboriginal men who failed and those who did not; thus, it did not distinguish between the two groups once other factors were considered.

Limitations and Future Research

There are a number of limitations that need to be considered with respect to this research. First, although detailed, the variables examined were constrained by what is available in our administrative database. Thus, it is possible that variables that would be associated with outcomes were not included in the current study. Future research should identify these potential factors (e.g., mental health of the offender, community support resources used by the offenders, factors associated with aboriginal social history, etc.) in order to develop a more comprehensive model to assist in release decision making and community management of offenders. In particular, it would contribute to the literature to identify protective factors, or assets that promote success on release. It would also be beneficial to understand more precisely how the unique indicators within each of the criminogenic need domains affect rates of revocations. For example, the community function domain includes several indicators such as type of accommodation, use of community resources and support, financial means, leisure activities, and self-care. In the current research, it was not possible to determine which of these contributed to the relationship of the overall rating on the community function domain with outcome. Understanding the importance of these individual factors could allow for better targeting of interventions and, in turn, reductions in revocations.

Future research may also consider including a larger sample of women in order to estimate the factors related to first revocation of conditional release for an offense. It may also be beneficial to consider looking at the risk factors for those on discretionary and statutory release separately, given that factors affecting success in the community may vary based on release type. Finally, a future study validating these findings would provide greater confidence in the application of the results.

Conclusion

The implications of this study, specifically the identification of factors related to poorer outcomes, should be considered for inclusion into the development of policy and training curricula of parole officers. Of note, based on these results, is that parole officers should be aware that assisting in promoting the successful reintegration of offenders might require a somewhat different emphasis for each of the groups included in the study. Understanding the factors that influence the outcome of community transition allows for the development and refinement of appropriate interventions and case management strategies to facilitate success on release.

Of note, based on these results, is that parole officers should be aware that assisting in promoting the successful reintegration of offenders might require a somewhat different emphasis for each of the groups included in the study.

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