ESCAPES FROM BRITISH COLUMBIA PROVINCIAL PRISONS 1981 - 1982: A DESCRIPTIVE STUDY.

by

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Escapes from British Columbia Provincial Prisons

1981-1982: A Descriptive Study

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ABSTRACT

This thesis examines escapes from provincial prisons in British Columbia from January 1, 1981 to December 31,1982. The purpose of the thesis is to determine whether data currently available in the B.C. Corrections Branch can afford a significant differentiation between groups of escapees and non-escapees, and hence be utilized in assessing the escape risk of prisoners on intake. Should such an assessment of risk be possible, it could be used by correctional organizations both in classification and in the development of policy relating to the placement of inmates.

An overview of the literature relating to prison escapes is provided. This is followed by a presentation of the methodology used in the study. The findings of escapes from British Columbia adult provincial prisons are presented and followed by a statement of recommendations and areas for further research.

Forty-one variables were analyzed from a group of 692 escapees and a comparison group of 692 non-escapees. The 692 escapees represented all of the escapees during the two year period. The comparison group was randomly selected from the total inmate non-escapee population who were in prison during the study period. The data were obtained from archival sources.

The results indicated that seven variables were significantly related to escape, including the inmate's length of sentence, having previously escaped, age at the time of escape, serving a sentence for theft, classified to a community

correctional centre, classified to an open prison, and having a majority of an inmate's offences against property.

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I. INTRODUCTION

The Problem and Reasons for the Study

Several factors have combined to indicate that a study of escapes from confinement in British Columbia Provincial prisons would represent an important contribution to the growing knowledge base in the field of criminology and could provide a research base for more effective policy making by correctional managers.

A review of the literature indicated a paucity of previous research in British Columbia relating to escapes from provincial prisons in that province. There have only been two research projects published in Canada;[1] both dealt with Federal inmates (i.e., those serving a prison sentence of two years or more). There have also been relatively few studies throughout the world.[2]

Additionally, in British Columbia, within the last few years, the Provincial Corrections Branch has changed its

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[1] S. Shuster, Report of Escapes from Penitentiaries 1966-67 to 1968-69. Correctional Research, Canadian Penitentiary Service, Ottawa, 1969; J.D. Wharry, A Study of the Nature and Frequency of Crimes Committed by Escapees of Maximum and Medium Security Institutions and Some Characteristics of Escapees. Canadian Penitentiary Service, Ottawa, 1972.

[2] These studies will be identified and delineated in Chapter 2.

philosophy and policy in that inmates, now entering provincial prisons, enter at the minimum level of security unless otherwise warranted.[3] In the past, inmates entered at maximum security and earned their way to minimum security. This change in policy was a reflection of the goals set out by the Corrections Branch in 1978.[4] To realize these goals and, as a result of data acquired in their development, the Branch felt that the majority of inmates did not require maximum security on admission.

However, escapes have continued to occur since the new policy was introduced. The majority of provincial prisons in British Columbia are minimum security and, due to the policy of attempting to locate inmates as close as possible to their home communities, the majority of prisons are built relatively close to the community.[5] With an ever increasing number of prisons being planned, the problem of escape represents a major concern to many communities.

Another factor to consider when studying escapes is cost. When inmates escape, prison staff are deployed to search for them. The police are also notified of prison escapes and they may commit manpower to search, establish roadblocks etc. Once

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[3]Province of British Columbia, Ministry of Attorney General, Provincial Classification and Corrections Branch Facilities, 1982. Queen's Printer for British Columbia, 1982.

[4]Province of British Columbia, Ministry of Attorney General, Corrections Branch, Goals, Strategies and Beliefs, 1978. Queen's Printer for British Columbia, 1978.

[5]Province of British Columbia, Ministry of Attorney General, Provincial Classification and Corrections Branch Facilities, 1982. Queen's Printer for British Columbia, 1982.

the escapee is captured and charged with escaping lawful custody there are then the associated court costs. As a result, escapes are costly in terms of prison staff time, police time and court time. An example of this is illustrated by the following quote from the Task Force on Municipal Police Costs (1978):

> "__ Police Board is alarmed at the number of breakouts and disturbances at the ___ jail .... the demands on the ___ Police Department, as a result of these incidents has been quite significant and has resulted in considerable expense to the community."[6]

Prison escapes are a problem within the institutional setting as each prison director is responsible for the safe custody, control and welfare of inmates and, in order to accomplish this, the safe custody of inmates must be maintained. Regardless of whether inmates are going to be trained, treated, rehabilitated, offered opportunities or punished in prison, they must be kept in custody.

Historically prisons were built with a primary emphasis on security as witnessed by high walls and armed guards.[7] The emphasis has now changed in British Columbia with the majority of prisons being designated as minimum security. There are 29 provincial prisons in B.C. and 22 are minimum security. In these types of units there are no high walls or armed guards, and the programs of the institution are set up to involve inmates in work, education, or recreation. Therefore inmates are not locked

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[6] P.D. Ross, Task Force on Municipal Policing Costs in British Columbia. 1978.

[7] A. Coffey, Correctional Administration, (Prentice Hall Inc., Englewood Cliffs, New Jersey, 1975), p. 135.

up for most of the day.

The question of preventing escapes then becomes more concerned with the inmate as an individual rather than as a number or a body. Since security in minimum security prisons involves less concern, than occurs in more secure prisons, with maintaining custody of the inmate, the correctional system must be more precise in its ability to determine whether a particular inmate can be expected to escape or not. Once this question is answered, the correctional system can then attempt to deal with the security and program needs of the inmate, either for the protection of society, the good of the institution, or the good of the inmate. The key is to have data available, at the time of initial classification, to assist in the determination of risk assessment i.e., to determine the likelihood of escape risk in each individual case.

Purpose of the Study

The purpose of this thesis is to determine, whether data currently available in the B.C. Corrections Branch can afford a significant differentiation between groups of escapees and non-escapees, and hence be utilized in assessing the escape risk of prisoners on intake. The data base for the study is provided by the adult Provincial correctional prisons in the Province of British Columbia. Should such an assessment of risk be possible, it could be used by correctional organizations, both in

classification, and in the development of policy relating to the placement of inmates. It is anticipated, in line with previous escape research, that a profile of escapees will emerge which could be the basis for the establishment of an escape prediction scale.[8]

Description of British Columbia Prisons

In Canada, the responsibility for prisoners is divided primarily between the federal and provincial governments. The federal government assumes responsibility for all sentenced inmates with a prison sentence of two years or more. The provincial governments assume responsibility for all persons sentenced to prison for less than two years. The provincial prisons also hold the majority of inmates held in custody on remand, i.e., those awaiting trial.

The placement of an offender is determined by the Provincial Classification Section of the Corrections Branch. Classification Officers, who do not report to any institutional director, are responsible for making final decisions on initial classification and reclassification.

During the period of this study, which was from January 1, 1981 to December 31, 1982, there were 29 correctional centres operated and staffed by the British Columbia Corrections Branch.

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[8] The findings of previous research will be delineated in Chapter 2.

There are three main categories of prisons: (a) secure; (b) community correctional centre (CCC); and (c) open. During this time, the Corrections Branch policy was to attempt, on initial classification, to place the offender in an open setting as close as possible to his home (except where clearly inappropriate).

The Corrections Branch has produced a booklet[9] which describes all of the Branch facilities and it is the basis for the following descriptions.

Secure Prisons

There are six secure prisons for men and one for women. These prisons provide the highest level of security available within provincial prisons. The criteria used in determining a need for secure placement include whether: (a) the offender is considered dangerous to the community; (b) the offender is considered likely to escape; (c) the offender is a serious "management" problem; (d) insufficient information is available to determine the level of security required; (e) a medical or psychological assessment is required; or (f) the offender has pending legal concerns. Programs in these institutions provide for work, recreation, life skills and personal development.

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[9] Province of British Columbia, Ministry of Attorney General, Provincial Classification and Corrections Branch Facilities, 1982. Queen's Printer for British Columbia, 1982.

Inmates with special needs such as psychiatric services, medical care, or protective custody (segregation from the general inmate population), are usually sent to secure prisons.

Community Correctional Centres

There are seven community correctional centres for men and one for women. These represent the lowest level of security, and provide supervised accommodation for offenders, within, or as near as possible to, their home communities. Many offenders in these prisons are on temporary absence permits which allow them to go daily into the community to work, look for work, or participate in educational or training programs. These activities are performed during the day and offenders return to the centre each night. They are also encouraged to be involved in community service. The criteria used in determining community correctional centre placement include: (a) the offender does not pose a threat to the community; (b) the offender is employed, registered at school or seeking employment; and (c) the offender demonstrates stable living patterns.

Open Prisons

There are 13 open prisons for men and one for women. These prisons are the primary placement for most sentenced offenders

and they provide the middle level of security. Included among these prisons are minimum security centres, semi-isolated forest camps, and farms. They are designed to provide work opportunities for the offender and therefore inmates require a medical clearance which indicates they are fit to work and whether that be heavy work or light duties. The criteria used for determining placement in an open setting vary greatly, depending on the prison. Open prisons are often designated according to offender type e.g., alcohol abuse, first time in prison, or according to age group.

Three other facilities were also included in the study. One was Southview, a community correctional centre, which was operational for part of the study period. Another was Surrey Re-Entry, a community based facility, which was staffed by Corrections staff. The third facility was Prince George Activators, which was also a community based facility, but was operated by a private society. Table 1 gives a description of the various prisons showing the type of security, capacity, and type of offenders.

TABLE 1

PRISON DESCRIPTION

PRISON	TYPE	CAPACITY	TYPE OF OFFENDERS
VIRCC	Secure(Men)	118	Remand and some sentenced offenders with special needs
LMRCC	Secure(Men)	512	Remand and sentenced offenders requiring security or protective custody
LCC	Sec(Women)	61	Remand and sentenced offenders requiring security or protective custody
CSU	Secure(Men)	25	Males under 24 requiring a maximum 60 day assessment
KRCC	Secure(Men)	86	Remand and sentenced offenders
PGRCC	Secure(Men)	140	Remand and sentenced offenders
NFRC	Secure(Men)	34	Sentenced offenders
VCCC	Community(Men)	25	Sentenced offenders
SWRU	Community(Men)	30	Sentenced offenders and those on Temporary Absence
MCCC	Community(Men)	18	Sentenced offenders with sentence less than 30 days
BCCC	Community(Men)	20	Sentenced offenders with sentence less than 3 months
LWCC	Comm(Women)	10	Sentenced offenders for in house program or on Temporary Absence
CCCC	Community(Men)	15	Sentenced offenders for in house program, Temporary Absence or Parole
KCCC	Community(Men)	20	Sentenced offenders on Temporary Absence
TCCC	Community(Men)	21	Sentenced offenders for in house program or Temporary Absence
ARCC	Open(Men)	119	Sentenced offenders with alcohol problem, at least 25, 3-6 month sentence
BBC	Open(Men)	51	Sentenced offenders, 22 years of age or less, fit, 9-15 month sentence

TABLE 1(cont.)

PRISON	TYPE	CAPACITY	TYPE OF OFFENDERS
NH	Open(Men)	40	Sentenced offenders, 22 years of age or less, first jail sentence, resourceless, 9 month sentence preferred
CP	Open(Men)	24	Sentenced offenders, fit and on Temporary Absence
BR	Open(Men)	24	Sentenced offenders, fit and on Temporary Absence
JR	Open(Men)	40	Sentenced offenders fit for work
SLC	Open(Men)	55	Sentenced offenders fit for work
PRC	Open(Men)	52	Sentenced offenders fit for work
TM	Open(Women)	43	Sentenced offenders
MT	Open(Men)	50	Sentenced offenders fit for work
FM	Open(Men)	50	Sentenced offenders fit for work
RC	Open(Men)	30	Sentenced offenders fit for work
BC	Open(Men)	30	Sentenced offenders fit for work
HL	Open(Men)	50	Sentenced offenders fit for work

See APPENDIX A for explanation of prison abbreviations.

Scope of the Problem

Data on escapes were gathered for all the prisons described in Table 1 for the period January 1, 1981 to December 31, 1982. Table 2 shows a breakdown, by prison, of the number of movements of inmates for the years 1981 and 1982, as well as the numbers with previous escape history and the number of escapes from each institution during each year. An escape rate was calculated by dividing the total number of movements by the total number of escapes. The term "movement" was used rather than "admissions", as the former includes transfers as well as initial admissions. This table indicates that escape rates as a whole, declined from 1981 to 1982. It also illustrates that the highest escape rates are in locations of initial admission. The open prisons of New Haven and Twin Maples had extraordinarily high escape rates.

TABLE 2

ESCAPES

PRISON	MOVEMENTS		ESCAPE HISTORY		ESCAPES		ESCAPE RATE	
	1981	1982	1981	1982	1981	1982	1981	1982
							%	%
VIRCC	2783	2800	386	357	1	3	0.04	0.11
LMRCC	6741	7106	1135	1126	23	30	0.36	0.42
LCC	551	646	106	124	0	0	0.00	0.00
CSU	1246	811	286	163	1	0	0.08	0.00
KRCC	1990	2679	320	360	20	10	1.01	0.37
PGRCC	1728	1968	282	261	18	12	1.04	0.61
NFRC	2159	5699	229	469	4	3	0.19	0.05
VCCC	363	375	29	27	6	13	1.65	3.47
SWRU	257	411	20	26	7	5	2.72	1.22
MCCC	105	238	15	16	3	8	2.86	3.36
BCCC	220	351	42	37	15	19	6.82	5.41
LWCC	88	167	13	6	1	0	1.14	0.00
CCCC	231	374	22	23	8	8	3.46	2.14
KCCC	225	387	36	28	16	3	7.11	0.78
TCCC	194	267	8	10	4	5	2.06	1.87
ARCC	1391	1635	152	184	19	15	1.37	0.92
BBC	220	394	49	73	16	7	7.27	1.78
NH	159	213	38	31	33	32	20.75	15.02
CP*		129		4	17	0		0.00
BR	85	120	20	26	2	0	2.35	0.00
JR	271	242	52	44	18	19	6.64	7.85
SLC	378	641	15	7	6	1	1.59	0.16
PRC	579	929	114	96	45	26	7.77	2.80
TM	214	282	55	52	23	21	10.74	7.45
MT	359	423	85	76	16	12	4.46	2.84
FM	356	414	92	69	24	11	6.74	2.66
RC	609	818	99	132	7	10	1.15	1.22
BC	276	296	76	45	11	11	3.99	3.72
HL	321	416	45	57	10	10	3.12	2.40
SV*					0	1		
SRE*					1	0		
PGA*					12	10		
TOTAL	24009	31231			387	305	1.61	0.98

* For some of the smaller prisons the movement figures were counted by a larger prison.
PC-Camp Point
SV-Southview
SRE-Surrey Re-Entry
PGA-Prince George Activators

As will be described in greater detail in Chapter 4, open prisons had the highest escape rates, followed by community correctional centres and secure prisons. It is interesting to note that the highest escape rates were occurring at the new policy point of initial admission. Unfortunately data were not available to compare with escapes under the old policy of individuals going to a secure prison first and, earning their way to open prisons. It does appear, however, that escapes are a definite problem in relation to the new policy.

II. REVIEW OF THE LITERATURE

The literature review was conducted by performing a computer check, using key words for escape, via the Criminal Justice Periodical Index; a similar check on the National Council of Crime and Delinquency computer; and, a written request for material relating to escapes to the Reference Centre, Ministry of the Solicitor General of Canada. All of the material is reported in this study, except for those studies which dealt exclusively with psychological tests and their use in the assessment of escapes. These studies were excluded because there is not a similar data base in British Columbia with which to make a comparison and, the focus of this study was not on psychological tests.

It is rather surprising when one considers how long prisoners have been escaping, the costs involved in terms of personnel time and wages, and the extra jail time served by escapees, that so little exists in the way of documented research. The literature is divided into two methodological categories: (1)those which report the number of escapes and scrutinize the physical factors of escape such as the method, time and location of the escape; and (2)those which look at escapees and non-escapees and attempt to identify differences between the two groups. Some of these latter studies then continue further to see if a prediction scale can be developed.

Physical Factors Relating to Escape

There are three studies that have investigated escapes from the "physical factor" perspective. The first of these was completed by the Earl Mountbatten of Burma as a result of his appointment "to conduct an inquiry into recent prison escapes in Britain, and to make recommendations for the improvement of prison security." The author reported on an intensive investigation into escapes by; George Blake, a spy; Charles Wilson and Ronald Biggs, of the Great Train Robbery; and Frank Mitchell, the Axe Murderer.[1] One of the recommendations arising from the study is that all prisoners should be divided into four categories according to their security risk. Two dimensions were considered here: (1) the likelihood of an escape; and (2) how dangerous the person would be if he escaped. Category "A" would be those prisoners whose escape would be highly dangerous to society. Category "B" would be those prisoners for whom you do not require the highest security but are escape risks. Category "C" would be those prisoners who only require simple perimeter security. Category "D" would be for those prisoners requiring no perimeter security. The report also stated that proper bureaucratic machinery had to be set up to ensure proper classifications, but it was not suggested how this could be

[1] Admiral of the Fleet, The Earl Mountbatten of Burma, Report of the Inquiry into Prison Escapes and Security. London, Her Majesty's Stationery Office, 1967.

accomplished.

A second study was completed by R.J. Hildebrand at Preston School of Industry at Ione, California.[2] Preston School is a 950 bed institution for boys 16 to 20 years of age who have been adjudged delinquent and declared wards of the California Youth Authority. The variables in the analysis included presence of an observation tower, time of day, day of week, month, and length of time in the program. There was no indication given as to size of the sample, and no control group was used. Escapes most frequently occurred: (1) at 8:00 p.m.; (2) on Saturdays; (3) during the third and the fourth month of commitment; and (4) during the months of July and September.

The author found that escape was generally accomplished alone, and postulated that one of the best indicators of escape risk is the person's previous record.

A third study, by S. Shuster, was completed in Canada. The purpose was to identify common factors in escapes in order to prevent or reduce the number of escapes.[3] The focus of the study was on the method, time and location of the escape rather than the characteristics of the escaper or the institutional situation at the time of the escape.

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[2] R.J. Hildebrand, "The Anatomy of Escape." Federal Probation Vol XXXIII, No.1, (1969): 58-60.

[3] S.A. Shuster, Report of a Study of Escape from Penitentiaries 1966-67 to 1968-69. Ottawa Correctional Research, Canadian Penitentiary Service, 1969.

All escapes, which totalled 248 during the three year study (1966-69), were examined. Institutions were divided into maximum, medium and minimum security. Variables used in the analyses included: (a) incidence of escape by institutional security classification and fiscal year; (b) month of escape; (c) day of escape; (d) time of escape; and (e) method of escape and time lapse before discovery of escape. The findings were reported, and recommendations made, on institutions by security classification.

Comparison of Escapees and Non-Escapees

The bulk of the literature on prison escapes attempts to identify thesychological and sociological characteristics of escapees. Most of the studies used an ex post-facto approach, and compared a group of recent escapees to a randomly selected group of non- escapees. The two groups were then compared on a wide range of variables.

Two British studies have examined escape(or absconding, as it is more commonly called in Britain) from this perspective. The first study, reported in 1974, examined male prisoners in open prisons in England between 1969 and 1970.[4] During this time period, one of every four sentenced males was in an open prison. Two groups of prisoners were identified as receptions and

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[4]Great Britain, Home Office Research Unit, Absconding from Open Prisons. London, Her Majesty's Stationery Office, 1974.

absconders. The absconders were compared with other men in open prison on the basis of age, type of offence, length of current sentence and criminal history. Only centrally recorded information was used.

The researchers expressed surprise that so few men escaped from open prisons. During the two year study period only 489 (3%) escaped. The variables used were found to identify classes of men who were more likely to escape. The researchers stressed, however, that the variables were not sufficient to predict individual escaping.

Men aged 21-24 were twice as likely as men 30 and over to have escaped. Burglars were the most likely to have escaped, followed in decreasing order by thieves, men convicted of fraud, and sexual or violent offenders. A lengthy criminal history was associated with an increased likelihood of escape, as was serving a "medium" term of imprisonment, i.e., 18 months to 4 years. Although the authors concluded that a prediction scale could not be used to predict individual escaping, they did suggest that, if prisons hoped to reduce escaping, it would best be done by excluding high risk classes from open institutions.

A second British study examined escapees from a regional assessment centre to see if escapees could be identified by differences in temperament.[5] The researchers selected 148 boys between 11 and 16 years who were admitted in sequence to the

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[5]B.J. Brown, M.R. Druce, and C.E. Sawyer, "Individual Difference and Absconding Behaviour." British Journal of Criminology 18(1), (1978); 62-70.

centre. Seventy-three boys escaped or failed to return from a weekend pass. Thirty-nine escaped more than once. Although most of the eighteen variables did not yield significant differences between the two groups the authors did find that socially "group-dependent" and "relaxed" boys were more likely to escape, and that "relaxed" boys were more likely to not return from a weekend pass. "Shy" boys usually escaped alone while socially group-dependent boys usually escaped with a group.

A study in New Zealand was undertaken partly as a research project and partly as a training exercise.[6] A newly formed research division compiled archival data on all male escapees from New Zealand penal institutions from 1954-58. The study combined men in prison and youths in borstal institutions, and compared personal and situational factors of escapees and non-escapees from both groups in the hope of producing a prediction scale. Persons on remand and those serving sentences of less than three months were excluded from the sample. Both the experimental and control group were comprised of 195 subjects.

The prediction scale utilized the variables of age, marital status, present offences, present sentence and total number of previous escapes. However, when the prediction scale was used, it turned out to describe borstal boys rather than typical escapers. The authors suggested that due to the large number of

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[6]New Zealand Department of Corrections, Absconders from Penal Institutions. Wellington, 1961.

borstal escapees, it would have been preferable to establish a separate scale for adult prison escapees.

A 1952 Canadian study attempted to assess the danger that escaped inmates represent.[7] At the same time, it was also decided to examine certain characteristics of escapees, thus indicating who might be more prone to escape. An experimental group of 137 persons who had escaped between January 1, 1972 and August 31, 1972 was compared to a similar number of randomly selected inmates who had not escaped. Escapes were found to occur early in the sentence, and involved persons younger than 24.5 years of age, and who were less involved in institutional programs. There were no differences due to marital status, nor was there any difference according to whether or not the inmate had visitors.

Another Canadian study examined 136 runaway incidents from after-care placements in Toronto during 1972.[8] The authors concluded that running away was typically due to one of two major explanatory variables: (1) as a response to particular situational pressures; or (2) the manifestation of a personality conflict.

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[7] J.D. Wharry, A Study of the Nature and Frequency of Crimes Committed by Escapees of Maximum and Medium Security Institutions and Some Characteristics of Escapees. Ottawa, Canadian Penitentiary Service, 1972.

[8] Y.Dandurand and V. D'Anjou, "Training School Wards Running Away from After-Care Placement." Canadian Journal of Criminology and Corrections. 17(4) (1975): 292-306).

The remainder of the studies were conducted in the United States. One of these studied runaways from a juvenile institution in Ohio, from January 1970 to October 1972.[9] During that period there were 125 boys involved in 145 runaways. The runaway group was made up of those 125 boys plus 39 others who had attempted to runaway but were unsuccessful. The comparison group was generated by matching each runaway with the next boy admitted after the runaway was initially admitted. A broad spectrum of variables was used to test the hypotheses that: (1) there is no personality makeup that defines runaways; (2) there is no relationship between organizational change and runaway behaviour; (3) there is no relationship between cottage assignment and runaway behaviour. The researcher failed to reject the hypotheses. This study identified two types of runaways. There were those who ran on impulse and those who planned to run away. Some racial differences were also noted in that whites ran much more than any minority group.

One of the earliest recorded studies of contemporary escapes was reported in 1948.[10] The author examined escapes from the state prison in Massachusetts between 1928 and 1937, and outlined the general escape situation and attempted to find factors related to escape.

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[9]C. Bartollas, "Runaways at the Training Institutions of Central Ohio."Canadian Journal of Criminology and Corrections. 17(3) (1975):221-235.

[10]H.H. Cochrane, "Escapes and Their Control: A Brief Study of Escape Data." Prison World, Vol.10, No.3, 1948: 3-5.

From an analysis of escape figures, it was found that September was the most favoured month for escape and March the least favoured. The preferred time for escape was in the evening between 5:00 and 9:00 p.m. Most escapes occurred within the first 6 months of incarceration, and from outside the walls of the institution. Individual factors selected as being related to escape were: (1) the amount of time to be served; (2) the proportion of time already served; (3) the type of offence; (4) the seriousness of the criminal record; (5) age; (6) geographical stability; (7) vocational stability; (8) and strength and nature of family ties. The author suggested a type of balance sheet of favourable factors and unfavourable factors to try and determine if someone is a good minimum security risk.

Another study was initiated in California because the State Department of Corrections was concerned about the inmates of camps who were assumed to be escaping because of an inability to handle the pressures of a camp setting.[11] It was hoped that the identification of the personal characteristics of escape prone inmates would lead to the decision not to place inmates in camps until they were deemed able to cope.

The escape group consisted of all 131 men who escaped during 1959 and January to October, 1960. A control group of camp non-escapees was also established. A chi square test of goodness of fit was utilized to make certain that the control

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[11]California Department of Corrections, Escape Study. Sacramento, Research Division, 1967.

group did not differ significantly from the general population group.

An escape proneness scale was developed that showed that the escape group had characteristics that differed from the non-escape group. A list of 29 characteristics were identified with the most significant being: white; under 35 years of age; sentenced for robbery; had a prior escape; and not in on a narcotic offence.

California continued to be one of the major states conducting research in the area of prison escapes and an additional study was reported in 1974.[12] This study was initiated to analyze the factors involved in escape because of governmental concern over a doubling of escapes during the previous four years. It was hoped that recommendations could be made to strengthen classification and reduce escapes.

The escape group was comprised of all inmates who escaped from the facilities of the California Department of Corrections from January 1, 1972 to June 30, 1972. The comparison group was of equal size and was selected by taking the inmate whose admission number was immediately prior to that of an escapee at the same facility. A total sample of 1,494 escapees was used. One part of the data focussed on background characteristics at the time of commitment. The other data focussed on events since the inmate arrived at the institution.

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[12] N. Holt, Escape From Custody. Sacramento, Research Division, California Department of Corrections, 1974.

The most consistent relationship was between previous escapes and current escapes, in that, inmates with previous escapes were twice as likely to escape again. It was even higher if there was more than one escape. It was also found that there is a low escape rate for minority groups. Escapees were most often in the younger age group. It was found that nothing that an inmate does in the institution indicates his escape potential one way or the other.

From this study, it appeared that the characteristics that best indicated escape potential were escape history, race, age, type of offence, and criminal background.

A Los Angeles study examined both personal and organizational characteristics as they relate to runaways.[13] Two different types of institutions were compared. One was termed "total institution" which was self contained in a rural, isolated area. The other was termed "mediatory institution" and was a small experimental community program in Los Angeles City. Delinquents were randomly assigned from a common population of delinquents in Los Angeles County. The major objective of the study was to determine if certain types of boys are predisposed to run away from one or the other of the programs, and whether program differences can account for any findings of variance. A stepwise regression analysis was used to examine 30 predictor variables. Past offence behaviour was found to be more

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[13]S.G. Lubeck and L.T. Empey, "Mediatory and Total Institution: The Case of the Runaway." Social Problems 16(1969): 242-260.

significantly related to runaways than personality, peer group influence or background. The findings strongly suggested that in order to attempt to predict runaways, you must examine the nature of institutional systems as well as personal characteristics of the runaway.

The ability of correctional decision makers to predict serious disciplinary infractions and escapes was the focus of another study.[14] Classification Officers rated 293 minimum security inmates on disciplinary infractions and escape potential. Follow up data and data from inmate files were also used to check the predictive validity of the ratings. The data were analyzed using multiple regression analysis with age, race, offence severity, number of previous prison terms and time served being the independent variables and disciplinary infractions and escapes being the dependent variables.

Disciplinary ratings of decision makers were found not to be significantly correlated with the occurence of disciplinary incident, nor did they contribute significantly to predicting outcome of disciplinary incidents. Escape ratings were significant in outcomes. However, the ratings, which were intuitive, did not contribute significantly to prediction when combined with the objective variables of age, race, offence severity, prior prison and time served.

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[14] T.R. Holland and N. Holt, "Correctional Classification and the Prediction of Institutional Adjustment." Criminal Justice and Behaviour 7/1 (1980): 51-60.

The Massachusetts Forest Camps were the location of a 1970 study.[15] This study compared all men who escaped from the three Massachusetts Forestry Camps between 1952 and August 1970, with all men released from the camps during 1966. The purpose of the study was to discover what types of men were likely to escape from the camps.

Information was collected from central files on the 69 escapees and the 120 men selected in 1966. The data used for comparison purposes concerned background and admission characteristics, criminal history, present offence and present incarceration.

The most important finding was that escapees had more serious criminal histories. They were younger at their first arrest and had more juvenile incarcerations. They also had more prior arrests for offences against property and persons. Escapees were more likely to have been incarcerated for a total of six months or more. Escapees were more likely to be men who had failed to adjust to life at work, school, marriage and the military. Escapees were also more likely than releasees to be young and white.

A Louisiana study was completed in the hope of assisting prison classification personnel in classifying inmates to various levels of custody.[16] The authors selected 100 white male

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[15] M. Hyler, An Analysis of Massachusetts Forestry Camp Escapees. Boston, Massachusetts, Department of Corrections, 1970.

[16] W.S. Loving, F.E. Stockwell, and D.A.Dobbins, "Factors Associated with Escape Behaviour of Prison Inmates." Federal Probation Vol XXIII, No. 3, (1959): 49-51.

inmates of the Louisiana State Penitentiary who had escaped between July 1955 and September 1957, and a comparison group of 100 non-escapee inmates. Negroes were excluded because of the small number who escaped.

The two groups were matched as closely as possible in order to equate opportunity for escape. A total of 22 variables were chosen and analyzed. Eight variables were found to be significant and further statistical analysis resulted in two cluster groups being identified. One cluster group was termed "transient criminality" and consisted of: years residence in Louisiana, mileage to home state, number of penitentiary commitments elsewhere and size of home community. The second cluster group was termed "early criminal history" and consisted of: number of juvenile commitments, age at first arrest, number of dependents and commission of property offences. The authors concluded that comprehensive studies of inmates, their situation and the interaction between the two are necessary in order to adequately predict escape behaviour.

The development of an escape prediction scale was one of the purposes of a study in Texas.[17] This study examined an escape group of 110 and a control group of 116 non-escapees from the 14 institutions of the Texas Department of Corrections. The author was trying to identify variables significantly related to escape. One hundred and sixty-four variables were analyzed using

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[17] W.E. Stone, "Factors Related to Escape Prediction." (Ph.D. dissertation, Sam Houston State University, 1975).

multiple linear regression and factor analysis.

Nine variables were found to be significantly related to escape. They were length of sentence, age at time of commitment, present offence of robbery, ethnic group, addiction to opiates, awol's during military service, escapes or attempted escapes from other institutions, escapes or attempted escapes from facilities of the Texas Department of Corrections, and the number of solitary confinements.

These variables were then weighted according to their relationship with escapes and an escape prediction scale was developed and validated on the two groups.

Escape rates from adult correctional centres in the State of Washington were also the subject of a study.[18] This study gave profiles of escapees and non-escapees and then looked at the possibility of being able to predict escape attempts.

The study involved all 262 men who had escaped from any Washington State Adult Correctional Institution between 1967-70. The total inmate population was used to randomly select a control group of 463 men who were non-escapees. The two groups were compared on 35 variables of which 13 were found to be statistically significant to escapees. The variables found to indicate a high probability of escape were non black race, non-users of drugs, excessive user of alcohol, conviction for a property offence, and a prior confinement record.

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[18] Washington (State) Division of Institutions, A Study of Escapes from Washington State Adult Correctional Facilities. Olympia, Office of Research, 1971.

Summary of the Literature

Some of the literature, e.g., Cochrane (1948) and Loving, Stockwell and Dobbins (1959), did not describe the extent to which some of the variables were significant. They may be describing the population of the institution, e.g., if a large percentage of the general population is under 30 years of age, then it should not be surprising that most escapees are under 30. Unfortunately, it was not possible to obtain further information on some of these studies, and this should be remembered in the following discussion.

The literature produced several consistant findings. California Department of Corrections (1967), Holland and Holt (1980), Holt (1974), Hyler (1970), Stone (1978) and Washington State Division of Institutions (1971) which had whites and others in their inmate populations found that escapees tended to be white. California Department of Corrections (1967), Cochrane (1948), Great Britain, Home Office Research Unit (1974), Holland and Holt (1980), Holt (1974), Hyler (1970), New Zealand Department of Corrections (1961), Stone (1978), and Washington State Division of Institutions (1971) found that escapees tended to be young. California Department of Corrections (1967), Cochrane (1948), Great Britain, Home Office Research Unit (1974), Holland and Holt (1980), Holt (1974), New Zealand Department of Corrections (1961), Stone (1978), and Washington

State Division of Institutions (1971) found that a significant proportion of escapees had been sentenced for a particular category of offences, specifically robbery and other property offences. California Department of Corrections (1967), Holt (1974), and Stone (1978) found that escapees had a record of previous escapes. Cochrane (1948), Great Britain, Home Office Research Unit (1974), Holland and Holt (1980), Holt (1974), Hyler (1970), New Zealand Department of Corrections (1961), and Washington State Division of Institutions (1971) found that escapees had a lengthy criminal history. Great Britain, Home Office Research Unit (1974), Cochrane (1948), and Stone (1975) found that escapees had longer sentences than non-escapees.

Only a few of the studies examined the possibility of developing a prediction scale. The California Department of Corrections (1967), Cochrane (1948), Holland and Holt (1980), Holt (1974), Stone (1978), and Washington State Division of Institutions (1972) all discussed such a possibility. The majority of prediction related studies in criminology have dealt with the higher occurrence rates of areas such as probation or parole outcome, or delinquency prediction. Part of the reason for this paucity of prediction scale research could relate to the limitations of statistical prediction techniques utilized in criminology prior to the seventies.

In the past, studies tended to utilize only bivariate statistical approaches and had some difficulties in obtaining predictive validity. Now, however, predictive validity is

starting to increase through the use of more advanced statistical approaches such as the multivariate techniques of multiple regression, discriminant analysis, and canonical correlation.

Conclusions

After a review of the literature dealing with prison escapes one is left with the problem of not having a comprehensive understanding of the phenomenon of escape. The literature explains the numbers and characteristics of people escaping but it does not answer the question of why they escape. That is probably an unanswerable question. However, some of the researchers make suggestions for the future study of other variables. They do not, however, produce any data to indicate that an understanding of the situational factors of escape would be of any further predictive value.

Loving, Stockwell and Dobbins (1959) concluded that comprehensive studies of inmates, their situation and the interaction between the two are necessary in order to adequately predict escape behaviour. Dandurand and D'Anjou (1975) stressed that running away must be viewed as situational and not just an isolated incident. Lubeck and Empey (1969) suggested that in order to attempt to predict runaways, the nature of institutional systems must be examined, as well as personal characteristics of the runaway.

Although these studies have raised the question of the role of environment in association with the behaviour of escaping, the research on prison escapes appears to have either used, or only had access to, archival data dealing with personal characteristics of escapees. Thus the literature is descriptive of escapees rather than theoretical or explanatory in relation to the situational reasons for escape and the environment in which escapes occur.

III. METHODOLOGY

Operational Definitions

Of critical importance to this research is the distinction between escapees and non-escapees. In the context of the current research, an escapee was defined as an inmate for whom an official escape notification form[1] had been filed with the British Columbia Corrections Branch during the calendar years 1981-1982. Inmates who did not have an escape notification form filed with the British Columbia Corrections Branch during 1981-1982 were considered non-escapees.

Selection of Variables

Certain variables[2] were selected for this study based on identification in the literature as having been tested in various contexts and found to be important. These variables were: (1) race; (2) age; (3) type of offence; (4) a record of

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[1]An escape notification form is a standardized form, filled out at each prison following an escape, which gives information on the escapee and details of the escape. It is distributed within the Corrections Branch and to law enforcement agencies. See Appendix B.

[2]See Appendix C for a complete list of variables.

previous escapes; (5) a number of previous convictions; (6) length of sentence; and (7) marital status.

Other variables were included to assist in describing various aspects relating to escapes. These were: (1) day of escape; (2) type of escape; (3) number of days since last escape from the prison; (4) escape from a building, grounds, escort or temporary absence; (5) prison break or walkaway; (6) was violence used; (7) was escapee considered dangerous; (8) prison from which escape occurred; (9) prison classification; (10) inmate status of remand or sentenced; (11) was escapee recaptured; (12) length of time awol; (13) was escapee convicted of escaping lawful custody; (14) court that convicted for escape; (15) length of sentence for escaping; and (16) month of the escape.

The remaining variables were available and were used in the study to ascertain if they were of sufficient significance to be considered. They were: (1) nationality of the inmate; (2) year entered Canada; (3) occupation; (4) address prior to incarceration; (5) education; (6) use of aliases; (7) age when first admitted to a B.C. Provincial prison; (8) number of previous B.C. Provincial prison terms; (9) any offences of violence; (10) any offences of failure to appear; (11) any offences of breach of probation or parole; (12) any offences of breach of recognizance; (13) number of behaviour transfers; and (14) what was the offence type of the majority of an inmate's offences.

Data Base

These data were obtained from two sources. The first was a compilation by the Inspection and Standards Division of the B.C. Corrections Branch of the escape notification forms. This enabled the distinction to be made, in the sample, between "escapees" and "non-escapees." The second data source was the B.C. Corrections Branch computerized data base, which provided data relating to personal history and B.C. Corrections history for all members of both groups.

Unfortunately, for the purposes of this thesis, the B. C. Corrections computer was set up to store case information on active and historical cases in a way more conducive to personnel management than to research. This data base provided information on an individual case by case basis. It did not, however, allow for aggregation concerning the number of escapees, or their attributes. On the other hand, given that one has the name and birthdate of a given person (e.g., escapees and non-escapees) it then becomes possible to obtain their personal data and B.C. Corrections history on an individual basis. This required manual transcription in order to prepare the data in a form suitable for the current analysis.

Sample Selection

The escape group for this study comprised all adult escapees from British Columbia provincial prisons during 1981 and 1982. The years 1981 and 1982 were chosen because they were the most recent years for which complete information was available.

Due to the limitations of the computerized data base it was not possible to obtain a computer selected random sample group of non-escapees for comparison. In order to obtain the comparison group, selections were made from the daily movement control lists. These lists are daily lists of all inmate "movements" for each institution on a daily basis throughout each month. These include admissions, transfers and discharges. There were approximately 24,000 movements in 1981, and approximately 31,000 in 1982. Due to the large number of movements, it was necessary to limit the time period, within the two year study period, in order to realistically obtain a comparison group. April and October movements for each year were chosen as the lists from which the comparison group would be selected. These months were chosen on the arbitrary basis of being one third and two thirds through each year. As they were movement lists, inmates could be admissions, transfers or discharges, and, consequently, inmates appearing in the sample could have been at any point in their sentence from start to finish.

The movements averaged 2,250 each month and it was arbitrarily decided to manually select every 20th inmate from each prison's lists. This allowed for the inclusion of inmates from each prison, and the larger prisons had a proportionately larger representation. The sample was checked to ensure that there were no escapees in the comparison group, and that no one appeared more than once. This process continued until the non-escapee comparison group was equal in size to the escapee group and included the same number of males and females as in the escapee group. Ultimately, the final sample included 1384 cases (i.e., 692 persons, of whom 646 were male and 46 female, in each group).

Given that the maximum sentence in a provincial prison is two years less a day, that inmates usually have their sentence reduced by one third due to remission, and that the average sentence being served is less than six months, the majority of the non-escapee control group were known to have completed their sentences without escaping. While the possibility exists that a few members of the non-escapee group who had not yet completed their sentence might have escaped after the data analysis, the number of such misclassifications would be so small as to be unproblematic.

Data Analysis

A total of 16 variables were included in the analysis. Some of the variables, such as age, were continuous in nature, while others, such as sex, race, and occupation were categorical. A series of "dummy" vectors were created to encode group membership (see Kerlinger, 1973). Ultimately, the 16 variables required 27 vectors to code fully. A discriminant analysis was then performed in order to ascertain that combination of variables which best discriminated between escapees and non-escapees. Owing to limitations in the SPSS (see Nie, Hull, Steinbrenner & Bent, 1975) printouts from their "discriminant" procedure, parallel regression analyses were also performed to provide further information regarding the magnitude of explanatory power of each of the "discriminating" variables. Regression analyses were performed by dichotomizing the sample into one group of even numbered subjects, on which the major analysis was performed. The second group then served the purpose of a cross validation sample and the results of the first stepwise multiple regression were entered, in the same order, in a multiple regression of this group. A further series of stepwise multiple regressions were also performed for all females, for all males, and then a further breakdown of males by type of prison, i.e. secure, open, or community correctional centre. Females were not further broken down as all female escapes, except two, occurred from one prison.

IV. DESCRIPTION OF ESCAPES

Initial Analysis of the Data

Although not the central focus of this research, the obtained data allowed for descriptions of escapes in accordance with the "physical factor" approach utilized by authors such as Mountbatten (1967), Hildebrand (1969), and Shuster (1969). During 1981 and 1982 in British Columbia provincial prisons, males accounted for 93.3% of escapees, as compared to 6.7% for females. On a proportionate basis, however, females at the only female open prison had the second highest escape rate of all provincial prisons, being 10.74% in 1981 and 7.45% in 1982(see Table 2, Chapter1).

Some of the variables initially analyzed related only to escapees. These included: (a) day of the escape; (b)single person or multiple person escape; (c) escape from building, ground, escort or temporary absence; (d) prison break or walkaway; (e) was violence used during the escape; (f) was escapee considered dangerous; (g) number of days in custody before escape; (h) number of days in custody at the prison from which the escape occurred; (i) was the escapee recaptured; (j) length of time awol; (k) convicted for escaping lawful custody; (l) sentence for escaping custody; (m) month of the escape; and

(n) type of prison. Table 3 gives a breakdown of escapes by prison type (secure, open, community correctional centre). This table clearly illustrates that the majority of escapes (434 or 62.7%) occurred from open prisons. This is noteworthy because during the two year study period the breakdown of average daily count was: (a) secure 51.3%; (b) open 37.7%; and (c) community correctional centres((C.C.C.) 11.0%. In sum, it would appear that escapes occurred with disproportionate frequency from "open" prisons.

A breakdown of incidence of escape by day of the week may be seen in Table 4. It illustrates that the escapes occurred most frequently on a Friday (21.8%). followed by a Thursday (16.1%), and then a Monday (15.3%). When this information was broken down by prison type (secure, open or community correctional centre) it was found that secure prisons had 23.2% of escapes on Fridays, 19.2% on Wednesdays, and 16.8% on Thursdays. Open prisons had 21.9% of escapes on Fridays followed

Table 3

Type of Prison

	Absolute Frequency	Adjusted Frequency(Pct)
Secure	125	18.1%
Open	434	62.7%
CCC	133	19.2%

Table 4

Day of the Week of Escape

	Absolute Frequency	Adjusted Frequency(Pct)
Sunday	70	10.1%
Monday	106	15.3
Tuesday	92	13.3
Wednesday	78	11.3
Thursday	114	16.5
Friday	151	21.8
Saturday	81	11.7
	692	100.0

Table 5

Month of Escape
(In Percentages)

	Secure	Open	CCC
Jan	8.8%	5.1%	6.0%
Feb	14.4%	6.7%	10.5%
Mar	4.0%	9.0%	3.8%
Apr	4.0%	9.0%	12.0%
May	10.4%	10.8%	9.0%
June	8.8%	12.2%	7.5%
July	15.2%	11.5%	11.3%
Aug	6.4%	11.5%	10.5%
Sept	7.2%	8.3%	8.3%
Oct	5.6%	6.2%	4.5%
Nov	7.2%	4.6%	5.3%
Dec	8.0%	5.1%	11.3%

by 16.4% on Mondays and Thursdays. At community correctional centres, 21.8% of escapes occurred on Saturdays, 20.3% on

Fridays and 16.5% on Thursdays.

Escapes were also examined as to the frequency of occurrence per month. Table 5 illustrates that the summer months appear to have been the favoured months for escaping, except for C.C.C.s, which had a higher escape rate during December.

When the type of escape was examined, i.e., one person escaping, or two or more people escaping at the same time, it was found that 55.1% were single escapes and 44.7% were multiple escapes. A breakdown by institution, however, showed that, in secure prisons, 53.7% of escapes were single while 46.3% were multiple. In open prisons, 45.2% were single while 54.8% were multiple. In community correctional centres, 89.5% were single and 10.5% were multiple. This latter group exhibits a very different breakdown of type of escape, with the vast majority being single escapes.

The next variable examined was the number of days since the last escape occurred from a particular prison. In all types of prisons, most escapes occurred within eight days of a previous escape. For secure prisons, 50.9% of escapes were within eight days of a previous escape; for open prisons, 41.2% were within eight days; and for C.C.C.s, 37.2% were within eight days. Table 6 provides a more detailed breakdown.

Escapes can occur from buildings, grounds, on escort or from temporary absence. In secure prisons 39.2% occurred from the grounds; in open prisons 58.3% occurred from the grounds; and for C.C.C.'s 79.7% occurred on temporary absences (see Table

Table 6

Number of Days Since Last Escape

	1-8	9-17	18-31	32-60	61-90	91-355
Sec	50.9%	7.8%	13.8%	7.8%	12.1%	7.8%
Open	41.2%	16.0%	13.6%	18.4%	7.0%	3.9%
CCC	37.2%	11.6%	13.2%	25.6%	5.0%	7.4%

7).

Of the 692 total escapes, 306 (44.2%) occurred from the grounds; 192 (27.7%) occurred from the buildings; 161 (23.3%) occurred while an inmate was on a temporary absence; and 33 (4.8%) occurred while an inmate was under escort.

Escapes were identified as being either a prison break or a walkaway. A prison break is identified as an escape where an inmate had to break security such as breaking out of a cell or building, or climbing a security wall or fence. A walkaway is identified as an escape where an inmate does not have to break a security barrier, but can merely walk out, as there are no fences or walls. Walkaways accounted for 95.5% of escapes while 4.5% were prison breaks. The overwhelming majority of prison breaks, as can be anticipated, occurred from secure prisons, and accounted for 97 (77.6%) escapes from secure prisons.

Another variable examined whether or not violence was used during an escape. There were only six reported escapes, or 0.9% of total escapes, where violence occurred.

When an escape occurred, the escapee was described as being dangerous, not dangerous, or may be dangerous. The determination

Table 7
Escape From

	Buildings	Grounds	Escort	Temp. Absences
Secure	23.2%	39.2%	8.8%	28.8%
Open	32.5%	58.3%	4.8%	4.4%
CCC	16.5%	3.0%	0.8%	79.7%

of whether an escapee is a threat to the community is primarily a subjective judgement on the part of the officer completing the escape notification form. There are no clear cut criteria for determining this and the officer would typically respond on the basis of information in the inmate's file and his observed behaviour of the inmate (if known to the officer) while in prison. Some prisons also use a colour coded file system which clearly identifies someone who is considered dangerous. That determination is usually taken at initial classification based on the person's previous record, present offences, and possibly, prior knowledge of the inmate or information gleaned from other sources. A full 83.7% were described as not dangerous, while 8.8% were considered dangerous, and 7.4% may have been dangerous.

Another variable examined whether escapees had been sentenced or were remanded in custody at the time of the escape. Sentenced offenders accounted for 98.3% of all escapes, and remanded prisoners accounted for 1.7% of all escapes.

Escapees were also examined as to both the total number of days in custody prior to escaping, and the number of days spent

at the prison from which they escaped. Tables 8 and 9 present that information. For secure prisons, the largest percentage (34.5%) of escapes occurred during the first 30 days of imprisonment. For open prisons, the largest percentage (34.1%) of escapes also occurred during the first 30 days. The next largest percentage occurred between 91-180 days - 24.1% for secure prisons, and 22.8% for open prisons. Community correctional centres differed in that the largest percentage of escapes occurred between 91-180 days (38.1%) followed by 181-365 days (25.4%). This difference is possibly accounted for by the fact that many people being classified to these centres are classified to them late in their sentence as part of a gradual re-entry plan. This interpretation receives affirmation in Table 9, where it is evident that a full 79.7% of CCC escapes occur within the first 30 days of entry into that prison type.

For open prisons, and community correctional centres the largest percentage of escapes (34.3% and 32.0% respectively) occurred within the first seven days after admission and the rate of incidence of escape decreased in relation to length of time served in the prison. Secure prisons had the largest percentage (25.6%) of escapes between 15-30 days of their arrival, and the next largest percentage (23.9%) between 91-625 days.

Of the 692 escapees, 627 (90.6%) were recaptured while 52 (7.5%) were not. Table 10 gives a breakdown as to the number of days before an escapee was recaptured. As can be seen,

Table 8

Total Days in Custody

	Secure	Open	CCC
1-30	34.5%	34.1%	15.9%
31-60	20.7%	19.5%	6.3%
61-90	7.8%	13.4%	8.7%
91-180	24.1%	22.8%	38.1%
181-365	12.1%	9.4%	25.4%
366-501	0.9%	0.7%	5.6%

Table 9

Days at Institution from which Escaped

	Secure	Open	CCC
0-7	12.0%	34.3%	32.0%
8-14	9.4%	17.8%	25.0%
15-30	25.6%	18.8%	22.7%
31-60	18.8%	14.6%	14.1%
61-90	10.3%	7.3%	2.3%
91-625	23.9%	7.3%	3.9%

approximately 53% were recaptured within 7 days.

Another variable examined was whether there was a conviction obtained on a charge of escaping lawful custody. 65.3% were convicted and 32.5% were not. A breakdown was not available, regarding the not convicted group, as to whether they were not charged in outside court, or whether they were actually charged but subsequently found not guilty. Prison directors have discretion regarding the laying of a charge of escaping lawful

Table 10

Days Before Recapture
by Type of Prison

N of Days	Secure	Open	CCC
0-7	53.5%	52.3%	53.2%
8-15	11.1%	11.9%	12.8%
16-30	9.1%	8.4%	8.3%
31-60	14.1%	9.6%	11.9%
61-90	5.1%	6.1%	5.5%
91-361	7.1%	11.7%	8.3%

custody. If an escapee is found within close proximity of the prison the matter can be dealt with internally and a charge of escaping lawful custody is often not laid. An escape notification form is nonetheless still completed.

One of the more interesting findings was the number of days in prison that an escapee received upon conviction of escaping lawful custody (see Table 11). It would appear from these figures that British Columbia courts do not view the charge of escaping lawful custody as one that warrants a lengthy prison sentence. The largest proportion of convicted escapees (42.4%) received a sentence of 30 days or less, and another 21.1% received a sentence of between 31-60 days. The legal maximum sentence is five years in prison.

Of all escapees, most (63.3%) had not escaped previously, while 24.1% of all escapees had one previous record of escape (see Table 12).

Table 11

Sentence for Escape (in days)
by Type of Prison

N of Days	Secure	Open	CCC
1-30	23.8%	40.7%	63.8%
31-60	27.0%	22.1%	12.5%
61-90	19.0%	20.5%	10.0%
91-180	20.6%	12.6%	12.5%
181-365	9.5%	2.8%	1.3%
366-730	0.0%	1.3%	0.0%

Table 12

Previous Escapes by Type of Prison

Prison	0	1	2	3	4	9
Secure	40.8%	28.8%	19.2%	7.2%	4.0%	0%
Open	70.3%	22.1%	4.8%	1.6%	0.9%	0.2%
CCC	61.7%	26.3%	7.5%	3.0%	0.8%	0.8%

When the race of the inmate was examined, a non-significant difference was found between escapees and non-escapees. Most escapees (81.4%) were caucasian, and 79.0% of the non-escapees were also caucasian. North American Indians accounted for 12.2% of escapees and 12.9% of non-escapees, while B.C. Indians accounted for 5.7% of escapees and 7.4% of non-escapees.

Table 13

Marital Status

Marital Status	Escapees	Non-Escapees
Single	69.6%	59.8%
Married	21.5%	23.3%
Divorced	4.5%	8.7%
Widowed	0.6%	0.4%
Separated	3.8%	7.8%

With regard to nationality 98.8% of escapees and 98.0% of non-escapees were Canadian. Also, 81.9% of escapees were born in Canada, as compared to 94.4% of the non-escapees.

Escapees also tended to be single, with 69.6% of escapees in this category (see Table 13).

V. DIFFERENTIATING ESCAPEES FROM NON-ESCAPEES

Discriminant Function Analysis

All variables which were applicable to both escapees and non-escapees were then subjected to discriminant function analysis. Discriminant function analysis is a statistical procedure which reveals which combination of variables is most useful in discriminating or differentiating between criterion groups (i.e., escapees and non-escapees, in this instance). The continuous variables such as age and length of sentence were left in their original form (i.e., as continuous variables), while grouping (i.e., nominal) variables (e.g., type of prison) were dummy coded. The sixteen variables for which data were available required a total of 27 vectors to code fully.

The single discriminant function was significant (CANCORR=0.7077,<p .001), indicating that a linear combination of variables submitted for analysis was effective in differentiating the two groups. A total of 16 variables contributed to the discriminant function, and these, along with their respective standardized coefficients, are shown in Table 14.

When used as the basis from which to predict group membership, the overall percentage of correctly identified cases was 86.43%. Escapees were correctly identified in 83.9% of the

Table 14

Standardized Canonical Discriminant Function Coefficients

Sentence	0.664
Age at time of escape	-0.291
Previous escapes	0.276
Offence of theft	0.182
Classified C.C.C.	0.328
Classified Open	0.286
Aliases	0.162
Majority of offences (Property)	0.142
Entered Canada	-0.115
Breach of Probation or Parole	0.061
Offence (Serious)	0.116
Majority of offences (Assault)	0.107
Marital status (Divorced)	0.091
Majority of offences (Breach)	0.076
Majority of offences (Theft)	0.880
Occupation (Domestic/Housewife	0.069

cases and non-escapees in 88.8% (see Table 15). While these success rates in "predicting" group membership appear adequate, it should be appreciated that the "prediction" was being done in the context of that sample from whom the discriminant function was generated. Hence, it represented an optimistic estimate, and would in all probability be less so in a cross-validation sample. Caution is thus warranted in extrapolating from these data.

Table 15

Classification Results

Actual Group	N of Cases	Predicted Group Membership	
		Esc	Non-Esc
Escapee	638	535 (83.9%)	103 (16.1%)
Non-Escapee	688	77 (11.2%)	611 (88.8%)

Percent of "grouped" cases correctly identified: 86.43%

Multiple Regression

Having thus ascertained an optimistic assessment of the ability to differentiate escapees and non-escapees, and in "predicting" group membership, it was then decided to seek (a) a more conservative answer; and (b) a way to further separate wheat from chaff in identifying particular variables worthy of discussion. This was done by performing a stepwise multiple regression analysis which paralleled the original (discriminant) procedure, and which allowed closer inspection of the proportion of variance explained by the discriminating variables.

The total sample (1384) was first divided into two equal groups (692), each of which comprised equal number of escapees and non-escapees. One subsample (the 692 persons arbitrarily given even subject numbers) was then treated as an "analysis" sample, while the second subsample (those 692 persons who had

arbitrarily received odd subject numbers) was retained as a cross-validational sample. A stepwise multiple regression analysis was then performed on the "analysis" sample, with all the variables which emerged on the discriminant function (reported earlier) being regressed on the escapee/non-escapee criterion.[1]

The results of this analysis are shown in Table 16. It may be seen that "length of sentence" emerged as the single most potent explanatory variable, followed by 10 other variables, each of which offered a signicant (at $p<.05$) increment in explanatory power. The eleven variables yielded a cumulative Multiple R of .699, indicating that their combination "explained" approximately 48.9% of the variance in the criterion (escape) and, the variable "length of sentence" by itself accounted for 36.6% of the variance.

In order to test the robustness of these results, these same 11 variables were then regressed in exactly the same order on the same criterion (escape) in the cross-validational subsample. The results of this analysis are presented in Table 17.

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[1]Multiple regression is a statistical technique which identifies and estimates the magnitude and the statistical significance of the variance of the dependent variable (escape), that is shared with several independent variables. "Stepwise" refers to the nature of the variable selection process i.e., the order of "entry" whereby the computer selects the most significant variables and enters them, one at a time, in order of explanatory power. The results of the stepwise multiple regression were based on a criterion which required a new variable to offer a significant increment (i.e., at beyond the .05 level) in explained variance before it would be recognized.

Table 16

Regression Summary Table
'Analysis' Subsample

Source	SS	df	MS	*F	Cumulative Multiple R
Sentence Length	60.59	1	60.59	378.69	0.605
Previous Escapes	5.79	1	5.79	38.60	0.638
Age at Escape	4.43	1	4.43	31.64	0.654
Offence of Theft	1.82	1	1.82	13.00	0.662
Entered Canada	1.46	1	1.46	10.43	0.669
Breach	1.29	1	1.29	9.21	0.674
Classif CCC	1.23	1	1.23	8.79	0.680
Classif Open	2.38	1	2.38	18.31	0.690
Maj. Offences(Prop.)	0.69	1	0.69	5.31	0.693
Maj. Offences(Breach)	0.69	1	0.69	5.31	0.696
Marital Status	0.54	1	0.54	4.70	0.699
Residual	84.84	652	0.13		
Total	165.65	663			

*Critical value for F1,652 is 3.84 for p<.05

Table 17

Regression Summary Table
Cross-Validation Subsample

Source	SS	df	MS	*F	Cumulative Multiple R
Sentence Length	63.31	1	63.31	422.07	0.625
Previous Escapes	2.63	1	2.63	16.20	0.638
Age at Escape	4.07	1	4.07	29.07	0.662
Offence of Theft	1.00	1	1.00	7.14	0.667
Entered Canada	0.14	1	0.14	1.00	0.668
Breach	0.24	1	0.24	1.71	0.669
Classif CCC	1.97	1	1.97	14.07	0.678
Classif Open	3.32	1	3.32	25.54	0.693
Maj Offences(Prop)	0.62	1	0.62	4.77	0.696
Maj. Offences(Breach)	0.12	1	0.12	0.92	0.696
Marital Status	0.12	1	0.12	0.92	0.697
Residual	83.29	637	0.13		
Total	140.83	648			

*Critical value for F1,637 is 3.84 for p<.05

The results of the two regressions are remarkably similar[2] indicating that the primary analysis did indeed identify a fairly robust set of variables which could withstand the test of crossvalidation. It is also of interest to note that while the proportional contributions of given variables varied slightly, the overall Multiple R in the "analysis" subsample was .699, while in the cross-validation sample it was .697.

Out of the 11 variables identified in the first regression analysis (Table17), seven survived cross-validation while four did not. In the context of the current samples, the following variables were reliably associated with a differential likelihood of escape: (a) length of sentence presently being served; (b) having a record of previous escapes; (c) age at time of escape; (d) serving a current sentence for theft; (e) serving a sentence in a C.C.C.; (f) serving a sentence in an open prison; and (g) majority of an inmate's offences being against property. The remaining four variables (i.e., date entered Canada, conviction for an offence of breach of probation or parole, majority of offences being breaches or failure to appear, and marital status (divorced)) did not survive cross-validation, indicating a more tenous association with the criterion, and should be treated accordingly.

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[2]For an introductory discussion to assist in interpreting the tables see R.B. McCall, Fundamental Statistics for Psychology. Harcourt, Brace, Jovanovich, 3rd Edition, New York, 1980. For a more advanced discussion see F.N. Kerlinger, E.J. Pedhazur, Multiple Regression in Behavioral Research. Holt, Rinehart and Winston Inc., New York, 1973.

Further Analyses

In order to provide a more detailed analysis which would be more informative to Corrections personnel, it was then decided to conduct further discriminant functions and also multiple regressions. To obtain the most relevant information for the operation of institutions these further analyses were broken down into: (a) males in secure prison; (b) males in open prisons; (c) males in C.C.C.s; and, (d) all females. Females were not further broken down as all female escapes, except for two, occurred from one prison.

Discriminant analyses were performed first and escapees from open prisons were correctly identified in 85.2% of the cases, and non-escapees were correctly identified in 83.0% of the cases, for a total overall, in open prisons, of 84.26% (see Table 18).

Escapees in community correctional centres were correctly identified in 83.8% of the cases, and non-escapees in 95.9% of the cases, giving a 89.25% correct identification for all cases in this category (see Table 19).

Escapees in secure prisons were correctly identified in 75.5% of the cases, and non-escapees in 94.8% of the cases, giving a 89.42% of correct identification for all cases in this category (see Table 20).

Table 18

Classification Results - Open Prisons

Actual Group	# of Cases	Predicted Group Membership	
		Esc	Non-Esc
Escapee	412	351 (85.2%)	61 (14.8%)
Non-Escapee	306	52 (17.0%)	254 (83.0%)

Percent of "grouped" cases correctly classified: 84.26%

Table 19

Classification Results - CCC

Actual Group	# of Cases	Predicted Group Membership	
		Esc	Non-Esc
Escapee	117	98 (83.8%)	19 (16.2%)
Non-Escapee	97	4 (4.1%)	93 (95.9%)

Percent of "grouped" cases correctly classified: 89.25%

Table 20

Classification Results - Secure Prisons

Actual Group	# of Cases	Predicted Group Membership	
		Esc	Non-Esc
Escapee	107	81 (75.5%)	26 (24.3%)
Non-Escapee	271	14 (5.2%)	257 (94.8%)

Percent of "grouped" cases correctly classified: 89.42%

Female escapees were correctly identified in 97.5% of the cases, and female non-escapees in 95.7% of the cases, giving a 96.51% of correct identification for all cases in this category (see Table 21).

Further multiple regression analyses were then performed on males in secure prisons, open prisons and C.C.C.'s, and all females. Females were not further broken down as all female escapes, except for two, occurred from one institution.

Male Secure

There were 124 escapes by males from secure prisons. Stepwise multiple regression analysis identified the following variables as being significant: (1) length of sentence; (2) number of previous escapes; (3) age at time of escape; (4) serving a sentence for trafficking in drugs; and (5) the majority of the offences committed by an individual were for

Table 21

Classification Results - Female Inmates

Actual Group	# of Cases	Predicted Group Membership	
		Esc	Non-Esc
Escapee	40	39 (97.5%)	1 (2.5%)
Non-Escapee	46	2 (4.3%)	44 (95.7%)

Percent of "grouped" cases correctly classified: 96.51%

common assault. Table 22 shows that escapees tended to have longer sentences with the majority serving sentences of 6 months or more.

Male escapees from secure prisons were also likely to have had a record of previous escapes. 51 (40.8%) had not previously escaped, 36 (28.8%) had one previous escape, 24 (19.2%) had two previous escapes, 9 (7.2%) had three previous escapes, and 5 (4%) had four previous escapes.

Male escapees from secure prisons were also significantly younger than the non-escapees as is demonstrated in Table 23 with 74.4% age 25 years and under.

The offence of trafficking in narcotics was also identified as being significant. However, due to the small sample size of 1 escapee and 10 non-escapees, it was decided that the variable could not be reliably used any further in the study. Similarly, the majority of offences of common assault were identified as

Table 22

Sentence Length in Days for Males in Secure Prisons

	Escapees	Non-Escapees
1-30	8(7.5%)	189(69.7%)
31-60	8(7.5%)	14(5.2%)
61-90	4(3.7%)	29(10.7%)
91-180	12(11.2%)	23(8.5%)
181-365	35(32.7%)	10(3.7%)
366-540	13(12.1%)	4(1.5%)
541-730	27(25.2%)	2(0.7%)

Table 23

Age for Males in Secure Prisons

	Escapees	Non-Escapees
16-19	40(32.0%)	35(12.9%)
20-25	53(42.4%)	103(37.9%)
26-35	24(19.2%)	77(28.3%)
36-45	5(4.0%)	37(13.6%)
46-70	3(2.4%)	20(7.4%)

significant, but in this case the sample size was again too small.

Males Open

There were 381 escapes by males from open prisons. Stepwise multiple regression identified the following variables as significant: (1) length of sentence; (2) age when first in B.C. prison; (3) using aliases; (4) history of previous escapes; (5) serving a sentence for the offence of theft; (6) born in Canada; (7) age; and (8) majority of offences for theft.

Similar to escapees from secure prisons, the majority of escapees from open prisons were serving a sentence of 6 months or more. 42.2% were serving a sentence of 6-12 months, 16% were serving a sentence of 1 year plus a day to 18 months, and 12.6% were serving a sentence of 18 months plus a day to 2 years less a day. Age when first in a B.C. prison is shown in Table 24 and escapees are shown to have been younger than non-escapees when admitted for the first time, with 57.6% between 15-19 years of age.

In open prisons, 183 (42.2%) of escapees had aliases as compared to 56 (18.1%) of non-escapees. 70.3% of escapees did not have a record of previous escape, but 96 (22.1%) had one previous escape; 21 (4.8%) had two previous escapes; 7 (1.6%) had three previous escapes; 4 (0.9%) had four previous escapes; and 1 (0.2%) had nine previous escapes.

The majority of male escapees in open prisons were also found to be serving a present sentence for theft, as is exhibited by 248 (58.2%) serving such a sentence.

Table 24

Age When First Admitted - Open Escapees

	Escapee	Non-escapee
15-19	249(57.6%)	82(26.5%)
20-25	131(30.3%)	117(37.9%)
26-35	40(9.3%)	54(17.5%)
36-45	11(2.5%)	39(12.6%)
46-70	1(0.2%)	17(5.5%)

Both escapees and non-escapees were predominantly born in Canada, but more so for non-escapees, as 279 (94.6%) were born in Canada, compared to 327 (79.4%) of escapees. Escapees from open prisons had also committed theft as the majority of their offences, with 271 (63%) being in that category.

Escapees in this group were also younger than non-escapees and Table 25 shows 180 (41.5%) escapees age 16-19, compared to 48 (15.5%) non-escapees age 16-19.

Males C.C.C.

There were 133 escapes by males from community correctional centres. Stepwise multiple regression identified the following variables as statistically significant: (1) length of sentence; (2) majority of offences for drinking and driving; (3) serving a sentence for breach of probation or parole, or for failure to appear; (4) a record of previous escape; (5) born in Canada; and

Table 25

Age of Males in Open Prisons

	Escapees	Non-Escapees
16-19	180(41.5%)	48(15.5%)
20-25	158(36.4%)	121(39.2%)
26-35	80(18.4%)	77(24.9%)
36-45	13(3.0%)	36(11.7%)
46-70	3(0.7%)	27(8.7%)

(6) serving a sentence for other motor vehicle offences.

Table 26 gives a breakdown by sentence, showing once again that escapees tended to be serving a sentence of more than 6 months, with 32.7% seving a sentence of 6 months plus a day to one year.

The variable majority of offences was significant in showing that 55 (49.5%) non-escapees committed drinking and driving offences, as compared to 9 (6.8%) escapees.

The next variable identified by the regression was the offence category of breach of probation or parole, or failure to appear. 12 (9.2%) escapees and 4 (3.5%) non-escapees were in this sample. However, the small sample size made this variable questionable for further study.

61.7% of the escapees had no previous escapes: 26.3% had one previous escape; 7.5% had two previous escapes; 3.0% had three previous escapes; 0.8% had four previous escapes and 0.8% had nine previous escapes.

Table 26

Sentence in Days for Males in CCC's

	Escapees	Non-Escapees
1-30	8(7.5%)	189(69.7%)
31-60	8(7.5%0	14(5.2%)
61-90	4(3.7%)	29(10.7%)
91-180	12(11.2%)	23(8.5%)
181-365	35(32.7%)	10(3.7%)
366-540	13(12.1%)	4(1.5%)
541-730	27(25.2%)	2(0.7%)

The variable "entered Canada" was significant in that both escapees and non-escapees were primarily born in Canada. 104 (94.5%) non-escapees and 110 (86.6%) escapees were born in Canada.

The offence variable of other motor vehicle offences was significant in the regression but will not be pursued further in this study due to the small sample size of 7 (6.3%) non-escapees and 0 (0.0%) escapees.

Female Inmates

There were 46 escapes by female inmates during the two year study period 1981-1982. Stepwise multiple regression analysis identified the following variables as significant: (1) classification to an open prison; (2) length of sentence; (3) marital status of divorced; (4) occupation as a student; (5)

having previous convictions; (6) majority of offences being against community order; (7) serving a sentence for theft; and (8) age at time of escape.

The variable open prison is significant because 44 (95.7%) of the 46 escapes committed by females occurred from one open prison.

Sentence is significant in that 13 (32.5%) female escapees were serving a sentence of 6 months plus a day to one year, whereas only 1 (2.2%) non-escapee was serving a similar sentence(see Table 27).

The sub category of divorce in the variable marital status is statistically significant in the multiple regression, but it will not be considered futher in this study since the small sample size of 7 (15.2%) non-escapees were divorced as compared to 1 (2.2%) escapee. Similarily, the sub category of student within the variable of occupation will not be considered further due to a sample of 2 (4.3%) non-escapees, and 0 (0.0%) escapees.

Female escapees also have more previous convictions than non-escapees. 73.9% of non-escapees had 0-3 previous convictions, compared with 34.8% of escapees. There were 9 (19.6%) escapees who had 4-6 previous convictions, 11 (23.9%) had 7-11 previous convictions, and 10 (21.7%) had 12 or more previous convictions. None of the non-escapees had more than 11 previous convictions.

A majority of offences by an individual against community order were identified but will not be considered further due to

Table 27

Female Escapees Sentence in Days

	Escapee	Non-escapee
1-30	3(7.5%)	25(54.3%)
31-60	3(7.5%)	4(8.7%)
61-90	7(17.5%)	6(13.0%)
91-180	11(27.5%)	10(21.7%)
181-365	13(32.5%)	1(2.2%)
366-540	2(5.0%)	0(0.0%)
541-730	1(2.5%)	0(0.0%)

a sample size of 1 non-escapee and no escapees.

The multiple regression analysis identified that serving a sentence for the offence of theft was significant with 12 (26.1%) escapees in this category.

In the escapee group, there were 10 (21.7%) in the age group 16-19 at the time of escape. This compared to 6 (13.0%) for the non-escapees (see Table 28).

Summary of Findings by Prison Type

For male inmates in secure prisons, the significant variables related to escape were: (1) serving a sentence of more than 6 months; (2) having a record of previous escapes; and (3) being under 25 years of age at the time of the escape.

For male inmates in open prisons, the significant variables related to escape were: (1) serving a sentence of more than 6

Table 28

Age of Female Inmates

	Escapees	Non-Escapees
16-19	10(21.7%)	6(13.0%)
20-25	17(37.0%)	18(39.1%)
26-35	17(37.0%)	15(32.6%)
36-45	1(2.2%)	4(8.7%)
46-70	1(2.2%)	3(6.5%)

months; (2) being aged 15-19 when first admitted to a B.C. prison; (3)using aliases; (4) having a record of previous escapes; (5) serving a present sentence for theft; (6) born in Canada; (7) 25 years or less at the time of the escape; and (8) having other property offences as a majority of offences committed.

For male inmates in community correctional centres, the significant variables related to escape were; (1) serving a present sentence of more than 6 months; (2) not having majority of offences in the drinking and driving category; (3) serving a present sentence for breach of probation, parole, or for failure to appear; (4) having a record of previous escapes; and (5) being born in Canada.

For female inmates the significant variables related to escape were: (1) serving a sentence in an open prison; (2) sentence length of 6-12 months; (3) having a record of previous convictions; (4) serving a sentence for theft; and (5) being

aged 16-19 at the time of the escape.

VI. DISCUSSION AND RECOMMENDATIONS

Discussion of Findings

The purpose of this thesis was to determine, whether data on those inmates who had previously escaped, could be generalized and used to assess the escape risk of prisoners on intake. The use of discriminant analysis resulted in an 86.43% of correct identification of groups of escapees and non-escapees for all subjects. The highest prediction was for females, with a 96.5% correct classification rate. It thus appears, that for this sample group, the variables employed in this analysis offer an enhanced ability to assess the risk of escape. However, as previously noted (p.53) the variable "length of sentence" accounts for such a high percentage of the variance in assessing escape risk, that a more refined analysis may be required to determine the true significance of the other variables. Additionally, and as discussed later in the thesis, research on other types of variables which can assess factors related to motivation and opportunity (situational variables) may either serve to modify the strength of factors included in this study or add other important factors which can increase the ability to assess escape risk.

The problem then becomes one of assessing the generalizability of such a risk assessment to other populations, both within and outside the British Columbia Corrections Branch. In order for the identified variables to maintain their utility, they would have to be updated periodically. The time frame for updating would depend upon the rate of population change. As Stone (1975) discussed, an indication of generalizability can be obtained by examining the results of previous research for similarities.

The review of the literature revealed several consistent findings. Escapees tended to be white, young, sentenced for specific offences (particularly robbery and other property offences), had a record of previous escapes, had lengthy criminal histories, and were serving longer sentences.

This is remarkably similar to the findings of the current study, which also identified: (a) length of sentence; (b) a record of previous escape; (c) age at the time of escape; (d) serving a sentence for theft; and, (e) having a majority of offences against property.

The close relationship between the results of this study and the results of other escape studies, indicate that there is the ability to generalize the results of this study to other prison populations, as well as assessing the escape risk of prisoners on intake.

Due to the possibility of assessing escape risk at the time of intake, the information can be used both in classification,

and in the development of policy relating to the placement of inmates.

The present study indicates that secure prisons had the lowest escape rates both in 1981 (0.0% to 1.01%) and 1982 (0.0% to 0.61%). Community correctional centres were the next lowest for both 1981 (1.14% to 7.11%) and 1982 (0.0% to 5.41%). Open prisons had the highest escape rates in 1981 (1.15% to 20.75%) and in 1982 (0.0% to 15.02%). In relation to other reported jurisdictions, escape rates of 20.75% and 15.02% are exceedingly high, as most other jurisdictions reported escape rates at 5% or lower.

If the B.C. Corrections Branch finds such high escape rates unacceptable, there appear to be some implications for classification and placement of inmates. The majority of escapes occurred from open prisons. The B.C. Corrections policy is to place inmates as close to their home community as possible and in the lowest level of appropriate security. It would appear that this policy is contributing to the escape profile identified in this study. The B.C. Corrections Branch has the opportunity to consider the acceptability of this situation and may decide to accept the high escape rate, change their policy regarding placement of inmates, or exclude high risk escape classes from open prisons. This study indicates that it is possible, at initial intake, to identify high escape risk inmates. Such persons could be excluded from open prisons, and particularly from the open prisons with the highest escape

rates.

However, after reviewing the literature and completing this study, there is still the problem of not having a comprehensive understanding of the situational factors in escapes. The literature, and this study, detail the number and characteristics of escapees, but do not answer the question of why they escape. In order to address this problem, it would seem useful to establish a theoretical base which can assist in exploring the phenomenon of escape from a situational perspective.

Studies dealing with the maintenance of prisons appear to have their origin in social control theory, as do the studies on escapes reported earlier. The literature dealing with social control evolves from two different perspectives. One sees social control evolving from the existence of a common value system within a group (e.g., see Hirschi (1974), Reckless (1973), Reiss (1951), Sykes and Matza (1975), and Toby (1974). A second view of social control is the "conflict school" as represented by Davis (1957), and Gibbs (1977). This school views social control as evolving from the existence of a prescribed set of values imposed on the majority by the minority. Social control is viewed, in this discussion, as relating to a common value system emerging from consensus rather than being imposed.

Prisons are a method of social control and systems of reward and punishment are central to it. Rewards and punishments are administered in all groups where an attempt is made to

influence the behaviour of individuals. Obviously, within a prison context, punishment is administered for escaping, and rewards, such as parole, are administered for not escaping. Someone who escapes is reacting within the context of society's attempt to control his freedom. He has previously contravened the law and society has responded by restricting his freedom.

It is interesting to note that the majority of escapees have previously committed aggressive offences against property or persons, and often with violence. This type of person continues to resist society's value system even when in prison. Escapees also have lengthy criminal histories which indicates a possible acceptance of deviant values.

Toby (1974) stated that:

> "Crime has nothing to do with morality; crime is any behaviour that the state is organized to punish. But criminology if it is to make sense as a behavioural science, must consider crime in the context of the tendencies toward value consensus in the society; the probability of an individual violating law differs depending on whether or not he and his reference groups are morally committed to the law in question." [1]

Due to the finding in the escape literature that escapees had a lengthy criminal history, one would suspect that they are not morally committed to the law. Toby also sees social control as a process within a social system which tends to produce conforming behaviour. Within a prison, social control is directed at the behaviour of inmates. Pressures are applied to

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[1] J. Toby, The Socialization and Control of Deviant Motivation. In Handbook of Criminology. Edited by D. Glaser, Chicago, Rand McNally, 1974, p86

conform to the norm of not escaping regardless of the motivational inclinations of the inmate. It would appear to work, as the highest escape rate found in the literature prior to this study was approximately 5% in California, with most other jurisdictions much lower. In other words, over 95% of the prison population conform to the norm of not escaping.

Social control theory attempts to understand how people become immune to control over their behaviour. Such immunity is explained as a lack of integration in the social system. The concepts of interdependence and integration are used to explain the occurrance of deviance as an indication of a breakdown in stability of equilibrium. A prison escape results from a breakdown in equilibrium within the prison.

Toby's view of stake in conformity is similar to Hirschi's (1974) concept of social bond. Hirschi's research into juvenile delinquency led him to conclude that the less a child was concerned about the rewards or the goals that the school urged him to attain, the less capable it was of directing his behaviour. This is applicable to the prison situation where the escapees would be seen as not aspiring to the reward or goals of the institution as the rewards do not have enough influence, as they do not balance with the benefits that would accrue on escape. A breakdown in equilibrium of this kind occurs in the prison prior to the escape.

Another aspect of social control theory is that deviance is not motivated, it is made possible or permitted. Deviance

results from failure to effectively control deviant impulses. People conform only to the extent they are pressured to do so. When these pressures,(social control) are not operative, one is freed from normative restraint. In prisons it is adherence to group interest that allows a prison to function. The benefits of conforming outweigh the benefits associated with causing a disruption. For escapees the pressures to conform are not sufficient, and self interest takes over and dominates group interest. Within the prison setting there would be fewer escapes if all inmates were locked up 24 hours a day, and armed guards patrolled high walls. Because of the correctional philosophy of humanizing incarceration escapes are permitted to occur.

This would be similar to Hirschi's view that a person is free to commit delinquent acts because his ties to the conventional order have somehow been broken. Relating this to prison escapes, it would appear that the majority of inmates still have some ties to the conventional order. The small minority who escape do not have this tie, and their escaping is described by identifying them as a group with some specific personal and social characteristics.

The literature dealing with escapes provides a list of characteristics that identifies escapees. But it does not address the question of why they escape. This is another reason for seeing the literature as having a basis in social control theory. As Hirschi (1974) stated:

> "The most disconcerting question that control theorists face is, 'yes but why do they do it?'"

Most social control theorists seem to imply that the motivation for escaping does not need to be explained. Motivation is seen as an inherent characteristic. Control theorists assume that the motivation to crime is constant across persons. To summarize control theory's view of deviation, it is a theory in which deviation is not problematic. The question, "Why do they do?" is simply not the question the theory is designed to answer.

Control theory assumes the existence of a common value system within the society or the group whose norms are being violated. Control theory identifies that some members do not share this value system. The literature on escapes says escapees do not share in this consensus because they are young, white, have lengthy criminal histories etc. The literature ignores the question, "Why do they escape?"

It would appear that prison escape research literature will continue from a social control theoretical point of view until an attempt is made to collect different data such as institutional climate information, prison overcrowding data and other data related to the escape situation rather than the characteristics of the escapees. Information is required on the personal characteristics, the situation, and how the two inter-relate. It is appreciated that these additional factors would probably not add significantly to the already high predictive results of the current study. However, it should be helpful to prison personnel to examine the situational factors for possible significance.

This study and others have identified personal variables and what is now needed is further research on the situation at the time of the escape, and how the situation inter-relates with the personal variables. In order for future research of this type to be possible, more detailed information would have to be collected at the time of the escape. Future research could also examine the possibility of interviewing escapees once they are re-captured. A data base from these additional sources could possibly start to answer the situational factor issue.

This study is viewed as an initial examination of escapes which can be used to develop a method for assessing the escape risk of prisoners on intake, since the data indicated that it is possible to significantly differentiate between escapees and non-escapees.

Recommendations

1. The findings of this research should be used to develop a profile of escapees.

2. The profile should be tested, using a sample and comparison group, to determine its usefulness as an assessment of escape risk device, both during initial intake and, at subsequent reclassifications.

3. If the profile of escapees is found to be useful by the B.C. Corrections Branch, the variables should be reviewed every two years. This task would be much simpler if the Corrections

Branch built in research capabilities to their present computer system.

4. Research on situational variables (motivation and opportunity) which may contribute to an assessment of escape risk should be undertaken.

5. The escape notification form should be expanded to enable the recording of pertinent information relating to the situation at the time of the escape e.g. prison overcrowding, recent changes in staff, program, or policy, dear John letter, peer pressure etc.

6. The Temporary Absence policy of the B.C. Corrections Branch should be reviewed as to the possibility of including an assessment of escape risk. This recommendation is made due to the high rate of escapes particularly from C.C.C.'s (79.7%) and secure prisons (28.8%) by inmates while on a temporary absence.

7. The escape rates for 1983 should be checked to see if there is a continuing trend towards decreasing escape rates.

If the above recommendations were to be implemented, there should be a significant increase in the ability to assess escape risk. A subsequent decrease in escape rates could be expected, particularly in open and community correctional centres. If the profile is periodically updated, this decrease should continue in future years.

APPENDIX

Appendix A

Institutions

VIRCC	Vancouver Island Regional Correctional Centre
LMRCC	Lower Mainland Regional Correctional Centre
LCC	Lakeside Correctional Centre
CSU	Chilliwack Security Unit
KRCC	Kamloops Regional Correctional Centre
PGRCC	Prince George Regional Correctional Centre
NFRC	North Fraser Reception Centre
VCCC	Victoria Community Correctional Centre
SWRU	Snowdon Work Release Unit
MCCC	Marpole Community Correctional Centre
BCCC	Burnaby Community Correctional Centre
LWCCC	Lynda Williams Community Correctional Centre
CCCC	Chilliwack Community Correctional Centre
KCCC	Kamloops Community Correctional Centre
TCCC	Terrace Community Correctional Centre
ARCC	Alouette River Correctional Centre
BBC	Boulder Bay Camp
NH	New Haven
CP	Camp Point
BR	Brittain River
JR	Jordan River
SLC	Stave Lake Camp
PRC	Pine Ridge Camp
TM	Twin Maples
MT	Mount Thurston
FM	Ford Mountain
RC	Rayleigh Camp
BC	Bear Creek
HL	Hutda Lake

Appendix B

B.C. Corrections Branch
Escape Notification Form

CENTRE/CAMP_____
DATE:_____
INFORMATION ON ESCAPEE:
NAME:_____NO._____AGE_____
Length of sentence_____
Offence_____
Probable date of release(before escape)_____
Balance of sentence to serve(including remission loss)___
What was escapee wearing_____
Does escapee present a potential threat to community_____
Has escapee exhibited self-hurt behaviour in custody_____
DETAILS OF ESCAPE:
Date of escape_____Time_____
Escaped from: Buildings___ Grounds___ Escort___ TA_____
Is escape considered a: Prisonbreak___ Walk-away_____
How was escape accomplished:_____
Any violence used_____
When was escape noticed and by whom_____
OFFICER REPORTING:_____
Date_____ Time_____
COMMENTS:_____
DISTRIBUTION:
Law Enforcement Agencies
Regional Director of Corrections
Provincial Classification
Director, Inspection & Standards

Appendix C

List of Variables

Subject - 0001 to 1384
Age - at time of escape for escapees, and while serving sentence for non-escapees
Sex - 1 Male
2 Female
Nationality -1 Canadian
2 U.S.
3 U.K.
4 Europe
5 Asian
6 Other
7 East Indian
9 Unknown
Race - 1 Caucasian
2 Negroid
3 Oriental
4 B.C. Indian
5 N.A. Indian
9 Unknown
Marital status
1 Single
2 Married (& Common Law)
3 Divorced
4 Widowed
5 Separated
9 Unknown
Year entered Canada
00 Life
99 Unknown
Occupation 01 Agriculture
02 Construction
03 Fishing
04 Laborer
05 Manufacturing
06 Mining
07 Transportation
08 Armed Services
09 Cler/Commercial
10 Managerial
11 Domestic
12 Mechanical
13 Forest

14 Housewife
15 Professional
16 Student
17 Other (& Retired)
18 Illegal
19 Unemployed
99 Unknown

Last address - Coded by area for address prior to incarceration

Education
01 None
02 Grade 6 or less
03 Grade 7-8
04 Grade 7-8 plus vocational
05 Grade 9-10
06 Grade 9-10 plus vocational
07 Grade 11-12
08 Grade 11-12 plus vocational
09 University
99 Unknown

Day of escape
01 Sunday etc.

Type of escape
1 Single escapee
2 Multiple escapees

Number of days since last escape from prison
001 etc

Aliases
1 Yes
2 No

Escape from a building, ground, escort or temporary absence
1 Building
2 Ground
3 Escort
4 T.A.

Prisonbreak or walkaway
1 Prisonbreak
2 Walkaway

Violence used - Was violence used during the escape
1 Yes
2 No

Considered dangerous - Was the escapee considered dangerous
1 Yes
2 No
3 Maybe

Institution - Four digit number identifying each prison

Institutional classification
1 Secure
2 Community Correctional Centre
3 Open

Status
1 Remand
2 Sentence

Present offence - See Appendix E for a listing of offences

Length of present sentence - Calculated in days

Age at first admission to B.C. provincial prison

Number of previous convictions
Number of previous B.C. provincial prison terms
Offences of violence - Did the inmate have any convictions for offences invloving violence
1 Yes
2 No
Offences of Failure to appear
1 Yes
2 No
Offences for breach of probation or parole
1 Yes
2 No
Conviction for Breach of recognizance
1 Yes
2 No
Number of behaviour transfers
Majority of offences - Offence category where most of escapees offences occurred
Number of days in custody before escape
Number of days at the prison from which escapee escapes
Recaptured 1 Yes
2 No
Length of time awol - Measured in days
Convicted in court of escaping lawful custody
1 Yes
2 No
Court Four digit number identifying each court area in the province
Sentence length for escape - Measured in days
Number of previous escapes
Month of escape
01 January etc.

Appendix D

Table A

Regression Summary Table - All Males

Source	SS	df	MS	*F	Cumulative Multiple R
Sentence	119.12	1	119.12	779.82	0.62352
Age when admitted	9.24	1	9.24	61.60	0.64723
Previous escape	6.14	1	6.14	43.86	0.66254
Classified C.C.C.	3.68	1	3.68	26.29	0.67154
Classified Open	4.68	1	4.68	36.00	0.68282
Offence(theft)	2.65	1	2.65	20.38	0.68912
Aliases	1.63	1	1.63	12.54	0.69298
Entered Canada	1.26	1	1.26	9.69	0.69594
Age	1.31	1	1.31	10.08	0.69900
Offence(Property)	1.12	1	1.12	8.62	0.70161
Marital status	0.95	1	0.95	7.31	0.70381
Breach	0.65	1	0.65	5.00	0.70532
Maj Off(Assualt)	0.63	1	0.65	4.85	0.70677
Offence(Serious)	0.63	1	0.63	4.85	0.70824
Maj Off(Theft)	0.51	1	0.51	3.92	0.70943
Residual	151.89	1211	0.13		

*Critical value for F1,1211 is 3.84 for $p<.05$

Table B

Regression Summary Table - All Females

Source	SS	df	MS	*F	Cumulative Multiple R
Classified Open	8.05	1	8.05	50.87	0.61641
Sentence	1.70	1	1.70	12.14	0.67851
Marital status	0.92	1	0.92	7.08	0.70981
Occupation	0.77	1	0.77	6.42	0.73506
Previous convictions	0.55	1	0.55	4.58	0.75261
Majority of offences	0.45	1	0.45	4.09	0.76646
Offence(theft)	0.51	1	0.51	4.64	0.78191
Age	0.51	1	0.51	5.10	0.79730
Residual	13.46	76	0.10		

*Critical value for F1,76 is 3.94 for p<.05

Table C

Regression Summary Table - Males C.C.C.

Source	SS	df	MS	*F	Cumulative Multiple R
Sentence	21.40	1	21.40	145.24	0.64213
Majority of offences	2.73	1	2.73	21.00	0.68187
Offence(Breach)	1.13	1	1.13	8.69	0.69764
Previous escape	0.91	1	0.91	7.00	0.71011
Entered Canada	0.70	1	0.70	5.33	0.71962
Offence(Other M.V.)	0.85	1	0.85	7.08	0.73081
Residual	24.18	202	0.12		

*Critical value for F1,202 is 3.89 for p<.05

Table D

Regression Summary Table - Males Open

Source	SS	df	MS	*F	Cumulative Multiple R
Sentence	54.86	1	54.86	335.27	0.58157
Age when admitted	10.40	1	10.40	69.33	0.63340
Aliases	2.91	1	2.91	20.79	0.64827
Previous escape	2.23	1	2.23	15.93	0.65879
Offence(theft)	1.81	1	1.81	12.93	0.66721
Entered Canada	1.14	1	1.14	8.14	0.67243
Age	0.90	1	0.90	6.43	0.67659
Majority of offences	0.91	1	0.91	7.00	0.68070
Residual	87.04	649	0.13		

*Critical value for F1,649 is 3.86 for p<.05

Table E

Regression Summary Table- Males Secure

Source	SS	df	MS	*F	Cumulative Multiple R
Sentence	32.79	1	32.79	279.72	0.66177
Previous escape	5.16	1	5.16	51.60	0.71194
Age	0.96	1	0.96	9.60	0.72092
Offence(Trafficking)	0.51	1	0.51	5.10	0.72562
Majority of offences	0.48	1	0.48	4.80	0.72997
Residual	34.98	355	0.10		

*Critical value for F1,355 is 3.86 for p<.05

Appendix E

Description of Offence Groups

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(01) Serious

Possession of a weapon
Pointing of a firearm
Use of a firearm
Perjury
Escape lawful custody
Rape and attempt
Sexual relations with female under 14 years
Sexual relations with feeble minded
Indecent assault on male or female
Negligence causing death
Capital murder
Non-capital murder
Manslaughter
Attempt to commit murder
Causing bodily harm with intent
Criminal negligence in operation of motor vehicle
Assault with intent
Assaulting a peace officer
Kidnapping
Robbery
Extortion
Arson
Making counterfeit money

(02) Non-Serious Sex and Morals

Incest
Buggery
Acts of gross indecency
Obscene matter
Indecent act
Indecent exposure
Corrupting children
Prostitution
Other(disorderly houses and gaming)
Keeping a gaming house
Occupant of a gaming house
Keeping a bawdy house
Occupant of a bawdy house
Procuring

Living off prostitution
Bigamy
Contributing to juvenile delinquency

(03) Community Order

Causing a disturbance
Trespassing
Vagrancy
Public mischief
Mischief

(04) Drinking and Driving

Impaired Driving
Refuse breath sample
Driving with above .08 alcohol content

(05) Other Motor Vehicle

Failing to stop at accident
Driving while disqualified
Breach of Motor Vehicle Act

(06) Theft

Theft by conversion
Theft over $200
Theft under $200
Taking auto without owner's consent
Breaking and entering
Unlawfully in dwelling house
Possession of housebreaking instruments
Possession of stolen property
Theft from mails

(07) Other Property

False pretences
Obtaining food and lodging by fraud
Possession of counterfeiting instrument
Fraud
Possession of counterfeit money
Breach of Customs Act
Breach of Post Office Act
Breach of Social Assistance Act
Other(property)

(08) Possession of Drugs

Breach of Narcotic Control Act - possession
Breach of Food and Drug Act - possession

(09) Trafficking or Intent to Traffic in Drugs

Breach of Narcotic Control Act - trafficking
Breach of Narcotic Control Act - possession for the purpose
Breach of Food and Drug Act - trafficking
Breach of Food and Drug Act - possession for the purpose

(10) Breaches/Fail to Appear

Breach of probation
Breach of National Parole
B.C. Parole violation
Breach of Prison and Reformatories Act
Fail to appear in court
Breach of Section 64A of Summary Convictions Act
Breach of intermittent sentence
Conditional discharge revoked

(11) Common Assault/Liquor Act

Common Assault
Breach of Government Liquor Act

(12) Other Person and Community

Unlawful assembly
Riot
Bribery of officers
Disobeying order of court
Resisting a peace officer
Failure to assist a peace officer
Breach of recognizance
Aid to escape
Failing to provide the necessities of life
Abandon children
Negligence causing bodily harm
Attempting to commit suicide
Harrassing and threatening
Attempting to commit accessory after the fact
Breach Family Relations Act
Conspiracy
Contempt of court
Habitual criminal
Breach of Immigration Act
Breach of Wives' and Children's Maintenance Act
Breach of Railways Act
Breach of Fisheries and Game Act
False fire alarm
Other(public order)
Other(administration of Law and Justice)

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