Research Report
Unlawfully at Large:
A Profile of Federal Offenders
Who Breach Conditional Release
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Unlawfully at Large: A Profile of Federal Offenders Who Breach Conditional Release

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Executive Summary

Key words: *unlawfully at large, UAL, conditional release, characteristics, profile, revocation.*

Conditional release to the community is a cost-effective strategy for offender management that effectively supports offender reintegration. Despite these benefits, concerns have been raised regarding the transition of offenders, specifically with respect to those offenders who go unlawfully at large (UAL) while supervised in the community. No studies exist addressing this population; therefore, the current study was conducted to identify factors associated with UAL status.

The study included 18,321 federal offenders conditionally released between April 2006 and March 2009 and followed in the community until March 2010. A total of 3,990 of these offenders (21.8%) went UAL. UAL and non-UAL offenders were compared in terms of admission, institutional, release, and return to custody characteristics. Analyses were conducted separately for non-Aboriginal male offenders (n = 14,995), Aboriginal male offenders (n = 3,326), and female offenders (n = 1,091).

Male and female offenders had similar UAL rates, but a higher percentage of Aboriginal offenders went UAL than non-Aboriginal offenders (this was true for males and females). Offenders who went UAL tended to do so shortly after release, with slightly over half doing so in the first two months, and half were returned to custody within the first week after going UAL. Roughly 80% of UAL offenders had their release revoked, with around two-thirds having a revocation without offence and about 16% having a revocation with offence.

Compared to their counterparts who did not go UAL, UAL offenders were younger, and had more extensive youth and adult criminal histories. Overall, they were more likely to be assessed as high risk and need and as having low motivation and a low reintegration potential (with one exception: among female offenders, motivation level was not related to UAL status).

While incarcerated, UAL offenders were more likely to enroll in correctional programs than non-UAL offenders. However, for male offenders, those who went UAL were less likely to complete a program. UAL offenders were also more likely to have institutional charges. Finally, UAL offenders were less likely to be supervised on a discretionary release and more likely to be assigned a residency condition upon release (although there was no difference in residency condition among female offenders).

Most of the predictors of UAL status were similar for non-Aboriginal male offenders, Aboriginal male offenders, and female offenders. The number of dynamic risk factors that predicted UAL status (e.g., education, employment, substance abuse, associates) suggest that a continued focus on both institutional and community correctional interventions may reduce UALs in the future. Given that the first two months on release in the community appear to be critical for offenders who go UAL, the timeliness of interventions may affect successful outcome.

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Introduction

Correctional systems are tasked with supervising a diverse population of offenders from those incarcerated in federal penitentiaries to those serving a portion of their sentence in the community. In Canada, conditional release trends demonstrate that discretionary release and statutory release are important strategies for federal offender population management and can also have several benefits for a correctional organization.

Annually in Canada, approximately 40% of the federal offender population is supervised in the community. This affects operational costs and influences offender reintegration. First, incarceration is an expensive option compared to community supervision – it costs approximately four times as much per year to maintain an offender in custody (\$109,699) than it costs to supervise an offender in the community (\$29,476; Public Safety Canada, 2010). Increasing time in the community can produce major cost savings for a jurisdiction. Second, conditional release can serve to promote offender reintegration and ensure the protection of the public. Virtually all offenders serve a portion of their sentence in the community, whether through day parole, full parole, statutory release or a long-term supervision order. Each of these options presents an opportunity to promote the safe transition of offenders as conditional release is based on the theory that gradual release of offenders enhances community safety. Under supervision in the community, offenders are able to acclimatize back to life outside prison walls while accessing programming and resources to support their successful reintegration (Motiuk, 1998).

Despite the benefits of conditional release as an offender management strategy, concerns have been raised regarding the transition of offenders, specifically with respect to those offenders who go unlawfully at large (UAL) while serving their sentence in the community. For example, thirty percent of statutory releases end with a breach of conditions, which includes a small percentage of offenders who are determined to be unlawfully at large (Public Safety Canada, 2010). In 2008-2009, administration of justice charges (offences related to case proceedings such as failure to appear in court, failure to comply with a court order, breach of probation, and unlawfully at large) accounted for more than one fifth of all charges before the courts. During that time period, unlawfully at large charges (2,524) accounted for 0.6% of all Criminal Code and other federal statute charges (Public Safety Canada, 2010). Further, in 2007 the Correctional

Service of Canada (CSC or the Service) released *A Roadmap to Strengthening Public Safety*, the report of the Correctional Service of Canada Review Panel, which emphasized among other priorities, the importance of reducing the number of 'unlawfully at large' offenders in order to improve public safety. There is a need to examine the prevalence and to understand the characteristics of this group so that CSC is better able to develop programming interventions to reduce the likelihood of offenders going unlawfully at large while on conditional release in the community.

Previous Research

Despite the importance of understanding offenders who go UAL from their conditional release in the community, there has been scant research in this area. Some related research has been conducted on factors associated with offender escapes from correctional institutions (Culp, 2005; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991; Wharry, 1972), and people leaving minimum security institutions without permission (Basu, 1983; Johnston & Motiuk, 1992a, 1992b; Murphy, 1984). In addition, a few studies have examined offenders who go unlawfully at large in a community setting (Chard-Wierschem, 1994; Wojtowicz & Liu, 2006), but no Canadian studies have been conducted to date. This study aims to address this research gap and to identify the factors that underlie this behaviour.

Since the available research on offenders who go unlawfully at large while on release in the community is sparse, the factors identified in the research literature related to escapes from correctional institutions and going UAL from minimum security facilities were examined as a starting point. Particular attention was paid to the factors influencing UAL from minimum security institutions as this situation more closely resembles that of offenders who are in the community on conditional release. Minimum security facilities operate in an open environment providing institutional and community programs, activities, and services. Moreover, these institutions often operate without the presence of a perimeter security system since the inmates confined to them are not considered a serious risk for potential escape. Typically, the inmates are either nearing their release on parole or, in certain American jurisdictions, are already on some form of conditional release. The situation of an institutional UAL also applies to circumstances where an individual inmate does not return to an institution while, for example, in a community work program (Sturrock, Porporino, & Johnston, 1991).

With respect to identifying characteristics of offenders who go unlawfully at large from correctional institutions, research has demonstrated that static factors, including demographic, lifestyle, and offence-related variables, are good predictors of escape behaviour (Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991; see also Cowles, 1981 and Stone, 1975). Dynamic factors are also useful because they are subject to change and can be used to identify situations for appropriate interventions to prevent offenders from going unlawfully at large while on release in the community (Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991).

In relation to demographic and lifestyle variables, empirical research has demonstrated that institutional UAL offenders tended to be Caucasian (Cowles, 1981; Haisted, 1985; Johnston & Motiuk, 1992a; Murphy, 1984; Stone, 1975) males (Chard-Wierschem, 1994) under the age of thirty (Chard-Wierschem, 1994; Culp, 2005; Johnston & Motiuk, 1992a, 1992b; Stone, 1975; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991), who were unemployed at the time of their offence or had an unstable employment record (Johnston and Motiuk, 1992a; Murphy, 1984; Sturrock, Porporino, & Johnston, 1991), and had a history of alcohol and/or drug use/abuse (Chard-Wierschem, 1994; Johnston & Motiuk, 1992a; Sturrock, 1993). Conflicting results were found in relation to marital status (Chard-Wierschem, 1994; Johnston and Motiuk, 1992a, 1992b; Sturrock, 1993) and education level (Basu, 1983; Chard-Wierschem, 1994; Johnston and Motiuk 1992a; Morgan, 1967) at the time of arrest.

With respect to offence-related characteristics, offenders who went UAL tended to be serving time for property offences, rather than offences against the person (Culp, 2005; Johnston & Motiuk 1992a, 1992b; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991). They had relatively longer sentences (Stone, 1975; Sturrock, 1993) than non-UAL offenders and had a significant criminal history record – including previous arrests, charges and convictions as a juvenile or an adult (Johnston & Motiuk 1992a, 1992b; Stone, 1975; Sturrock, 1993).

In examining their institutional profile, offenders who went UAL from an institution were generally uninvolved with institutional programs, or perceived these programs as being inadequate (Sturrock, Porporino, & Johnston, 1991) and had more incidents of institutional misconduct (Johnston & Motiuk 1992a, 1992b; Sturrock, 1993). They also tended to have more prior parole violations/revocations (Sturrock, 1993) and previous institutional escapes (Johnston & Motiuk 1992a, 1992b; Stone, 1975; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991). Going UAL from a correctional institution appears to be a complex behaviour with a multitude

of predictors. The research on institutional UALs may provide insight to help identify offenders more likely to go UAL in the community and to prioritize resources to manage the risk of UAL.

Current Study

Within this context, the objective of this study was to develop a profile of federally sentenced offenders who go unlawfully at large from their conditional release (day parole, full parole, statutory release, or long-term supervision order¹). Based on the previous empirical research related to institutional UALs and escapes, this profile focused on demographic and lifestyle information, offence-related information, institutional program participation and adjustment, prior parole releases and failures, and escape history. Characteristics of offenders who went UAL were contrasted with their counterparts who did not go UAL while on release in the community. Characteristics that significantly predicted UAL status were then entered into a logistic regression model to focus on the core risk factors for UAL (i.e., those that added incremental information beyond other risk factors already considered). These analyses were also conducted with a subgroup of high risk offenders. Further, the study explores UAL behaviour including the use of survival analyses to examine the length of time to UAL, as well as revocation with and without offence. For the purposes of this study, data were analyzed separately for three groups: non-Aboriginal male offenders, Aboriginal male offenders, and female offenders.

¹ A long-term supervision order is designated by the court and occurs after the offender has served his or her determinate sentence. As such, offenders serving long-term supervision orders are not actually on conditional release from a sentence but are subject to community supervision and can go UAL. They were therefore included with conditionally released offenders within this study.

Method

Participants

The sample for this study consisted of all offenders who were released from the Correctional Service of Canada (CSC) on day parole, full parole, statutory release, or a long-term supervision order (LTSO) between April 1st, 2006 and March 31st, 2009. For offenders with multiple releases in a given sentence, their first release in the study period was considered. If they had a release before April 1, 2006, then their first release after the study period began was included. Data were available for 18,438 offenders. The substantial number of Aboriginal offenders in the correctional population made it possible to disaggregate the group from other offenders, similar to other studies (Johnston & Motiuk, 1992a; 1992b). Additionally, female offenders were also disaggregated. Those without ethnicity information (n = 117, <1%) were omitted and the final study cohort consisted of 18,321 offenders, comprised of 14,211 non-Aboriginal male offenders (77.6%), 3,019 Aboriginal male offenders (16.5%), and 1,091 female offenders (6%).

Data

All data were extracted from CSC's automated database, the Offender Management System (OMS). Data on several demographic and lifestyle variables were collected including offenders' gender, ethnocultural group, age at release, marital status, employment history, and history of alcohol and drug use. Information on current sentence length, type of current admission offences (violent, property, drug, escape/UAL, or other non-violent offences) and previous offence history were also collected. Information was collected on the number and type of institutional correctional programs in which offenders participated (enrolled in and completed). The following are the nationally recognized correctional programs offered to offenders: violence prevention, sex offender, substance abuse, family violence and living skills. Data were also collected on offenders' convictions for minor and serious institutional charges. Data were collected on the type of release obtained by offenders (day parole, full parole, statutory release, or long term supervision) as well as whether a residency condition was attached to their release. Information was also collected on prior parole performance as well as on escape history (youth criminal record escape history, adult criminal record escape history, and previous

escape/UAL offence). Several assessments administered prior to release were also examined (risk level, need level, reintegration potential and motivation level).

Post-Release Outcome

Offenders were followed up until March 31, 2010, ensuring that all offenders had at least one year of post-release follow-up. Data were collected on whether offenders went UAL during this time period, as well as whether they were revoked. Revocations were coded as to whether they involved a new offence (yes/no). UAL was defined as a suspension warrant issued during the supervision period for being unlawfully at large. This definition may overestimate UAL events. If the suspension warrant was cancelled or withdrawn, the offender is still considered a UAL for the purposes of this study, but some of these suspension warrants may have been cancelled following receipt of a reasonable explanation for the offender's absence.

Analytic Strategy

First, descriptive features of the UAL events were explored. Survival analyses were used to determine the rate and speed at which offenders go unlawfully at large once released to the community. The date on which offenders were identified as being UAL was used to determine length of time to failure. The rate and speed at which UAL offenders had their release revoked (with or without offence) were also examined. For these analyses, outcome was tracked for one year after release. Next, risk factors for going UAL were explored. Specifically, characteristics of offenders who went UAL were compared to those who did not go UAL via chi-square analyses for categorical risk factors and the Mann-Whitney U test for continuous predictors (this test was chosen because the continuous variables were skewed, violating the assumption of a normal distribution necessary for a t-test). For both chi-square tests and the U statistic, interpretation is based on the probability associated with the statistic. This is because the actual value of both the chi-square and U are heavily influenced by total sample size (i.e., larger samples produce larger test statistics) and are, therefore, not interpretable. Finally, the significant predictors of UAL status were included in logistic regression analyses to identify the key predictors (i.e., those that add unique information to each other).

Results

For the 18,321 offenders granted conditional release (day parole, full parole, statutory release, or long-term supervision order), 21.8% were identified as being unlawfully at large at some point during the follow-up period. Table 1 presents rates of UAL separated by gender and ethnicity. Male and female offenders had similar rates of UAL (approximately 22%; χ^2 (1) = 0.1, p = .797); however, within each group, Aboriginal offenders had much higher UAL rates. UAL rates for Aboriginal male offenders (34.1%) were significantly higher than for non-Aboriginal males (19.1%; χ^2 [1] = 324.9, p < .001). Similarly, UAL rates for Aboriginal female offenders (37.5%) were significantly higher than for non-Aboriginal females (16.4%; χ^2 [1] = 58.6, p < .001). Due to the small number of Aboriginal and non-Aboriginal female offenders, these groups will be combined for the remaining analyses.

Table 1
Rates of Unlawfully-at-Large Based on Gender and Ethnicity

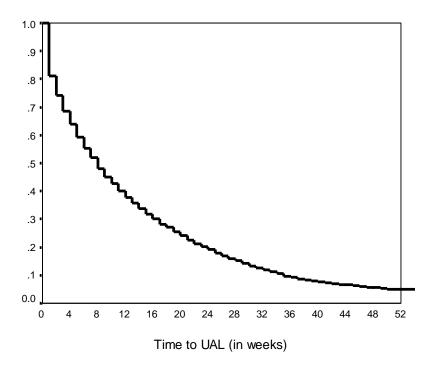
Group	Total N	UAL % (<i>n</i>)
Males	17,230	21.8 (3,749)
Non-Aboriginal Aboriginal	14,211 3,019	19.1 (2,721) 34.1 (1,028)
Females	1,091	22.1 (241)
Non-Aboriginal Aboriginal	784 307	16.1 (126) 37.5 (115)
Total	18,321	21.8 (3,990)

'Unlawfully at Large' Characteristics

The survival curve in Figure 1 demonstrates that many of the offenders who went UAL during the first year after release did so very quickly. The curve was highly similar across gender and ethnicity and was therefore combined together. For all three groups (non-Aboriginal male, Aboriginal male, and female), one third of the offenders who went UAL did so within the first

three weeks, and 50% did so within seven and a half weeks.² For non-Aboriginal male offenders, the average amount of time from release to going UAL was just over fourteen weeks (M = 100 days, SD = 137 days, mdn = 52 days). Average time to UAL was also similar for Aboriginal male offenders (M = 99 days, SD = 148, mdn = 51) and female offenders (M = 98 days, SD = 126, mdn = 52).

Figure 1. Time to UAL



The time until offenders went UAL was also examined based on whether the offender had a residency condition associated with their release, as this may affect how quickly their absence is detected. There was a significant association between residency condition and UAL status, but only for males. For non-Aboriginal male offenders, 16% of offenders who went UAL had a residency condition, compared to only 8% of non-UAL offenders (χ^2 (1) = 214.4, p < .001). For Aboriginal male offenders, 13% of offenders who went UAL had a residency condition, compared to only 7% of non-UAL offenders (χ^2 (1) = 34.6, p < .001). For female offenders, only 4% of offenders had a residency condition, regardless of UAL status (χ^2 (1) = 0.1, p = .752).

Table 2 presents the mean and median number of days until offenders went UAL,

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² Of the 3,990 UAL offenders examined, 36 went UAL after a revocation and re-release.

separated by residency condition. There was a significant difference in time to UAL status based on residency condition only for non-Aboriginal male offenders. For non-Aboriginal male offenders without a residency condition, 19% went UAL within the first week, and the median time to UAL was 54 days. In contrast, for those with a residency condition, 30% went UAL within the first week, and the median was 42 days, which was 12 days shorter. For female offenders and Aboriginal male offenders, there was no significant difference in length of time to UAL based on residency condition. However, in both groups, the median time to go UAL was actually shorter for those *without* a residency condition. It should be noted, however, that there are only nine female UAL offenders with a residency condition, so the sample size of female offenders prohibits strong conclusions.

Table 2

Time to UAL Based on Residency Condition

Group	N	M Days to UAL	SD	Mdn	Mann- Whitney <i>U</i>	Z
Non-Aboriginal Males						
No residency	2,272	100.8	139.8	54	469893	-2.64**
Residency	449	95.1	120.4	42		
Aboriginal Males						
No residency	898	96.9	144.0	50	65015	-0.74
Residency	130	113.4	168.9	58		
Females						
No residency	232	97.6	125.8	53	966	-0.38
Residency	9	108.6	128.9	59		

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

In examining the amount of time spent unlawfully at large, non-Aboriginal male offenders (n = 2,362) were UAL for an average of four and a half weeks (M = 32 days, SD = 84 days); however, 50% of offenders were returned (voluntarily or through apprehension) within 5 days. Aboriginal male offenders were UAL for an average of 5 days longer (M = 37 days, SD = 76, Mdn = 9). Female offenders were missing for an average of three and a half weeks (M = 26 days, SD = 46, Mdn = 7). Of the 3,990 UAL offenders, 13.1% (n = 523) were excluded from

analyses of average days spent UAL because they had still not returned or had not been apprehended at the end of the follow-up period.

Rates of revocation

Revocations for offenders who went UAL were also examined (see Table 3). For most offenders, the revocation would be related to the UAL.³ Female offenders had the lowest revocation rates (77%) and Aboriginal males had the highest (84%), with intermediate rates for non-Aboriginal males (81%). Revocation without a new offence was most common (63% of female offenders, 64% of non-Aboriginal males, and 68% of Aboriginal males). Rates of revocation with a new offence ranged between 15% to 17%. Time to revocation was generally longer than time to UAL, which reflects the greater processing time for revocations (e.g., a warrant of suspension is issued and the offender must appear before the Parole Board of Canada for a revocation decision). Depending on the group or type of revocation, the average time to revocation varied between 203 days (for revocation with new offence for females) to 310 days (for revocation without offence for non-Aboriginal males). Revocations with a new offence occurred faster than revocations without an offence. Additionally, women were revoked most quickly, whereas non-Aboriginal male offenders were revoked least quickly.

Predictors of UAL Status

Demographic/lifestyle information

The average age at release of non-Aboriginal male offenders who went UAL was 34.9 years (SD = 9.4), significantly lower than the average age of offenders who did not go UAL (M = 37.8 years, SD = 11.5, U = 13531586, Z = -10.92, p < .001). Similarly, Aboriginal male offenders who went UAL were significantly younger (M = 32.1, SD = 8.4) than Aboriginal males who did not go UAL (M = 35.4, SD = 10.7; U = 851871, Z = -7.561, p < .001), and female UAL offenders were significantly younger (M = 33.3, SD = 7.5) than non-UAL female offenders (M = 36.7, SD = 10.0; U = 82895, Z = -4.53, p < .001).

[.]

³ An offender who goes UAL is automatically issued a suspension warrant. Based on a review by the Parole Board of Canada (PBC), UAL offenders usually have their release revoked, either with or without offence, depending on the PBC, parole officer, and police discretion.

Table 3

Revocation Rates for UAL Offenders

Group	N	% Revoked	M days to revocation	SD	Mdn
Non-Aboriginal Males	2,721	81.0	292	286	190
Without Offence With Offence		64.0 17.0	310 222	310 148	196 176
Aboriginal Males	1,028	84.1	278	285	185
Without Offence With Offence		68.0 16.1	292 219	310 124	182 196
Females	241	77.6	244	221	176
Without Offence With Offence		62.6 14.9	254 203	230 169	190 152

Table 4 outlines the UAL rates across ethnocultural groups. Aboriginal offenders were subdivided into categories of First Nation, Inuit, and Métis. The highest UAL rates were found for First Nation offenders (35%), followed by Métis (34%), White (20%), and Inuit offenders (19%). The remaining groups all had UAL rates less than 15%, with the lowest rates found among Chinese offenders (4%).

Table 4

Percentage of Offenders Who Went UAL by Ethnocultural Status

Ethnocultural Status	UAL %
White $(n = 12,629)$	20.3
First Nation $(n = 2,274)$	35.4
Inuit $(n = 106)$	18.9
Métis $(n = 946)$	33.5
Black $(n = 1,155)$	14.2
Arab/West Asian $(n = 157)$	9.6
South East Asian $(n = 338)$	8.6
South Asian $(n = 144)$	8.3
Latin American $(n = 111)$	8.1
Chinese $(n = 113)$	4.4
Other $(n = 348)$	14.7

Note. 'South East Asian' includes Asiatic offenders; 'South Asian' includes East Indian offenders; 'Latin American' includes Hispanic offenders; and 'Other' includes unknown, Filipino and Korean offenders.

As demonstrated in Table 5, for all three groups (non-Aboriginal males, Aboriginal males, and females), approximately 60% to 62% of offenders who went UAL were single, representing a significantly higher proportion compared to non-UAL offenders (roughly half of whom were single).

Table 5

Marital Status: Percent Single by UAL Status

	_	UAL Stat	us %	_	
Group	N	No	Yes	Overall	Chi-Square (χ^2)
Non-Aboriginal Males Aboriginal Males Females	14,151 2,992 1,086	47.2 50.9 45.4	61.8 60.6 60.1	50.0 54.2 48.6	185.4*** 25.4*** 16.0***

Note. This variable was dichotomized. Offenders who were married, common-law, separated, widowed, or divorced were considered non-single.

Table 6 presents the percentage of offenders with less than grade 10 education and without a high school diploma, separated by UAL status, gender, and ethnicity. Aboriginal male offenders had the least amount of education (overall, 59% did not complete grade 10, and 87% did not complete high school), and female offenders had the most education (overall, 39% did not complete grade 10 and 66% did not complete high school). In all groups, UAL offenders had significantly less education than non-UAL offenders.

Table 7 summarizes the employment history of offenders. Overall, offenders who went UAL once released into the community were significantly more likely to have unstable job histories and to be unemployed than non-UAL offenders. These findings held true across gender and Aboriginal ancestry. For example, 93% of Aboriginal male offenders who went UAL had unstable job histories, compared to 83% of non-UAL offenders.

^{***} p < .001.

Table 6

Education Level by UAL Status

		UAL Sta	tus %	_	
Group	N	No	Yes	Overall	Chi-Square (χ ²)
Non-Aboriginal Males					
Less than grade 10	12,802	44.1	52.1	45.7	51.0***
No high school	12,753	72.8	81.2	74.4	75.0***
Aboriginal Males					
Less than grade 10	2,788	56.8	63.0	59.0	9.9**
No high school	2,778	85.9	89.6	87.2	7.5**
Females					
Less than grade 10	1,048	36.5	46.3	38.6	7.4**
No high school	1,039	63.3	77.7	66.5	16.6***

^{**} *p* < .01, *** *p* < .001.

Table 7

Employment History and UAL Status

		UAL Stat	us %	<u></u>
Group	N	No	Yes	Chi-Square (χ^2)
Non-Aboriginal Males				
Unstable job history	13,310	71.6	87.0	255.3***
Unemployed at arrest	13,192	60.5	77.0	240.0***
Unemployed 50% of time	13,108	53.3	71.0	257.5***
Unemployed 90% of time	13,176	31.0	42.5	121.6***
Aboriginal Males				
Unstable job history	2,814	83.2	92.6	48.4***
Unemployed at arrest	2,806	69.4	81.1	45.2***
Unemployed 50% of time	2,786	68.8	82.3	58.6***
Unemployed 90% of time	2,803	38.9	54.7	64.4***
Females				
Unstable job history	1,056	74.1	91.0	30.0***
Unemployed at arrest	1,055	70.4	89.3	34.4***
Unemployed 50% of time	1,049	58.3	78.4	30.9***
Unemployed 90% of time	1,054	41.8	60.1	24.5***

^{***} *p* < .001.

Table 8 describes four indicators of alcohol abuse and four indicators of drug abuse. Overall, offenders who went UAL had a significantly higher rate of all eight substance abuse indicators. In all three groups, differences between UAL offenders and non-UAL offenders appeared larger for the drug abuse variables. For example, between 85% and 92% of offenders who went UAL abused drugs, compared to between 64% and 78% of offenders who did not go UAL.

Table 8
Substance Abuse History and UAL Status

		UAL Sta		
Group	N	No	Yes	Chi-Square (χ^2)
Non-Aboriginal Males				
Early age alcohol use	13,122	34.6	45.3	102.1***
Drinks on regular basis	13,106	28.7	34.2	30.2***
Frequent binge drinking	13,068	32.6	42.9	95.9***
Abuses alcohol	13,166	44.7	54.5	79.8***
Early age drug use	13,139	46.0	68.6	415.1***
Uses drugs on regular basis	13,110	49.6	72.4	424.4***
Has gone on drug binges	12,988	44.7	69.8	511.4***
Abuses drugs	13,192	64.0	85.1	420.3***
Aboriginal Males				
Early age alcohol use	2,805	71.9	77.5	10.3**
Drinks on regular basis	2,796	57.8	64.6	12.5***
Frequent binge drinking	2,749	66.7	73.6	13.7***
Abuses alcohol	2,814	80.0	83.9	6.7*
Early age drug use	2,796	65.1	78.4	53.2***
Uses drugs on regular basis	2,791	60.0	72.2	41.3***
Has gone on drug binges	2,713	52.3	64.5	36.8***
Abuses drugs	2,808	78.3	88.5	44.6***
Females				
Early age alcohol use	1,051	25.6	43.1	26.5***
Drinks on regular basis	1,051	22.0	31.6	9.2***
Frequent binge drinking	1,043	25.7	38.4	14.3***
Abuses alcohol	1,054	34.0	50.2	20.4***
Early age drug use	1,055	39.7	68.7	61.5***
Uses drugs on regular basis	1,052	52.3	79.8	56.7***
Has gone on drug binges	1,044	48.3	78.9	66.8***
Abuses drugs	1,057	63.8	92.3	70.7***

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

Current and previous offences

Non-Aboriginal male offenders who went UAL were serving average aggregate sentence lengths of 1,574 days (4.3 years, SD = 1,467) while offenders who did not go UAL were serving average aggregate sentence lengths of 1,513 days (4.1 years, SD = 1,390). However, a Mann-Whitney test found no significant difference in aggregate sentence length between the two UAL categories, U = 14415084, Z = -1.79, p = .074. Similarly, for Aboriginal male offenders, there was no significant difference in the aggregate sentence length for those who went UAL (M = 1,479 days, SD = 1,225) compared to those who did not (M = 1,466 days, SD = 1,588; U = 929320, Z = -1.03, P = .301). For female offenders, however, those who went UAL had an average aggregate sentence length about 99 days shorter (M = 1,091, SD = 601) compared to female offenders who did not go UAL (M = 1,190, SD = 730; U = 89815, Z = -1.99, P = .047).

Table 9 presents the percentage of offenders with various admission offence types, separated by UAL status, gender, and Aboriginal ancestry. In all three groups, offenders who went UAL were significantly more likely to have property offences at admission and were more than twice as likely to have escape or UAL offences at admission. For non-Aboriginal male offenders and for female offenders, those who went UAL were significantly more likely to have violent offences (for Aboriginal male offenders, rates of violent offences were comparably high for both UAL and non-UAL offenders). Despite the higher rates of substance abuse problems among UAL offenders noted in Table 8, for non-Aboriginal male offenders, those who went UAL were significantly less likely to have drug offences (no difference was found among female offenders or Aboriginal males). For male offenders (both Aboriginal and non-Aboriginal), those who went UAL were less than half as likely to have sex offences compared to non-UAL offenders.

Not surprisingly given the generally higher rates of both violent and property offences, offenders who went UAL had, on average, significantly more offences at admission compared to non-UAL offenders (see Table 10). For example, non-Aboriginal males who went UAL had approximately two more offences at intake than those who did not go UAL (M = 10.2 compared to M = 7.9).

With respect to previous offence history (see Table 11), offenders who went UAL were significantly more likely to have a previous youth conviction and a previous adult conviction than offenders who did not go UAL, with one exception. Among Aboriginal male offenders, the

Table 9

Admission Offence Types and UAL Status

	_	UAL St	atus %		
Group	N	No	Yes	Overall	Chi-Square (χ^2)
Non-Aboriginal Males	14,211				
Violent Offences		59.8	66.0	61.0	35.7***
Property Offences		36.3	56.6	40.2	376.7***
Drug Offences		33.3	28.0	32.3	27.6***
Escape/UAL Offences		5.6	13.5	7.1	206.4***
Sex Offences		10.1	3.3	8.8	125.7***
Aboriginal Males	3,019				
Violent Offences		74.1	74.3	74.2	0.02
Property Offences		34.7	45.9	38.5	36.0***
Drug Offences		19.0	16.4	18.2	3.1
Escape/UAL Offences		7.0	16.4	10.2	65.3***
Sex Offences		15.3	6.9	12.5	44.0***
Females	1,091				
Violent Offences		44.6	54.4	46.7	7.2**
Property Offences		30.6	41.9	33.1	10.9**
Drug Offences		40.9	37.3	40.1	1.0
Escape/UAL Offences		3.4	13.3	5.6	34.6***
Sex Offences		1.5	0.8	1.4	0.7

Note. Columns sum to more than 100% as offenders could be convicted of multiple offences.

rates of previous adult convictions were quite high (approximately 90%) and not significantly different based on UAL status. The difference between UAL and non-UAL offenders was consistently larger for previous youth convictions compared to adult convictions (e.g., among non-Aboriginal males, 58% of UAL offenders had a youth conviction, compared to 40% of non-UAL offenders). The effect of previous adult convictions was likely smaller due to the universally high rates of previous adult convictions (i.e., all groups except females who did not go UAL had previous adult conviction rates higher than 80%).

^{**} *p* < .01, *** *p* < .001.

Table 10

Average Number of Offences at Admission by UAL Status

Group	N	M # of Offences	SD	Mdn	Mann- Whitney <i>U</i>	Z
Non-Aboriginal Mal	es					
Did not go UAL Went UAL	11,490 2,721	7.9 10.2	11.3 12.6	5 7	12313424	-17.30***
Aboriginal Males						
Did not go UAL Went UAL	1,991 1,028	6.3 7.1	10.5 7.3	4 5	901783	-5.38***
Females						
Did not go UAL Went UAL	850 241	6.5 7.5	9.4 7.5	3 5	80245	-5.16***

^{***} *p* < .001.

Table 11

Previous Convictions and UAL Status

	_	_		
Group	N	No	Yes	Chi-Square (χ^2)
Non-Aboriginal Males				
Previous youth conviction	11,736	39.5	57.8	249.3***
Previous adult conviction	12,003	81.1	92.8	184.4***
Aboriginal Males				
Previous youth conviction	2,541	58.7	74.7	63.8***
Previous adult conviction	2,567	89.0	91.2	3.0
Females				
Previous youth conviction	946	25.0	44.6	29.4***
Previous adult conviction	954	68.5	85.6	24.0***

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

Institutional behaviour

Table 12 outlines the institutional correctional programs in which offenders participated. Data are presented for the proportion of offenders that enrolled in a program, and also the proportion that completed a program (among those that enrolled), as well as the breakdown by five types of core programs. Overall, offenders who went UAL were significantly more likely to have enrolled in a program than offenders who did not go UAL. However, among male offenders (both Aboriginal and non-Aboriginal), for those that started a program, offenders who went UAL were significantly less likely to complete a program.

Examining enrolment and completion rates by type of program, offenders who went UAL were significantly more likely to enrol in programs targeting violence and substance abuse. For non-Aboriginal male offenders, however, those who went UAL were significantly less likely to complete these programs. Male offenders (Aboriginal or non-Aboriginal) who went UAL were significantly less likely to have started a sex offender program. Among non-Aboriginal males, UAL offenders who started the sex offender program were significantly less likely to complete it. Enrolment in the sex offender program among female offenders was virtually non-existent. For the family violence and living skills programs, non-Aboriginal male offenders who went UAL were significantly more likely to start these programs and significantly less likely to complete them. Among Aboriginal male offenders, there was no difference in enrolment rates for these programs, although those who went UAL were significantly less likely to complete them. For female offenders, going UAL was significantly related to higher enrolments in the living skills program and lower completions. No females enrolled in the family violence program.

The finding of more program enrolments among UAL offenders is not surprising given their higher level of need. Table 13 presents the proportion of offenders rated as having "some" or "considerable" need in the seven dynamic risk domains assessed at intake. Offenders who went UAL were significantly higher need than non-UAL offenders on all seven domains, with a few exceptions. Among Aboriginal male offenders, the proportion with some/considerable need among the family/marital domain was similar across UAL status. For female offenders, the proportion with identified needs in the personal/emotional and attitude domains were similar across UAL status. Among non-Aboriginal males, the largest difference between UAL offenders and non-UAL offenders was for problems with substance abuse (86% compared to 66%, respectively). For Aboriginal male offenders, rates of substance abuse were high among both

groups (at least 88%). In this group, however, the largest differences were found for problems with associates (83% among the UAL group compared to 70% among the non-UAL group) and community functioning (48% among the UAL group compared to 37% among the non-UAL group). For female offenders, the differences were most pronounced for problems with associates (86% in UAL group compared to 63% in non-UAL group) and substance abuse (95% among UAL group compared to 64% among non-UAL group).

Table 12

Percentages that Enrolled in and Completed Institutional Correctional Programs by UAL Status

Enro	lled (%)		Complet	ed (%)			
No UAL	UAL	Chi-Square (χ^2)	No UAL	UAL	Chi-Square (χ^2)		
Non-Aboriginal Males $(n = 14,211)$							
66.4	77.1	116.9***	90.7	84.7	62.4***		
4.3	8.7	89.1***	82.8	76.1	4.7*		
6.7	1.8	98.2***	83.4	66.7	8.8**		
44.7	59.8	201.2***	89.4	84.8	25.2***		
7.7	6.5	4.8*	87.3	73.9	21.0***		
30.3	34.5	18.9***	87.9	78.6	52.6***		
3,019)							
80.3	84.5	8.1**	90.1	85.3	12.9***		
19.2	23.6	8.2**	85.6	83.5	0.5		
10.6	5.1	26.5***	70.8	57.7	3.3		
57.1	65.1	18.1***	86.8	85.1	1.1		
12.1	11.6	0.2	84.2	73.1	6.3*		
30.9	33.3	1.7	85.9	75.7	15.5***		
61.1	87.1	57.6***	81.5	83.3	0.3		
7.4	15.8	15.6***	87.3	86.8	0.004		
0.9	0.0	2.3	62.5	-	-		
52.6	80.5	60.4***	74.5	78.9	1.4		
0.0	0.0	-	_	-	_		
18.2	24.5	4.6*	95.5	84.7	7.1**		
	No UAL (n = 14,211) 66.4 4.3 6.7 44.7 7.7 30.3 3,019) 80.3 19.2 10.6 57.1 12.1 30.9 61.1 7.4 0.9 52.6 0.0	(n = 14,211) 66.4 77.1 4.3 8.7 6.7 1.8 44.7 59.8 7.7 6.5 30.3 34.5 3,019) 80.3 84.5 19.2 23.6 10.6 5.1 57.1 65.1 12.1 11.6 30.9 33.3 61.1 87.1 7.4 15.8 0.9 0.0 52.6 80.5 0.0 0.0	No UAL UAL Chi-Square (χ^2) (n = 14,211) 66.4 77.1 116.9*** 4.3 8.7 89.1*** 6.7 1.8 98.2*** 44.7 59.8 201.2*** 7.7 6.5 4.8* 30.3 34.5 18.9*** 3,019) 80.3 84.5 8.1** 19.2 23.6 8.2** 10.6 5.1 26.5*** 57.1 65.1 18.1*** 12.1 11.6 0.2 30.9 33.3 1.7 61.1 87.1 57.6*** 7.4 15.8 15.6*** 0.9 0.0 2.3 52.6 80.5 60.4*** 0.0 0.0 -	No UAL UAL Chi-Square (χ^2) ($n = 14,211$) 66.4 77.1 116.9*** 90.7 4.3 8.7 89.1*** 82.8 6.7 1.8 98.2*** 83.4 44.7 59.8 201.2*** 89.4 7.7 6.5 4.8* 87.3 30.3 34.5 18.9*** 87.9 3,019) 80.3 84.5 8.1** 90.1 19.2 23.6 8.2** 85.6 10.6 5.1 26.5*** 70.8 57.1 65.1 18.1*** 86.8 12.1 11.6 0.2 84.2 30.9 33.3 1.7 85.9 61.1 87.1 57.6*** 81.5 7.4 15.8 15.6*** 87.3 0.9 0.0 2.3 62.5 52.6 80.5 60.4*** 74.5 0.0 0.0 -	No UAL UAL Chi-Square χ^2) (n = 14,211) 66.4 77.1 116.9*** 90.7 84.7 4.3 8.7 89.1*** 82.8 76.1 6.7 1.8 98.2*** 83.4 66.7 44.7 59.8 201.2*** 89.4 84.8 7.7 6.5 4.8* 87.3 73.9 30.3 34.5 18.9*** 87.9 78.6 3,019) 80.3 84.5 8.1** 90.1 85.3 19.2 23.6 8.2** 85.6 83.5 10.6 5.1 26.5*** 70.8 57.7 57.1 65.1 18.1*** 86.8 85.1 12.1 11.6 0.2 84.2 73.1 30.9 33.3 1.7 85.9 75.7 61.1 87.1 57.6*** 81.5 83.3 7.4 15.8 15.6*** 87.3 86.8 0.9 0.0 2.3 62.5 - 52.6 80.5 60.4*** 74.5 78.9 0.0 0.0		

Note. Total percentage will be greater than 100% as offenders could participate in multiple programs. Completed (%) reflects the percentage of those enrolled who completed the program. There was no missing information for these variables.

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

Table 13

Need Domains and UAL Status

		UAL St	atus %	-	
Group	N	No	Yes	Overall	Chi-Square (χ^2)
Non-Aboriginal Males	13,969				
Employment		53.0	63.7	55.1	100.5***
Marital/family		32.3	37.7	33.3	28.9***
Associates		67.6	75.5	69.1	63.7***
Substance Abuse		65.7	85.7	69.5	412.0***
Community Functioning		24.4	38.9	27.2	228.8***
Personal/Emotional		80.0	88.4	81.6	102.6***
Attitude		60.4	69.2	62.1	72.8***
Aboriginal Males	2,983				
Employment		76.1	86.5	79.7	45.0***
Marital/family		55.4	57.0	56.0	0.7
Associates		70.3	83.4	74.8	60.8***
Substance Abuse		88.3	94.8	90.5	32.8***
Community Functioning		36.9	48.1	40.7	34.5***
Personal/Emotional		90.6	94.8	92.1	15.8***
Attitude		60.2	70.0	63.6	27.7***
Females	1,078				
Employment		69.6	84.9	73.0	22.2***
Marital/family		47.9	63.6	51.4	18.3***
Associates		63.4	85.8	68.4	43.0***
Substance Abuse		64.5	94.6	71.2	82.0***
Community Functioning		28.5	41.4	31.4	14.5***
Personal/Emotional		74.4	80.3	75.7	3.6
Attitude		35.5	37.2	35.9	0.2

Note. "Need" was considered a rating of some or considerable difficulty in a domain. Columns sum to more than 100% as offenders could have difficulty in multiple domains. *** p < .001.

In all three groups (non-Aboriginal male offenders, Aboriginal male offenders, female offenders), offenders who went UAL were significantly more likely to have either a serious or minor institutional charge (see Table 14). In general, the difference between those who went UAL versus those who did not were larger for minor charges than serious charges. Not surprisingly, minor institutional charges were generally more common. Additionally, Aboriginal male offenders had the highest rate of charges, and female offenders had the lowest.

Table 14

Institutional Charges and UAL Status

	UA	L Status %		
Group	No	Yes	Overall	Chi-Square (χ^2)
Non-Aboriginal Males (n = 14,2	211)			
Serious Charge	37.6	59.5	41.8	434.2***
Minor Charge	62.0	83.8	66.2	463.5***
Aboriginal Males ($n = 3,019$)				
Serious Charge	43.4	60.3	49.1	77.6***
Minor Charge	70.5	84.0	75.1	66.8***
Females ($n = 1,091$)				
Serious Charge	24.7	41.5	28.4	26.0***
Minor Charge	49.8	73.9	55.1	44.0***

Note. Columns sum to more than 100% as offenders could have both serious and minor charges. *** p < .001.

Release and performance on community supervision

Table 15 presents a breakdown of release type for offenders who went UAL compared to those who did not. For all offender groups, there was a significant association between release type and UAL status. For example, among non-Aboriginal male offenders, 70% of offenders who went UAL had been released at their statutory release date; in contrast, 55% of offenders who did not go UAL were released at statutory release. For male offenders (both Aboriginal and non-Aboriginal), those who went UAL were more likely to be on statutory release and less likely to be on day parole or full parole. For female offenders, those who went UAL were more likely to be on statutory release or day parole, but less likely to be on full parole.

Table 16 examines prior parole failures and escapes. Among non-Aboriginal males, a significantly higher percentage of offenders who went UAL had a prior parole failure (30%) than offenders who did not go UAL (24%; these analyses combined failures on either day parole or full parole). However, among female offenders and Aboriginal male offenders, there was no significant difference in prior parole failures.

Table 15

Release Type and UAL Status

	UAL S	tatus %	_	
Group	No	Yes	Overall	Chi-Square (χ^2)
Non-Aboriginal Males $(n = 14,$	211)			
Day Parole	31.5	22.1	29.7	213.0***
Full Parole	13.0	7.5	12.0	
Statutory Release	54.8	70.0	57.7	
Long-term Supervision	0.7	0.5	0.7	
Aboriginal Males $(n = 3,019)$				
Day Parole	21.3	17.2	19.9	26.3***
Full Parole	7.2	3.7	6.0	
Statutory Release	70.6	77.6	73.0	
Long-term Supervision	0.9	1.5	1.1	
Females $(n = 1,091)$				
Day Parole	46.6	52.3	47.8	17.7**
Full Parole	21.2	10.4	18.8	
Statutory Release	32.2	36.9	33.3	
Long-term Supervision	-	0.4	0.1	

Note. For the chi-square analyses, df = 3.

Offenders who went UAL were significantly more likely to have a prior escape as either a youth or an adult, and this difference was generally quite large. For example, among female offenders, those who went UAL were more than twice as likely to have a prior escape as a youth, and nearly twice as likely to have a prior escape as an adult.

Assessments prior to release

Table 17 presents the static and dynamic risk/need assessments conducted prior to release. For all three groups, offenders who went UAL had significantly higher static and dynamic risk/need ratings compared to offenders who did not go UAL. In all analyses, offenders who went UAL were less than half as likely to be low risk compared to offenders who did not go UAL, with one exception: among static risk ratings for female offenders, 46% of non-UAL offenders were low risk compared to 24% of UAL offenders.

^{**} *p* < .01, *** *p* < .001.

Table 16

Prior Escapes, Parole Failure, and UAL Status

	UAL Status %				
Group	N	No	Yes	Chi-Square (χ^2)	
Non-Aboriginal Males					
Prior parole failure	14,211	24.4	29.9	34.6***	
Prior escape (youth)	11,616	4.3	9.4	93.3***	
Prior escape (adult)	11,960	20.9	36.2	238.5***	
Aboriginal Males					
Prior parole failure	3,019	24.2	26.5	1.8	
Prior escape (youth)	2,523	10.8	17.0	19.4***	
Prior escape (adult)	2,562	27.8	35.3	15.2***	
Females					
Prior parole failure	1,091	16.6	19.5	1.1	
Prior escape (youth)	949	2.3	7.8	14.8***	
Prior escape (adult)	955	11.1	19.7	10.6***	

^{**} *p* < .01, *** *p* < .001.

Table 17
Static and Dynamic Risk and UAL Status

	Static Risk (%)			Dynamic Risk/Need (%)		
Group	No UAL	UAL	Chi-Square (χ^2)	No UAL	UAL	Chi-Square (χ^2)
Non-Aboriginal Males	(n = 12,394)					
Low Moderate High	19.7 46.6 33.7	7.9 43.4 48.6	275.4***	14.1 40.9 45.0	2.9 31.4 65.7	417.3***
Aboriginal Males $(n = 2)$	2,581)					
Low Moderate High	8.3 40.1 51.6	3.5 34.4 62.2	37.9***	6.1 37.6 56.4	1.2 28.9 69.9	62.9***
Females $(n = 964)$						
Low Moderate High	45.5 40.5 14.0	24.2 50.2 25.6	36.5***	20.9 47.1 32.0	3.6 43.5 52.9	51.3***

Note. For the chi-square analyses, df = 2. *** p < .001.

Offenders were also compared on reintegration potential and motivation level (see Table 18). Among male offenders (both Aboriginal and non-Aboriginal), those who went UAL had significantly lower reintegration potential and motivation. Among female offenders, those who went UAL had significantly lower reintegration potential, but were approximately equivalent in motivation level compared to those who did not go UAL.

Table 18

Reintegration Potential, Motivation Level, and UAL Status

	Reintegration Potential (%)			Motivation Level (%)		
Group	No UAL	UAL	Chi-Square (χ^2)	No UAL	UAL	Chi-Square (χ^2)
Non-Aboriginal Males ($n = 12,394$)						
Low	20.5	40.8	628.4***	13.4	23.4	211.9***
Moderate	40.9	43.5		58.1	59.0	
High	38.6	15.7		28.5	17.6	
Aboriginal Males (n	= 2,582)					
Low	32.7	46.7	64.2***	12.9	20.2	47.0***
Moderate	47.7	43.0		57.9	61.1	
High	19.6	10.4		29.2	18.8	
Females $(n = 964)$						
Low	7.8	10.3	24.6***	4.3	5.4	0.7
Moderate	35.2	51.6		35.9	33.6	
High	57.0	38.1		59.8	61.0	

Note. For the chi-square analyses, df = 2.

Multiple Regression Models Predicting UAL Status

Logistic regression was used to predict UAL status using risk factors that were significant in the previous section. The goal of these analyses was to synthesize the previous results and identify the key predictors of UAL status (i.e., those variables that add non-redundant information). Given the large number of significant risk factors in the bivariate analyses, it was desirable to reduce the item pool for the regression analyses to improve parsimony and facilitate interpretation of the model. The following items were not entered: education/employment rating on the dynamic factors assessment (because 6 individual items already captured more clearly-

^{***} *p* < .001.

defined information on these domains), substance abuse rating on the dynamic factors assessment (because 8 individual items already captured substance abuse information), and Reintegration Potential Rating (because it is based on other information already included in the model, such as the static risk rating). Given the large number of variables regarding program enrolments and completions, only the overarching variables "enrolled in any program" and "completed any program" were included.

Additionally, when several similarly structured variables assessed the same construct, they were combined into one item, representing a sum of the indicators. Having less than grade 10 education and not having a high school diploma were summed, with the new variable "low education" ranging from 0 to 2. The 8 items pertaining to substance abuse (from Table 8) were combined into two items (ranging from 0 to 4) measuring drug abuse and alcohol abuse, respectively. The four items assessing employment history (from Table 7) were combined into an unemployment scale (ranging from 0 to 4). Additionally, three variables relating to escapes (prior escape as an adult, prior escape as a youth, and current escape/UAL offence) were summed to create an escape scale (ranging from 0 to 3).

Separate models were created for non-Aboriginal males, Aboriginal males, and females, using a backward stepwise likelihood ratio entry method. Items were removed if the probability exceeded .05, and re-entered only if the probability was less than .05. The following 18 items were entered for all three groups: age at release, single, low education, unstable job history, alcohol abuse, drug abuse, current property offence, escape/UAL, total number of current offences, previous youth conviction, enrolled in a program, difficulty with associates, difficulty with community functioning, serious institutional charge, minor institutional charge, statutory release, static risk, and dynamic risk. Additionally, for all male offenders, the following six items were added: current sex offence, completed a program, difficulty with the personal/emotional domain, difficulty with attitudes, residency requirement, and motivation level. For non-Aboriginal male offenders, the following items were also added: current violent offence, current drug offence, previous adult convictions, difficulty with the marital/family domain, and prior parole failure. For female offenders, the following items were added: Aboriginal ancestry, aggregate sentence length (days), current violent offence, previous adult conviction, and difficulty with the marital/family domain.

Non-Aboriginal male offenders

A total of 29 variables with significant bivariate associations with UAL status were entered in the backwards stepwise selection model. Nineteen variables were retained in the model predicting UAL status, which was statistically significant, $\chi^2(19) = 1095.32$, p < .001. The effect size for this model (R^2) was moderate (Cox & Snell = .112, Nagelkerke = .179). Logistic regression requires no missing information on any variable, so from the overall sample (n = 14,211), only 65% of cases were included in the analysis (n = 9,206 offenders), of whom 19.3% went UAL (n = 1,781).

Table 19 presents the results for the model, including the odds ratios and the associated 95% confidence interval, as well as the log odds ratios and the Wald test. As an example of interpreting the odds ratio, the odds of going UAL were 1.30 times higher (or 30% greater) for offenders who were single compared to offenders who were not single, after controlling for the other variables in the model. Additionally, the unemployment scale included four items, with total scores ranging from 0 to 4. Each one-score increase on the unemployment scale is associated with a 7% increase in the odds of going UAL, after controlling for the other variables in the model. Because each odds ratio is linked to the measurement scale of the predictor variable (i.e., it reflects the change in odds of going UAL for each one-score increase on the predictor), it is not possible to compare the magnitude of the odds ratios for variables with different measurement scales (e.g., continuous and dichotomous predictors). Specifically, the more values on the predictor variable, the smaller the odds ratios are expected to be (so dichotomous variables will tend to have the largest odds ratios).

Most of the risk factors were positively associated with UAL (i.e., the odds of going UAL increased with the presence of the risk factor), but there were some exceptions. As expected, age at release and motivation level were inversely associated with UAL (i.e., older and more motivated offenders were less likely to go UAL). Consistent with Table 9, having a current drug or sex offence was associated with a reduced likelihood of going UAL. In particular, after controlling for all other variables in the model, current sex offenders had half the odds of going UAL compared to non-sex offenders. The odds of going UAL among current drug offenders was 83% of the odds of going UAL for non-drug offenders. In terms of release type, surprisingly, after controlling for the other variables in the model, offenders on statutory release were less likely to go UAL than offenders with any other type of release, which is in the opposite direction

of the bivariate findings, where offenders on statutory release were most likely to go UAL.⁴ Among the dichotomous predictors, the largest effect sizes were for current sex offence, minor institutional charge, previous adult convictions, and residency requirement, all of which were associated with an increase in the odds of going UAL, with the exception of current sex offence, which decreased the odds of going UAL.

Table 19
Logistic Regression Model of UAL Status: Non-Aboriginal Male Offenders

Variables		Wald Chi-Square	Odds Ratio	95% Confidence Interval for OR	
	Log Odds Ratio			Lower	Upper
Age at release	006	3.83*	.99	.99	.99
Single	.261	20.34***	1.30	1.16	1.46
Unemployment Scale	.070	8.98**	1.07	1.02	1.12
History of Alcohol Use Scale	.038	4.98*	1.04	1.01	1.07
History of Drug Use Scale	.137	43.02***	1.15	1.10	1.20
Current Property Offence	.292	23.80***	1.34	1.19	1.50
Current Drug Offence	183	7.76**	.83	.73	.95
Current Sex Offence	689	19.15***	.50	.37	.68
Enrolled in Treatment Program	.144	4.29*	1.15	1.01	1.32
Escape Scale	.342	56.37***	1.41	1.29	1.54
Associates	.176	6.16*	1.19	1.04	1.37
Community Functioning	.374	34.68***	1.45	1.28	1.65
Personal/Emotional	.204	5.30*	1.23	1.03	1.46
Serious Institutional Charge	.209	10.40**	1.23	1.08	1.40
Minor Institutional Charge	.529	44.10***	1.70	1.45	1.98
Statutory Release	294	16.29***	.75	.65	.86
Previous Adult Conviction	.570	27.86***	1.77	1.43	2.18
Residency Requirement	.581	39.07***	1.79	1.49	2.14
Motivation Level	191	13.65***	.83	.75	.91
(Constant)	-3.554	128.64***	-	-	-

Note. $R^2 = .112$ (Cox & Snell), .179 (Nagelkerke).

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

⁴ Logistic regression analyses do not take into account the length of follow-up, and offenders released later in their sentence (e.g., at statutory release) would have less opportunity to go UAL while on community supervision. Examining the same predictor variables using Cox regression analyses to control for time at risk, however, yielded remarkably similar results to the logistic regression findings reported above, with lower UAL rates still found for offenders released at statutory release, after controlling for the other variables in the model.

Aboriginal male offenders

Twenty-four variables were entered in this model. Due to missing data, only 65% of offenders were included in the analysis (n = 1,969), of whom 35.9% went UAL (n = 706). Eleven variables were retained in the model (Table 20), which was statistically significant, $\chi^2(11) = 236.56$, p < .001. The effect size for this model (R^2) was moderate (Cox & Snell = .113, Nagelkerke = .155) and similar to the model with non-Aboriginal male offenders (despite having fewer predictors).

Although this model contained fewer items than the one for non-Aboriginal males, the item content was similar. With the exception of the dynamic risk/need rating, all of the predictors in this model were also in the model for non-Aboriginal male offenders. In other words, it appears possible to achieve similar predictive accuracy with Aboriginal male offenders using fewer items. Most of the variables were associated with increases in the odds of going UAL. Similar to the model with non-Aboriginal male offenders, being older, having a sex offence, and being on statutory release were associated with a lower likelihood of going UAL, after

Table 20
Logistic Regression Model of UAL Status: Aboriginal Male Offenders

				95% Confidence Interval for OR	
Variables	Log Odds Ratio	Wald Chi-Square	Odds Ratio	Lower	Upper
Age at Release	021	12.22***	.98	.97	.99
Single	.316	9.49**	1.37	1.12	1.68
Unemployment Scale	.161	13.06***	1.17	1.08	1.28
History of Alcohol Use Scale	.080	5.52*	1.08	1.01	1.16
History of Drug Use Scale	.115	9.32**	1.12	1.04	1.21
Escape Scale	.411	29.79***	1.51	1.30	1.75
Serious Institutional Charge	.342	10.26**	1.41	1.14	1.74
Statutory Release	278	4.13*	.76	.58	.99
Dynamic Risk/Need Rating	.282	7.57**	1.33	1.08	1.62
Current Sex Offence	755	14.15***	.47	.32	.70
Residency Requirement	.681	15.22***	1.98	1.40	2.78
(Constant)	-1.712	19.38***	-	-	-

Note. $R^2 = .113$ (Cox & Snell), .155 (Nagelkerke)

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

controlling for the other variables in the model. Among the dichotomous variables, the strongest effects appeared to be for current sex offence and residency requirement. Similar to non-Aboriginal male offenders, the odds of going UAL among sex offenders was roughly half the odds of going UAL among non-sex offenders. The odds of going UAL among those with a residency condition were twice as high as the odds of going UAL among those without residency conditions.

Female offenders

Twenty-three variables were entered in the model. From the overall sample (n = 1,091), only 72% of cases were included in the analysis due to missing data (n = 786 offenders), of whom 21.9% went UAL (n = 172). Nine variables were retained in the model (Table 21), which was statistically significant, $\chi^2(10) = 170.62$, p < .001. The effect size (R^2) was moderate to large (Cox & Snell = .195, Nagelkerke = .300), and notably larger than the effect sizes for male offenders. The individual odds ratios in this model tended to be larger than the models for male offenders, although the confidence intervals also tended to be much wider, reflecting greater error around these estimates (due to the smaller sample size of female offenders). In other words, this model has less precision than the ones for male offenders.

Table 21

Logistic Regression Model of UAL Status: Female Offenders

				95% Confidence Interval for OR	
Variables	Log Odds Ratio	Wald Chi-Square	Odds Ratio	Lower	Upper
Single	.528	7.06**	1.70	1.15	2.50
History of Drug Use Scale	.181	5.30*	1.20	1.03	1.40
Escape Scale	.629	13.09***	1.88	1.33	2.64
Enrolled in Program	1.043	15.29***	2.84	1.68	4.78
Associates	1.233	19.72***	3.43	1.99	5.91
Serious Institutional Charge	.949	17.46***	2.58	1.66	4.03
Statutory Release	644	8.77**	.52	.34	.80
Aggregate Sentence Length	0004	6.43*	.99	.99	.99
Aboriginal Ancestry	.872	18.17***	2.39	1.60	3.57
(Constant)	-4.464	51.72***	-	-	-

Note. $R^2 = .195$ (Cox & Snell), .300 (Nagelkerke).

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

The items in this model show some similarity with the models for male offenders, although one item was retained that does not appear in either of the models for male offenders: the likelihood of UAL increased with shorter sentence length. The only other variable with an inverse relationship was statutory release (similar to the models for male offenders). Additionally, Aboriginal ancestry was entered for female offenders because there was insufficient sample size to examine both groups separately. After controlling for the other variables in the model, the odds of going UAL were over two times higher for Aboriginal offenders. Among the dichotomous predictors, the largest effect sizes tended to be for having enrolled in a correctional program, difficulty with associates, serious institutional charges, statutory release, and Aboriginal ancestry. Statutory release was negatively associated with UAL, but the other four variables had odds ratios higher than 2. For example, the odds of going UAL were 2.5 times greater for offenders with a serious institutional charge and the odds of going UAL were almost 3.5 times greater for offenders identified as having some need in the domain of associates.

Comparing the three models

Table 22 summarizes the three logistic regression models by indicating which variables were retained in which models. Nineteen variables were retained in the model for non-Aboriginal male offenders, compared to only eleven variables in the model for Aboriginal male offenders and nine variables for female offenders. Despite having fewer variables, the latter two models achieved similar or greater explanatory power (R^2 values) as the model for non-Aboriginal male offenders. In Table 22, a positive sign denotes a positive relationship between the variable and UAL status, whereas a negative sign denotes an inverse relationship. Whenever a variable was retained in more than one model, the direction of the relationship stayed the same. Although there was considerable overlap among retained variables, there was still some fluctuation, particularly in that fewer variables were retained for Aboriginal male offenders and female offenders. Only five variables were retained in all three models (these variables are in bold font): single, history of drug use, escapes (current or past), serious institutional charges, and statutory release (with the last variable demonstrating an inverse relationship).

Predicting UALstatus among high risk offenders

Another research question is whether it is possible to predict UAL status among high risk offenders. In other words, for offenders already identified as high risk, is it possible to further

differentiate those at risk of going UAL? This question was explored among non-Aboriginal male offenders (as this was the largest subgroup) examining the bivariate analyses for the items included in the logistic regression analyses, but restricting the sample only to offenders who were assessed as having a high static risk to reoffend (n = 4,539). Of the 28 variables examined for non-Aboriginal male offenders⁵, 24 of them remained significant predictors (analyses not reported but are available upon request). This means that among high risk offenders, the same predictors generally distinguished those who went UAL from those who did not.

Table 22
Comparing the Logistic Regression Models

	Non-Aboriginal Males	Aboriginal Males	Females
Age at release	-	-	
Single	+	+	+
Unemployment Scale	+	+	
History of Alcohol Use Scale	+	+	
History of Drug Use Scale	+	+	+
Current Property Offence	+		
Current Drug Offence	-		
Current Sex Offence	-	-	
Enrolled in Treatment Program	+		+
Escape Scale	+	+	+
Associates	+		+
Community Functioning	+		
Personal/Emotional	+		
Serious Institutional Charge	+	+	+
Minor Institutional Charge	+		
Statutory Release	-	-	-
Dynamic Risk/Need Rating		+	
Previous Adult Conviction	+		
Residency Requirement	+	+	
Motivation Level	-		
Aggregate Sentence Length			-
Aboriginal Ancestry			+

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⁵The previous logistic regression model included 29 predictors, but static risk was removed in these analyses because there was no longer any variability on this item.

Discussion

This research explored the characteristics of offenders who go unlawfully at large while on conditional release in the community, compared to those who do not go UAL. Aboriginal offenders were more likely to go UAL than non-Aboriginal offenders, likely partly due to their generally higher levels of criminal history and risk. Differences in the assessed risk and outcomes of Aboriginal and non-Aboriginal offenders have previously been recognized by the Correctional Service of Canada (2010).

Offenders who went UAL tended to do so shortly after release, with more than half doing so within the first two months. This suggests that the first two months after release are critical for offenders – interventions, programming, employment opportunities, and support during this time period may be particularly important for successful reintegration. Of those who went UAL, roughly half were returned (voluntarily or through apprehension) within 5 to 9 days. Compared to findings from other jurisdictions, offenders in the current study spend less time unlawfully at large. For example, in his study of the New York Department of Corrections, Chard-Wierschem (1994) found that 38% of absconders were returned to custody within one month.

Approximately 80% of UAL offenders eventually had their releases revoked as a result of the UAL or for other subsequent reasons, mostly without a new offence. About 16% had their release revoked with an offence. The high rate of revocation without an offence is understandable because UAL is a breach of their release conditions. Ultimately, the decision to revoke the offender's release depends on the parole officer's recommendation and the Parole Board of Canada's assessment as to whether the risk posed by the offender is manageable in the community, despite the UAL.

Risk Factors for UAL

When offenders who went UAL were compared to their non-UAL counterparts, results were generally consistent with previous research on institutional UALs (Chard-Wierschem, 1994; Cowles, 1981; Culp, 2005; Haisted, 1985; Johnston & Motiuk, 1991a, 1992b; Murphy, 1984; Stone, 1975; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991) and with general research on risk for future criminal behaviour (Andrews & Bonta, 2010).

In this study, offenders who went UAL were more likely to be younger. This is not surprising as age is typically inversely correlated with criminal behaviour. In other words, as

offenders age, they slowly desist from rule-breaking behaviour (Hirschi & Gottfredson, 1983; Sampson & Laub, 2003; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991).

Offenders who went UAL were more likely to be single, have lower levels of education, less stable job histories, and longer periods of unemployment than offenders who did not go UAL. A higher percentage of those who went UAL were also identified as having problematic alcohol and drug use, which is not surprising given that research has consistently demonstrated a correlation between substance use and criminal behaviour in general, as well as with misconduct among offenders (Andrews & Bonta, 2010; CSC, 1991).

Past research found that institutional UALs tended to be serving time for property offences with relatively longer sentences, had a significant criminal history, and poor behaviour in the institution (Culp, 2005; Johnston & Motiuk 1992a, 1992b; Stone, 1975; Sturrock, 1993; Sturrock, Porporino, & Johnston, 1991). In the current study, offenders who went UAL after community release were more likely to have property offences and more extensive criminal histories (including institutional charges), but they had similar sentence lengths as non-UAL offenders (with the exception of female offenders, for whom UAL was associated with a shorter sentence length). UAL offenders were also more likely to be admitted with violent offences (with the exception of Aboriginal males), and escape or UAL offences.

Although previous research found that institutional UAL offenders tend to be uninvolved with institutional programs (Sturrock, Porporino, & Johnston, 1991), the present study found that offenders who went UAL enrolled in significantly more institutional correctional programs than offenders who did not go UAL. This is likely because UAL offenders demonstrated higher criminogenic needs, which would have influenced program referrals. Importantly, however, UAL offenders were significantly *less* likely to complete programs.

Overall, offenders who went UAL were significantly more likely to be assessed as high risk, high need, and as having a low reintegration potential. For male offenders, they were also more likely to have a low motivation rating. Further, significantly more male offenders who went UAL had a residency condition as part of their release.

The bivariate analyses also demonstrated substantial similarity in the predictors of UAL status across the three groups (non-Aboriginal males, Aboriginal males, and females). Specifically, 34 individual items significantly predicted UAL status for all three groups. An additional 8 items were significant for both non-Aboriginal and Aboriginal male offenders.

There were only 6 risk factors unique to non-Aboriginal male offenders, and only 1 risk factor unique to female offenders (aggregate sentence length). No risk factors were unique to Aboriginal male offenders.

Multiple logistic regression analyses were conducted to identify the variables most strongly associated with UAL status, after controlling for the other risk factors. Separate models were created for non-Aboriginal males, Aboriginal males, and females. Between 9 and 19 items were retained in the models, but only five risk factors were retained in all three models: being single, history of drug use (sum of 4 items related to drug abuse), the escape scale (sum of 3 items related to current and prior escape history), serious institutional charge, and statutory release. More generally, the models demonstrated that a combination of static and dynamic risk factors incrementally predicted UAL status. The results of the bivariate and multiple regression analyses both suggest that the risk factors related to going UAL in the community are similar to the risk factors for institutional UALs and criminal behaviour.

The analyses (particularly the incremental findings) suggest that it may be possible to improve the prediction of risk for going UAL by developing an assessment scale. Furthermore, the results found similar predictive accuracy when restricting the sample to offenders already identified as high static risk to reoffend. This suggests that it is possible to further distinguish risk of UAL among high risk offenders.

One notable finding was that in the bivariate analyses, offenders on statutory release were more likely to go UAL. However, in all three regression models, after controlling for the other items, statutory release was associated with a reduced likelihood of going UAL. Similar analyses using Cox regression (not reported) to control for time at risk also confirmed the inverse relationship between statutory release and UAL, after controlling for other risk/need items. This finding could mean that statutory release is an indicator of multiple constructs: offenders on statutory release tend to be higher risk than those granted discretionary release, which increases their likelihood of going UAL. However, due to their higher risk, offenders on statutory release likely receive more intensive supervision in the community, which may reduce UAL rates. This could explain why, when factors related to risk are partialled out, the relationship between statutory release and UAL becomes negative (i.e., reflecting the effect of supervision). Another possibility is that whether offenders are given discretionary or statutory release is influenced by risk and also by factors unrelated (or inversely related) to risk, so after controlling for risk, the

remaining relationship reflects irrelevant factors that influenced type of release.

Implications for assessment and treatment

The findings support the predictive value of static and dynamic criminal risk factors in predicting which offenders go unlawfully at large. In terms of assessment practices, scales that are already being used to assess risk (e.g., static risk rating, dynamic risk rating) could also be used to evaluate risk of UAL. It may also be possible to develop a scale specifically to predict risk of going UAL. Dynamic risk factors were generally related to UAL status, particularly measures of employment difficulties and substance abuse. These findings suggest the importance of addressing offenders' needs for employment training through institutional and CORCAN employment placements – particularly for younger offenders with limited work experience who would benefit from the skills development offered by these programs. CSC has increased its emphasis on providing employment opportunities and preparing offenders to be 'skills ready' for the labour market, a key recommendation of the *Transformation Agenda*. Further initiatives in this area may help reduce UALs (CSC Review Panel, 2007). Also, the large majority of offenders who went UAL were identified as having some/considerable need in the area of substance abuse; however a smaller proportion of these offenders were participating in substance abuse programming. This suggests that additional focus could be placed on encouraging enrolment and increasing retention in institutional substance abuse programming. Furthermore, programming and supervision in the community should help ensure continuity of care and proper monitoring of substance abuse in the community for offenders with substance abuse problems.

Limitations

Some limitations should be considered when interpreting the results of this study. The sample size of female offenders was substantially smaller than for male offenders. This could mean that some of the variables found to be non-significant might have been significant if the sample size of women was as large as it was for men. Additionally, the smaller sample size of women precluded disaggregating the results by Aboriginal ancestry. The similarity in the findings for Aboriginal and non-Aboriginal men were encouraging, but ideally should be replicated with women.

As with most studies that use administrative data, this study was only able to use

variables that were available in the Offender Management System (OMS). While the use of administrative datasets allows for large numbers of cases to be studied, it does restrict the types of variables that can be used in an analysis. Previous research on institutional UALs indicated that dynamic factors, including a disruptive or unstable family situation or intoxication at the time of escape/UAL are important factors to consider (Basu 1983; Johnston & Motiuk, 1992a; Wharry, 1972); however, these variables are not readily captured by OMS. Future investigations into offenders who go UAL while on conditional release could examine variables not available in OMS, including qualitative data, which may help develop a more in-depth understanding of the antecedents to going UAL. Further, given that the first two months after release were identified as the time when more than half of UALs occur, it would be of particular benefit to focus future research on community variables (as opposed to assessments completed in the institution), particularly those that are dynamic in nature.

Conclusions

In Canada, conditional release is an important, cost-effective strategy for federal offender population management that supports offender reintegration. However, a small number of offenders have difficulty transitioning to the community and go unlawfully at large while on release. This report aimed to provide a profile of federally-sentenced offenders who went UAL while serving their sentence in the community. While there is a paucity of research in this area, the results of this study demonstrate that offenders who go UAL share many characteristics with those found in previous studies on institutional UALs and studies on general criminal behaviour. The importance of dynamic risk factors also suggests that a focus on correctional interventions that address these issues may be fruitfully pursued in order to reduce UALs. Moreover, given that this study demonstrated that the first two months on release in the community appear to be critical for offenders who go UAL, the timing of these interventions would most likely be critical to ensure a successful re-integration.

References

- Andrews, D. A., & Bonta, J. (2010). *The psychology of criminal conduct* (5thed.). Newark, NJ: LexisNexus/Anderson.
- Basu, S. (1983). *Models of escape behaviour of minimum security inmates in Ontario: The use of routine administrative data for risk assessments* (Unpublished doctoral dissertation). Cornell University, Ithaca, NY.
- Chard-Wierschem, D. J. (1994). Comparison of temporary release absconders and non-absconders: 1993-1994. Albany, NY: State of New York Department of Correctional Services.
- Cowles, E. L. (1981). A study to explore race as it relates to correctional institution escape behaviour (Unpublished doctoral dissertation). Florida State University, Tallahassee, FL.
- Correctional Service of Canada (1991). *Task Force on the Reduction of Substance Abuse: Final report*. Ottawa, ON: Author.
- Correctional Service of Canada (2010). *Report on plans and priorities* (2010-2011). Ottawa, ON: Author.
- Correctional Service of Canada Review Panel (2007). Report to the CSC Review Panel: A roadmap to strengthening public safety. Retrieved from http://www.publicsafety.gc.ca/csc-scc/report-rapport/toc-eng.aspx
- Culp, R. F. (2005). Frequency and characteristics of prison escapes in the United States: An analysis of national data. *The Prison Journal*, 85(3), 270-291.
- Haisted, J. B. (1985). Why Black prisoners seldom try to escape from American penal institutions: A humanistic perspective. *Journal of Police and Criminal Psychology*, 1(2), 48-66.
- Hirschi, T., & Gottfredson, M. R. (1983). Age and the explanation of crime. *American Journal of Sociology*, 89, 552-584.
- Johnston, J. C., & Motiuk, L. L. (1992a). Factors related to unlawful walkaways from minimum security institutions (Research Report R-23). Ottawa, ON: Correctional Service of Canada.
- Johnston, J. C., & Motiuk, L. L. (1992b). *Unlawful departures from minimum security institutions: A comparative investigation* (Research Report R-27). Ottawa, ON: Correctional Service of Canada.

- Morgan, D. (1967). Individual and situational factors related to prison escape. *American Journal* of Correction, March-April, 30-31.
- Motiuk, L. L. (1998). Profiling federal offenders on conditional release. *Forum on Corrections Research*, 10(2), 11-14.
- Morgan, D. (1967). Individual and situational factors related to prison escape. *American Journal of Correction, March-April*, 30-31.
- Murphy, T. H. (1984). *Prediction of minimum security walkaways*. Lansing, MI: Michigan Department of Corrections.
- Public Safety Canada (2010). *Corrections and conditional release statistical overview* (Annual Report). Retrieved from http://www.publicsafety.gc.ca/res/cor/rep/2010-ccrso-eng.aspx.
- Sampson, R. J., & Laub, J. H. (2003). Life-course desisters? Trajectories of crime among delinquent boys followed to age 70. *Criminology*, 41, 555-592.
- Stone, W. E. (1975). *Factors related to escape prediction* (Unpublished doctoral dissertation). Institute of Contemporary Corrections and the Behavioral Sciences, Sam Houston State University, Huntsville, TX.
- Sturrock, R. C. (1993). Factors associated with inmate escapes from correctional institutions (Unpublished master's thesis). Department of Criminology, University of Ottawa, Ottawa, ON.
- Sturrock, R. C., Porporino, F. J., & Johnston, J. C. (1991). *Literature review on the factors related to escape from correctional institutions* (Research Report R-12). Ottawa, ON: Correctional Service of Canada.
- Wharry, J. D. (1972). A study of the nature and frequency of crimes committed by escapees of maximum and medium security institutions and some characteristics of escapes. Ottawa, ON: Canadian Penitentiary Services.
- Wojtowicz, J. P., & Liu, T. (2006). A seven-year analysis of walk-away rates of the New Jersey halfway house program. *Corrections Compendium*, 31(6), 6-7 and 22-23.