

**VIOLENT CRIME AND CHARACTERISTICS OF TWELVE INUIT COMMUNITIES  
IN THE BAFFIN REGION, NWT.**

by

**Darryl S. Wood**

B.C.J. New Mexico State University, 1987

M.C.J. New Mexico State University, 1989

**THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
DOCTOR OF PHILOSOPHY**

in the  
School of Criminology

©Darryl S. Wood 1997

**SIMON FRASER UNIVERSITY**

July 1997

All rights reserved. This work may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.



National Library  
of Canada

Acquisitions and  
Bibliographic Services

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque nationale  
du Canada

Acquisitions et  
services bibliographiques

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file Votre référence*

*Our file Notre référence*

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-24367-2

Canada

## APPROVAL

Name: Darryl S. Wood  
Degree: Doctor of Philosophy (Criminology)  
Title of Thesis: Violent Crime and Characteristics of Twelve Inuit Communities  
in the Baffin Region, NWT

### Examining Committee:

Chair: Joan Brockman

---

William G. Glackman  
Senior Supervisor  
Associate Professor of Criminology

---

Raymond R. Corrado  
Professor of Criminology

---

Curt T. Griffiths  
Professor of Criminology

---

Douglas F. Cousineau  
Internal External Examiner  
• Associate Professor of Criminology

---

David M. Blurton  
External Examiner  
Associate Professor of Justice  
University of Alaska-Fairbanks

Date Approved: \_\_\_\_\_

## ABSTRACT

Geographically isolated in the remote Canadian eastern arctic, the Inuit communities of the Baffin Region, Northwest Territories share a common cultural and historical heritage that makes the area a unique setting for the study of violent crime among aboriginal peoples. Despite that uniqueness, however, the communities of the Baffin Region have high rates of violent crime that are typical of those found in aboriginal populations across North America. Previous attempts to account for the high rates of violent crime in aboriginal communities have generally relied upon one of two perspectives, both the socio-economic circumstances brought about by the process of colonization and the factors surrounding the consumption of alcoholic beverages have each been looked to for explanations of violent crime in aboriginal communities. Both of these perspectives were considered in this dissertation to account for the rates of violent crime in the Baffin Region communities. Indicators of community-level characteristics related to the consumption of alcohol and to the circumstances surrounding the colonization process were used to examine community-level measures of violent crime. Some of the community characteristics were more adept at accounting for violent crime rates than were others. Of the characteristics related to the use of alcoholic beverages, the presence or absence of local alcohol prohibitions did more to explain violent crime rates in Baffin Region communities than did the average amount of alcohol consumed in a community. Likewise, of the circumstances brought about by the colonization process, the violent crime rate in Baffin Region communities appeared to have more to do with whether a community was settled by forced relocation and less to do with measures of levels of socio-economic deprivation. These findings suggest that violent crime in aboriginal communities cannot be attributed to colonization or to alcohol use by themselves. Instead, a clearer understanding of violent crime patterns in aboriginal communities emerges with a detailed examination of certain aspects of those general factors.

## QUOTATION

I don't know nothin', but I *suspect* a lot of things

— Junior Samples

## ACKNOWLEDGMENTS

The completion of this dissertation would not have been possible without the support and guidance I received during its creation. I am thankful for the help I received and for the friends I made along the way.

Utmost thanks go to the members of my supervisory committee. First, I would like to thank Bill Glackman, my senior supervisor, for his patience and for pulling me through the latter stages of the process. He taught me some very important lessons which I won't soon forget. There is not sufficient space here for me to express my gratitude to Curt Griffiths for all he gave me, so I will just say thank you for taking me under your wing and for providing me with numerous opportunities to grow as a scholar. I would also like to thank to Ray Corrado for his valuable comments and for helping me to see the 'big picture' in my research. I am also grateful to David Blurton from the University of Alaska Fairbanks and to Doug Cousineau from the School of Criminology at SFU for giving me their time and their insights as members of my examining committee.

There were many people that were most helpful in allowing me access to specific data sources used in this dissertation. Jim Sturrock, Robert Allen, and, most importantly, Gordon MacKay of the Canadian Centre for Justice Statistics, David Stewart of the Bureau of Statistics, Government of the Northwest Territories, Ron Courtoreille from the Northwest Territorial Liquor Commission, and, especially, Barrie Stanton, formerly of the Department of Social Services, Government of the Northwest Territories. My field research in the eastern arctic would have been much less productive without the help of the members of "G" Division of the RCMP. I would like to give special thanks to RCMP members Chris Bergman, Tim MacArthur, Tom Milne, Lou Philip, Roger Piper, Dean Taylor, and Vern White for their assistance and their insights.

I would also like say thank you for the support I received from those individuals that became very important to me during my time at SFU. In particular, thanks must go out to John Lowman and Paul Brantingham for steering me in the right direction, to Donna Robertson for going beyond the call of duty for me, to Rob and Ev and Dave and Laura Adamoski for making me feel at home in the big city, and to Greg Saville for broadening my horizons. I would also like to give special thanks to my research accomplice Evelyn 'Thelma' Zellerer. I grew a lot as a

person because of her. Finally, I would like to express my utmost gratitude to Al and Darlene Pateñaude. This research would not have been possible without Al's early efforts and without the hospitality his family provided me in and out of the north.

This research was supported by grant # 411-90-0014 from the Social Sciences and Humanities Research Council of Canada and by grant # 19081-2-C165-01-1 from Justice Canada. All content within remains the responsibility of the author.

# TABLE OF CONTENTS

<b>APPROVAL</b> .....	<b>ii</b>
<b>ABSTRACT</b> .....	<b>iii</b>
<b>QUOTATION</b> .....	<b>iv</b>
<b>ACKNOWLEDGMENTS</b> .....	<b>v</b>
<b>TABLE OF CONTENTS</b> .....	<b>vii</b>
<b>LIST OF TABLES</b> .....	<b>x</b>
<b>LIST OF FIGURES</b> .....	<b>xiii</b>
<b>CHAPTER 1: INTRODUCTION</b> .....	<b>1</b>
STRUCTURE OF THE DISSERTATION.....	2
<b>CHAPTER 2: POPULATION, HISTORY, AND CRIME IN THE BAFFIN</b> .....	<b>4</b>
INUIT AND THEIR LAND.....	5
A BRIEF HISTORY OF BAFFIN REGION COMMUNITIES.....	8
PATTERNS OF VIOLENT CRIME IN BAFFIN REGION COMMUNITIES.....	11
<i>Levels of Crime in the Baffin Region</i> .....	13
<i>The Focus on Crimes of Violence</i> .....	17
<i>Variations in Community-level Patterns of Violent Crime</i> .....	20
SUMMARY.....	23
<b>CHAPTER 3: PRIOR EXPLANATIONS OF VIOLENT CRIME IN NATIVE COMMUNITIES</b> .....	<b>25</b>
COLONIZATION AND CRIME.....	25
ALCOHOL AND CRIME AMONG NATIVE PEOPLES.....	28
<i>Prevalence of Alcohol Use</i> .....	29
<i>Alcohol Use and Criminal Justice System Contact</i> .....	31
<i>The Alcohol Violent Crime Relationship</i> .....	34
Biological Explanations.....	34
Social Explanations.....	36
Bio-Social Explanations.....	40
SUMMARY.....	41



<b>CHAPTER 4: DATA SOURCES AND ANALYTICAL TECHNIQUES .....</b>	<b>43</b>
DATA SOURCES .....	43
<i>Qualitative Data Sources</i> .....	44
Face-to-Face Interviews .....	44
Field Notes .....	46
<i>Quantitative Data Sources</i> .....	47
Violent Crime Rate Data .....	47
RCMP Operational File Records .....	50
Community Characteristic Measures .....	51
DATA ANALYSIS FOR SMALL SAMPLE SIZES .....	52
<i>Nonparametric Statistics and Exact Tests for Bivariate Analysis</i> .....	54
<i>Pooled Time-Series Analysis of Multivariate Data</i> .....	55
SUMMARY .....	56
<b>CHAPTER 5: COLONIZATION AND VIOLENT CRIME .....</b>	<b>57</b>
SOCIO-ECONOMIC UNDERDEVELOPMENT .....	59
<i>Variables and Hypotheses</i> .....	60
<i>Analysis and Results</i> .....	64
COMMUNITY RELOCATION .....	69
<i>Variables and Hypotheses</i> .....	72
<i>Analysis and Results</i> .....	73
EXTERNAL MARKET FORCES .....	77
<i>Variables and Hypotheses</i> .....	79
<i>Analysis and Results</i> .....	81
SUMMARY .....	86
<b>CHAPTER 6: ALCOHOL AND VIOLENT CRIME IN THE BAFFIN REGION .....</b>	<b>88</b>
CONCERN ABOUT ALCOHOL ABUSE IN THE BAFFIN REGION .....	88
INDICATORS OF ALCOHOL USE IN THE BAFFIN REGION .....	93
<i>Prevalence of Alcohol Use</i> .....	93
<i>Levels of Alcohol Consumption</i> .....	95
LOCAL ALCOHOL CONTROL LEGISLATION AND VIOLENT CRIME .....	104
<i>Types of Local Alcohol Controls</i> .....	104
<i>Violent Crime in 'Wet' and 'Dry' Communities</i> .....	107
ALCOHOL USE AND VIOLENT CRIME .....	110
<i>Prevalence of Alcohol Use and Violent Crime</i> .....	112

<i>Per Capita Consumption of Alcohol and Violent Crime</i> .....	114
<b>MODELS OF DRUNKEN BEHAVIOR AND VIOLENT CRIME</b> .....	120
<i>Drinking Models of the Baffin Region Inuit</i> .....	121
<i>Violent Crime in Transient and Non-Transient Communities</i> .....	124
<b>SUMMARY</b> .....	130
<b>CHAPTER 7: DISCUSSION</b> .....	132
UNIQUE FEATURES OF THE STUDY.....	132
THE FOCUS ON VIOLENT CRIME.....	133
THEORETICAL PERSPECTIVE AND OVERVIEW OF FINDINGS.....	135
<i>Colonization</i> .....	135
<i>Alcohol Use</i> .....	137
CONCEPTUAL/THEORETICAL IMPLICATIONS OF THE STUDY.....	138
<i>"Colonization"</i> .....	139
<i>Alcohol Use</i> .....	140
POLICY/PROGRAM IMPLICATIONS.....	140
<b>WORKS CITED</b> .....	143
<b>APPENDIX A: INTERVIEW SCHEDULES</b> .....	156
INTERVIEW SCHEDULE FOR BAFFIN REGION COMMUNITY RESIDENTS.....	157
INTERVIEW SCHEDULE FOR RCMP OFFICERS CURRENTLY SERVING.....	160
<b>APPENDIX B: SAMPLE SCREENS FROM RCMP OCCURRENCE REPORTS DATABASE</b> .....	163
<b>APPENDIX C: LETTERS OF ETHICS APPROVAL AND UNIVERSITY SUPPORT FOR BAFFIN REGION CRIME AND JUSTICE STUDY</b> .....	166
<b>APPENDIX D: SAMPLE LIQUOR COMMISSION MAIL ORDER INVOICE</b> .....	169
<b>APPENDIX E: SAMPLE LOCAL OPTION LIQUOR PLEBISCITE BALLOT</b> .....	171

## LIST OF TABLES

TABLE 1: CRIME RATES PER 1,000 POPULATION, CANADA, NWT, AND BAFFIN REGION, 1992.....	13
TABLE 2: VIOLENT CRIME RATES PER 1,000 POPULATION FOR SELECTED ABORIGINAL COMMUNITIES AND POPULATIONS.....	16
TABLE 3: PERCEPTIONS OF FAMILY VIOLENCE AND SEXUAL ABUSE IN BAFFIN REGION COMMUNITIES, 1991.....	20
TABLE 4: VIOLENT CRIME RATES PER 1,000 POPULATION, TOTAL POPULATION, AND NUMBER OF VIOLENT OFFENCES, BAFFIN REGION COMMUNITIES, BY COMMUNITY POPULATION GROUP, 1992.....	21
TABLE 5: ALCOHOL USE PREVALENCE AMONG DIFFERENT ABORIGINAL CULTURAL GROUPS AS REPORTED IN ETHNOGRAPHIC STUDIES.....	30
TABLE 6: ALCOHOL USE PREVALENCE AMONG DIFFERENT ABORIGINAL CULTURAL GROUPS AS REPORTED IN SURVEYS ON ALCOHOL USE.....	31
TABLE 7: EMPLOYMENT, EDUCATION, HOUSING CONDITIONS, AND INCOME, BAFFIN REGION COMMUNITIES AND CANADA, 1991.....	61
TABLE 8: DESCRIPTIVE STATISTICS FOR ALL VARIABLES USED IN THE ANALYSIS OF OUTCOMES OF COLONIZATION UPON VIOLENT CRIME, BAFFIN REGION COMMUNITIES, 1981, 1986, AND 1991 (N = 34).....	65
TABLE 9: ZERO-ORDER CORRELATION COEFFICIENTS FOR ALL VARIABLES USED IN THE ANALYSIS OF OUTCOMES OF COLONIZATION UPON VIOLENT CRIME, BAFFIN REGION COMMUNITIES, 1981, 1986, AND 1991 (N = 34).....	67
TABLE 10: LEAST SQUARES REGRESSION ESTIMATES OF EFFECTS OF ALL VARIABLES USED IN THE ANALYSIS OF OUTCOMES OF COLONIZATION UPON VIOLENT CRIME, BAFFIN REGION COMMUNITIES, 1981, 1986, AND 1991 (N = 34).....	68
TABLE 11: METHODS OF COMMUNITY SETTLEMENT, BAFFIN REGION, NWT COMMUNITIES.....	71
TABLE 12: MEAN RANK OF RCMP VIOLENT CRIME RATES BY COMMUNITY SETTLEMENT METHOD, BAFFIN REGION, NWT, 1981-1993.....	75
TABLE 13: MEAN RANK OF RCMP VIOLENT CRIME RATES BY COMMUNITY SETTLEMENT TYPE (NON-RELOCATED VS. RELOCATED), BAFFIN REGION, NWT, 1981-1993.....	76
TABLE 14: VIOLENT CRIME RATE (CCJS DATA) AND SALES OF FURS, 12 BAFFIN REGION, N.W.T. COMMUNITIES, 1980, 1982, 1984, AND 1987.....	78
TABLE 15: COMPARISON OF FUR SALES, BAFFIN REGION COMMUNITIES, 1980 AND 1987.....	81
TABLE 16: RANK-ORDER (SPEARMAN) CORRELATIONS BETWEEN VIOLENT CRIME MEASURES AND LOSS OF FUR SALES MEASURES, 10 BAFFIN REGION COMMUNITIES.*.....	82
TABLE 17: CROSSTABULATION OF COMMUNITIES ABOVE AND BELOW MEDIAN VALUE OF PERCENT CHANGE IN VIOLENT CRIME RATE BY COMMUNITIES ABOVE AND BELOW MEDIAN VALUE IN DOLLARS DECREASE IN PERCAPITA SALES OF FUR, BAFFIN REGION COMMUNITIES.....	83

TABLE 18: CROSSTABULATION OF COMMUNITIES ABOVE AND BELOW MEDIAN VALUE OF PERCENT CHANGE IN VIOLENT CRIME RATE BY COMMUNITIES ABOVE AND BELOW MEDIAN VALUE IN PERCENT DECREASE IN PERCAPITA SALES OF FUR, BAFFIN REGION COMMUNITIES.....	84
TABLE 19: CROSSTABULATION OF COMMUNITIES ABOVE AND BELOW MEDIAN VALUE OF 1987 VIOLENT CRIME RATE BY COMMUNITIES ABOVE AND BELOW MEDIAN VALUE IN PERCENT DECREASE IN PER CAPITA SALES OF FUR, BAFFIN REGION COMMUNITIES.....	84
TABLE 20: CROSSTABULATION OF COMMUNITIES ABOVE AND BELOW MEDIAN VALUE OF 1987 VIOLENT CRIME RATE BY COMMUNITIES ABOVE AND BELOW MEDIAN VALUE IN DOLLAR DECREASE IN PERCAPITA SALES OF FUR, BAFFIN REGION COMMUNITIES.....	84
TABLE 21: ADULT PERCEPTIONS OF EXTENT OF ALCOHOL ABUSE, INUIT IN BAFFIN REGION COMMUNITIES, AND NATIVE PEOPLES IN THE NWT AND CANADA, 1991.....	91
TABLE 22: SUSPECT AND VICTIM ALCOHOL USE IN VIOLENT OFFENCES, BAFFIN REGION COMMUNITIES, 1991.....	92
TABLE 23: VICTIM / OFFENDER RELATIONSHIP AND ALCOHOL USE BY OFFENDER, VIOLENT CRIMES, BAFFIN REGION, 1991.....	92
TABLE 24: PREVALENCE OF SELF-REPORTED ADULT ALCOHOL USE, INUIT IN BAFFIN REGION COMMUNITIES, AND NATIVE PEOPLES IN THE NWT AND CANADA, 1991.....	94
TABLE 25: VOLUME OF ABSOLUTE ALCOHOL PER CAPITA (AGES 15 AND UP) PURCHASED, INUIT AND NON-INUIT RESIDENTS, NINE 'WET' BAFFIN REGION COMMUNITIES, THE NWT, AND CANADA, 1991.....	101
TABLE 26: VOLUME OF ABSOLUTE ALCOHOL PER CAPITA (AGES 15 AND UP) PURCHASED, INUIT RESIDENTS ONLY, NINE 'WET' BAFFIN REGION COMMUNITIES, 1991.....	101
TABLE 27: VOLUME OF ABSOLUTE ALCOHOL PER CAPITA (AGES 15 AND UP) PURCHASED, NON-INUIT RESIDENTS ONLY, NINE 'WET' BAFFIN REGION COMMUNITIES, 1991.....	102
TABLE 28: TYPES OF LOCAL OPTION ALCOHOL CONTROLS, BAFFIN REGION COMMUNITIES, 1991.....	106
TABLE 29: MEAN RANK OF RCMP VIOLENT CRIME RATES (3 YEAR RUNNING AVERAGE RATE) BY COMMUNITY ALCOHOL REGULATION TYPE, BAFFIN REGION; NWT, 1985-1992.....	109
TABLE 30: PROPORTION OF DRY COMMUNITIES BELOW THE MEDIAN RCMP VIOLENT CRIME RATE (3 YEAR RUNNING AVERAGE RATE), 1985-1992. ALL BAFFIN REGION COMMUNITIES.....	110
TABLE 31: RANK-ORDER (SPEARMAN) CORRELATIONS BETWEEN THE 1990-92 RCMP VIOLENT CRIME RATE AND 1991 PREVALENCE OF ALCOHOL USE MEASURE, 'WET' AND 'DRY' BAFFIN REGION COMMUNITIES.....	112
TABLE 32: MEAN RANK OF 1990-92 RCMP VIOLENT CRIME RATE FOR COMMUNITIES ABOVE AND BELOW THE MEDIAN ON 1991 PREVALENCY OF ALCOHOL USE MEASURES, 'WET' AND 'DRY' BAFFIN REGION COMMUNITIES.....	113
TABLE 33: PROPORTION OF COMMUNITIES ABOVE THE MEDIAN VALUES FOR THE 1990-92 RCMP VIOLENT CRIME RATE AND THE 1991 PREVALENCE OF ALCOHOL USE MEASURES, 'WET' AND 'DRY' BAFFIN REGION COMMUNITIES.....	114

TABLE 34: RANK-ORDER (SPEARMAN) CORRELATIONS BETWEEN THE 1990-92 RCMP VIOLENT CRIME RATE AND 1991 ABSOLUTE ALCOHOL CONSUMPTION MEASURES, 'WET' BAFFIN REGION COMMUNITIES.....	116
TABLE 35: MEAN RANK OF 1990-92 RCMP VIOLENT CRIME RATE FOR COMMUNITIES ABOVE AND BELOW THE MEDIAN ON 1991 ABSOLUTE ALCOHOL CONSUMPTION MEASURES, 'WET' BAFFIN REGION COMMUNITIES. . .	117
TABLE 36: PROPORTION OF COMMUNITIES ABOVE THE MEDIAN VALUES FOR THE 1990-92 RCMP VIOLENT CRIME RATE AND THE ABOVE THE 1991 ABSOLUTE ALCOHOL CONSUMPTION MEASURES, 'WET' BAFFIN REGION COMMUNITIES. ....	119
TABLE 37: COMPARISON OF TRANSIENT COMMUNITIES AND NON-TRANSIENT COMMUNITIES ON VIOLENT CRIME AND ALCOHOL CONSUMPTION, 1991.....	128
TABLE 38: MEAN RANK OF RCMP VIOLENT CRIME RATES (3 YEAR RUNNING AVERAGE RATE) FOR TRANSIENT COMMUNITIES AND NON-TRANSIENT COMMUNITIES, BAFFIN REGION, NWT, 1985-1992.....	129



## LIST OF FIGURES

FIGURE 1: A MAP OF THE COMMUNITIES OF THE BAFFIN REGION, NWT, CANADA.....	6
FIGURE 2: POPULATION STRUCTURE BY AGE, BAFFIN REGION, NWT, AND CANADA, 1991.....	7
FIGURE 3: BAFFIN REGION TOTAL POPULATION, 1976 TO 1991, PROJECTED TO 2001.....	7
FIGURE 4: VIOLENT CRIME RATE, CANADA, NWT, AND BAFFIN REGION, 1977 TO 1992.....	15
FIGURE 5: PROPERTY CRIME RATE, CANADA, NWT, AND BAFFIN REGION, 1977 TO 1992.....	15
FIGURE 6: VIOLENT CRIME RATE, FOUR MOST POPULOUS BAFFIN REGION COMMUNITIES, 1981-1993.....	22
FIGURE 7: VIOLENT CRIME RATE, FOUR MIDDLE SIZE BAFFIN REGION COMMUNITIES, 1981-1993.....	23
FIGURE 8: VIOLENT CRIME RATE, FOUR SMALLEST BAFFIN REGION COMMUNITIES, 1981-1993.....	23
FIGURE 9: MEAN RANK OF RCMP VIOLENT CRIME RATES BY COMMUNITY SETTLEMENT METHOD, BAFFIN REGION, NWT, 1981-1993.....	74
FIGURE 10: MEAN RANK OF RCMP VIOLENT CRIME RATES FOR RELOCATED AND NON-RELOCATED COMMUNITIES, BAFFIN REGION, NWT, 1981-1993.....	77
FIGURE 11: VIOLENT CRIME RATES FOR 'WET' COMMUNITIES AND 'DRY' COMMUNITIES, BAFFIN REGION, 1981-1993.....	108
FIGURE 12: RANK OF RCMP VIOLENT CRIME RATES, TRANSIENT AND NON-TRANSIENT 'WET' BAFFIN REGION COMMUNITIES, 1985-1992.....	129

## CHAPTER 1: INTRODUCTION

After hearing stories about the especially high prevalence of violence in native communities such as Davis Inlet, Newfoundland or Hobbema, Alberta, one might be tempted to think that violence is prevalent in all native communities. However, an examination of violent crime statistics shows that there is a good deal of diversity in terms of the amount of violent crime in native communities. While there are native communities that are especially violent places, many others are no more violent than a "typical" non-native community. It is this variation in levels of violence in native communities that is of interest in this study. Instead of asking "What makes native communities like Davis Inlet so violent?" the more interesting question is "Why is it that only some native communities are as violent as Davis Inlet?"

By focusing upon the Inuit communities of the Baffin Region, Northwest Territories (NWT), this study attempted to arrive at an understanding of why some native communities have more crime than others by examining variations in community characteristics that might possibly be viewed as being associated with variations in violent crime. Two perspectives previously used to explain violent crime in native communities, the view that violent crime is related to alcohol use and the view that violent crime is the result of the colonization process, were considered in this study. Different hypotheses developed from those viewpoints on violent crime in native communities were examined using a variety of data sources to determine the extent to which variations in certain community characteristics corresponded with variations in violent crime rates in the Baffin Region.

As a "research site" the Baffin Region is a unique locale that is especially well suited for an analysis of inter-community violent crime rate variations among native peoples. Isolated in the eastern Canadian arctic, the Baffin Region includes 13 widely scattered communities that are largely populated by Inuit. Its isolation, the distances between communities, the existence of multiple communities, and the fact that the area is inhabited only by a single cultural group creates a particular context unlike that used in prior research on violent crime in native communities.

## **STRUCTURE OF THE DISSERTATION**

This dissertation can be broken down into two main parts. The first part of this study in Chapters 2, 3, and 4, lays the groundwork for the remainder of the study. Then, in Chapters 5, 6, and 7, the community characteristics thought to be associated with violent crime in the Baffin Region are examined.

Chapter 2 serves two of purposes. It provides the reader with an introduction to the people, the land, and the culture of the region thereby providing a better understanding of the historic, geographic, and cultural context of the study. It also considers statistics on violent crime in the Baffin Region, giving the reader an understanding of the extent of the violent crime problem in the Baffin Region and the degree to which communities vary in their violent crime rates. As will be seen, some communities in the Baffin Region are much more violent than others.

The research literature concerning the two main perspectives predominantly used to explain violent crime in native communities is considered in Chapter 3. That chapter first reviews studies that have attempted to account for the high rates of violent crime sometimes found in native communities by pointing to the process of colonization and to the neo-colonial relationship that is said to exist between native peoples and the larger political economy. The studies on the possible impact that the use of alcoholic beverages has had on violent crime among native peoples are also considered. A number of different hypotheses suggested in the prior research literature were of use in attempting to find community characteristics that might have been associated with community violent crime rates.

A description of the data sources and analytical techniques used in this study is provided in Chapter 4. Consideration is given in that chapter to the community-level measures of violent crime and to the primary and secondary data sources that provided measures of community characteristics used in the analyses that followed in the next two chapters.

In Chapter 5 the relationships between violent crime and three different factors said to result from the colonization process are examined. The possible associations between socio-economic underdevelopment, community relocation, and the effects of external market forces at the community-level, with violent crime are each considered. By looking at these



factors it is possible to explore the extent to which the colonization process might have had a differential impact upon Baffin Region communities.

The relationship between violent crime and alcohol is considered in Chapter 6. The possible effects of community local option ordinances that prohibit the importation and possession of alcohol upon violent crime are first examined. Then the association thought to exist between the quantities of alcohol consumed in a community and the violent crime rate is considered. Finally, the potential impact that different models of drunken behavior might have had upon differences in violent crime in Baffin Region communities is examined.

Chapter 7 serves to summarize and provide highlights of the findings. It concludes with a discussion of the potential theoretical and policy implications of the study findings.

## **CHAPTER 2: POPULATION, HISTORY, AND CRIME IN THE BAFFIN**

Before it is possible to begin laying a foundation for examining violent crime in the Baffin, it is necessary to introduce the people, the land, and the culture of the region. To understand where the Inuit are today requires an understanding where they have been. The first two sections of this chapter briefly introduce the reader to the demography and history of the people of the Baffin Region. This allows violent crime in the region to be placed into its proper geographic and historical context in the final section. The last section describes characteristics of violent crime in the Baffin Region.

Although the Baffin Region Inuit have a culture and a history that are as unique to their isolated arctic homeland, the patterns of crime found in the region are not atypical of those found among native peoples across the North America. As in other aboriginal regions, the communities of the Baffin Region generally have violent crime rates that are often several times higher than those found elsewhere in Canada. Crime reports from the Canadian Centre for Justice Statistics (CCJS) show that the Baffin Region has rates of reported violent crime that are among the highest in Canada.

CCJS figures also indicate that the property crime rates in the Baffin Region are about 40 percent higher than those found for the country as a whole. But concern about crime in the Baffin Region is almost exclusively focused upon crimes of violence. This may be because the property crimes in the region are relatively minor and appear to not have commanded much attention within the community or the criminal justice system.

Another characteristic of crime found in the Baffin Region, also common in other aboriginal regions, is notable variability in crime rates between communities. According to crime figures published by the CCJS, some communities in the Baffin Region have rates of violent crime that are similar to national rates, while other communities have rates 10 to 15 times greater.

Each of these phenomena are described in the latter half of this chapter. Three main points will be established there: (1) that the amount of violent and property crime in Baffin Region communities appears to be quite large and should cause concern, (2) that crimes of violence rather than property crimes are the offences that are most in need of examination in

Baffin Region communities, and (3) that there is indeed variation between Baffin Region communities in terms of their rates of reported crime.

## **INUIT AND THEIR LAND**

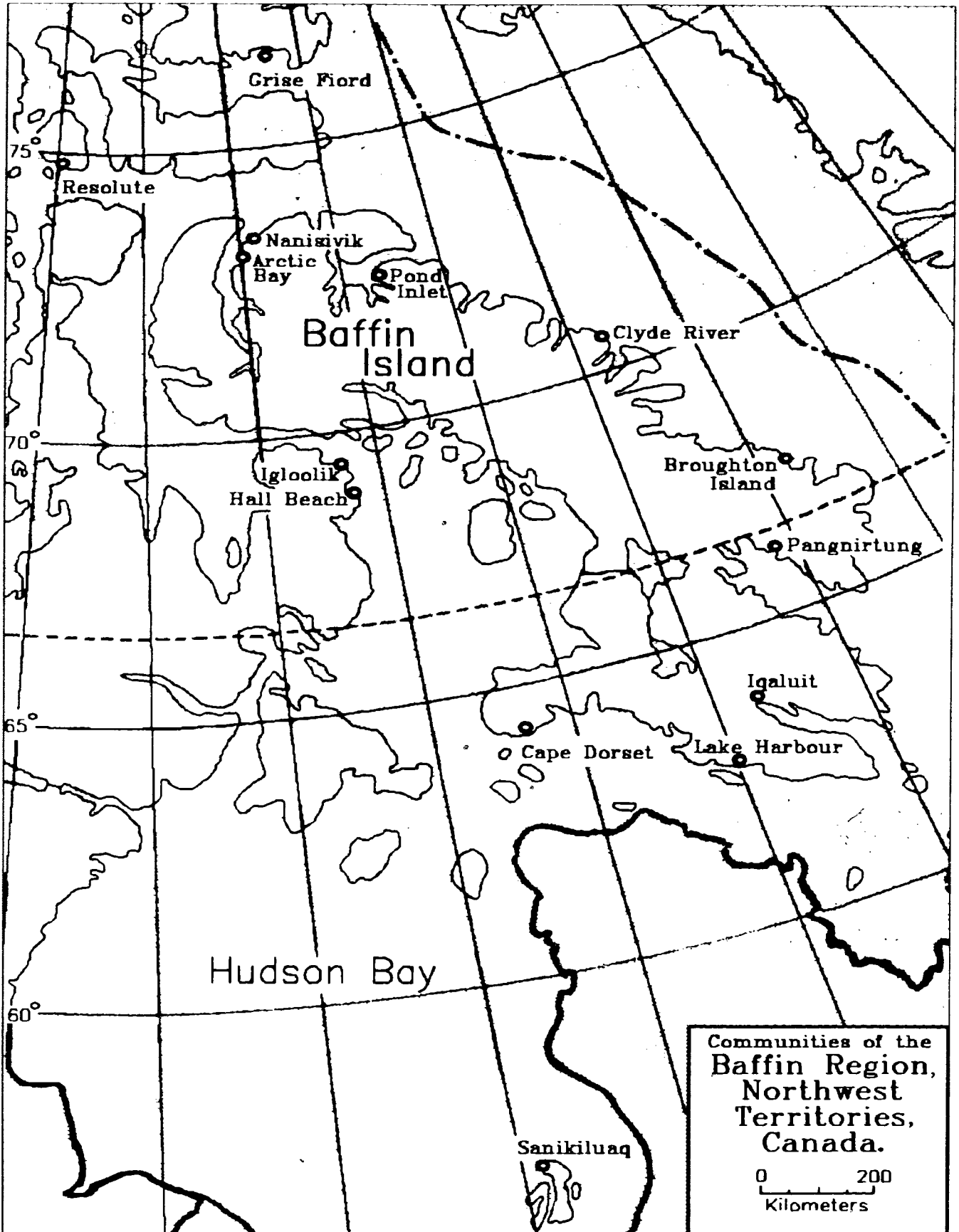
The Baffin Region is comprised of 13 communities, ranging in population from 130 to 3,500 (Statistics Canada, 1992). These communities (Arctic Bay/Nanisivik,<sup>1</sup> Broughton Island, Cape Dorset, Clyde River, Grise Fiord, Hall Beach, Igloolik, Iqaluit, Lake Harbour, Pangnirtung, Pond Inlet, Resolute Bay, and Sanikiluaq) are shown in Figure 1. Five of the communities (Cape Dorset, Igloolik, Iqaluit, Pangnirtung, and Pond Inlet) had populations of over 1,000 residents. As is the case with other NWT communities, Baffin Region communities are accessible only by air, or, for a few weeks in late summer, by sea. The Baffin Region, like other remote and northern regions of the country, is generally invisible to the majority of Canadians who reside in southern urban areas. Few have had the opportunity to travel to the northern-most regions of their own province, and even fewer have gone north of 60°. This distance has tended to obscure the problems which afflict many northern settlements.

The Baffin Region population is young, rapidly growing, and primarily Inuit. Figure 2 reveals that the population of the Baffin Region is much younger than that of the rest of Canada. As of the 1991 National Census, 47 percent of the residents in the Baffin Region were under the age of 19, compared to 28 percent of the population for the rest of Canada (Statistics Canada, 1992).

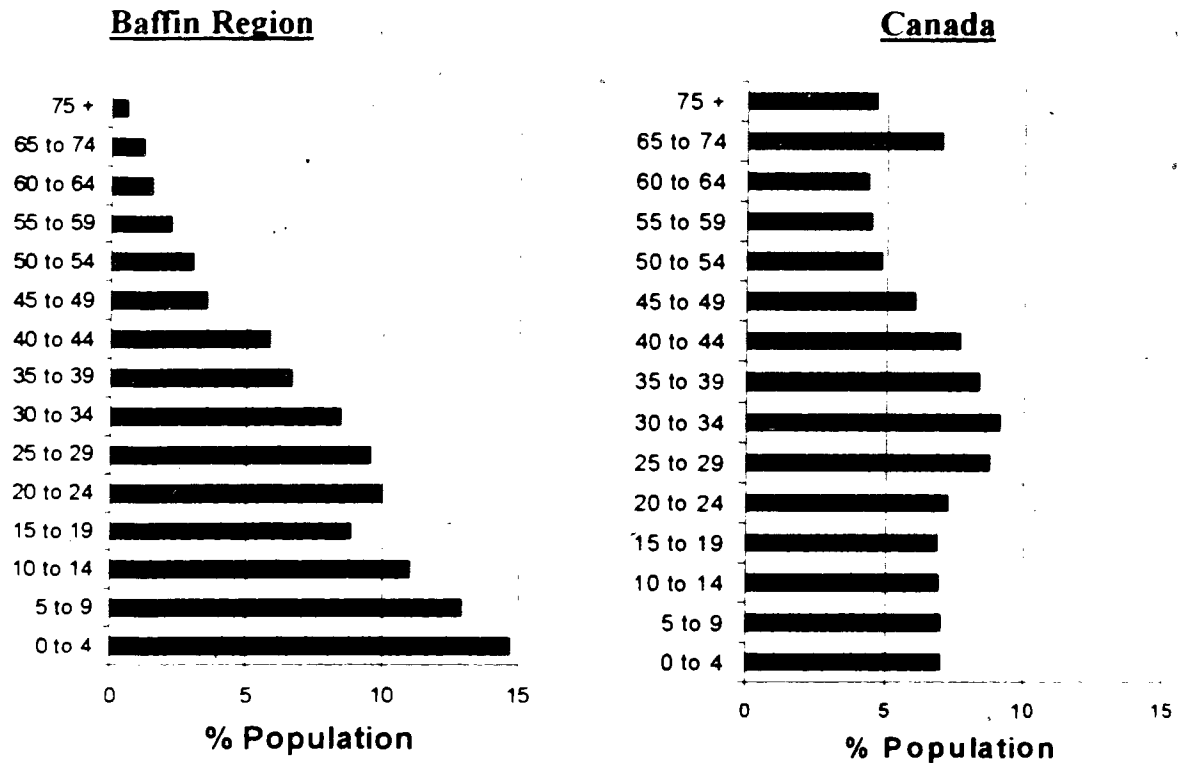
---

<sup>1</sup> Although they are separated by 10 kilometres (via the longest stretch of road in the region) Arctic Bay and Nanisivik are essentially a single community and are treated as such throughout this study. Both locales are policed from a single RCMP detachment in Nanisivik, and the available crime data does not distinguish between the two communities. Any references made to Nanisivik should be read as "Nanisivik and Arctic Bay."

Figure 1: A Map of the Communities of the Baffin Region, NWT, Canada.

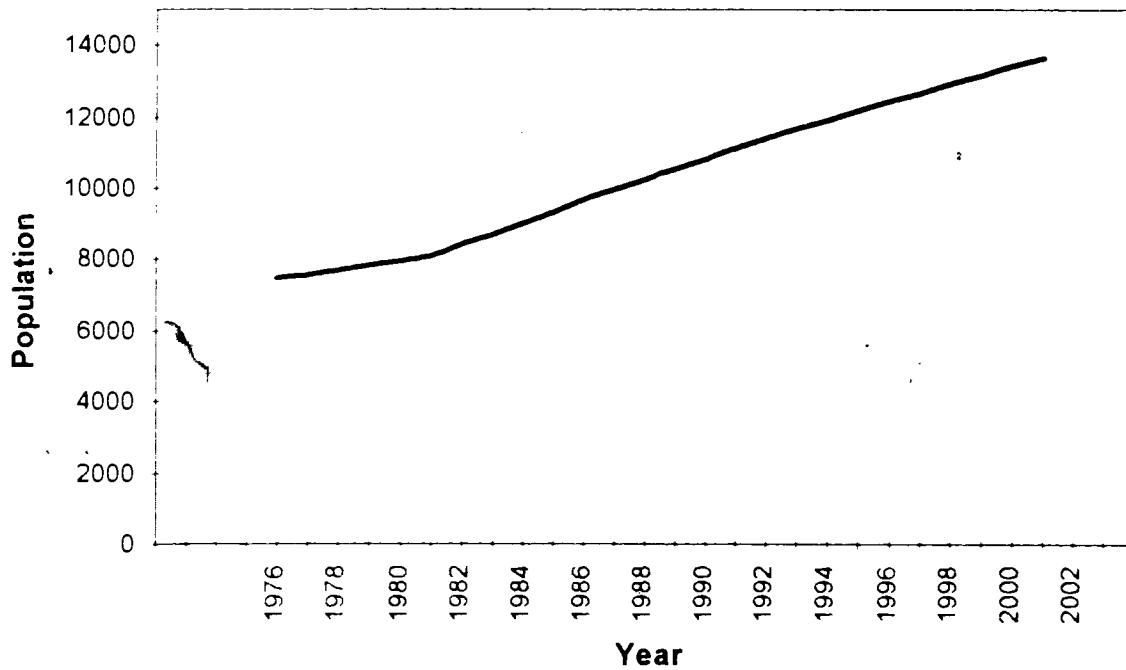


**Figure 2: Population Structure by Age, Baffin Region, NWT, and Canada, 1991.**



Source: Statistics Canada, 1992.

**Figure 3: Baffin Region Total Population, 1976 to 1991, Projected to 2001.**



Source: Projections from 1991 to 2001 derived from population growth projections made by Hagey Larocque & McBride (1989) using procedures outlined by Rives & Serwo (1984)

Accompanying the young population in the Baffin Region is a rapid population growth rate. In Figure 3, the increase in the Baffin Region population from 1976 to 1991, with estimates to the year 2001, is presented. Between 1976 and 1991 the population in the region grew at an annual rate of 3.28 percent. The annual population growth rate in the Baffin Region, largely the result of high birth rates common to Inuit of the eastern arctic (Nunavut Implementation Commission, 1995), is much higher than the national annual population growth rate of 1.09 percent. It is even higher than the annual population growth rates of places with reputations for high population growth such as Mexico (1.90 percent per year), Bangladesh (2.32 percent per year), or Sierra Leone (2.63 percent per year) (Central Intelligence Agency, 1996). At present growth rates, the population of the Baffin Region will double by the year 2017 (and then every 21 years after that).

Most of the people that live in the Baffin Region are Inuit. According to census figures from 1991, 81 percent of the Baffin Region population is of Inuit ethnic heritage (Statistics Canada, 1992). Ten of the Baffin Region communities are at least 90 percent Inuit. Nanisivik, where a nickel and zinc mine is located, is the only community in the region where Inuit are not the majority (Statistics Canada, 1992).

## **A BRIEF HISTORY OF BAFFIN REGION COMMUNITIES**

In earlier times, before the mid-to-late 1950s, Inuit lived in what has been characterized as "a small-scale society whose members, living together in camps that changed in size and location in accordance with the rhythm of the seasons, strongly depended on each other for their survival and well-being" (Rasing, 1994, p. 25). Nearly every aspect of social life among the Inuit was geared toward survival. All individuals performed tasks which ensured the survival of the larger social group and its individual members. These tasks were allocated by age and gender. As Rasing notes:

Adult males had to hunt, the adult females were to take care of the household. The skills involved in these activities were taught when children were at a young age. Girls were expected to assist their mothers. The boys, from about age eight, were taken by their fathers on hunting excursions (1994, p. 20).

No single development had a greater impact on the Inuit of the Baffin Region than their transformation from a subsistence culture, based on the land, to a permanent settlement culture,

subsisting upon imported foods purchased with funds distributed as government transfer payments. Until the late 1950s, most Inuit lived a nomadic hunting/gathering existence on the land. Life revolved around the seasons, the land, and the animals. The change from a culture focused on a nomadic existence to the sedentary life in permanent settlements has had fundamental consequences for the culture and the people. In the words of one Inuit resident interviewed for the Baffin Region Crime and Justice Study:

I have two different lifestyles: the way it was and the way we are now, the white man's way of life. The way the white man lives has not changed much in a short period of time, but the Inuit way of life has changed very rapidly and changed in a way that is so much that it seems like it's been hundreds of years. There's been so much change.<sup>2</sup>

While life on the land had been harsh and unforgiving, life in permanent settlements has been devastating, and the aftershocks are still being felt by the communities and their residents. It is often said that the Inuit went from the stone age to the space age in period of only 40 years. As one resource worker in the Baffin Region said, "They stepped right out of igloos and right into rocket ships."<sup>3</sup>

In many ways, Canada's Inuit have adjusted to the technological and lifestyle changes thrust upon them. New methods of traveling by motorized snowmachine and boat, hunting with scoped high-powered rifles, and caching food in refrigerated storage lockers have all been incorporated into the lifestyle of Inuit. Inuit communities of the Baffin Region are now linked by, and rely heavily upon, communication by telephone, fax, and video conference. Via satellite, community cable companies distribute the latest news, sports, and entertainment from the urban centres of Toronto, Vancouver, and Detroit.

---

<sup>2</sup> This quotation, along with others used in this chapter, is from an interview done for the Baffin Region Crime and Justice Study. Those interviews were conducted based upon promises of anonymity for the respondents. Throughout this study these quotations are included without stating the name of the individual source. All quotations without a source were taken from those field interviews. A full discussion and justification of the use of these interview materials is in the section on "face-to-face" interviews in Chapter 4.

<sup>3</sup> This is not as much of an overstatement of the changes Inuit have faced in the past 40 years as it might appear to be at first glance. According to the RCMP Iqaluit Sub/Division Staff Sergeant, the airport runway at Iqaluit is listed as 4th in line for a US Space Shuttle landing (after Kennedy Space Center in Florida, Edwards Air Force Base in California, and Holloman Air Force Base in New Mexico). A plaque and thank you letter from the NASA Space Shuttle program thanking the Iqaluit RCMP for their aid and support is proudly displayed in the canteen of the Iqaluit Sub/Division Headquarters.

Even though the Inuit have moved from a life dictated by the harsh arctic environment to a life in permanent settlements that provides them with a measure of control over their environment, there are remnants of the nomadic culture. *Inuktitut*, the Inuit language, is the primary language of the community schools in grades one through three and is spoken among community residents with pride. Hunting and fishing are still a source of sustenance for some Inuit families. Time spent on the land with family and friends, away from the settlements, is now cherished. Indeed, these remaining facets of nomadic culture serve to distinguish life among the Inuit from that in white or First Nations communities in the south.

With the increase in the *material* standard of living brought to the Inuit by westernization has come an increased dependency of the Inuit on the government. Government agencies have replaced communities and families as providers of services and Inuit communities have become dependent upon outside government for education, medical care, criminal justice and social services. Shamanism has been largely eradicated, the extended family groupings have been replaced by nuclear families, modern schools have replaced the oral and demonstrative traditions of teaching the young, and the elders in many communities no longer play a role in community life. All told, the past 40 years has seen the displacement of Inuit culture by that of the *Qallunaat* (white Europeans) — it is understandable that the Inuit have had considerable difficulty in adapting to this new culture. In the words of one Inuit resident interviewed for the Baffin Region Crime and Justice Study:

The people have come from a very self-reliant existence into one that is a welfare state run by the government. A lot of people have lost their sense of purpose and sense of values and that has taken a drastic toll on families and on the community.

An RCMP officer posted to the Baffin Region in the 1960s, in an interview conducted for the Baffin Region Crime and Justice Study in 1991, noted that the move to permanent settlements marked the beginning of intervention by outside justice and social service agencies into all facets of Inuit life.

All of a sudden there were 500 people living in a community. They have never had the social skills to deal with each other on the basis of a group of 500. So, now you have to bring in the white man's social skills - which means the social worker, the clergy, the justice system, more policemen, jail cells in each community.



Today, the Inuit of the Baffin Region are faced with many challenges, including the fastest growing population of any group in the country (largely the result of very high birth rates), the lack of an economic base in many of the communities and the dilemma of how to retain traditions while adjusting to the social, political and economic changes which are occurring all around them. A particularly critical challenge, in fact something that greatly hinders the possibility of positive change in the Baffin Region, is dealing with the widespread presence of violent behavior. As is shown in the remainder of this chapter, some Baffin Region communities are among the most violent places in Canada.

### **PATTERNS OF VIOLENT CRIME IN BAFFIN REGION COMMUNITIES**

It is necessary to establish that there are measurable differences in the relative amount of violent crime found in Baffin Region communities before it is possible to consider the community characteristics that might be associated with those differences. In this section those differences are examined. Two different issues are addressed before the presence of inter-community violent crime rate variations is established. First, some justification for why explanations of the patterns of crime in Baffin Region communities should be sought is provided. Comparisons of Baffin Region crime rates with those of other aboriginal and non-aboriginal jurisdictions, the viewpoints of individuals interviewed for the Baffin Region Crime and Justice Study, and the perceptions of community residents as recorded by the Aboriginal Peoples Survey (Statistics Canada, 1993a) all seem to suggest that crime problems in the Baffin Region are acute and therefore need to be researched. Second, it is necessary to provide a rationale for why the study will only attempt to explain violent crime and will not attempt to explain property crime. As will be evident, there are a variety of reasons why property crime in the Baffin Region generally is seen as having less significance than violent crime. Once these tasks have been completed and the existence of inter-community violent crime variations has been established, the focus of this study will shift to understanding the community characteristics associated with the variations in the patterns of violent crime.

An important point must first be made before looking at those differences in violent crime between Baffin Region communities. Although there are there are 13 different communities in the Baffin Region, this study only considered the characteristics associated with

violent crime in 12 of those communities. Iqaluit, the administrative centre and transportation hub for the Baffin Region, was excluded from all analyses conducted in this study. All rates or measures used in this study for the Baffin Region as a whole do not include Iqaluit but are instead totals or averages for the 12 other communities in the region.

There were many good reasons for excluding Iqaluit in this study. One reason for not considering Iqaluit in the analysis of inter-community violent crime rate variations is that it has already been the focus of major studies of deviance and crime and justice (Finkler, 1976; Honigmann & Honigmann, 1965a; Szabo, Finkler, & Parizeau, 1973). Another reason for excluding Iqaluit from further study in this thesis is that it was impossible to do a complete analysis of all RCMP operational files because time and resources only allowed the recording of only one out of every five files. However, the main reason for excluding Iqaluit from the analysis is that it has very little in common with the other Baffin Region communities. Iqaluit is unequalled in reputation as a place of crime and deviance in the eastern arctic,<sup>4</sup> and is dissimilar to the other communities in the Baffin Region. Iqaluit shares very few characteristics with the other Baffin Region communities. It is the largest of the communities, having a population that is at least 3 times as large as the next comparable community (Statistics Canada, 1992). The region's residential high school and the main campus of the region's vocational school are both located in Iqaluit, drawing youth and young adults from all over the region. There is a homeless population in Iqaluit, including outcasts from the region's other communities. Iqaluit is the transport centre for the eastern arctic and the administrative centre for the Baffin Region. It attracts visitors and residents from all the other communities, including those individuals looking for a "good time." Many individuals that get into trouble in Iqaluit are from someplace else. For instance, an analysis of jail records shows that about 13 percent of individuals held for public intoxication by the Iqaluit RCMP in 1991 and 1992 were visiting Iqaluit from other communities. As the only community in the Baffin Region with establishments that sell beer, wine, and liquor by the drink, Iqaluit is a magnet to those whose behaviors are unacceptable in

---

<sup>4</sup> A banner in the canteen lounge of the RCMP sub-division headquarters for the Baffin Region boldly states that "After Iqaluit, Everything Else is Fiction!"

their home communities <sup>5</sup> All of these factors — the “large,” disconnected, transient population combined with a unique alcohol distribution arrangement — makes it necessary to exclude Iqaluit from the analysis. It is difficult enough to account for the effect that factors that occur within a single community have upon its violent crime without having to account for the effects that the social and economic structure of other communities have upon violent crime in that community. In other words, the high transience in Iqaluit makes it difficult to separate the effects of the social processes and social structure in Iqaluit upon violent crime in Iqaluit from the effects of social processes and social structures in the outlying communities upon violent crime in Iqaluit.

### Levels of Crime in the Baffin Region

The rates of violent and property crime found in the Baffin Region, when compared with rates found elsewhere in the country, would be considered by most observers to be exceptionally high. Compared with Canada as a whole, there is much more violent and property crime in the Baffin Region. For instance, Table 1, which compares the violent, property, and *Criminal Code* total rates per 1,000 population, shows that in 1992 the Baffin Region property crime rate was 40 percent higher than the national rate while the violent crime rate for the Baffin Region was nearly four times the national rate. Table 1 also shows that in 1992 the violent and property crime rates in the Baffin Region were 15 and 8 percent less, respectively, than the rates recorded for the NWT as a whole.

**Table 1: Crime Rates per 1,000 Population, Canada, NWT, and Baffin Region, 1992.**

Jurisdiction	Violent Crime Rate	Property Crime Rate	<i>Criminal Code</i> Total Rate
Baffin Region	53	88	245
NWT	62	95	316
Canada	11	61	103

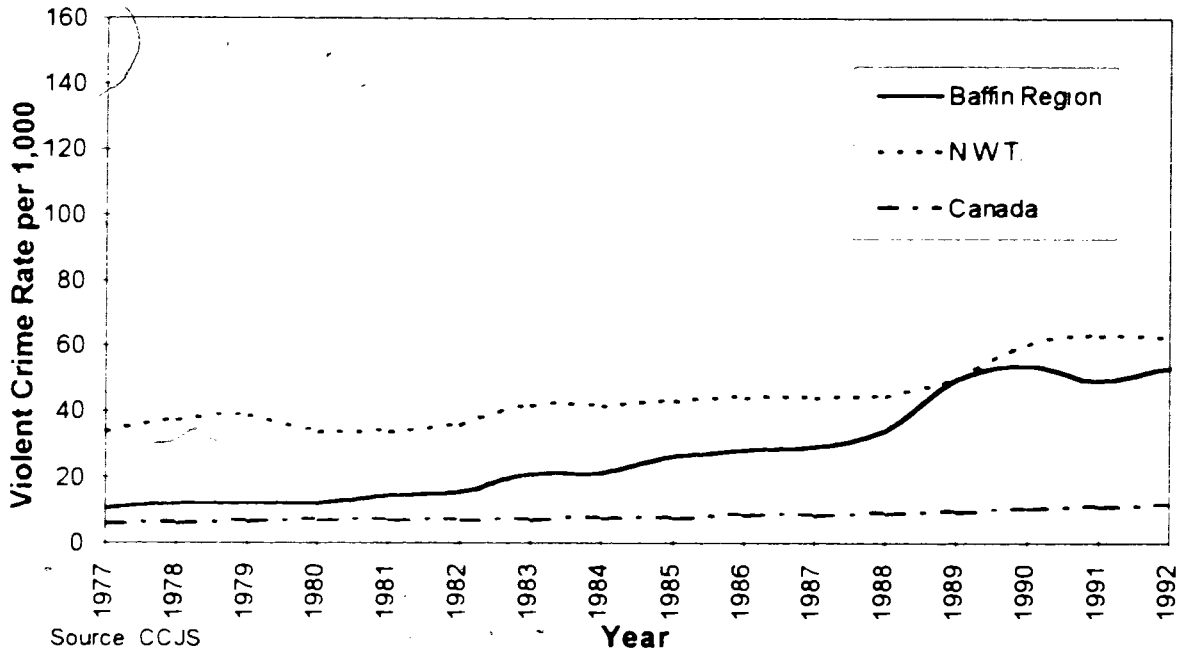
Source: CCJS, 1993

<sup>5</sup> There are well worn snowmachine trails between Lake Harbour and Iqaluit for those willing to make the 5 to 8 hour trip for a “cold one.”

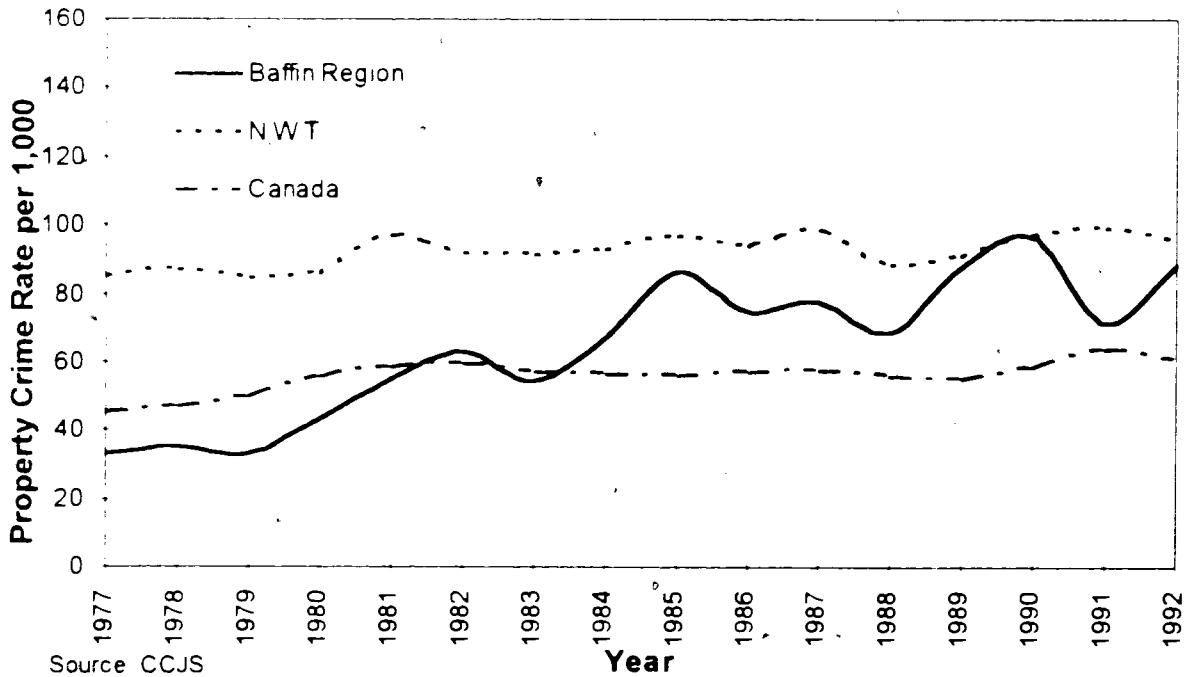
<sup>6</sup> Geographers refer to the phenomena of *spatial autocorrelation* to refer to the condition of a variable in one location being influenced by values on that same variable in other locations (Griffith, 1987; Odlund, 1988). Spatial autocorrelation is said to be a violation of most multivariate statistical methods because the assumption of independence of observations is violated. (Griffith, 1987; Odlund, 1988)

From the time that comparable records have been kept, crime rates in the Baffin Region have generally been greater than those of Canada. Since the mid 1980s the crime rates of the Baffin Region have come to equal those of the NWT. The Baffin Region violent and property crime rates over the 15 year period 1977 through 1992 are shown Figure 4 and Figure 5 which compares those rates with those of the NWT and of Canada for the same time period. As illustrated in Figure 4, not only has the Baffin Region violent crime rate continually been higher than the Canadian rate, but the difference in rates has also continued to grow. Between 1977 and 1992 the violent crime rate in Canada nearly doubled (from 5.8 per 1,000 population to 11.2 per 1,000 population) while over that same period the violent crime rate in the Baffin Region has quadrupled (from 10.7 per 1,000 population to 53.5 per 1,000 population). The differences in Baffin Regional property crime rates and Canadian property crime rates have not been as great as the differences found for violent crime rates. As seen in Figure 5, it has only been since 1984 that the property crime rate of Baffin Region communities has exceeded the Canadian rate. While the differences in rates are not all that large, the property crime rate for the Baffin Region has increased at a much faster rate. Over the 15 years from 1977 through 1992 shown in Figure 5, the Canadian property crime rate increased by roughly a quarter (from 46 per 1,000 population to 61 per 1,000 population) while the Baffin Region property crime rate grew by a factor of two-and-a-half-times (from 33 per 1,000 population to 88 per 1,000 population). Crime rates over time in the Baffin Region can also be compared with those of the entire NWT. Both Figure 4 and Figure 5 show that since the mid to late 1980s, the Baffin Region violent and property crime rates have begun to approach those for the entire NWT.

**Figure 4: Violent Crime Rate, Canada, NWT, and Baffin Region, 1977 to 1992.**



**Figure 5: Property Crime Rate, Canada, NWT, and Baffin Region, 1977 to 1992.**



Another indication that crime in the Baffin Region is problematic comes from a comparison with crime patterns of other aboriginal jurisdictions in Canada. Although many reports focus upon the fact that, on an aggregate basis, aboriginal communities have higher crime rates than those found in non-aboriginal jurisdictions (e.g., Cawsey, 1991; Hamilton &

Sinclair, 1991) some scholars recognize that there are sometimes tremendous differences in patterns of crime between different aboriginal cultural groupings (Hayner, 1942; May, 1982, Wood & Griffiths, 1996). Mean violent crime rates among different aboriginal groups located across Canada are shown in Table 2. A few conclusions can be drawn from the figures in Table 2. First of all, the mean rate of violent offences in each of the jurisdictions could be considered to be quite high. Each measure substantially exceeds the national violent crime rate for the year it was recorded. Second, there is a large range of violent offence rates between the communities within the various jurisdictions. Some communities reported no offences while others reported upwards of more than 1 offence for every 10 residents. Unfortunately, direct comparisons are problematic because the violent crime rate measures displayed in Table 2 are from different years and are reported by different police organizations. In effect, there are too many validity issues limiting comparisons, nonetheless the presented rates illustrate the fact that all of the aboriginal jurisdictions have high violent rates and that there at least appears to be a great deal of variation of violent crime rates between communities and populations within those jurisdictions.

**Table 2: Violent Crime Rates per 1,000 Population for Selected Aboriginal Communities and Populations.**

Jurisdiction and Year(s)	Mean Rate of Violent Crime	Range of Rates of Violent Crime	Sources
Amerindian Reserves. Quebec, 1978 to 1983	19	0 to 57	Hyde & LaPrairie, 1987
Aboriginal Residents. 4 Western Cities, 1990* & 1992**	32	17 to 58	Trevethan, 1993; Griffiths, et al., 1994
Nishnawbe-Aski Nation Communities, Ontario, 1990	36	18 to 63	Auger, et al., 1992
Saskatchewan Reserves, 1989***	51	32 to 93	Wolff, 1991
Baffin Region Communities, NWT, 1992	70	7 to 136	CCJS, 1993

\*Calgary, Regina, and Saskatoon

\*\*Vancouver

\*\*\*Range for Saskatchewan reserves is across the 13 Justice Administration Areas in the Province rather than across all Indian reserves.

## **The Focus on Crimes of Violence**

As shown in the above section, Baffin Region communities have rates of violent crime that are considerably higher than those of the nation as a whole and property crime rates that are about 40 greater than is found nationally. Because property crime can be seen as being much less serious in comparison with the harm resulting from violent crime, this dissertation will only attempt to find the community characteristics that are associated with the inter-community variations in violent crime.

Prior studies of crime among aboriginal populations have generally treated violent crime as being more serious than property crime. Most of the academic research literature on crime and criminal justice processing in aboriginal communities has focused primarily upon violent crime rather than property crime (e.g., Bachman, 1992; Griffiths, et al., 1995; Jayewardene, 1975, LaPrairie, 1991; Millar, 1990). Likewise, the special government task forces and commissions of inquiry in the NWT have focused upon violence crime (and specifically on violence against women) rather than upon property crime (Bayley, 1985; Peterson, 1992)

If one also considers the types of property crimes committed in the Baffin Region and their relatively low levels of harm, it becomes clear that energies are better spent trying to understand the factors associated with violent crime. Most property crimes committed in the Baffin Region can be characterized as belonging to one of four types. The first type of property crime commonly committed in the region is shoplifting. Although the managers of the Northern and Co-Op stores (which are about the only places to shop in these communities) would disagree, the thefts from their markets are generally of a petty nature.

A second type of property crime found quite often in Baffin Region communities is the "pop-n-chip" break and enter. These burglaries are generally committed by bored young offenders who break into local stores for the soft drinks, snack foods, and other perishables they can plunder.

The third type of commonly committed property crime, a type similar to the "pop-n-chip" variety, is the break and enter committed by individuals in search of intoxicants. The school teacher that finds the lock on his or her front door smashed, the door left ajar, but does not find anything inside to have been taken or disturbed would most likely be the victim of a burglar in search of alcohol or other drugs. Likewise, a construction contractor may discover

a workshop has been broken into overnight, and that a full propane tank has gone missing. Rather than attributing that burglary to someone that needed to refuel a bar-b-que, the police would look for youngsters with a history of “sniffing” and solvent abuse. While the consequences of the use of stolen intoxicants are potentially quite harmful, the actual property offences committed to steal hard liquor or beer or ABS glue or whatever other substances people in the Baffin Region use to get high on are rather trivial.

The last type of property crime that can be seen to be common to the Baffin Region is “joyriding”. Although many of the same elements are present when a culprit<sup>7</sup> appropriates a motor vehicle that he does not own, the lack of places to take a stolen snowmachine or ATV makes the actual harm resulting from the offence “theft of a motor vehicle” in the isolated Baffin Region communities much less severe. In the typical motor vehicle theft in the Baffin Region, the stolen machine is ridden in and around the community where it is stolen until it runs out of gas. At that point the vehicle is abandoned for the police and the owner to find and retrieve. Compared with motor vehicle theft outside the arctic, and compared with most violent offences, the harm resulting from “joyriding” is relatively small and is usually only temporary.

This classification of property offences into four types of offences that are claimed to be of little severity should not be taken to indicate that there are no serious property offences in the Baffin Region. Some serious property crimes do occur. Expensive audio-visual equipment is sometimes stolen when local schools are broken into. Snowmachines taken for joyrides are sometimes wrecked, making them useless to their owners. However, those types of cases are the exception rather than the rule. The large majority of property crimes committed in the Baffin Region are relatively minor compared to many of the violent crimes committed there.

Perceptions held by many of the people that live and work in Baffin Region communities add further support for the idea that it is violent crime, not property crime, that is of utmost concern. There are two data sources of community resident viewpoints to consider. First of all, we can look to the views of community residents collected through interviews during field visits of the Baffin Region Crime and Justice Study. Secondly, we can look at the aggregate

---

<sup>7</sup> As with the different types of break and enter, the “joyriding” offences are generally committed by males under the age of majority. With the exception of shoplifting, which is committed by individuals of all ages, it appears as though property crime in the Baffin Region is largely the domain of young offenders (Griffiths, et al., 1995).



perceptions of community residents gathered in the Aboriginal Peoples Survey addendum to the 1991 Census (Statistics Canada, 1993a).

The idea that violent crime is prevalent in the Baffin Region came through quite clearly in interviews conducted with community residents and justice service providers. Even the most experienced RCMP members were startled by the levels of violence in the region, one RCMP member recalling

I was quite shocked and surprised when I went there and found the amount of violence that occurred in that community, and I'm talking about everything from murders to sexual assaults.

Violence is a predominant factor of life in many Baffin Region communities and is not confined to specific groups. It occurs in different families across all communities. One respondent argued that violent crime occurs in all age groups.

Spousal assaults, sexual abuse — these crimes seem to go right across the age segment. I think with things like break and enter and vandalism, they're restricted almost to, I've not done any statistical reviews of this, but I think they're restricted to the younger age groups. But the sexual abuse, assaults, they can go probably right through the whole society.

The signs of violence are everywhere in the Baffin Region. According to the manager of the Northern Store in one community, the results of spousal assault come walking through his store on a frequent basis. He pointed out that

Whenever we seem to get a lot of booze orders in on the plane, the next day you go to the store and a lot of women are coming in with black eyes and bruises and that sort of stuff.

Even those that are supposed to be helping victims of crime are themselves victims of violence. According to one social worker, "spousal assault is happening just continuously. All the workers here are victims. It's just so common and it's quite violent."

Concern about violent crime as a problem for Baffin Region community residents was also recorded on an aggregate basis in the Aboriginal Peoples Survey (Statistics Canada, 1993a). Included in that addition to the 1991 Census were questions on whether individuals felt certain social problems were present in their community. One question asked individuals if they thought family violence is a problem and another question asked if sexual abuse is a problem. The viewpoints of adults in Baffin Region communities on those two questions are presented in

Table 3 Across the region, almost half of those questioned thought that family violence (47 percent) was a problem in their community while almost as many of those questioned (43 percent) felt that sexual abuse was a problem in their community. These figures are higher than what was recorded nationally, two-out-of-five (39.2 percent) aboriginal peoples across Canada thought family violence was a problem in their community while only one-out-of-four (24.5 percent) aboriginal peoples across Canada thought sexual abuse was a problem in their community (Statistics Canada, 1993a).

**Table 3: Perceptions of Family Violence and Sexual Abuse in Baffin Region Communities, 1991.**

Community	Percentage of Adults that Think Family Violence is a Problem in their Community	Percentage of Adults that Think Sexual Abuse is a Problem in their Community
Broughton Island	48	38
Cape Dorset	65	48
Clyde River	29	34
Grise Fiord	21	0
Hall Beach	48	34
Igloolik	51	34
Lake Harbour	19	30
Nanisivik	42	50
Pangnirtung	53	54
Pond Inlet	53	54
Resolute Bay	43	21
Sanikiluaq	38	47
Baffin Region	47	43

Source: Statistics Canada, 1993a.

### **Variations in Community-level Patterns of Violent Crime**

As should be apparent by now, crimes of violence are of concern to the residents of Baffin Region communities. Official statistics indicate that violent crimes in the Baffin Region occur at levels that are among the highest in the nation. While it is fair to say that most would agree that violence is a major problem in the Baffin Region, it is also fair to say that not all communities in the region are impacted by violence on an equal basis. This section will show

that there is a great deal of variation in the amount of violent crime found in Baffin Region communities

The inter-community variation in 1992 violent crime rates for 12 communities of the Baffin Region are shown in Table 4. According to these CCJS statistics, there are some communities in the Baffin Region with very high violent crime rates and some communities with very low violent crime rates. The differences between communities in terms of high and low crime rates are tremendous. For instance, the violent crime rate in Grise Fiord of 7 violent offences per 1,000 population was 129 violent crimes per 1,000 population less than its "neighbor" Resolute Bay.

**Table 4: Violent Crime Rates per 1,000 Population, Total Population, and Number of Violent Offences, Baffin Region Communities, by Community Population Group, 1992.**

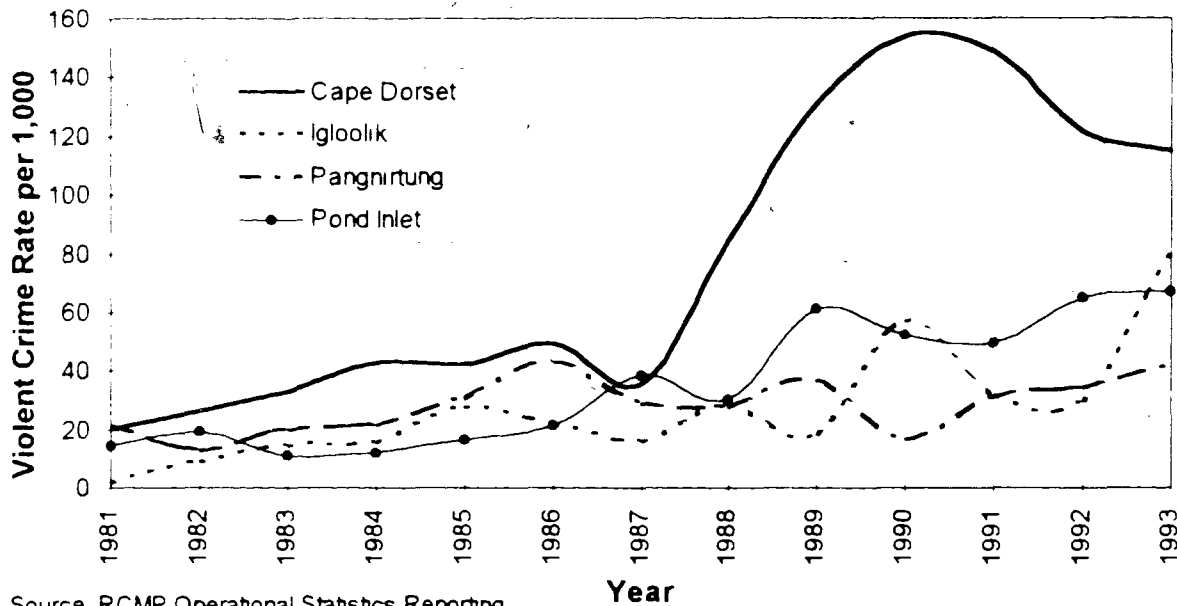
Community and Population Group	Violent Crime Rate	Total Population	Number of Violent Offences
<b>Communities with biggest populations:</b>			
Cape Dorset	124	980	122
Igloolik	29	953	28
Pangnirtung	34	1164	40
Pond Inlet	66	1015	67
<b>Communities with midrange populations:</b>			
Clyde River	39	586	23
Hall Beach	39	543	21
Nanisivik	35	848	30
Sanikiluaq	31	550	17
<b>Communities with smallest populations:</b>			
Broughton Island	69	466	32
Grise Fiord	7	134	1
Lake Harbour	32	373	12
Resolute Bay	136	169	23

Source: CCJS, 1993.

It is not just in recent times that the Baffin Region has exhibited variations in the amount of crime present between communities. An examination of crime statistics over recent history

confirms that, for many years, there has been variation in community-level crime rates. The inter-community variation of violent crime rates for the most populous communities, for the middle size population communities, and for the least populous communities are presented in Figure 6, Figure 7, and Figure 8, respectively. Developed from community-level crime statistics published by the RCMP,<sup>8</sup> each of the figures shows that there is a great deal of variation between communities of similar size. Cape Dorset, as shown in Figure 6, had the highest violent crime rates among the "larger" communities (those with populations of more than 1,000) in 12 out of 13 years from 1981 through 1993. In Figure 7, which compares the violent crime rates of the mid-sized Baffin Region communities, reveals that Hall Beach and Sanikiluaq generally have had higher rates than Nanisivik or Clyde River. There is also a great deal of variation in the violent crime rates of the smaller communities. Figure 8 shows that Resolute Bay has, since 1981 at least, always had the highest violent crime rate while the violent crime rates of Grise Fiord and Lake Harbour have generally been quite low.

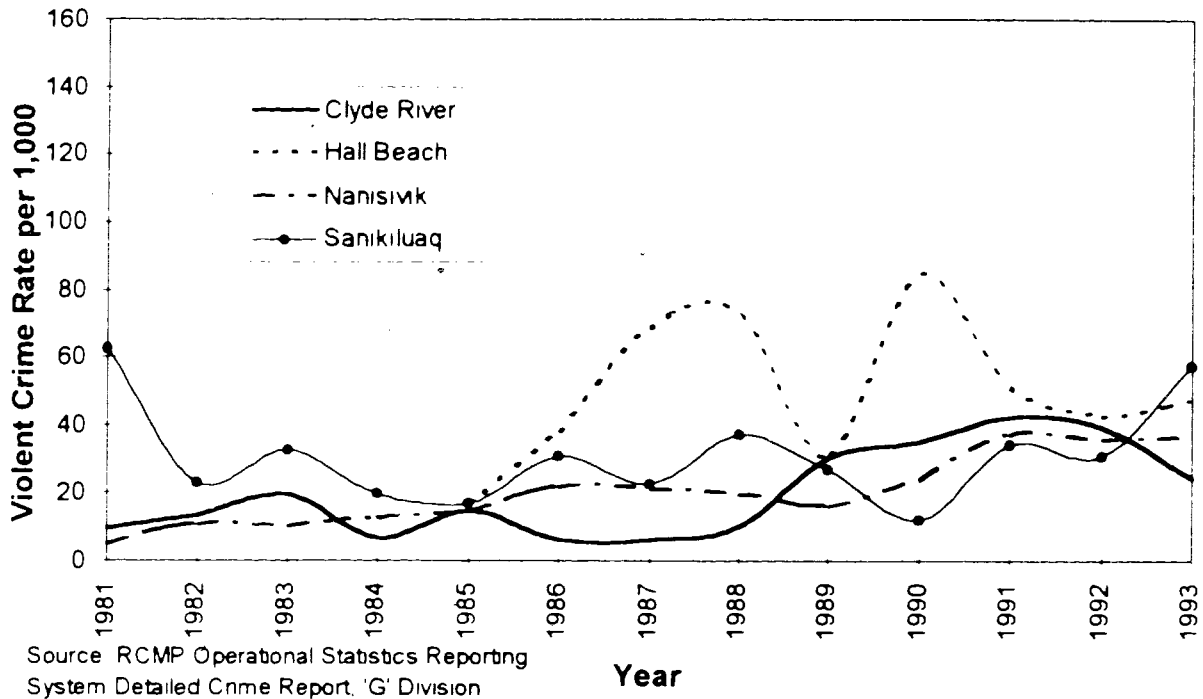
**Figure 6: Violent Crime Rate, Four Most Populous Baffin Region Communities, 1981-1993.**



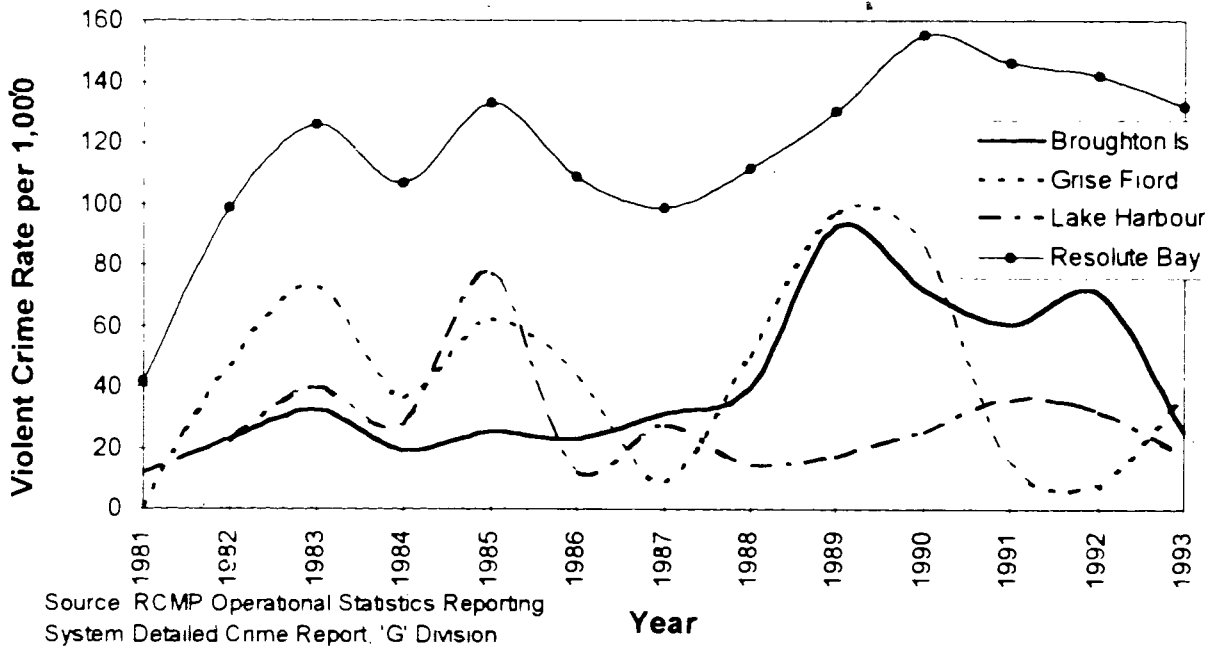
Source: RCMP Operational Statistics Reporting System Detailed Crime Report, 'G' Division

<sup>8</sup> For a comparison of RCMP and CCJS data, see the section in Chapter 3 on crime statistics.

**Figure 7: Violent Crime Rate, Four Middle Size Baffin Region Communities, 1981-1993.**



**Figure 8: Violent Crime Rate, Four Smallest Baffin Region Communities, 1981-1993.**



**SUMMARY**

The changes the Inuit of the Baffin Region have faced as a cultural group within the past half-century have been tremendous. Within that time they have gone from a semi-nomadic

hunter-gatherer existence to one rooted in permanent settlements and irreversibly linked to the south of Canada for sustenance. Besides their shared historical and cultural heritage, the Inuit communities of the Baffin Region have a number of present-day attributes in common. From a geographic standpoint, the communities of the Baffin Region are all still relatively isolated and subject to the perils of the harsh arctic environment. In terms of their demographic composition, all Baffin Region communities have comparatively small populations that are growing at a pace generally associated with third world nations

## **CHAPTER 3: PRIOR EXPLANATIONS OF VIOLENT CRIME IN NATIVE COMMUNITIES**

As shown in the previous chapter, violent crime is one of the larger concerns of communities in the Baffin Region. The frequency with which native peoples are touched by violent crime adds credence to those concerns. This chapter examines several of the major attempts to explain violent crime among the native peoples of North America.<sup>9</sup>

Two major perspectives currently employed to explain violent crime in native communities are considered here. First, this chapter will review studies that have attempted to link the process of European expansion and colonization to violent crime in native communities in North America. Second, studies on the possible impact that alcoholic beverage use has had on violent crime in native communities are considered.

There are several reasons why it is important to take a look at prior research on correlates of crime in native communities. Most importantly, it provides a starting point for the development of theoretical models to understand the community characteristics associated with violent crime. Examination of the literature on violent crime in native communities also allows for the identification of explanations that have proven fruitful in explaining why some native communities have more violent crime than others, as well as pointing out which explanations are of little informative value. Ultimately, this examination will provide a basis for the selection of measures of community characteristics that might possibly be found to be associated with violent crime at the community level.

### **COLONIZATION AND CRIME**

Over the past thirty-odd years the focus on the plight of natives in North America has shifted. Jorgensen (1971) points out that prior to 1960, most of the social problems natives encountered were attributed to their inability to become acculturated into mainstream society. Since then, these acculturation-failure models have fallen into disfavor and have been replaced by a perspective that focuses on the relationship aboriginal peoples have had with the larger political economy. With the radicalization of the social sciences during the early 1970s came the

---

<sup>9</sup> Where appropriate, due consideration will be given to studies looking at crime among native peoples in Australia, Greenland, and Siberia.

application of theoretical models to the situation of aboriginal peoples which previously had been used to explain poverty and underdevelopment in "third-world" nations.

Following the works on 20th century colonialism in Latin America (Snipp, 1986), a multitude of studies looking at the aboriginal peoples of North America have identified the socio-structural position of aboriginal peoples within the parameters of a colonialist model. Many scholars looking at the relationship between aboriginal peoples and the dominant white society speak in terms of a neo-colonial<sup>10</sup> relationship in which the imposition of white economic and social structures leads to the economic and social underdevelopment of the aboriginal population (Anders, 1980; Harding, 1988; Jorgensen, 1971, 1978; LaDuke & Churchill, 1985; Pretes, 1988; Snipp, 1986a). These neo-colonial models are premised on the Marxist view that the capitalist economic structure results in development for the few and underdevelopment for the many, which includes aboriginal peoples (Owens, 1976). This underdevelopment is said to result in poverty, under- and unemployment, low levels of educational attainment, a lack of access to capital and land, social disorganization, and pretty much everything else that ails aboriginal peoples (Jorgensen, 1971, 1978)

The underdevelopment which results from the neo-colonial relationship is said to be ultimately responsible for violent crime among aboriginal peoples. Bachman (1992) argues that measures of social disorganization, economic deprivation, and culture conflict (all said to be the result of colonization) are all relatively strong predictors of county-level homicide rates among aboriginal peoples in the US. She argues that "no model explaining any phenomenon with regard to American Indians would be complete without acknowledgment of the colonization process to which our government has subjected this population" (Bachman, 1992, p. 36).

As might be expected, the rates that aboriginal peoples come into contact with the criminal justice system are much higher than those of non-aboriginal peoples (Wood & Griffiths, 1996). The highest provincial/territorial crime rates are in Canada's two northern territories, where the largest proportions of aboriginal peoples reside. The neo-colonial model serves as an insightful framework for explaining inter-cultural patterns (i.e., aboriginal vs non-aboriginal) of

---

<sup>10</sup> The terms 'neo-colonial' and 'colonial' have been used interchangeably to explain the relationship (Jorgensen, 1978, p. 5)



crime, mainly because the many outcomes of colonialism — underdevelopment, social disorganization, culture conflict, and relative deprivation — which affect aboriginal peoples, are thought to be associated with criminal behavior (Vold & Bernard, 1986; Bachman, 1992). Fleras and Elliott (1992, pp. 16-18), for example, argue that aboriginal overrepresentation in Canadian crime statistics is but one outcome of "colonialist domination" (see also Berger, 1991, p. 36). Colonization (and its consequences such as poverty, underemployment, social disorganization) has also been offered as an explanation for why the crime rates for aboriginal peoples are higher than for non-aboriginals. Minnis (1963), for example, pointed to the dilapidated and crowded housing, poverty, unemployment, and lack of access to farm land among the Shoshone-Bannock of Fort Hall, Idaho as a reason why that American Indian reservation had crime rates many times that of surrounding non-Indian communities or the national average. In explaining the patterns of aboriginal crime in the urban centres of Calgary, Regina, and Saskatoon, Trevethan (1993, p. 34) argues that "the differences in crime patterns between aboriginal and non-aboriginal persons may be attributed to several socio-demographic variables" including lower levels of educational attainment, labor force participation, average income, and higher levels of unemployment. This colonial perspective is valuable because it suggests why aboriginal peoples who are subject to the effects of colonization may have higher violent crime rates than non-aboriginal peoples who are not subject to the effects of colonization.

Although the colonization perspective is able to explain inter-cultural (i.e., aboriginal versus non-aboriginal) differences in levels of officially recorded criminal behavior, it has been less successful in explaining the intra-cultural differences in crime among aboriginal peoples. The colonization perspective would lead one to predict that the consequences of colonization were equally as disastrous for all aboriginal cultures and communities and, therefore, there should be little variation in violent crime among these cultures and communities. And yet, there is great variation in levels of officially recorded violent criminal behavior between communities (see Chapter 2) that share many of the same difficulties — low levels of education, employment, and income, and loss of traditional cultural practices. This suggests that these types of variables

are unable to tell us why some aboriginal communities have higher rates of violent crime than others (Marenin, 1992, Wood, 1991).

Only a couple of studies have attempted to account for variation in violent crime between native populations using measures of the consequences of the neo-colonial relationship that exists between native peoples and the larger political economy. Bachman's (1992) multiple regression model using measures of socio-economic underdevelopment showed some success accounting for differences in American Indian homicide rates in 114 "reservation" counties across the US. Wolff (1991), in a rank-order analysis of the crime patterns on Saskatchewan reserves, found no relationship between the manifestations of colonization (including single parent families, persons per dwelling, unemployment, labor force participation, education, average income, and income from government transfer payments)<sup>11</sup> and violent crime rates

Other than the studies by Bachman (1992) and Wolff (1991), there has been little research which has attempted to explain differences in violent crime rates between native communities from the perspective of colonization. Depending upon how one looks at it, the lack of prior research using the colonization perspective to account for differences in violent crime between aboriginal communities can be seen as a curse or as a blessing. On the one hand, the lack of prior research is a curse because there is little to guide the current study in linking colonization to violent crime at the community level. On the other hand, the lack of prior research is a blessing because there are no set limits to the ways that colonization can be looked at to find community-level factors associated with violent crime. That lack of limits will allow for the development of theoretical links between colonization and violent crime that take into account the special historical, geographic, and cultural context of the Baffin Region.

## **ALCOHOL AND CRIME AMONG NATIVE PEOPLES**

In the study of criminal behavior among aboriginal peoples, a large amount of time and effort is spent considering the role of alcohol consumption as a correlate of crime. Some

---

<sup>11</sup> In the aboriginal crime literature, these measures are taken to be indicators of the effects of colonization. In that literature no connection is made between the measures and the impact that the Euro-Canadian political economy has had upon aboriginal peoples. However, research which looks mainly at the effects of colonization upon aboriginal peoples would point out that such variables measure the extent to which colonization has created social disorganization in aboriginal communities (Berger, 1991; Fleras & Elliott, 1992)

commentators argue that it is difficult to study crime among aboriginal peoples without considering the role of alcohol (Peak & Spencer, 1987; Mills, 1989). Respondent after respondent in interviews conducted for the Baffin Region Crime and Justice Study (Griffiths, et al., 1995) pointed to the use of alcohol as a prime contributor to crime in the jurisdiction. As will be seen below, there have been many studies which have attempted to account for the seemingly all-pervasive amount of alcohol-related violence among native peoples. Before that discussion of the explanations for why alcoholic beverage use leads to violent crime among native peoples, this chapter examines the variability in alcohol use among different groups of native peoples and then considers the degree to which alcohol use is implicated in the violent offences for which native offenders come into contact with the criminal justice system

### **Prevalence of Alcohol Use**

Not all aboriginal peoples drink. Among many aboriginal groups the proportion of drinkers is less than that found in non-aboriginal populations (May, 1989, 1992). There is a great deal of variability across aboriginal cultural groups and across aboriginal communities in terms of the proportion of individuals that consume alcohol. It is important to point out the variability in aboriginal drinking for two reasons. First of all, as pointed out by May (1992), there are many misconceptions surrounding drinking by aboriginal peoples. As he points out in reference to American Indians, "[s]tereotypes and myths have so clouded the perceptions of most Americans, both Indian and non-Indian, that most people believe that a much greater proportion of the Indian population drinks than actually does so" (May, 1992, p. 8). A comparison of alcohol use among different aboriginal groups will help to disconfirm such stereotypes. A second reason for looking at variation in aboriginal alcohol use, and the reason which is most important for the purposes of this study, is that community-level variations in alcohol use must first be established before such variation can be implicated as being responsible for variation in crime rates.

The prevalence of alcohol use among aboriginal peoples and its variations can be seen in the numerous studies that have looked at aboriginal drinking over the last three decades. In Table 5, the prevalence of alcohol use among different aboriginal groups as reported in studies of an ethnographic nature are shown. The proportion of drinkers reported varied from 'nearly

all' adult male Naskapi to 'slightly more than half' of Navajo at Rimrock, New Mexico. All but one of these ethnographic studies reported a high prevalence.

Survey research over the past quarter-century has shown that in some places, at specific time periods, there have been recorded differences in the prevalence of alcohol use among aboriginal peoples. For instance, as is shown in Table 6, only 30 percent of the Navajo surveyed by Levy and Kunitz (1974) in the early 1970s were drinkers. Twenty years later Avkesntyuk et al (1994) reported that 98 percent of the Chukchi and Eskimo peoples in Siberia they surveyed were drinkers. Because of the 20 year period of time between those studies, it is not possible to say that more Chukchi and Eskimo of Siberia are drinkers compared to the Navajo. It is possible that very few Chukchi and Siberian Eskimos drank in 1974, as it is possible that nearly all Navajo were drinkers in the early 1990s. As the use of different time frames does not allow for direct inter-cultural comparisons, all that can be claimed is that there were proportionally more Chukchi and Siberian Eskimos that were drinkers in the early 1990s than there were Navajo that were drinkers in the 1970s. The best indication in Table 6 of inter-cultural variation in the prevalence of drinkers is found in the results of the Health and Welfare Canada (1991) survey that compared the proportion of Inuit (at 48 percent drinkers) and Dene (at 79 percent) in the NWT that were considered to be drinkers.

**Table 5: Alcohol Use Prevalence Among Different Aboriginal Cultural Groups As Reported in Ethnographic Studies.**

Cultural Group and Location	Proportion of Drinkers Reported	Source
Forest Potawatomi, Upper Peninsula, Michigan	"Of the 74 adults, only 7 could be considered as moderate drinkers or nondrinkers"	Hamer, 1965
Naskapi, Schefferville, Quebec	"I knew of only one adult male who claimed never to drink... Otherwise, all Naskapi males drink, and most drink heavily"	Robbins, 1973
Chipewyan, Snowdrift, NWT	"Nearly all ... adult males drink home brew, and most of them become intoxicated at least once a month or oftener"	VanStone, 1965
Mescalero Apache Males, New Mexico	"Out of 54 men ..., only 4 described themselves as abstainers, and 15 stated that they drank at least twice a week"	Curley, 1967
Mescalero Apache Females, New Mexico	"5 women out of 32 stated they abstained from drinking, and 6 that they drank at least twice a week"	Curley, 1967
Navajo, Rimrock, New Mexico	"slightly more that half of the total population of 614 would probably have to be counted as occasional drinkers"	Heath, 1964

For each aboriginal group save the Iñupiat, the prevalence of drinking is less than or equal to that for the comparative group of non-aboriginal peoples. For instance, the 79 percent of Dene and 48 percent of Inuit in the NWT that drink is less than the 86 percent of non-aboriginal peoples in the NWT that drink (Health & Welfare Canada, 1991). Likewise, the 70 percent of all aboriginal peoples in Canada that drink is less than the 78 to 81 percent of the Canadian population that drinks alcohol (Health & Welfare Canada, 1981, 1988, 1990, 1991, 1993). Even the high prevalence of drinking among the Chukchi and Eskimo peoples of Siberia (who are said to be closely related to aboriginal peoples of North America (Shields, et al., 1993)) is roughly equal to the high prevalence of drinking by other Russians (Avksentyuk, et al., 1994)

**Table 6: Alcohol Use Prevalence Among Different Aboriginal Cultural Groups As Reported in Surveys on Alcohol Use.**

Cultural Group and Location	Proportion of Drinkers Reported	Source
3 Navajo Nation Communities, Arizona	30 percent of Navajo sampled were current drinkers.	Levy & Kunitz, 1974
South-central Navajo Nation, Arizona	52 percent of Navajo adults were current drinkers.	May & Smith, 1988
Iñupiat, Barrow, Alaska	83 percent of Adult Iñupiat in Barrow were drinkers.	Klausner & Foulks, 1982
Inuit Adults, 1985-86, NWT	48 percent of Inuit had consumed alcohol in the year previous to the survey.	Health & Welfare Canada, 1991
Dene Adults, 1985-86, NWT	79 percent of Dene had consumed alcohol in the year previous to the survey.	Health & Welfare Canada, 1991
Aboriginal Adults, 1990-1991, Canada	70 percent had consumed alcohol in the year previous to the survey.	Statistics Canada, 1993a
Chukchi & Eskimo, Northeastern Siberia, Russia	98 percent of males sampled had consumed alcohol in year prior to the survey.	Avksentyuk, et al., 1994

### **Alcohol Use and Criminal Justice System Contact**

Of the offenders that come into contact with the criminal justice system, many do so for offences committed following the use of alcoholic beverages. Studies exploring the incidence of alcohol use prior to the commission of a criminal act among native and non-native populations alike are abundant (Greenberg, 1981). The assumption that alcohol is a strong correlate of violent criminal behavior in native communities is in part based upon the idea that a large

proportion of native individuals coming into contact with the criminal justice system as offenders do so while under the influence of alcohol. As is shown below, the premise of the above assumption does have some merit.

Studies which have examined offence characteristic information in police reports show that many offences are committed while an aboriginal individual is intoxicated. Auger, Doob, Auger, and Driben (1991, p. 329) showed that from 31 percent to 48 percent of all offences committed in 3 Nishnawbe-Aski Nation communities were alcohol related. LaPrairie (1991), in her analysis of police occurrence reports recorded in James Bay Cree communities, found a high degree of alcohol involvement for many types of offences. For example, she found that alcohol was involved in 76 percent of assaults and 100 percent of sexual assaults. In all, of the 500 occurrence reports which recorded alcohol as being involved in an offence, "69 percent of interpersonal and 16 percent of property offences involved alcohol" (LaPrairie, 1991 p. 50). Alcohol was implicated in anywhere from 56 percent to 83 percent of offences against the person in 5 Alaska Native villages studied by Marenin (1992, p. 346). On various Indian reservations in the U.S. according to Stewart (1964, pp. 62-65), the offender was under the influence of alcohol in anywhere from 59 percent to 95 percent of all types of offences committed. In Australia as well, alcohol "is a factor in as much as 80 to 95 percent of all aboriginal entanglements in the legal process" (Sackett, 1988, p. 66).

Besides the police statistics, there are other indicators from the criminal justice system which show that alcohol is implicated in many offences involving aboriginal peoples. Mills (1989, p. 13) found that of Wind River Shoshone convicted for violent felonies, 82 percent were intoxicated at the time they committed their offence. Of those offenders, 77 percent had three or more previous alcohol-related arrests (Mills, 1989, p. 13). In a survey of 30 native homicide offenders done by Bachman (1992, p. 31), all but one were under the influence of alcohol during the commission of their offence.

Victimization and self-report surveys which are independent of criminal justice processing also show that many potential offences committed by native peoples are alcohol related. Two surveys, in particular, show a high level of alcohol involvement in actions which could be classified as criminal. Klausner and Foulks (1982, p. 167), in a survey of Iñupiat in Barrow, Alaska, found that 62 percent of the sample reported fighting while drinking.

Bachman's analysis of intake questionnaires at two battered women's shelters found that 75 percent of aboriginal women were physically abused by husbands or boyfriends who were under the influence of alcohol (1992, p. 92).

It must be pointed out, however, that it is not just native offenders that have consumed alcohol prior to getting into trouble with the law. While it is difficult to make direct comparisons, a multitude of studies showing that a great number of offences committed by non-native offenders were alcohol related can be taken to indicate crime committed after drinking isn't solely a native phenomena. A host of studies from across the globe show that many of the individuals held in correctional institutions were incarcerated for offences committed while under the influence of alcohol. In the United States, for instance, depending on the year, anywhere from one-third (36 percent in 1986) to one-half (49 percent in 1979) of state prisoners, two-fifths (41 percent in 1989) to one-half (48 percent) of municipal and county jail inmates, and nearly one-third (32 percent in 1987) of juveniles held in state institutions were under the influence of alcohol at the time of the offence that landed them in the institution (Baunach, 1985, Beck, 1991, Beck, Kline, & Greenfeld, 1988; Innes, 1988). In England, 38 percent of young offenders in a borstal admitted drinking prior to their present offence (Hollin, 1983) while 67 percent of juvenile "trainees" being held for a violent crime were under the influence of alcohol at the time of the offence for which they were being held (Cookson, 1992). Studies in Denmark, Sweden, Finland, Norway, and Iceland have shown that roughly 60 to 80 percent of violent offenders were under the influence of alcohol at the time of the offence (Hague, 1990).

In short, it appears as though roughly equal proportions of the offences that come to the attention of the criminal justice system for both native and non-native peoples are alcohol related. Furthermore, as seen in the preceding section, the differences in the prevalence of alcohol use between native and non-native peoples are either small or seem to show that natives are much less likely to use alcohol (May, 1992). Despite those similarities, the relative amount of violent crime found in many native jurisdictions is much more prevalent compared to that found in non-native jurisdictions (see Chapter 2, especially Table 2). These latter two points (roughly equivalent proportions of alcohol related violent crime and much higher rates of violent crime in native jurisdictions), when taken together, indicate that there is a relatively greater

amount of alcohol related violent crime in native jurisdictions. The explanations for why there is relatively so much more alcohol related violent crime among native populations are considered below.

### **The Alcohol / Violent Crime Relationship**

There is little agreement as to why drinking leads to violent crime. The explanations for why alcoholic beverage use leads to violent behavior can be placed along a continuum ranging from the biological to the social. At the biological end of the continuum are the explanations which link the physiological effects of alcohol to violent behavior. Explanations at the social end of the continuum are predicated upon the premise that violent behavior resulting from alcohol use is socially determined. Located between the biological and social models are the various bio-social explanations, which argue that the physiological effects of alcohol combined with a pre-existing anti-social setting can lead to violent behavior. While each of these general categories of explanation are used to account for the effect of alcohol on violent crime among aboriginal and non-aboriginal peoples, the following discussion focuses on those which have attempted to address the issue among aboriginal peoples.

#### **Biological Explanations**

The assertion that aboriginal peoples have a biological or genetic predisposition to becoming violent when using alcohol has been widely debated (e.g., Avksentyuk, et al., 1994; Fenna, Mix, Schaefer & Gilbert, 1971; Wolf, 1980; v. Schaefer, 1981; May, 1992). Biological explanations are centred on the premise that as a pharmacological agent, alcohol causes specific changes in physiological processes and identifiable psychological abilities including changes which produce violent behavior (Pernanen, 1991). Proponents of biological explanations of the alcohol/crime relationship among aboriginal peoples offer three explanations of the effects of alcohol on aboriginal peoples. 1) aboriginal peoples metabolize alcohol at a slower rate (Fenna, et al., 1971), which makes them more susceptible to committing criminal behavior while intoxicated, 2) aboriginal peoples are genetically predisposed toward the abuse of alcohol (Fenna, et al., 1971; Grygier, 1948) and the problems that accompany its use, and 3) aboriginal peoples have a greater propensity toward 'blackouts' which are said to be accompanied by violent and anti-social behavior (Wolf, 1980).



For the most part, these wholly biological explanations have been dismissed by both medical and social scientists. Schaefer (1981, p. 114), in a thorough examination of the medical literature argues that "we cannot prejudge a person's drinking problem based on culture or race" because medical science has yet to show that there are racial differences in rates of alcohol metabolism or in the sensitivity toward alcohol, and that genetic differences have yet to be mapped out. As May (1989) points out, because the *intra*-racial differences of biological factors such as metabolism or sensitivity are much greater than the *inter*-racial differences on these factors, it would be foolish to attribute the crime which results from the use of alcohol by aboriginal peoples to such factors

The idea of trying to make inter-racial comparisons of the effects of alcoholic beverage use has been strongly denounced by Fisher (1987) who raises two important points. First, Fisher argues that using biological race as a scientifically valid concept is problematic because there is not a great deal of diversity between racial groups. Fisher (1987) cites a study (Lewontin, 1972) which showed that only 6.3 percent of human difference can be accounted for by differences between racial groups. Second, Fisher argues that making a "racial" comparison between aboriginal and non-aboriginal peoples is problematic because the "racial" groups are not as homogenous as would be necessary to make such comparisons. Fisher (1987) points to a study (Szathmary & Reed, 1972) which shows that there is a significant European contribution to the genetic make up of some aboriginal peoples in Canada.

While medical and social scientists have rejected the first two types of biological explanations described above, there has been no strong condemnation of the 'blackout' explanation advocated by Wolf (1980). According to this perspective, aboriginal peoples have a lower threshold of 'alcoholic amnesia' after blood alcohol levels go above a certain point and once blacked-out they are prone to commit violent crimes (Wolf, 1980). In his study, "alcoholic amnesia was reproduced clinically in 5 Alaskan Native men who had committed homicide during previous alcoholic blackouts but had no recollection of events" (Wolf, 1980, p. 456). The subjects were said to exhibit a violent and angry mood during these blackouts (Wolf, 1980, p. 460). While Wolf (1980) does show that blackouts do occur and that they perhaps may lead to violence, he fails to show that Alaska Natives have a lower threshold of alcoholic amnesia because no comparative group of non-Alaska Natives is considered. He also fails to establish

the degree of "racial purity" of the Alaska Natives used in the study and to account for the European contribution to the genetic make-up of Alaska Natives. It may be that it is because of the blackout and not because of the race of the drinker that the violence occurred.

### Social Explanations

At the opposite end of the continuum is the social explanation for alcohol-related violence. From this perspective, violent behavior, as with most other "*behaviors of people under the influence, are learned, socially determined behaviors*" (May, 1992, pp. 9-10, emphasis in original). These social explanations view violent drunken behavior "as rather exclusively determined in a basically instrumental fashion by socially provided behavior norms" (Permanen, 1991, p. 18). In their classic study of the "drunken comportment" of individuals across many societies, MacAndrew and Edgerton (1969, p. 88) argued that:

*Over the course of socialization, people learn about drunkenness what their society "knows" about drunkenness; and, accepting and acting upon the understandings thus imparted to them, they become the living confirmation of their society's teachings.* (italicized in original)

There are four types of social explanations for the relationship between alcohol use and crime among aboriginal peoples. The first is a modeling or social-learning approach, which purports that aboriginal peoples get in trouble when they get drunk because their models of drinking behavior have taught them that you are supposed to behave in such a manner when intoxicated. The second approach is one which looks at how the legal environment influences drinking habits, where alcohol is prohibited or strongly regulated, rapid binge drinking often occurs and trouble erupts from quick and high levels of intoxication. A third approach argues that cultural influences remaining from pre-contact social organization still play a role in influencing behavior, even drunken behavior. The final social approach argues that drunken violence is a way for aboriginal peoples to gain a form of social power in an unjust society where they have none.

Proponents of the social learning or modeling approach assert that aboriginal peoples, as social groups, have been exposed to models of intoxication in which violence is the norm.<sup>12</sup> In his historical look at the American frontier Winkler (1966) describes how Indians became

---

<sup>12</sup> Caswell (1989) found that alcohol related violence is much lower on the islands of Polynesia colonized by the French, where access to liquor is much more permissive and drunkenness is not associated with violence, compared to the islands colonized by the Americans or British.

entangled in the drunken debauchery which was the hallmark of the 'wild west', mainly because they knew of no other way of drinking alcohol except for the expressed purposes of becoming drunk and rowdy. Levy and Kunitz (1974, pp. 68-71) note that in many ways drinking patterns on the Navajo Reservation resemble the patterns of hard drinking cowboys and railroad workers from the 1880s. In many places in the Canadian and American west these models are still provided to explain the drunken behavior of non-natives of the area (Anderson, 1981, p. 38; Gray, 1995; Wilkinson, Thompson, Reynolds, & Ostresh, 1984). Because aboriginal peoples have yet to develop a perspective on alcohol which is culturally relevant (Peak, 1989), and because there are no traditional patterns of control (Northend Ferguson, 1968); their only indication of what is acceptable intoxicated behavior comes from those who behave violently while intoxicated (Bach & Bornstein, 1981).

The arguments that the legal environment plays a role in the drinking patterns of aboriginal peoples, which, in turn, lead to violence, are rooted in a consideration of the special alcohol prohibition legislation created for aboriginals. Until 1958 in Canada (and in 1953 in the US) it was illegal for an aboriginal person to possess alcohol or for a non-aboriginal person to sell it to an aboriginal person. On over two-thirds of American reservations and on many Canadian reserves and aboriginal communities, it is still illegal for people to possess alcohol. May (1975) points out that because of prohibitions on the use of alcohol by aboriginal peoples on reservations (and originally everywhere), they have learned to consume liquor rapidly so as to reduce the risk of being caught with it in their possession. "In other words, the drinking patterns which have developed in Native American society may have been highly influenced and shaped by the unique legal status of alcohol" (May, 1975, p. 133). Hayner, more than 50 years ago, tells us about the American Indian tribal leader who said that the rapid consumption of alcohol on reservations to avoid confiscation and arrest was because: "the boys figure they can't take it away if it's inside" (1942; p. 603).

Even within cultural groups the role of this prohibition on drunkenness and behavior is in evidence. Levy and Kunitz (1974, pp. 134-141) compared the drinking patterns of Navajos who resided on the reservation with the drinking patterns of Navajos who lived in a nearby city which bordered the reservation, on-reservation Navajos were binge drinkers who often got in trouble after consumption while off-reservation Navajos drank more like lower or middle class blue

collar workers who would pick up a six-pack on the way home from work and drink it while watching television and then go to sleep to be ready for the next working day.

The attention paid to the effect of alcohol prohibitions upon alcohol related trouble such as violent crime fits within a larger concern over the effect of alcohol control policies. There are many studies outside of those concerned with native peoples that consider the impact different alcohol control policies have upon crime in a population. Those studies have been characterized by Giacomassi and Stitt (1991) as falling under what they call the *distribution of consumption model*. According to that model, policies that allow for the increased availability of alcohol increase the aggregate consumption in a population which, in turn, increases the amount of "alcohol-related" damage such as violent crime (Giacomassi and Stitt, 1991). Essentially, the *distribution of consumption model* predicts that there will be fewer violent crimes in jurisdictions where there are greater restrictions on the availability of alcohol.

A pair of studies have considered the *distribution of consumption model* when examining the effects of changes in alcohol policies upon violent crime among native populations. Smart (1979) looked at the impact of changes in alcohol policies upon arrests for assault (among other offences) in some selected NWT communities with primarily native populations. He found that some restrictions were accompanied with decreases in violent crime while others were not. The establishment of a rationing system (another legal method of controlling the distribution of consumption) in the Mackenzie River community of Fort Resolution, for instance, failed to reduce the assault arrest rate, whereas the assault arrest rate was cut in half with the imposition of prohibition in the Great Slave Lake community of Rae-Edzo and the closure of the liquor store in Iqaluit (Smart, 1979, p. 911).

Schechter (1986) considered the impact an experimental alcohol rationing program had upon crime among the primarily aboriginal population of Greenland. A comparison of the number of crimes in 1978 in Greenland (the full year before rationing took effect) with the number of crimes in 1980 in Greenland (the full year after rationing took effect) shows that the rationing apparently did have some influence on the amount of crime (Schechter, 1986). One of the most positive effects of the rationing system, according to Schechter (1986), was the drop in violent crime in Greenland during the period of rationing, between 1978 and 1980 there was a 53 percent drop in the number of homicides, a 12 percent decrease in the number of attempted

homicides, and an 18 percent decline in the number of assaults.<sup>13</sup> These declines came with a 33 percent reduction in the amount of alcohol consumed in Greenland between 1978 and 1980 (Schechter, 1986, p. 591). An increase in violent crimes followed the end of the rationing program in 1981. There was a 25 percent increase in assault and a 10 percent increase in sex crimes between 1980 (the last full year that the rationing program was in effect) and 1982 (the first full year after the end of the rationing program) in Greenland (Schechter, 1986). However, the increases in violent crime were not in direct proportion to the increase in the consumption of alcohol which increased 96 percent between 1980 and 1982 (Schechter, 1986, p. 591).

Most of the literature on aboriginal drinking tends to discuss the reasons for drinking and criminal behavior among aboriginal peoples as if they were one homogeneous group, which they certainly are not (May, 1981). Some have looked to the distinctions between aboriginal cultures for explanations of the links between alcohol use and criminal behavior. Levy and Kunitz (1974) compared the drinking patterns and resulting behavior of three different southwestern US Indian Tribes who had quite varying pre-contact social organizations. The three tribes they studied were looked at according to the degrees to which the socio-cultural integration was individualistic or communalistic; the White Mountain Apache were said to be more individualistic than the Navajo who were more individualistic than the Hopi, who were the most communalistic. Both historical and contemporary statistics and sources were used by Levy and Kunitz (1974, pp. 98-103) to demonstrate that the Apache use alcohol more and are more violent when intoxicated than the Navajo, who use alcohol more and are more violent when intoxicated than the Hopi, who have relatively fewer problems with alcohol and alcohol related violence.

The final social approach considers the domination over aboriginal peoples' lives by non-aboriginal colonizers as a source of drunken violence which serves as a means for aboriginal peoples to gain a form of social power in an unjust society where they have none. According to Lurie (1971, pp. 314-15 [cited in Sackett, 1988]), aboriginal peoples use alcohol and sometimes act in a violent manner "to register opposition and hold the line against what they do not want."

---

<sup>13</sup>There is, however, a 28 percent increase in the number of sex crimes in the 1978 to 1980 period in Greenland, a figure that Schechter (1986) does not account for.

Lurie (1971) suggests that the use of alcohol by aboriginal peoples can be seen as protection against the larger social order and as a tool for the maintenance of distinctness from the larger assimilative society. Sackett, who studied the use of alcohol and criminal behavior of Aborigines in Western Australia argues that:

Liquor, the substance of disorder and chaos, provides an ideal way of responding to the perceived threat of being ordered by and completely incorporated into the wider society. Intoxication simultaneously facilitates and to an extent excuses the apparently uncontrolled behavior of a people opposing the imposition of ever more constraints. Certainly this is the case for Western Desert Aborigines (1988, p. 67)

In his description of the drinking behavior of the Aborigines of Wiluna, Sackett (1988, p. 69-70) shows they drink "to get drunk" and that their reactions when intoxicated are violent, "especially to attempts by others to order or control them."

#### Bio-Social Explanations

Situated in the middle of the explanatory continuum of alcohol related violence, the bio-social explanations have most frequently (in the aboriginal alcohol use / crime literature) been utilized to explain the violence associated with aboriginal alcohol use. Most of these bio-social explanations are made by those who wish to emphasize the influence of macro-level social structural influences upon crime, but they also try to take into account the effects of alcohol, which they treat as an intervening variable between the social world and crime. Taking into account both the physiological and psychological effects of alcohol use *and* the social setting in which alcohol use takes place, this perspective views alcohol as a "disinhibitor," a "trigger," or even a "catalyst" for violent behavior. Alcohol exacerbates a pre-existing anti-social situation, thereby leading to violent behavior. Using a largely bio-social explanation, Jilek-Aall (1988, p. 605) argues.

Rapid Westernization, destroying the adaptive function of indigenous culture, has a detrimental effect upon these northern communities. . . . Alcohol abuse, killing the pride that was left, destroying family life and depleting resources, becomes a tragic and self-defeating means of relief. The disinhibiting effect of alcohol facilitates violence and self-destructive behavior.

McCone (1966, p. 150) also employs a bio-social explanation when he argues that "the breakdown of the old cultural definitions then are a factor in the increased drunkenness, and increased drunkenness in turn becomes a factor in increased crime against the person."

Jayewardene (1975) argued that among the Inuit, alcohol is a catalyst for violence which is grounded in psychological stress produced by social disorganization. In a similar light, Finkler (1976, p 51), in a study of crime problems in Iqaluit, suggested that among the Inuit "aggressive behavior, which emanates from a situation of cumulative stress, appears to be unmasked by alcohol " Researchers utilizing the bio-social approach have argued that socio-cultural strain (Klausner & Foulks, 1982), rapid economic development and growth (Hobart, 1978), and unemployment and poverty (Peak & Spencer, 1987; Mills, 1989) among aboriginal peoples, when combined with the use of alcoholic beverages, quite often leads to violent behavior.

Implicit in these bio-social explanations of why alcohol consumption leads to violent crime is the presumption that when all else is held equal in a population (e.g., poverty or socio-cultural strain) there should be a direct relationship between the amount of alcohol used and the amount of violent crime committed. This underlying presumption is contained in what Giacomassi and Stitt (1991) have termed the *constant proportion hypothesis*: the proportion of excessive drinkers and, therefore, the amount of alcohol related damage (such as violent crime) in a population are directly related to the amount of consumption in the population (see also Room, 1978, Rush, Gliksman, & Brook, 1986).

While the studies that have considered the constant proportion hypothesis in non-native jurisdictions have provided mixed support (Giacomassi & Stitt, 1991; Lenke, 1984, Lester, 1992), there was little support from the one study that has attempted to use it to explain violent crime among native peoples. That study, by Hobart (1978), found little support for the idea that the amount of consumption was related to the amount of violent crime in the Mackenzie River valley of the NWT, Canada. There was no relationship between the rate of convictions for non-liquor offences in Magistrate's Court and the per capita dollars spent in local liquor outlets during the years 1960 through 1975. Instead, Hobart (1978) pointed to the oil exploration boom and the completion of a highway up the Mackenzie River valley as a possible explanations for increases in violent crime rates.

## **SUMMARY**

This chapter has examined two different perspectives attempting to explain the high rates of violent crime found among native peoples. First of all, a consideration of the colonization

perspective was undertaken. The research reviewed in that section contends that the socio-economic underdevelopment said to result from the colonization process is ultimately responsible for the large amounts of violence found in native jurisdictions. Second, explanations of the relationship between alcohol use and violent crime among native peoples were presented. The broad range of reasons, biological to social, for the acute prevalency of alcohol related violent crime in many native populations were examined.

Although the range of explanations considered from both perspectives was quite diverse, the research that has been performed is similar in at least one respect. The studies have examined violent crime among native peoples either at the level of all aboriginal peoples or at the level of a single community/tribal grouping. Relatively few studies have attempted to explain the differences in violent crime rates between different ethnically homogeneous native communities. As such, it is difficult to assess the degree to which the explanations that have support when explaining the differences between native and non-native violent crime rates are supported when applied to the differences between native jurisdictions. Later, in Chapters 5 and 6, both perspectives are considered in an attempt to find the community characteristics that are associated with variation in Baffin Region community violent crime rates. In the next chapter, however, the data and the methods used to carry out the study are presented.



## **CHAPTER 4: DATA SOURCES AND ANALYTICAL TECHNIQUES**

This study is essentially a correlational analysis attempting to link variability in Baffin Region community violent crime patterns with other community characteristics, within theoretical frameworks taking into account the potential effects of colonization and alcohol consumption. The community-level measures of violent crime, indicators of alcohol use, and measures of the impact of the colonization process used in this study were developed from a variety of primary and secondary data sources. The examination of the correspondence between violent crime variations and differences in community characteristics in this study was performed using nonparametric statistical techniques which are especially suited for studies having a small number of cases. This chapter provides a description and explanation of the data sources used and of the type of analyses performed in this study.

### **DATA SOURCES**

Both qualitative and quantitative data sources were used in this study. The analyses that attempted to determine the correspondence between violent crime and the community characteristics related to alcohol use or to the colonization process, relied primarily upon quantitative sources of data. The conceptualization of the various hypotheses connecting violent crime to alcohol use or to colonization was supported and illustrated by the use of qualitative data sources.

Some of the data used in this dissertation are from secondary sources. One secondary data source, especially as it pertains to qualitative data, was the Baffin Region Crime and Justice Study. The Baffin Region Crime and Justice Study was carried out from 1990 to 1994 by a multi-disciplinary research team (including Inuit field researchers) in the Baffin Region communities (Griffiths, et al., 1995). The primary mission of that study was to gather information and provide analyses which would be of use to Inuit community leaders, hamlet councils, and regional organizations in their efforts to improve the delivery of justice services in the existing region, as well as in the soon-to-be-created territory of Nunavut. The qualitative data gathered in the Baffin Region Crime and Justice Study and used in the present study included (1) responses gathered from semi-structured interviews performed with community residents, justice system personnel, and with other social and health service providers, and (2)

the personal field notes of the author of the present study. Various sources of quantitative data originally gathered for the Baffin Region Crime and Justice Study, including both the community measures of violent crime and the individual offence characteristic information from RCMP operational files, were also employed in the current study.

Not all data sources used in this dissertation originated in the research done for the Baffin Region Crime and Justice Study. Other secondary data sources and a few key primary data sources were obtained elsewhere. The majority of the measures of community characteristics were gathered specifically for this study.

Each of the different types of data sources used in this study are considered in further detail below. A consideration of the qualitative data gathered and used in this study is provided to begin with. Then, the different quantitative indicators that were used in the study are discussed. For each of the different types of data an indication of the steps taken to gather the information and an explanation of the usefulness of the information is provided.

### **Qualitative Data Sources**

#### **Face-to-Face Interviews**

The primary type of qualitative data utilized in this study was the responses from interviews conducted with justice, health and social service personnel and community residents by members of the Baffin Region Crime and Justice Study research team. These interviews queried respondents about a wide range of issues relating to crime and victimization in the communities, the delivery of justice services, and the development of community-based justice services and programs (Griffiths, et al., 1995).

The creation of the schedules for the face-to-face interviews was a two step process. First of all, justice system officials representing the Baffin Region and the rest of the NWT were brought to Vancouver for a focus group meeting. Those officials identified key issues relating to crime and justice in the eastern arctic. Open-ended questions were then drafted to explore the issues that had been identified. The actual drafting of the questions at the second step of the interview schedule creation process was completed during a further series of meetings between project team members. Three Inuit researchers, who were hired for the express purpose of conducting interviews with Baffin Region residents whose primary language was *Inuktitut* (the

Inuit language), also took part at this second step of the interview schedule creation. They assisted in the phrasing of the questions to ensure the cultural relevancy of terms and concepts (Griffiths, et al., 1995). Ultimately, three different interview schedules were developed: one for RCMP members currently serving in the Baffin Region, one for RCMP members previously serving in the Baffin Region, and one for community residents and local justice and social service system personnel (see Appendix A).

A total of 367 individuals were interviewed by researchers from the Baffin Region Crime and Justice Study. Roughly two-fifths (157 out of 367) of the interviews were conducted with active and retired RCMP members who had, at some time during their career, been posted to detachments in the Baffin Region. One of the goals of the Baffin Region Crime and Justice Study was to collect information relating to the historical and contemporary aspects of policing in the region (Griffiths, et al., 1995). It was, therefore, necessary for interviews to be conducted with a relatively high number of active and retired RCMP members. At least one RCMP member from each decade (since the 1930s) from each Baffin Region community was included in the sample of interviews. Interviews with RCMP members that previously served in the Baffin Region were conducted across Canada, in: Nova Scotia, Ottawa (RCMP Headquarters), the Okanagan Valley of British Columbia (where a number of RCMP members have retired to), and northern Alberta (Griffiths, et al., 1995).

The remaining three-fifths (210) of the interviews from the Baffin Region Crime and Justice Study were conducted with persons other than the police. This sample included Inuit and non-Inuit community residents, social workers, school teachers, judges and other lawyers, and other criminal justice system personnel. With few exceptions, those interviews were conducted in the Baffin Region communities.<sup>14</sup>

Sampling for these face-to-face interviews began as a purposive sample followed by "snowball" sampling (Griffiths, et al., 1995). Research team members visiting Baffin Region communities made sure that in each of the communities the RCMP members, the social worker, the hamlet's or municipality's Senior Administrative Officer, and at least one of the nurses was

---

<sup>14</sup> A half-dozen or so interviews with nurses who had previously worked in the Baffin Region were conducted in the Vancouver, BC area

interviewed. Individuals from initial group then identified other key informants in the community. Those key informants and knowledgeable community residents, in turn, often identified other informants (Griffiths, et al., 1995).

The Inuit research team members who assisted in designing the interview schedule, also conducted interviews in *Inuktitut* (Griffiths, et al., 1995). Due to slight differences in *Inuktitut* dialect across the Baffin Region, each Inuit research team member conducted interviews in communities where they were most comfortable with the local dialect. These Inuit field researchers relied upon friendship and family networks to facilitate the "snowball" sampling

All respondents were interviewed following standard research protocols of voluntary participation and assurances of confidentiality.<sup>15</sup> Only one potential interviewee refused to take part in the study. Most interviews lasted for one-and-a-half to two hours. Many of the respondents expressed appreciation for the "chance to tell their story". Interviews were tape recorded, translated into English if necessary, and transcribed (Griffiths, et al., 1995).

The information gathered in the field interviews served two important functions for this study. It helped to demonstrate the pervasiveness of violence and alcohol use in some Baffin Region communities. The perceptions of the respondents served to reinforce the quantitative indicators of those factors and to put the problems of violent crime and alcohol abuse into perspective. Second, the interview data aided in the generation and clarification of measures and hypotheses used in the analysis. The task of linking theory to data was made much easier when informed by the perceptions of those that experience the effects of violent crime on a day-to-day basis.

#### Field Notes

The second source of qualitative data used in this study is the field notes gathered during research visits to Baffin Region communities. Those unstructured records of the researcher's field work assisted in reconstructing an accurate portrayal of how other forms of data were gathered. For instance, the field notes register the process followed and the problems encountered in building a computer database to record the RCMP operational file data

---

<sup>15</sup> See Appendix C for a copy of letters indicating the university ethics committee's approval of the Baffin Region Crime and Justice Study and the university's support of that study.

(discussed below). Likewise, the field notes documented the procedures by which respondents were chosen for the face-to-face interviews. The most important purpose of the field notes, however, is that they served as a chronicle of the researcher's observations and perceptions about experiences and interactions with residents and justice and social system personnel in the Baffin Region communities.

Time in the field was not limited to conducting face-to-face interviews and collecting police operational data. A single visit to a community ranged anywhere from 7 to 10 days, so adequate time remained for less formal interactions with residents. In most of the communities, for example, time was spent with RCMP officers on "ride alongs" observing how the officer and community interacted. Those observations and perceptions were recorded in field notes, along with many other observations and perceptions. There were many opportunities for observing and arriving at a limited understanding of life in the Baffin Region. These included visits to outpost camps, "chewing the fat" (quite literally with those that shared their *muktuk*) with community residents visiting the hotel, eating supper with a RCMP detachment commander and his wife and then watching a hockey game, attending community committee meetings, taking coffee breaks with RCMP members, and spending evenings at drinking establishments and parties. Generally speaking, all activities were incorporated in to the field notes.

### **Quantitative Data Sources**

#### **Violent Crime Rate Data**

To document crime in the communities of the Baffin Region, community-level crime data produced by the Royal Canadian Mounted Police (RCMP) and by the Canadian Centre for Justice Statistics (CCJS) were examined. Crime data for the Baffin Region communities were available from CCJS for the years 1977 through 1991; RCMP data were available for the years 1981 through 1993. CCJS figures were used to make comparisons between the Baffin Region and other jurisdictions. For intra-regional comparisons and analysis, depending upon the time frame, both sources of data were used.

There is no doubt that the use of official records of crime in this study will be questioned by some. It is for good reason that their use should be questioned. Lowman and Palys (1991,

p. 366) identify three different categories of bias<sup>16</sup> in official records of crime. First, there is *ideological bias* in which some activities are classified as crimes while others are not. Secondly, there is what they term *instrumental bias* which refers to technical errors that result from the ways information about crime is recorded and processed. Finally, Lowman and Palys point out that there is *essential bias* which “refers to the systematic effects of socially differentiated structures of meaning on the signification of behavior as delinquent, criminal, or deviant (so that some persons or groups are more likely than others to have their behavior considered criminal, *not* because of differences in behavior, but because of their particular social status)” (1991, p. 366). This essential bias is said to be a result of the “institutional and organizational imperatives of people who produce crime statistics” and from the discretion which “arises in the context of police occupational culture and refers to the informal rules police use to apply the criminal law” (1991, p. 366). The main question is: are the differences in crime rates between jurisdictions (or over time) the result of the behavior of those we call ‘criminals’ or can the differences be found in the activities of those who record the behavior as criminal? Lowman and Palys (1991) take the position that the above question cannot be answered prior to looking at a jurisdiction’s crime patterns but should instead be considered from an empirical point of view. They argue that

the extent to which any crime rate differential is produced by the one or the other (the behavior of ‘criminals’ or the activities of recorders) must ultimately remain an empirical question; it cannot be decided ahead of time theoretically. This still leaves the possibility that control factors are far more important than criminal behavior in producing crime rates in certain instances, vice versa in others (Lowman & Palys, 1991, p. 365).

While it is impossible to rule out all sources of bias and to consider the police produced crime statistics as wholly unbiased, there are some indications that the sources of bias pointed out by Lowman and Palys (1991) might not be as great a hindrance to the proper interpretation of official crime data in the Baffin Region as they might be in other jurisdictions

First of all, it is clear that the crime rate data produced by the RCMP and the CCJS *are* ideologically biased. They do not consider the crimes of the elite of society. The military and

---

<sup>16</sup> According to Lowman and Palys (1991), these forms of “bias” should be viewed more broadly than would be connoted by the term’s normal statistical meaning.

mining companies, for example, have been allowed to pollute the region with little or no censure (Spence, 1991). Their actions certainly have not been considered criminal but rather are seen by some as 'the cost of doing business' (NWT Federation of Labour, 1991). This pollution and the censure due it, however, are topics for another study. The concern in this study was over the violent behaviors considered illegal under the *Canadian Criminal Code*.

The degree to which the crime rate data for the Baffin Region are subject to instrumental bias is difficult to determine here, but it is fair to say that it probably does exist. As in any other police jurisdiction, the crime rate in the Baffin Region is a measure of offences that come to the attention of the police. These rates will be biased to the extent that the likelihood of an offence being reported to the police in one community is larger than another community. Unfortunately, there was no victimization survey component to the Baffin Region Crime and Justice Study, making it impossible to say with a high degree of certainty that residents of one community are any more likely than the residents of another to report crimes. Given the high levels of dependency that Inuit have on government services (Irwin, 1988), inter-community variations in reporting rates probably are not all that high. The relatively small population sizes of the Baffin Region communities also make it more likely that offences will eventually come to the attention to the police so that any inter-community differences in reluctance to report an offence might be irrelevant.

The crime rate data of the Baffin Region are largely unaffected by the forms of essential bias discussed by Lowman and Palys (1991). There are two main reasons for a lack of essential bias effects on inter-community crime rates in the Baffin Region. The first reason for a lack of essential bias in the crime data of the Baffin Region is that the population is largely homogenous. For the most part the population of the Baffin Region is Inuit (as shown in Chapter 2) and of middle or lower socio-economic status. This makes it unlikely that one group is likely to receive differential police attention compared with another group because there is only one group to be policed. The second reason for a lack of essential bias is that the Baffin Region is a single police jurisdiction, which makes it impossible, by definition, for crime rate variation to be the result of variation in departmental goals, policies, and procedures. Rather than seeing the Baffin Region as being policed by 12 different police departments, each with its own 'institutional and organizational imperatives,' it is more appropriate to view the region as being policed by one

police department with 12 different "precincts." The ties that each detachment have with the RCMP sub-division headquarters in Iqaluit are strong. Records in each detachment are audited at least once a year by a staff sergeant from sub-division headquarters in Iqaluit which insures some degree of uniformity in recording practices. Members posted to communities in the Baffin Region are brought through the sub-division headquarters in Iqaluit prior to their posting for an orientation to the area. Officers are rotated for short periods of time throughout the sub-division as replacements for members who go out on holiday or other police business. Some RCMP officers serve in more than one Baffin Region community for extended periods of time. Individual detachments are in constant contact with each other and with the sub-division headquarters assisting each other with cases. For instance, an analysis of tasks performed by Baffin Region RCMP detachments shows that nearly 13 percent of non-enforcement files and 5 percent of all files produced by those detachments in 1991 were for assistance to other Baffin Region RCMP detachments (Wood & Trostle, in press).

#### RCMP Operational File Records

Police file records are a second type of quantitative data that were used in this study. Specifically, this study looked at data gleaned from the RCMP operational files in each of the Baffin Region's detachments. These operational files record each and every criminal and non-criminal incident the RCMP respond to. The breadth and depth of these files allowed for an analysis of the patterns of violent crime in the Baffin Region that was more thorough than that provided by the RCMP and CCJS violent crime rate measures.

Operational file data were collected from each of the 13 RCMP detachments in the Baffin Region for the year 1991. Every operational file in all of the communities were recorded into a database. For criminal files, information about the offence, the suspect/offender, the victim, and the way that the criminal justice system's handling of the case was recorded in the database (see Appendix B for sample data entry screens). In all, information from 3,164 different RCMP operational files in the 12 communities were entered into the database. The major value of the operational file data for this study is that when analyzed they allowed for the identification of crime patterns in the Baffin Region beyond offence type and community. In



Chapter 6, for instance, the proportion of violent offences in a community that were alcohol related was calculated using these RCMP operational data.

#### Community Characteristic Measures

The other major group of quantitative measures in this study are those used to examine the relationships between violent crime and alcohol consumption or between violent crime and the impacts of colonization. These measures came from a variety of sources, including Statistics Canada, the GNWT Bureau of Statistics, and the GNWT Liquor Commission. A general description of the measures is provided below. The specific operationalizations of the measures are found in the chapters where they are used in analyses.

One source of community characteristic indices was the census material produced and published by Statistics Canada. Population and socio-economic measures gathered in the 1981, 1986, and 1991 quint-annual National Census (Statistics Canada, 1982; 1983; 1987b; 1988; 1992; 1993b) as well as measures gathered in the 1991 Aboriginal Peoples Survey (Statistics Canada, 1993a) were used to differentiate between communities on a number of factors in this study. The National Census, for example, provided community-level measures of employment, income, and household occupancy. The Aboriginal Peoples Survey provided some interesting community-level indicators relating to health, use of harmful substances such as alcohol and drugs, and participation in native activities.

Another source of measures that served to characterize communities came from the Government of the NWT (GNWT). Those measures, which were used mainly to supplement National Census measures, also provided indices with which to differentiate between communities. The GNWT, through its Bureau of Statistics, publishes inter-censusal employment and income data not available from Statistics Canada. For example, the GNWT Bureau of Statistics completes and publishes the results of a labor force survey (1984a; 1989) between the years the censuses are conducted. The community-level measures of employment from that survey helped to fill the gaps in census data, which allowed for a more in-depth analysis of the relationship between employment and violent crime.

In order to examine the association of alcohol use with violent crime in the Baffin Region, another set of variables was developed from information provided by the GNWT Liquor

Commission. Community-level measures of alcohol consumption were created from individual liquor sale mail order invoices made available to the author. These invoices record the quantity and brand of alcohol sold by the Liquor Commission to individuals living in non-dry communities outside Iqaluit (a sample invoice is shown in Appendix D). Using the quantity and brand of alcohol it was possible to construct a measure of absolute alcohol consumed on a per capita basis<sup>17</sup> for each of the communities in the Baffin Region where drinking alcohol is allowed. No other study has been able to compute a measure of per capita alcohol consumption at the community level. According to the literature examined for this study, measures of per capita alcohol consumption have only been available at the provincial / territorial / state level. As will be shown later, where the specific steps taken to compute the per capita consumption measure described, the special geographic circumstances of the Baffin Region made it possible to compute that measure at the community level.

The final source of data used in this study was the situational and historical record of the communities. There are many things in the histories and situations of the communities that provide theoretically compelling means of differentiation. For instance, variations in the liquor laws of the communities, that is, whether or not alcohol is allowed in a community, were used to differentiate between communities to see which type of community had more violent crime. Other situational and historical factors that were used for differentiating between communities to see how community types differed in terms of violent crime include whether a community was settled by forcible relocation and whether a community had a population of transient non-Inuit residents.

## **DATA ANALYSIS FOR SMALL SAMPLE SIZES**

A major limitation of this study was the small number of "cases" that were available for analysis. The small number of communities limited both the type of information that could be gathered and the way that the information was analyzed. Having 12 cases was a problem

---

<sup>17</sup> To compute the standardized measure of per-capita consumption of absolute alcohol (i.e., 100 % or 200 proof alcohol), the quantity of beverage ordered was multiplied by the volume of the beverage ordered multiplied by the alcohol content in percentage; that figure was then divided by the number of adults in the community to arrive at the per-capita measure. Measures of alcohol content by beverage were obtained from the product listings of the British Columbia Liquor Distribution Product Guide (Myers, 1994).

because there were too many communities to employ ethnographic methods with the available resources, but too few communities with the power to detect subtle effects. The end results of that conundrum were that the qualitative data that were gathered and used could not be considered to be as in-depth as those gathered in community ethnographies while the analysis of the quantitative data required the use of rather basic statistical techniques

Although the qualitative methods of field interviews and participant observation were used in the gathering of data for this study, the data gathered lack the depth one would generally acquaint with such methods. To achieve such depth would have required the completion of community studies in all 12 of the communities. Such an undertaking would have required considerably more resources, a much broader time frame, and an ethnographic approach similar to that employed by Condon (1987) in the central arctic Inuit community of Holman Island and by Rasing (1994) in the Baffin Region community of Igloolik.<sup>18</sup> Both of those studies involved in-depth documentation over a period of years with a great deal of time spent on the ground in the community. The qualitative data used in this study comes from the community research visits done for the Baffin Region Crime and Justice Study. Those visits generally lasted two weeks or less. As such, the qualitative information used in this study will mostly be limited to perceptions gathered in face-to-face field interviews rather than the perceptions of the researcher gathered during field observation.

At the same time that having 12 communities to consider in the analysis limited the depth of qualitative information gathered, the small number of units of analysis affected the types of statistical techniques that could be used. Multivariate statistical tests could not be used because proper model specification would have required many more cases than variables. It was also impractical to employ commonly used bivariate tests of statistical significance in analyses with small numbers of cases because the assumptions of those tests are often violated with small samples. And in any event, they have little power to detect but the strongest effects. There were, however, alternatives to the avoidance of the use of statistical analysis in this dissertation. Solutions to the problem of having a small number of cases to analyze included 1) applying less

---

<sup>18</sup> The depth of information gained even in those ethnographic studies can be questioned. It is difficult to ascertain the extent to which non-Inuit field researchers from outside of the community are successful in peeling back what one informant in termed the "layers of the onion" that surround life in Inuit communities.

commonly used tests of statistical significance that are not influenced by sample size and 2) employing statistical techniques that increase the sample size. Solution number one involves the use of nonparametric statistics (also referred to as rank-order statistics) with exact tests of significance and solution number two involves pooling different years of cross-sections to increase the number of cases available for analysis. These broad classes of statistical analysis are discussed below. The specific statistical tests that are employed are introduced in the chapters in which they are used

### **Nonparametric Statistics and Exact Tests for Bivariate Analysis**

Nonparametric statistics should be used when the conditions of "classical" tests of statistical significance (such as the  $t$  test or  $F$  test) cannot be met (Seigel and Castella, 1988). Before one can be confident with a probability statement obtained by the use of those "classical" tests, one must insure that

- the observations are drawn from normally distributed populations,
- the observations are independent,
- the variables must have been measured at the interval scale (Seigel & Castella, 1988)

Although all of these stringent assumptions are rarely met in the social sciences (Leach, 1979, p. xiii), when dealing with small sample sizes the first assumption that the observations are drawn from normally distributed populations is especially in jeopardy of being violated. Nonparametric statistics do not make such assumptions. As pointed out by Conover and Iman (1981) the key difference between nonparametric statistics and parametric statistics is that the former allows for measurement of the statistical significance of a relationship when the observations are not drawn from a normally distributed population. These nonparametric statistics are also known as "distribution free" statistics (Stahl & Hennes, 1980). According to Dickinson Gibbons (1993, p. 63), the use of nonparametric measures of association and tests of significance is most appropriate when the data are measured on a nominal or an ordinal scale, when the shape of the distribution from which the sample is drawn is unknown, when there are outliers and/or extreme values in the data, or, of most importance for this study, when dealing with small sample sizes. As Seigel and Castella (1988, p. xv) point out, a major "advantage of the nonparametric tests is their usefulness with small samples, a feature which should be helpful to the researcher collecting

pilot study data and to the researcher whose samples must be small because of their very nature "

In most instances even nonparametric statistical tests require sample sizes larger than the 12 cases used in the bivariate analyses in this dissertation. These nonparametric tests assume that the number of cases in the analysis is "large enough for the test statistic to converge to an appropriate limiting normal or chi-square distribution" (Mehta & Patel, 1996, 12). For example, the 2 X 2 table chi-square test is said to be inappropriate if the grand total of the table is less than 20 or if the total lies between 20 and 40 and the smallest expected (not observed) value is less than 5 (Cochran, 1954). The general rule for larger tables is that the chi-square test is inappropriate if any cell has an expected value of less than 1 or if one-fifth of the cells have expected values of less than 5 (Cochran, 1954, see also Mehta & Patel, 1996, Swinscow, 1978). In other words, the nonparametric statistical tests are appropriate when the sample is small, sparse, unbalanced, or poorly distributed.

When having a small number of cases for analysis makes the use of nonparametric statistical significance tests inappropriate, it is necessary to compute exact probabilities to test the statistical significance of a relationship. The exact probability is the probability of a single outcome in a contingency table being present among all possible outcomes of that contingency table when the margins of the table are held constant. In other words, the exact probability of an outcome is computed by examining the observed table in relation to all other tables in a reference set of tables whose margins are the same as those of the actually observed table (Mehta & Patel, 1996, Swinscow, 1978). Calculations of exact probability tests always produce reliable results regardless of the size, distribution, sparseness, or balance of the data because they consider only the true distribution of the data (Mehta & Patel, 1996).

#### **Pooled Time-Series Analysis of Multivariate Data**

The use of nonparametric statistics and exact probability tests to determine the statistical significance of substantive findings from a data set with relatively few members is limited to a set of sequential bivariate analyses. According to Leach (1979), the major disadvantage of nonparametric techniques is that they are not useful when more than two variables are being

analyzed at one time. As such, the small sample size must be addressed in some other way to produce any sort of multivariate statistical analysis.

Pooled time-series analysis is a form of analysis for data that are a combination of time series and cross-sections (Schroeder, Sjoquist, & Stephan, 1986, p. 55). This method of bringing together different cross-sections from different time periods is said to be "particularly useful in applied research when the length of the time series is abbreviated and/or the sample of cross-sections is modest in size" (Says, 1989, p. 7, emphasis added). In this dissertation, for instance, any one cross-section of communities equals 12. This small "n" is hardly large enough to obtain meaningful results from multivariate statistical analyses. However, an "n" large enough to get meaningful results can be obtained by taking into account a number of years worth of data on those 12 communities. For some measures, especially those gathered by the twice-a-decade national census, it is possible to generate a large enough number of cases to carry out a form of basic multiple regression analysis.

## **SUMMARY**

Given the research design employed, along with the small number of communities available for analysis, the conclusions made in this study are based on associations between measures. It is therefore, impossible to effectively rule out rival plausible explanations. The very nature of the type of research, the *ex post facto* analysis of violent crime in different jurisdictions, means that experimental designs which control for potential rival causal factors through the random assignment of cases to "treatments" are unavailable. Having only 12 cases served to rule out the use of multivariate data analysis techniques to eliminate rival plausible explanations using statistical controls. In short, with the data and design used, this research must be seen as exploratory rather than confirmatory. But, while there certainly limitations to what can be said in using a correlational strategy, it was still possible to conduct an informed examination of the community characteristics that are associated with violent crime in the Baffin Region. The challenge in this study was not in employing sophisticated multivariate models, but rather in coaxing substantive meaning out of the limited data sources that were available. By doing so, this study has contributed to knowledge about crime in native communities.

## CHAPTER 5: COLONIZATION AND VIOLENT CRIME

It is taken as a given that the expansion of white society in North America has come at the expense of the Native people that lived here first. There is general agreement that the introduction of Euro-Canadian culture resulted in overwhelming change in Inuit culture (Adamyk, 1987, Anderson, 1971, Brody, 1977, Hodgkinson, 1972, Honigmann & Honigmann, 1965, Sammons, 1985, van Dyke, 1982, Wenzel, 1985, Whyte, 1976, Zaslow, 1984). Kellough (1980), Paine (1977), Rea (1968) and Tobias (1976) have argued that the relationship between the federal government and the Inuit can best be understood from a colonial perspective. These observers contend that the colonization of the Canadian arctic has been an intentional, long-term process which has involved replacing the traditional, self-reliant lifestyle of the Inuit with a dependent and subordinate status

Crowe (1974), Minor (1979), Swiderski (1985) and Zaslow (1971), among others, have documented the role played by the missionaries, fur traders, whalers, and government officials as agents of change in the colonization process (see also Coates, 1985, Coates & Powell, 1989, Coates & Morrison, 1988). Through this process, Inuit culture was displaced and the Inuit were swept into dependency and resignation (Irwin, 1988). Zaslow (1984) and van Dyke (1982) note that the introduction of Euro-Canadian culture resulted in rapid and overwhelming change in the cultures of Inuit. This, in turn, created widespread cultural shock and disruption at both the community and individual levels (see also Pretes, 1988). In this chapter the possible impacts of colonization upon Baffin Region communities are considered in an attempt to understand why some communities have more violent crime than others.

The task of considering the potential impact of colonization upon violent crime in Baffin Region communities in this study was made somewhat difficult due to a lack of linkages between those two constructs in the research literature. Many studies have failed to provide an exact specification of the reasons why colonization is said to lead to high levels of violence. Of the research that has attributed the high rates of violent crime among aboriginal peoples to the process of colonization, little of it has examined the relationship from an empirical standpoint. Instead, a logical connection is made between (1) the aboriginal peoples' having been through the process of colonization resulting in their current domestic dependent relationship with non-native governments and (2) the high rates of violent crime present in aboriginal populations,

to make the conclusion that the high rates of violent crime among aboriginal peoples is the result of colonization. The actual process by which colonization is translated into high rates of violent crime has generally been the subject of speculation in those non-empirical studies. In the few studies that have taken an empirical approach to consider the effects of the process of colonization upon violent crime, only one type of linkage between the two constructs has been used. Those studies have almost exclusively considered indicators of the socio-economic underdevelopment said to have resulted from the colonization process to connect it to violent crime among aboriginal populations.

By focusing only upon the socio-economic outcomes of the colonization process, those prior empirical studies have not considered aspects of that process which could possibly be used to further understand the differences in violent crime patterns found in native communities. As suggested by the research literature that has focused specifically upon the colonization process (without even considering violent crime), a pair of aspects of the colonization process that have been played out in the Baffin Region and that might have had a differential impact upon violent crime are looked at in this chapter. In total, three hypotheses concerning the colonization process as it might have impacted Baffin Region community crime rates were assessed in this chapter. Each of the hypotheses were derived from some aspect of colonization that took place during, or is an outcome of, that process as it involved the communities of the Baffin Region.

As with the prior empirical studies referred to above, this study also considered the possible impact of socio-economic underdevelopment as one of the results of the colonization process upon violent crime. Components of socio-economic underdevelopment such as low levels of employment, education, income, along with poor housing conditions, all said to be a result of the colonization process (Hagan & Schaw, 1960, Pretes, 1988), could account for why some Baffin Region communities have more violent crime than others. As such, the first hypothesis considered in this chapter examined measures of socio-economic underdevelopment in an attempt to understand the degree to which variation in violent crime across communities may be associated with variation in socio-economic measures.

Another aspect of the colonization process which has been linked to many problems in native communities and which might possibly account for differences said to lead to social problems such as violent crime is the forced settlement and relocation of communities.



(Brokensha & Scudder, 1968; Scudder, 1982; Scudder & Colson, 1982). The second hypothesis looked to the way that Baffin Region communities were settled, to understand the extent to which violent crime in today's Baffin Region communities may be determined by the way in which they were settled and populated.

An additional way that the colonization process is said to impact upon native communities is that it brings them into the larger political economy, making them vulnerable to the effects of outside economic and political forces (Jorgensen, 1971; Owens, 1976). The final hypothesis in this chapter examines the possible impact of the European seal skin ban on community-level violent crime

For each of these hypotheses, the theoretical connection between the hypothesis and colonization will first be drawn. Then, the concepts that are components of each hypothesis will be operationalized in order to establish a connection between theory and data. The results of the appropriate statistical analyses will then be reported and interpreted. Following will be a discussion of how the findings aid us in looking at the colonization process to gain an understanding of the community characteristics that are associated with violent crime

## **SOCIO-ECONOMIC UNDERDEVELOPMENT**

As a process, colonization is generally identified by its outcomes. One of the main outcomes considered by those studying the neo-colonial relationship between native people and the larger non-native society is the native peoples' low socio-economic status measured in terms indicators such as income, levels of employment, or conditions and availability of housing.

The idea of characterizing the relationship between native people and the larger non-native society as "neo-colonial" arose to explain the persistence of poverty and economic underdevelopment among native people (Jorgensen, 1971; Owens, 1976). Many observers (Aberle, 1983, Anders, 1980; Dunbar-Ortiz, 1979, Harding, 1978, 1988; Jorgensen, 1971, 1972, 1978; LaDuke & Churchill, 1985; Owens, 1976; Pretes, 1988; Snipp, 1986a, 1986b; Turner-Ruffing, 1979) have demonstrated how the growth of the non-native economy has been at the expense of the native economy. This growth is, in turn, said to result in native people having the lowest levels of income, health, housing, employment, and educational attainment on a national level. According to Bachman (1992, p. 38), colonization "is perhaps the earliest antecedent to

some of the present deleterious conditions under which many American Indians live. . . . This colonization process has undoubtedly contributed to economic deprivation and social disorganization within American Indian populations."

The Inuit communities of the Baffin Region are clearly behind the rest of the nation on a number of indicators of socio-economic well-being. Table 7 compares Baffin Region communities with national totals on a number of socio-economic indicators, including measures of employment, education, housing conditions, and income. The percentage of people age 15 and over that are employed in Baffin Region communities is was considerably less than that found nationally, only three of the communities had more people employed than what is found on average in Canada. There were three times as many people over the age of 15 with a less than grade 9 education and twice as many people per room in Baffin Region communities than what is found nationally. A direct comparison of Baffin Region community incomes with the national average shows that the majority (9 out of 12) of communities were lower than the national average. However, when the cost of living differential is figured into the comparison, all Baffin Region communities had incomes less than the national average. Taken as a whole, it is clear that the Baffin Region communities have lagged far behind the rest of the nation in terms of socio-economic conditions.

### **Variables and Hypotheses**

The apparent relationship identified in the literature (Bachman, 1992; Kellough, 1980, Thatcher, 1986; Zion & Zion, 1996) between the socio-economic outcomes of colonization and violent crime at the native / non-native level suggests several hypotheses that can be examined in an inter-community level analysis. From that relationship one would expect to find an inverse association between measures of violent crime and measures of income, education, employment, and quality of housing conditions. Communities where people are working, have good educations and incomes, and are living in adequate housing should have less violent crime than those communities where people are not working, have poor educations and low incomes and are living in inadequate housing

**Table 7: Employment, Education, Housing Conditions, and Income, Baffin Region Communities and Canada, 1991.**

Community	Percent Employed* (a)	Percent Less Than Grade 9 Education* (a)	Average Number of People per Room (a)	Average Income in \$ (b)	Cost of Living Differential** (c)
Broughton Island	48	57	0.9	16,341	160 - 165
Cape Dorset	45	45	1.0	15,755	160 - 165
Clyde River	42	50	1.1	15,735	160 - 165
Grise Fiord	69	38	0.9	24,660	170 - 175
Hall Beach	40	47	1.2	21,316	165 - 170
Igloolik	36	45	1.0	17,059	165 - 170
Lake Harbour	57	43	1.0	18,024	160 - 165
Nanisivik	61	38	0.8	36,490	165 - 170
Pangnirtung	48	46	0.9	18,452	160 - 165
Pond Inlet	46	42	1.1	18,030	160 - 165
Resolute Bay	67	38	0.7	29,350	165 - 170
Sanikiluaq	43	40	1.1	14,394	150 - 155
CANADA	61	14	0.4	24,001	

\*Includes population age 15 and up

\*\*Montreal = 100

(a) Statistics Canada, 1993b

(b) GNWT Bureau of Statistics, 1996a

(c) GNWT Bureau of Statistics, 1996b

There are many ways of measuring the amount of employment, or the lack thereof, in a population (Jacob, 1984, National Commission on Employment and Unemployment, 1979). The unemployment rate, the most common measure of employment levels, is a measure of those that are actively seeking a job at the time of measurement as a percentage of the total number of people working plus the number of people actively seeking a job. By only measuring the non-employed status of those actively seeking employment, the unemployment rate excludes from measurement those individuals that could be working but who have given up looking for a job (Groth, 1982, Shiskin, 1976). The unemployment rate, as an indicator of the extent to which those that are able to work are working or are seeking work, is especially problematic in jurisdictions such as the Baffin Region where many individuals would not be likely to be seeking

employment because the chances of ever being employed are very low. To measure levels of employment in places such as the Baffin Region where the opportunity of employment is not widespread, it is necessary to look beyond those that have employment or are seeking employment at the time of measurement because the actual possible available labor pool is much bigger.

About the only way to capture the actual available labor pool (i.e., discouraged and non-discouraged possible workers and workers) in the Baffin Region is to account for all the individuals that possibly could be workers. The percentage of individuals age 15 and older that are employed in a community will be therefore used. Data for this measure comes from the national census (Statistics Canada, 1983, 1988, 1993b) and is available for all 12 Baffin Region communities for the years 1981, 1986, and 1991. An inverse relationship between the percentage of individuals that are employed and the violent crime rate would be expected.

As with employment, there are many ways to measure educational attainment at the community level. A number of census measures are available including the proportion of a jurisdiction that has graduated from high school, university, and trade school. In the Baffin Region, however, very few individuals graduate from high school, much less, university (Statistics Canada, 1993b). As such, the best measure of educational attainment to compare Baffin Region communities is the percentage of individuals age 15 and older that have a less than grade 9 education. The national census (Statistics Canada, 1983, 1988, 1993b) is the source for this measure, covering all 12 Baffin Region communities for the years 1981, 1986, and 1991. A direct relationship between the percentage of individuals with less than grade 9 education and the violent crime rate was expected.

A few measures from the national census provide indicators of housing conditions in a jurisdiction. Counts of the number of dwellings by dates of construction, the number of dwellings with central heating, and the average rent or mortgage payment all provide some insight into the housing situation. However, the housing conditions in the Baffin Region are generally satisfactory on these measures, most dwellings have been built in the last 20 years, nearly all have central heating, and the rent and mortgage payments are very low compared to national figures (Statistics Canada, 1993b). Although the houses in the Baffin Region may be relatively new, heated, and inexpensive to live in, they are also very crowded. The one measure

that does indicate poor housing conditions in the Baffin Region communities, the average (mean) number of persons per room, provides an indication of how crowded the houses are. Once again, the national census (Statistics Canada, 1983, 1988, 1993b) is a source for this measure of housing density covering all 12 communities for the years 1981, 1986, and 1991. It was expected that the more crowded the housing conditions, the more violent crime there should be

The national census also provides many measures of income in a community. However, it is not possible to use the census measures because the census does not report incomes for jurisdictions with very small populations (e.g. Grise Fiord and Resolute Bay) due to *Privacy Act* restrictions (Statistics Canada, 1993b). It is possible to use a measure of income from another source to avoid excluding the smallest communities from the analysis. The GNWT Bureau of Statistics (1984b, 1991, 1996a) reports average (mean) incomes according to Revenue Canada Locality Code Statistics for all communities in the NWT including the 12 communities of the Baffin Region of interest to this dissertation. As with the other measures of the outcomes of colonization, the average community income measure is available for the years 1981, 1986, and 1991. An inverse relationship between average income in a community and violent crime rate in a community was expected

Violent crime is measured in this analysis with two different indicators. The first measure of violent crime is the yearly violent crime rate per 1,000 population according to RCMP figures ("G" Division RCMP, 1982, 1987, 1992). The second measure of violent crime is the three year mean crime rate per 1,000 population according to CCJS figures (CCJS, 1981-83, 1986-88, 1991-93). Each of these violent crime rate measures has its advantages and disadvantages. On one hand, RCMP figures are preferable because they are recorded closer to the source and because they contain all violent offences including those that would be excluded by the CCJS hierarchy rule (which counts only the most serious offence in a multiple offence occurrence). On the other hand, the use of CCJS figures is preferable because they were published for the year 1980 (while the RCMP figures were not) which allows for the calculation of an average violent

crime rate that helps to adjust for the effects of "one man crime waves"<sup>19</sup> upon the relative amount of violent crime in a community. The mean of three years worth of CCJS violent crime data (which includes the year of, the year before, and the year after the measurement of the independent variables) is used in the present analysis.

### **Analysis and Results**

In order to assess the relative effects of the different outcomes of the colonization process upon violent crime at the community level, a pooled time-series regression model was employed. As pointed out in Chapter 4 of this study, a pooled time-series regression model allows for the testing of the effects of multiple independent variables upon a single dependent variable when the number of cases is small and when there are several years worth of data available for analysis. Three years of data (1981, 1986, and 1991) were used for the 12 communities, resulting in 34 different data points<sup>20</sup> available for the regression analysis. The descriptive statistics for the variables used in the analysis are shown in Table 8.

Although there are benefits to combining three years worth of data to generate an adequate number of units of analysis for the regression analysis, the use of pooled time-series regression brings with it all of the problems of cross-sectional analyses combined with the problems of time-series analysis. The assumptions behind the interpretation of regression coefficients and, especially, tests of significance, must each be considered when employing pooled time-series regression (Sayrs, 1989; Schroeder, Sjoquist, & Stephan, 1986). Inspections of the regression residuals of the results of the present analysis, however, showed the results to be plagued neither by autocorrelation (the regression assumption violation generally confined to time-series analyses that occurs when error terms for different observations are correlated) nor

---

<sup>19</sup> Individual offenders that commit multiple offences have more of an impact on the rates of crime in communities with small populations rather than in communities with large populations. If several violent offences are committed in a single year by a lone individual in a community with a very small population, it will seem as though the community is crime-ridden when, in fact, only a single individual is responsible (Marenin, 1992).

<sup>20</sup> In this analysis n=34, not n=36. The "cases" of Broughton Island in 1981 and Hall Beach in 1981 are excluded from the analysis because they were policed from RCMP detachments in Clyde River and Igloodik, respectively, at that time. The "case" of Clyde River in 1981 combines independent variables from Broughton Island and Clyde River and the "case" of Igloodik in 1981 combines independent variables from Hall Beach and Igloodik.

by heteroscedasticity (the regression assumption violation occasionally encountered in cross-sectional analyses that occurs when the variance of the error terms is not constant).

According to Sayrs (1989), autocorrelation can be checked for a pooled time-series model by computing the Durbin-Watson coefficient for each cross-section and then computing mean of those coefficients to arrive at a Durbin-Watson coefficient for the entire pool. This pooled coefficient is then used to estimate the amount of autocorrelation in the pool. Sayrs (1989, p. 19) points out that "as the pooled statistic approximates the number 2, the less autocorrelation, on average, there is in the pool." In the present analysis the pooled Durbin-Watson coefficient was 1.90 for the model estimating the CCJS three year mean violent crime rate and 1.98 for the model estimating the RCMP violent crime rate

**Table 8: Descriptive Statistics for All Variables Used in the Analysis of Outcomes of Colonization Upon Violent Crime, Baffin Region Communities, 1981, 1986, and 1991 (n = 34)**

Variable	Mean	Standard Deviation	Minimum	Maximum
<i>Independent Variables</i>				
Mean community income	16444	6916	8730	36490
Percentage of population over age 15 that is employed	43	13	16	69
Percentage of population over age 15 with less than grade 9 education	55	13	29	76
Number of persons per room	1.09	0.17	0.70	1.40
<i>Dependent Variables</i>				
RCMP Violent Crime Rate	39	33	5	144
CCJS 3 Year Mean Violent Crime Rate	37	33	5	142

As suggested by Hanushek & Jackson (1977, p. 168), a visual inspection of regression residuals was conducted to detect the presence of non-constant error variance (i.e., the presence of heteroscedasticity). Partial regression plots, which depict the residual of the dependent variable against residuals from each independent variable (Norušis, 1993), were constructed to chart the change in residuals of each independent variable against those of the dependent

variable. Although these plots unveiled a few outliers, the visual inspection of these partial regression plots show a general scattering of residual points in a band of relatively equal width from the regression line. This "general scattering" is indicative of a relationship absent of constancy between error terms (Lewis-Beck, 1980) and therefore, the results are not plagued by heteroscedasticity.

After considering the assumptions involving residuals, a correlation matrix was constructed to examine the zero-order relationships between the variables and to search for possible multicollinearity between the independent variables in the analysis. As is shown in Table 9 all of the correlations between the independent variables except for one were in excess of the  $r = .60$  level and two of the relationships were at the  $r = .70$  level. These relatively strong zero-order relationships make sense from a theoretical standpoint. One would expect high average incomes in communities where a large proportion of residents are educated and employed along with low average incomes where people are not educated or employed. And while the "clustering" of these variables adds support to their ability to indicate differences between communities on the overall socio-economic impact of the colonization process, the high correlations appear to indicate the presence of multicollinearity in the regression model. Multicollinearity, a problem in regression analysis that occurs when independent variables are intercorrelated (Berry & Feldman, 1985), is mainly a problem when trying to discern the effects of individual independent variables upon the dependent variable. As Hanushek and Jackson point out, "the more two variables covary or move together in a sample, the harder it is to ascertain the independent effect of one of them, holding the other constant" (1977, p. 87). However, multicollinearity is not as large a concern in the current analysis as it might be in other models because the concern here is with the overall effect of the outcomes of colonization upon violent crime rather than the relative effects of each individual independent variable. Understanding the total effect of all variables upon violent crime is considered to be more important in this analysis than understanding the relative individual effect of any one independent variable.

An examination of the correlation coefficients revealed some interesting associations between the two measures of violent crime and the independent variables. The most interesting outcome was that all of the correlations were opposite the direction anticipated from the colonization perspective. For example, there is a direct relationship between the average



community income and both measures of violent crime. There is also a direct relationship between the proportion of adults employed and the measures of violent crime. These findings suggest that high violent crime rates in Baffin Region communities were associated with high, not low, average incomes and high, not low, levels of employment. The other associations between the measures of violent crime and variables representing the outcomes of colonization are also in the direction opposite that expected by the colonization perspective. The education measure (the proportion of adults with less than grade 9 education) and the housing density measure (the mean number of people per room) were both inversely related to the two measures of violent crime. These results of the correlational seem to indicate that high levels of violent crime were associated with lower levels of housing density and with higher levels of educational attainment

**Table 9: Zero-Order Correlation Coefficients for All Variables Used in the Analysis of Outcomes of Colonization Upon Violent Crime, Baffin Region Communities, 1981, 1986, and 1991 (n = 34)**

	Mean community income	Percentage of population over age 15 that is employed	Percentage of population over age 15 with less than grade 9 education	Number of persons per room
Mean community income	1.00			
Percentage of population over age 15 that is employed	.64*	1.00		
Percentage of population over age 15 with less than grade 9 education	-.67*	-.70*	1.00	
Number of persons per room	-.55*	-.70*	.65*	1.00
RCMP Violent Crime Rate *	.41*	.31	-.44*	-.48*
CCJS 3 Year Mean Violent Crime Rate	.43*	.37*	-.49*	-.55*

\*Indicates statistical significance at the .05 level or less.

In order to estimate the overall effect of the model consisting of measures of underdevelopment upon violent crime, ordinary least squares regression was applied. Each of the four independent variables described above, as measures of the socio-economic underdevelopment said to result from colonization, were regressed on both of the violent crime

rate measures for each community. The results of these regressions are shown in Table 10. For the RCMP violent crime rate, only about 30 percent of variation is explained by the model combining 4 variables, none of which contribute significantly to the explained variation. For the CCJS three year mean violent crime rate, the 4 combined variables explained about 35 percent of the variation.

**Table 10: Least Squares Regression Estimates of Effects of All Variables Used in the Analysis of Outcomes of Colonization Upon Violent Crime, Baffin Region Communities, 1981, 1986, and 1991 (n = 34)**

Independent Variable	Dependent Variable	
	RCMP Violent Crime Rate	CCJS 3 Year Mean Violent Crime Rate
Mean community income	.21	.16
Percentage of population over age 15 that is employed	-.27	-.23
Percentage of population over age 15 with less than grade 9 education	-.23	-.24
Number of persons per room	-.41	-.46*
	<i>R</i> <sup>2</sup>	
	30*	35*

\*Indicates statistical significance at the .05 level or less.

It would be foolish to strongly interpret the relative effects of the model's individual independent variables upon the violent crime measures because the results of these regression analyses were affected by multicollinearity. Due to the strong zero-order correlations between those independent variables shown in Table 9, it would not be possible to separate the effects upon the dependent variable of one independent variable that is highly correlated with another independent variable in the model.

The combined effects of all independent variables used in the regression models to estimate violent crime rates indicate that violent crime was moderately associated with those combined measures of socio-economic underdevelopment. However, while it is very difficult to specify the nature of that association, because the presence of multicollinearity made it difficult to consider the direction of the individual independent variables used in the model, it appears

that the communities that were the most socio-economically underdeveloped had the lowest rates of violent crime (contrary to the colonization perspective). As it stands, neither regression model adds support for the hypothesis that there is a direct relationship between measures of socio-economic underdevelopment and the amount of violent crime in Baffin Region communities

## **COMMUNITY RELOCATION**

Socio-economic underdevelopment is but one outcome of the colonization process that could possibly be used to understand why some Baffin Region communities have more violent crime than others. There are other effects of the colonization process that have had differential impacts upon Baffin Region communities that could account for the differences in levels of violence. One such impact of the colonization process is the effect of a community being populated via the relocation of residents from one part of the arctic to another. In this section the amount of violent crime in a community is considered in light of the method in which it was settled and populated. This section first looks at the different ways in which Baffin Region communities were settled. Some reasons why different methods of community settlement might result in different levels of violent crime are then considered. Finally, a comparison of community violent crime rates in relation to their settlement method is made and interpreted to try to come to an understanding of the differential impact of the colonization process upon violent crime in Baffin Region communities.

The history of how the communities in the Baffin Region came to be settled is an interesting one. Before the 1950s, most Inuit lived out on the land or in small camps along the coast. Although the RCMP, religious missionaries, and Hudson's Bay Company outposts all entered the region in the early 1900s (Kemp, 1984, p. 474), it was not until the 1950s when the Inuit settled into communities. During the 1950s a decline in the trapping economy, outbreaks of infectious disease among the Inuit and among their sled-dogs, and a growth in wage labour opportunities brought most of the Inuit off the land and into permanent settlements (Yatsushiro, 1963). The rest of the Inuit were brought to the communities in the 1960s when permanent medical, educational, and governmental facilities were built (Kemp, 1984).

Although Baffin Region communities became populated by Inuit residents only within the past half century or less, the method in which they were populated (or settled) varies according to the community. Even with this variation, three general patterns (or methods) of settlement can be identified: continuous inhabitation, internal migration, and relocation.

The majority of communities in the Baffin Region were settled in and around places that the Inuit had continuously inhabited for centuries prior to contact with Euro-Canadians. In pre-settlement times the nomadic Inuit followed a cycle of subsistence, moving from place to place with the flow of game and fish. Some places became seasonal places of encampment each year due to their location near subsistence sources. It is in this sense that an area is considered to be continuously inhabited. Communities settled by the "continuous inhabitation method" are those that were settled in these yearly and traditional places of encampment. As is shown in Table 11, 7 out of 12 of the Baffin Region communities are considered to have been settled via the continuous inhabitation method.

About a quarter of the communities in the Baffin Region were settled through the internal migration of Inuit from other parts of the region. These communities were generally established by the government near the weather stations and military installations that were operated beginning in World War Two. They are not, however, located in a place traditionally relied upon by the Inuit in pre-settlement times for subsistence. The Inuit moved into these communities in a more or less voluntary migration from other areas during the late 1950s and early 1960s when the communities established near areas of continuous inhabitation were also populated.

The most noteworthy of settlement methods is the government's relocation of 17 Inuit families comprising 87 persons (Soberman, 1991), from areas around Inukjuak, Quebec to create the high arctic communities of Grise Fiord and Resolute Bay in 1953. Some argue that these families were relocated because the Canadian government wanted to establish sovereignty over the high arctic due to American and Greenlandic intrusions (Marcus, 1990, 1991, Tester & Kulchyski, 1994). Others argue that the families were relocated because of dwindling subsistence opportunities in and around Inukjuak (Bell, 1993; Kenney, 1994). While a compelling argument can be made for each view (e.g., Soberman, 1991), the fact remains that

the families were removed from their homeland and placed in an environment that was vastly different than that from which they originated.

**Table 11: Methods of Community Settlement, Baffin Region, NWT Communities**

Settlement Type and Community	Event	Year(s)
<b><u>Continuous Inhabitation</u></b>		
Cape Dorset	Hudson's Bay Post Opens	1913
	Catholic Mission Opens	1938
	Federal Nursing Station Opens	1951
Hall Beach	Dew Line Station Opens	1955
	Last Family Leaves Land	1968
	"Always a large population in the area "	
Igloolik	Hudson's Bay Post Opens	1939
	"Unique record of unbroken Inuit habitation."	
Lake Harbour	Anglican Mission	1900
	RCMP Outpost Opens	1927
	Canine Distemper Outbreak. 80 percent of Dogs Die	1960
	"Area inhabited for centuries "	
Pangnirtung	Whaling Posts	Late 1800s
	RCMP Outpost Opened	1923
	Canine Distemper Outbreak	1960
	"Loss of dogs made people move into settlement permanently."	
Pond Inlet	RCMP Outpost Opens	1921
	Anglican Mission Opens	1922
	Schools Open	1960-1966
	Last Family Leaves Land	1960s
	"Ancestral homeland of North Baffin Inuit."	
Sanikiluaq	"Pretty Much Always Inhabited "	
<b><u>Internal Migration</u></b>		
Broughton Island	Dew Line Construction Begins	1956-1957
	Federal Offices Open	1958
	Hudson's Bay Post Opens	1960
	"No settlement in current location until 1956."	
Clyde River	Hudson's Bay Post Opens	1922
	Weather Station Operated	1941-1945
	"Uninhabited before 1922."	
Nanisivik / Arctic Bay	Weather Station Operated	1942-1952
	Zinc Mine at Nanisivik Opens	1974
<b><u>Relocation</u></b>		
Grise Fiord	Families Moved from Pond Inlet & Inukjuak, Que.	1953
Resolute Bay	Weather Station Opens	1947
	Families Moved from Pond Inlet & Inukjuak, Que.	1953

Source Derived from community profiles compiled by Outcrop Publishing, 1990.

A common thread found in the operation of the colonization process across the world is the relocation of indigenous inhabitants (Scudder & Colson, 1982). From the movement of people in the path of man-made lakes in Africa (Brokensha & Scudder, 1968) to the movement of the Cherokee (among others) from the path of "progress" in the southeast US (Deloria & Lytle, 1983), the growth of a colonial power has often resulted in indigenous peoples' relocation.

Apart from the general sense of loss of a home caused by being moved, relocation undermines a peoples' faith in themselves, increases their dependency on government, disrupts the family and undermines the authority of parents, and weakens the influence and authority of local leaders. According to Scudder (1982, p. 10):

The results of over twenty-five studies around the world indicate without exception that the compulsory relocation of low-income rural populations with strong ties to their land and homes is a traumatic experience. For the majority of those who have been moved, the profound shock of compulsory relocation is much like the bereavement caused by the death of a parent, spouse, or child. This multidimensional stress has been shown to have a number of negative effects.

There is evidence, albeit mostly anecdotal, that increases in violence are one of these negative effects following the relocation of a community. There are many examples of relocation leading to increased incidence of violence. In 1957 the Churchill Band of Chipewyan was moved many miles from Duck Lake, Manitoba to Camp 10, just outside of Churchill, Manitoba, because of the closure of the Hudson's Bay Company post at Duck Lake. (Lal, 1969a, p. 6). Once at the new settlement, life quickly deteriorated as violence and alcohol abuse became widespread. Lal (1969b) blames this deterioration partly on the stress of being relocated and partly on the people not being able to adjust to their new surroundings. Increases in violent behavior are also said to have accompanied the relocation of the northern Manitoba Cree community of "Chemawawin" (Waldram, 1980), of the Grassy Narrows Ojibwa (Shkilnyk, 1985), of the Fort Hope Ojibwa (Driben & Trudeau, 1983), and of the northern Manitoba Cree community of "Rat Lake" (Waldram, 1987).

### **Variables and Hypotheses**

A problem with prior studies considering the impact of relocation upon social problems such as violent crime is that they only look at the communities that have been relocated. They don't consider what has happened in similar communities that have not been relocated. For

instance, Waldram (1987) provides no indication of how the amount of violence in "Rat Lake" compares with other Manitoba Cree communities. By not comparing the relocated communities with those not relocated, it is difficult to attribute the changes in violence to the relocation. This section of the dissertation attempts to correct that previous inattention by comparing violent crime rates in communities settled by relocation with violent crime rates in communities settled by other methods.

Given that settlement via relocation is thought to have had such profound impact upon violence in communities outside the Baffin Region, it was expected that the communities in the Baffin Region that were settled by relocation would have greater levels of recorded violent crime than that found in communities settled by other means. Since the effect of being relocated is thought to be so strong because of the pains of being moved from a homeland, the opposite should also be true. Those communities that were settled in an area continuously inhabited by Inuit would have the least amount of violence. It was also expected that the communities settled through internal migration would have levels of violence between the relocated communities and those settled in areas of continuous inhabitation.

### **Analysis and Results**

Nonparametric statistical procedures were used to test comparisons of violent crime indicators among communities of different types. Community violent crime rates were first ranked<sup>21</sup> and then the mean rank for each community type was computed. Due to the small number of cases, exact tests of statistical significance were then performed to determine if the differences between the groups were likely to be "real", as opposed to sampling or other chance variability.

The mean violent crime rate ranking for each community type, based on RCMP figures ("G" Division RCMP, 1982-1994)<sup>22</sup> for the years 1981 through 1993, is shown in Figure 9. Of the three types of communities, the mean rank of the communities settled by relocation is generally the highest. In 9 out of 13 years the mean violent crime rate rank of communities

---

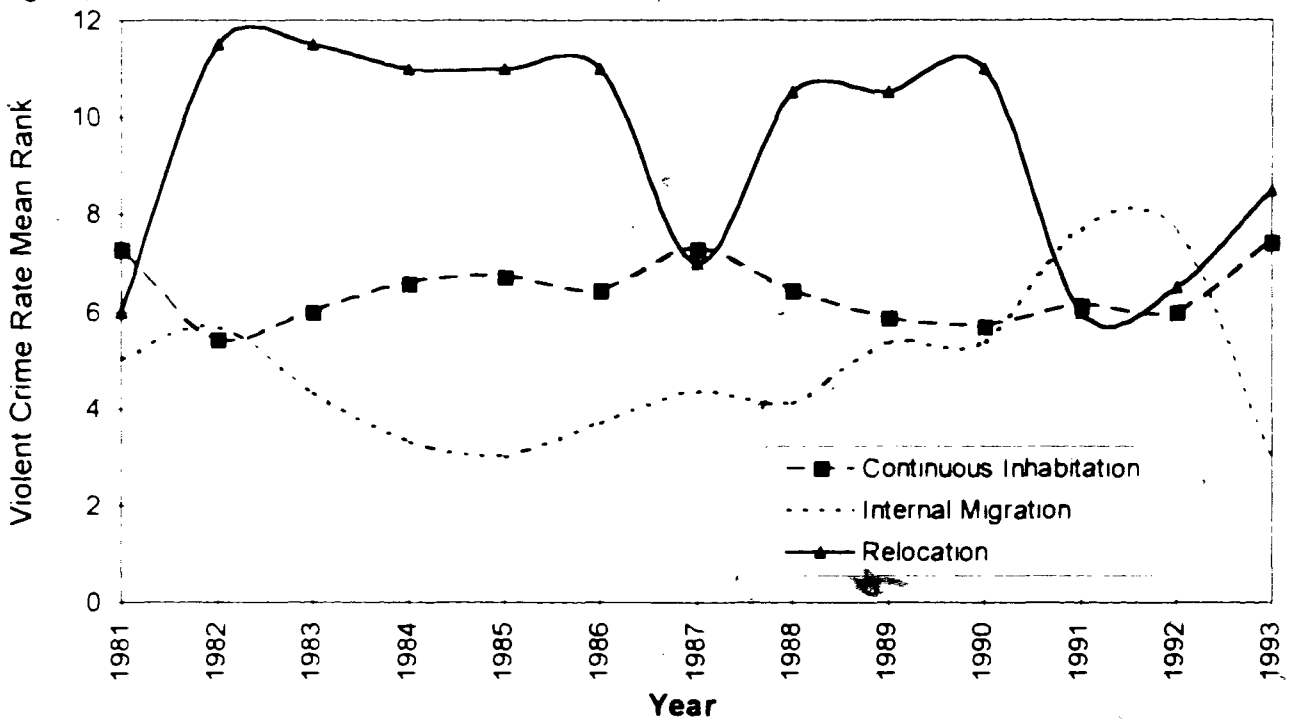
<sup>21</sup> The lowest rank goes to the lowest rate and the highest rank goes to the highest rate (Leach, 1979, p. 51).

<sup>22</sup> Although not reported in detail here, comparisons of community types were also made using CCJS figures. The results of those comparisons were similar to those reported for RCMP figures: most years the relocated communities had the highest rank of violent crime rates but the differences were statistically significant only for 3 of the 16 years examined.

settled by relocation was higher than the mean violent crime rate rank of communities settled by internal migration or communities settled in areas continuously inhabited by the Inuit. The next highest mean rank generally was for those communities that were settled in areas continuously inhabited by the Inuit. The mean rank for the communities that were settled by internal migration generally was the lowest of the three community types. Those communities had the lowest mean violent crime rate rank 10 out of the 13 years examined.

While the differences between the violent crime rate ranks of the different community types were fairly constant, those differences were not often statistically significant. In Table 12 the mean ranks of the different community types' RCMP violent crime rates are compared and the exact significance level of the differences between the types is presented. In only five years (1982 - 1986) were the differences between the mean ranks less likely than 1 in 10 to be simply due to chance

**Figure 9: Mean Rank of RCMP Violent Crime Rates by Community Settlement Method, Baffin Region, NWT, 1981 to 1993**



As was expected, the communities that were settled by relocation generally had the highest violent crime rate ranks. However, the violent crime rate ranks for the communities settled by internal migration and by continuous inhabitation were usually the opposite of what



was expected. This apparent inconsistency suggests that what matters most in terms of the amount of violent crime is whether or not a community was settled by relocation.

**Table 12: Mean Rank of RCMP Violent Crime Rates by Community Settlement Method, Baffin Region, NWT, 1981 to 1993.**

Year	Mean Rank of Community Settlement Method			Exact Significance Level
	Continuous Inhabitation	Internal Migration	Relocation	
1981	7.29	5.00	6.00	.6742
1982	5.43	5.67	11.50	.0928
1983	6.00	4.33	11.50	.0600
1984	6.57	3.33	11.00	.0414
1985	6.71	3.00	11.00	.0283
1986	6.43	3.67	11.00	.0629
1987	7.29	4.33	7.00	.5417
1988	6.43	4.10	10.50	.1444
1989	5.86	5.33	10.50	.2508
1990	5.71	5.33	11.00	.1687
1991	6.14	7.67	6.00	.8947
1992	6.00	7.67	6.50	.8230
1993	7.43	3.00	8.50	.1444

A comparison of the mean ranks of RCMP violent crime rates in relocated communities with the mean ranks of RCMP violent crime rates in non-relocated communities is made in Table 13 and is graphically displayed in Figure 10. The mean rank of violent crime rates in relocated communities is greater than that of non-relocated communities in 10 out of the 13 years considered. The differences between the mean ranks are statistically significant at  $p < .10$  in 8 of the years and at  $p < .05$  in 6 of those 13 years.

From both of the comparisons made above ([1] relocated communities with internal migration and continuously inhabited communities and [2] relocated communities with non-relocated communities) it seems safe to say that communities settled by compulsory relocation do have relatively more violent crime than communities settled in other ways. While it seems safe to say that relocated communities have greater violent crime rates than non-relocated

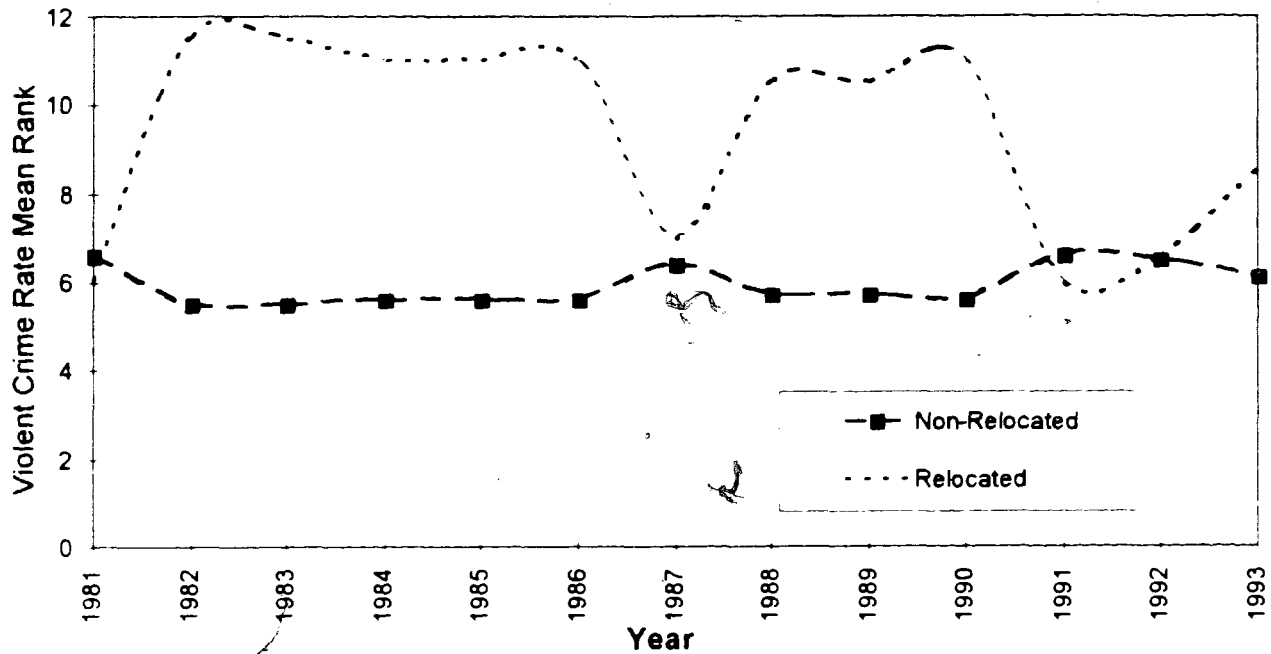
communities, it is not clear what features of relocation might be the cause of those high violent crime rates.

**Table 13: Mean Rank of RCMP Violent Crime Rates by Community Settlement Type (Non-Relocated vs. Relocated), Baffin Region, NWT, 1981 to 1993**

Year	Mean Rank of Community Settlement Type		Exact Significance Level
	Non-Relocated	Relocated	
1981	6.6	6.0	.4242
1982	5.5	11.5	.0152
1983	5.5	11.5	.0152
1984	5.6	11.0	.0303
1985	5.6	11.0	.0303
1986	5.6	11.0	.0303
1987	6.4	7.0	.4545
1988	5.7	10.5	.0606
1989	5.7	10.5	.0606
1990	5.6	11.0	.0303
1991	6.6	6.0	.4242
1992	6.5	6.5	.5455
1993	6.1	8.5	.2424

Although the quantitative comparison of settlement types provides some support for the idea that relocation, as a part of the colonization process, could introduce factors responsible for high levels of violent crime in some Baffin Region communities, an inability to rule out rival causal factors while simultaneously looking at the effect of relocation makes it impossible to assert with any degree of confidence that relocation is likely a prime determinant of violent crime in the Baffin Region.

**Figure 10: Mean Rank of RCMP Violent Crime Rates for Relocated and Non-Relocated Communities, Baffin Region, NWT, 1981 to 1993.**



## EXTERNAL MARKET FORCES

Besides relocating people from their homelands and creating socio-economic underdevelopment, the colonization process is also said to impact upon native communities by bringing them into the larger political economy which makes them vulnerable to the effects of outside economic and political forces. This section looks to the impact of the environmental movement, as an outside political force, upon fur sales, as another possible explanation of why some Baffin Region communities have more violent crime than others. It is expected that the communities most impacted by the environmental movement through the loss of income from fur sales should be the communities which have had the biggest problems with violent crime.

Hunting took on new meaning for the Inuit with their movement into settlements in the late 1950s and early 1960s. No longer was game taken only for food and for the clothes and shelter it could provide. At that time Inuit began to hunt for the money it would bring from the sale of skins (Wenzel, 1989). Of all the animals hunted by the Inuit, the ringed seal became the most important source of food and, through the sales of their skins, cash. According to Wenzel,

The importance of ringed sealskins as an exportable, cash earning commodity is that it enabled Inuit to maintain an important measure of local control over community economic and social conditions through the security of subsistence practices. Sealing provided a means of producing both food and money through a culturally relevant and cogent activity (1989, p. 5).

The selling of the sealskins provided the Inuit cash which allowed them to continue to participate in traditional subsistence activities while residing in centralized communities.

Ringed seals are still hunted today. However, Inuit currently hunt the ringed seal mainly for its meat because the skins have little cash value. The reduction in income from the sale of ringed sealskins is directly attributable to the efforts of environmentalists operating outside the eastern arctic. Beginning in the mid 1950s with the SPCA's concern over methods used to take baby harp seals<sup>23</sup> in the Maritimes and culminating in a 1982 ban by the European Economic Community on the importation of all seal products, environmental groups such as Greenpeace effectively ended the sale of all seal products (Wenzel, 1985). The Inuit hunters that relied upon the money they made in the seal hunt lost their independent means of maintaining a self-sufficient and culturally relevant subsistence lifestyle because of the efforts of those outside political forces.

**Table 14: Violent Crime Rate (CCJS Data) and Sales of Furs, 12 Baffin Region, NWT Communities, 1980, 1982, 1984, and 1987**

Year	Violent Crime Rate	Sales of Furs in Dollars Per Capita
1980	13.0	146
1982	16.8	43
1984	20.7	31
1987	29.3	12

Sources: CCJS, 1981, 1983, 1985, 1988;  
Outcrop Publishing, 1982, 1984, 1986, 1990.

As a result of the environmental movement, there was a tremendous decrease in fur sales in the Baffin Region during the 1980s. Table 14 shows that the dollars per capita earned for sales of furs decreased from \$146 per Baffin Region resident in 1980 to \$12 per Baffin Region

<sup>23</sup> These are the cute little white coated seals generally associated with the anti-sealing movement. Harp seals and ringed seals are two different species

resident in 1987. This more than ten-fold decrease in per capita fur sales happened at the same time that there was a large increase in violent crime rates across the region. As is also shown in Table 14, the violent crime rate for the 12 Baffin Region communities more than doubled between 1980 and 1987.

### **Variables and Hypotheses**

For a region that has had very few non-governmental sources of income, the loss of earnings from the decline of the seal skin trade was especially profound. A number of negative ramifications that resulted from that decline provide a theoretical basis for the expectation that the demise of the seal skin trade would be associated with increased levels of violent crime

When the seal skin market was viable it did more than provide families with way to support themselves financially. The earned income allowed the Inuit to afford the equipment necessary to hunt seals and, just as importantly, to hunt the other animals which are valued not for the money they bring but for the food they provide. Snowmachines, boats with outboard motors, gasoline, firearms, and ammunition, all required for subsistence hunting in the arctic, make it an expensive undertaking (Wenzel, 1989). The income from the sale of seal skins also allowed the majority of Inuit (especially Inuit males) to take part in an activity that is considered to be culturally relevant. For individuals living in permanent settlements, hunting has been an activity that has allowed an expression Inuit identity. Rasing argues that "hunting is the means *par excellence* to express identity and maintain self-respect" among Inuit males (1994, p. 132 emphasis in original).

With the loss of income from the sale of seal skins came a reduction in the number of Inuit males that could afford to hunt. The high costs of hunting combined with the depressed seal skin prices made it so that only those Inuit with wage earning jobs could afford to hunt. According to Wenzel (1989, p. 17), the decline of the seal skin market created "two strata of Inuit . . . those who are employed and have direct access to money but little available time [to hunt], and those who hunt but are critically short on cash support." The decrease in the number of individuals able to afford to hunt brought additional changes that could have been responsible for the changes in the amount of violence. First, the patterns of community ~~and~~, especially, household interaction were altered. Rasing (1994, p. 189) argues that the combination of low

levels of employment with the large numbers of men that no longer hunted on a full-time basis led to their spending much more time at home with their wives. At the very least, that change raised the potential for violence to have occurred. Secondly, the loss of their ability to hunt meant the loss of one of the few activities that men could look upon as making themselves Inuit. It is possible that the psychological stress brought about by that loss of identity might have increased the likelihood of violence by itself or by contributing to other factors thought to be related to violent behavior. Undoubtedly there are other possible reasons for why the reduction in the number of Inuit males that could afford to hunt might have led to increases in violent crime. What is most important is that there are reasons to believe that the decline of the seal skin market could have resulted in increases in violent crime.

While there was an overall drop in fur sales in the Baffin Region as a whole, some communities were hit harder by the loss of fur markets than others. A comparison of fur sales in Baffin Region communities is shown in Table 15. Although all communities experienced a drop in fur sales of at least three-fourths between 1980 and 1987, some communities, such as Pangnirtung, saw a decrease of over 95 percent. The extent to which those different decreases in fur sales were associated with community differences in violent crime was examined. An inverse relationship was expected in that greater decreases in fur sales would be associated with higher levels of violent crime.

Two measures of fur sales losses and two measures of violent crime, as shown in Table 15, were used to examine expected connection between the two concepts. Fur sales losses at the community level were measured by the percent decrease in per capita sales of furs between 1980 and 1987 and by the dollar decrease in per capita sales of furs between 1980 and 1987. Data for these variables were yearly fur sales reports from the GNWT Department of Renewable Resources recorded in the *N.W.T. Data Book* (Outcrop Publishing, 1982, 1990). The years 1980 and 1987 were chosen because they are representative of high and low points in fur sales and because they were the first and last years for which data on fur sales at the community level were available. Violent crime rates from CCJS (1981, 1988) were used as measures of violent crime because only the CCJS data was available for the year 1980. One violent crime variable measured the percent change in the community's violent crime rate between 1980 and 1987 while the other violent crime variable measured the violent crime rate for the year 1987. The use

of the percent change in violent crime rates variable made it possible to test the relative effect changes in fur sales losses might have had upon changes in violent crime while the use of the single year violent crime rate measure allowed for a consideration of the effect of prior fur sales income losses upon violent crime at a later point in time.

**Table 15: Comparison of Fur Sales, Baffin Region Communities, 1980 and 1987.**

Community	1980 Sales of Furs in Dollars Per Capita	1987 Sales of Furs in Dollars Per Capita	Percent Decrease in Per Capita Sales of Furs, 1980 to 1987	Decrease in Fur Sales in Dollars Per Capita, 1980 to 1987
Broughton Island	253	21	88	232
Cape Dorset	57	3	95	54
Clyde River	195	37	81	158
Grise Fiord	194	25	87	170
Igloolik/Hall Beach	110	9	92	101
Lake Harbour	78	9	89	69
Nanisivik	70	6	92	64
Pangnirtung	472	9	98	463
Pond Inlet	89	4	96	85
Resolute Bay	154	37	76	117
Sanikiluaq	115	28	75	87

Sources: Outcrop Publishing, 1982, 1990.

### Analysis and Results

Rank-order (Spearman) correlations were computed to check for a relationship between losses in fur sale income and violent crime at the ordinal level. As noted in Chapter 4, it is appropriate to use nonparametric measures of associations, such as rank-order correlations, when dealing with small samples or with samples that are not normally distributed. In Table 16 the values of the rank-order correlations are shown. Of the two measures of violent crime, the one indicating the percent change in the violent crime rate between 1980 and 1987 had the strongest rank-order correlation with the measures of fur sales losses. There were low to moderate positive correlations between the variable measuring the percent change in the violent crime rate between 1980 and 1987 and the variables measuring (1) the percent decrease in per capita sales of furs between 1980 and 1987 and (2) the dollar decrease in per capita sales of furs

between 1980 and 1987. These low to moderate positive correlations provide some evidence that decreases in fur sales corresponded with increases in violent crime at the community level. The rank-order correlations between the other measure of violent crime, the 1987 violent crime rate, and the measures of community-level fur sales losses, are negligible. At least for the year 1987, there appears to be no relationship between the great declines in fur sales and the amount of violent crime a community endured. As might be expected given the relatively weak correlations between the loss of fur sales measures and both of the violent crime measures, none of these relationships were shown to be statistically significant at the .05 level when exact tests of significance were performed.

**Table 16: Rank-Order (Spearman) Correlations Between Violent Crime Measures and Loss of Fur Sales Measures, 10 Baffin Region Communities.\***

		LOSS OF FUR SALES MEASURE	
		Percent Decrease in Per Capita Sales of Furs, 1980 to 1987	Decrease in Fur Sales in Dollars Per Capita, 1980 to 1987
VIOLENT CRIME MEASURE	Percent Change in Violent Crime Rate, 1980-1987	.38 (exact $p = .28$ )	.43 (exact $p = .21$ )
	Violent Crime Rate, 1987	.17 (exact $p = .61$ )	-.16 (exact $p = .65$ )

\*There are 10 rather than 12 cases in this analysis because Broughton Island is combined with Clyde River for a single case and Igloodik and Hall Beach are combined for a single case. These communities were combined because prior to 1983 Broughton Island and Clyde River were policed by a single RCMP detachment and Igloodik and Hall Beach were policed by a single RCMP detachment.

As a final step, to further tease out the impact of the decline in fur sales upon differences in the amounts of violent crime in Baffin Region communities, crosstabulations were constructed to see if there is any correspondence between the group of communities with the greatest fur sale income losses and the group of communities with the greatest increases or amounts of violent crime. Both types of variables, the violent crime variables and the loss of fur income variables, were dichotomized to make these crosstabulations possible. Communities were divided into those above and below the median on each violent crime variable and each fur income loss variable to achieve the reduction to the nominal level of measurement. From the colonization perspective, it was expected that the communities above the median on the loss of



fur income variables should also be the communities above the median on the violent crime variables.

Of the four crosstabulations constructed, only two provided results in the direction expected from the hypothesis that losses in fur sale income lead to greater levels of violent crime. Table 17 shows that four out of five of the communities above the median in dollars decrease in per capita sales of fur were also above the median in the percent change in the violent crime rate. Likewise, as is shown in Table 18, three out of the five communities above the percentage decrease in per capita fur sales were also above the median in the percent change in the violent crime rate. The other two crosstabulations provide results that diverge from that which would be expected from the hypothesis that losses in fur sales income lead to greater levels of violent crime. As is seen in Table 19 and Table 20, just two out of five communities above the median in percent decrease in per capita sales of furs and above the median in dollar decrease in per capita sales of fur were also above the median 1987 violent crime rate. And while all of these crosstabulations point to different interpretations of the hypothesis that violent crime was associated with losses in fur sales, none had less than a 1 in 5 ( $p < .20$ ) likelihood of being the result of something besides random chance.

**Table 17: Crosstabulation of Communities Above and Below Median Value of Percent Change in Violent Crime Rate by Communities Above and Below Median Value in Dollars Decrease in Per Capita Sales of Fur, Baffin Region Communities**

		Dollars Decrease in Per Capita Sales of Fur, 1980 to 1987	
		Communities Below Median	Communities Above Median
Percent Change in Violent Crime Rate, 1980 to 1987	Communities Below Median	4 (80%)	1 (20%)
	Communities Above Median	1 (20%)	4 (80%)

Exact Significance = .21

**Table 18: Crosstabulation of Communities Above and Below Median Value of Percent Change in Violent Crime Rate by Communities Above and Below Median Value in Percent Decrease in Per Capita Sales of Fur, Baffin Region Communities**

		Percent Decrease in Per Capita Sales of Fur, 1980 to 1987	
		Communities Below Median	Communities Above Median
Percent Change in Violent Crime Rate, 1980 to 1987	Communities Below Median	3 (60 %)	2 (40 %)
	Communities Above Median	2 (40 %)	3 (60 %)

Exact Significance = 1.00

**Table 19: Crosstabulation of Communities Above and Below Median Value of 1987 Violent Crime Rate by Communities Above and Below Median Value in Percent Decrease in Per Capita Sales of Fur, Baffin Region Communities**

		Percent Decrease in Per Capita Sales of Fur, 1980 to 1987	
		Communities Below Median	Communities Above Median
Violent Crime Rate, 1987	Communities Below Median	2 (40 %)	3 (60 %)
	Communities Above Median	3 (60 %)	2 (40 %)

Exact Significance = 1.00

**Table 20: Crosstabulation of Communities Above and Below Median Value of 1987 Violent Crime Rate by Communities Above and Below Median Value in Dollar Decrease in Per Capita Sales of Fur, Baffin Region Communities**

		Dollar Decrease in Per Capita Sales of Fur, 1980 to 1987	
		Communities Below Median	Communities Above Median
Violent Crime Rate, 1987	Communities Below Median	2 (40 %)	3 (60 %)
	Communities Above Median	3 (60 %)	2 (40 %)

Exact Significance = 1.00

The relative geographic isolation of Baffin Region communities has not kept them immune from the effects of outside political and economic forces. It is clear that the environmental movement, as an outside political and economic force, has had a tremendous impact upon the Inuit communities of the eastern arctic (Wenzel, 1985; 1989). The large decline in income from the sales of furs that occurred in the 1980s, a decline that resulted from the efforts of outside groups such as Greenpeace and the European Economic Community, is one piece of evidence of just how susceptible Inuit communities really are to those forces.

One can be quite certain that the enormous losses in fur sales income experienced by Inuit families were the result of external market forces thousands of miles from the Baffin Region. However, one must be less certain in attributing either the tremendous growth in violent crime in the region or the great differences between communities' violent crime rates to that loss in fur sales income. While the rates of violent crime in the region increased in correspondence with the immense decreases in fur sale income, the simple bivariate analyses conducted here do not allow for the consideration of other rival, plausible explanations of why the regional increase in violent crime rates was so large. In other words, one cannot say that the great losses in fur sales income caused the great increases in violent crime across the Baffin Region.

If it is difficult to say that the reason for the large violent crime increases in the Baffin Region during the 1980s was the decline of the seal hunt, then it is even more difficult to attribute the differences in violent crime in the Baffin Region communities to the differences in losses in fur sales income. Depending upon which measure of violent crime was used, the nonparametric analyses conducted above provided mixed interpretations of the direction and strength of that relationship. There was either no relationship between the 1987 violent crime rate variable and the two measures of fur sales income declines, or what relatively weak relationships there were between those variables were contrary to the hypothesis that declines in fur sales are related to high levels of violent crime. The relationships between the other crime rate variable, the percent change in violent crime rates from 1980 to 1987, and the two measures of fur sales income declines were somewhat stronger and were in support of the hypothesis of a relationship between fur sales declines and increases in violent crime. According to the results of these nonparametric tests of the impact of fur sales losses upon violent crime, none of the

relationships were especially strong and none were statistically significant when tests of exact significance were conducted.

## **SUMMARY**

This chapter has examined three different aspects of the colonization perspective and the degree to which they were associated with violent crime among Baffin Region communities. First, the connection between socio-economic underdevelopment and violent crime was explored. Next, the association between violent crime and the methods of community settlement, especially the impact of community relocation, was considered. Finally, the correspondence between violent crime and the effects of changes brought by external economic market forces was looked at. While the results of the individual analyses are mixed, none provided especially strong support for the hypotheses derived from the colonization perspective for examination of violent crime at the community level.

The results of the regression analysis looking at the relationship between socio-economic underdevelopment were difficult to interpret due to multicollinearity. While an apparent moderate association between the entire set of indicators of socio-economic underdevelopment and violent crime was found, it was not possible to determine precisely the direction of that association because of inter-correlations among independent variables used in the analysis. However, it appears as though the communities that had the lowest crime rates were those with the highest levels of socio-economic underdevelopment. Therefore, there is no support for the hypothesis that the communities with the most violent crime are the communities that are the most socio-economically underdeveloped.

The results of the analysis that considered the association between community relocation and violent crime were the only ones that can be seen as being supportive of the colonization perspective in terms of its ability to account for inter-community variations in violent crime. Even those results, however, provide only modest support. While the violent crime rates in relocated communities were significantly higher than those of non-relocated communities in two-thirds of the years looked at, the type of data available did not allow for an understanding of the features of relocation that might be the cause of those higher violent crime rates.

The least support for any of the hypotheses considered in this chapter was provided by the analysis of the association between the amount of violent crime in a community and effects of change in the region brought about by external market forces. Differences in the changes resulting from the demise of the seal skin trade did not correspond with differences in changes over time in the amount of violent crime in a community. The changes in the amount of violent crime in the communities hit hardest by actions of environmentalists from outside the arctic were not any greater than the communities which felt much less of an impact.

Although the differences in violent crime found between native and non-native peoples may be attributed to the effects of the colonization process as measured by factors such as those examined here, the analyses performed in this chapter call into question the ability of some of those factors to account for differences in the amounts of violent crime found between native communities. The next chapter of this study will determine if factors surrounding the use of alcohol are any more successful at explaining why some Baffin Region communities have more crime than others.

## **CHAPTER 6: ALCOHOL AND VIOLENT CRIME IN THE BAFFIN REGION**

Unlike the largely academic interest in the impact of colonization upon violent crime, widespread attention is given across the north to the impact of alcoholic beverage use upon violent crime. Alcohol use is seen by justice system personnel and by community residents to be a prime contributor to violence in native communities across the north. This chapter considers the relationship between alcohol and violent crime in the Baffin Region. Doing so may shed additional light on the question of why some Baffin Region communities have more violent crime than others.

Three different facets of the alcohol / violent crime relationship are examined in this chapter. First, the effects of community ordinances prohibiting the possession of alcohol are investigated. Communities that have chosen to be "dry" are compared with "wet" communities to decide what impact such legislation might have upon the prevalence of violent crime. Next, community-level patterns of alcohol consumption are looked at in relation to community violent crime rates. In that section the constant proportion hypothesis (which holds that the proportion of excessive drinkers and the amount of alcohol related damage in a population are directly related to the amount of consumption in the population) is examined using measures of community-level alcohol consumption. Finally, this chapter attempts to assess the possible impact of different models of drunken behavior upon contemporary levels of violent crime in the Baffin Region. The amount of violent crime in those communities that could be considered to have had particularly poor models of drunken behavior is compared with the amount of violent crime in communities with somewhat "better" models of drunken behavior. Prior to looking at the different explanations of the alcohol / violent crime relationship, this chapter reviews the magnitude of alcohol abuse in the Baffin Region and then looks at indicators of the use of alcohol in the region.

### **CONCERN ABOUT ALCOHOL ABUSE IN THE BAFFIN REGION**

For most people in the North, the problem of violent crime is synonymous with the problem of alcohol abuse. Given the high levels of violent crime and the apparently widespread occurrence of alcohol abuse in the Baffin Region, it is difficult to consider either social disorder in isolation of the other. A broad array of research materials underscore the connection that is

frequently made between alcohol abuse and violent crime in the Baffin Region. Field interviews with community residents and justice system personnel, surveys of Inuit residents, and the occurrence records of the police, when considered in conjunction, show that the use and abuse of alcohol is considered a problem and is seen to go hand-in-hand with violent crime by those that live and work in the region.

Community residents and justice system personnel alike see alcohol abuse as a major problem in the Baffin Region. The perceptions of respondents recorded in field interviews conducted for the Baffin Region Crime and Justice Study provide some insight into the extent of concern about alcohol abuse and the association between alcohol abuse and violent crime. Some field interview respondents saw the abuse of alcohol as a problem by itself. For instance, a school counselor, an Inuk in his forties, was asked what kinds of problems there were in his community. His response was that "the major one [problem] is the alcohol. I believe that for myself, that is what I see. Alcohol is the major problem within the community."

Other respondents generally made a connection between the abuse of alcohol and violent crime. Alcohol is definitely seen by those respondents as *a*, if not *the*, prime contributor to violence in the Baffin Region. One RCMP officer that served across the north throughout the 1950s and 1960s said that "I don't think you could go too far wrong by accepting the fact that all crime in the Northwest Territories, that is to say, on the native side, has its beginnings from alcohol." Another RCMP officer attributed much of the violence he saw during his two years Baffin Region experience in the late 1970s to alcohol: "I can't recall an assault that occurred that didn't involve liquor." This view was echoed by a female Elder who pointed out that "alcohol is always involved in spousal assaults. We never heard of spousal assaults happening without alcohol being involved." A long-time community resident and manager of a local "Bay" store saw the violent effects of alcohol abuse walk into his shop quite often. He pointed out that "whenever we get a lot of booze orders in on the plane, the next day you go to the store and a lot of women are coming in with black eyes and bruises and that sort of stuff." In some of the field interviews it seemed as though some respondents took it for granted that alcohol abuse is a major cause of violence in the north. The response of a RCMP officer who served in a particularly violent Baffin Region community in the late 1980s underscores the extent of

violence in some communities and how much of it is related to the use and abuse of alcohol.

When asked about the prevalence of spousal assault he said that:

It's an everyday occurrence. Often times I'd go to give my police report before the hamlet council and I'd look at the mayor and she'd have two black eyes. I'd look at the secretary, she'd have a broken nose. I'd be called up to the nursing station at two or three o'clock in the morning because the nurse was crying that she couldn't control herself, so I'd go up there and I would have to stitch people up. A cop would actually have to stitch people up because the nurse was so upset, emotionally distraught she couldn't do it. What was it? It was women that had the shit kicked out of them by the husband. I'd go arrest the old man and always, not 99.9 percent of the time, but 100 percent of the time, they were drunk.

Although this officer's experience probably goes beyond what most RCMP officers who have served in the Baffin Region faced, it does show just how pervasive alcohol related violence can become

Depending upon the community, concern about alcohol abuse is widespread among some Inuit residents of the Baffin Region. While the findings of the Aboriginal Peoples Survey (see Table 21) show that a slim majority of Inuit residents across the region believe that their community has problems with alcohol abuse, in some communities the concern about the problem is especially high. Across the region, a majority (54 percent) of Inuit residents felt that alcohol abuse was a problem in their community (Statistics Canada, 1993a). Compared with native people across the NWT or Canada, the residents of the Baffin Region were less likely to have said that alcohol abuse is a problem. Sixty three percent of native adults in the NWT and 61 percent of native adults in Canada felt that alcohol abuse was a problem in their community (Statistics Canada, 1993a). Although the amount of concern about alcohol abuse in some Baffin Region communities such as Grise Fiord (36 percent) or Lake Harbour (19 percent) was quite low, the Inuit residents of other Baffin Region communities saw it as a much bigger problem. At least two-thirds of the residents of Cape Dorset (66 percent) and Pond Inlet (71 percent), for example, thought alcohol abuse to be a problem in their community (Statistics Canada, 1993a).



**Table 21: Adult Perceptions of Extent of Alcohol Abuse, Inuit in Baffin Region Communities, and Native Peoples in the NWT and Canada, 1991.**

Community	Percent Who Feel Alcohol Abuse is a Problem in their Community	Community	Percent Who Feel Alcohol Abuse is a Problem in their Community
Broughton Island	42	Lake Harbour	19
Cape Dorset	65	Nanisivik	57
Clyde River	48	Pangnirtung	48
Grise Fiord	36	Pond Inlet	71
Hall Beach	50	Resolute Bay	57
Igloolik	58	Sanikiluaq	54
Baffin Region, Total	54		
NWT	63		
Canada	61		

Source: Statistics Canada, 1993a

An examination of information found in the RCMP operational files demonstrates that people in the Baffin Region have good reason to be concerned with alcohol abuse. As is shown in Table 22, alcohol use is implicated in many of the violent offences that come to the attention of the RCMP. Across the Baffin Region, more than a half of all suspects (52.9 percent) and more than a quarter of all victims (26.4 percent) of violent offences in 1991 were considered to be under the influence of alcohol when the offence was committed. In a few communities two-thirds of the suspects and half of the victims of a violent offence were said to be under the influence of alcohol at the time the offence was committed. Some suspects of violent crime, depending on who their victim was, were more likely to be under the influence of alcohol than others. Table 23 shows that almost 60 percent (59.5 percent) of those suspects that committed a violent offence against their wives, compared to only 30 percent of suspects that committed a violent offence against other family members, were said to be under the influence of alcohol at the time the offence was committed.

**Table 22: Suspect and Victim Alcohol Use in Violent Offences, Baffin Region Communities, 1991.**

Community	Number of Violent Offences	Number of Suspects Under Influence (%)	Number of Victims Under Influence (%)
Broughton Island	25	8 (32.0)	3 (12.0)
Cape Dorset	137	83 (60.6)	43 (31.2)
Clyde River	22	10 (45.4)	2 (9.1)
Grise Fiord	2	2 (100.0)	1 (50.0)
Hall Beach	21	11 (52.3)	9 (42.6)
Igloolik	26	17 (65.3)	13 (50.0)
Lake Harbour	8	2 (22.2)	0 (0.0)
Nanisivik	27	16 (59.2)	8 (29.6)
Pangnirtung	31	11 (35.5)	5 (16.1)
Pond Inlet	45	20 (44.4)	7 (15.6)
Resolute Bay	22	15 (68.1)	9 (40.9)
Sanikiluaq	16	7 (43.8)	1 (6.2)
Total	382	202 (52.9)	101 (26.4)

Source: Iqaluit Sub-Division RCMP Operational Files.

**Table 23: Victim / Offender Relationship and Alcohol Use by Offender, Violent Crimes, Baffin Region, 1991.**

Victim / Offender Relationship	Offender <u>Not</u> Under Influence of Alcohol		Offender Under Influence of Alcohol		Totals	
	No.	Pct.	No.	Pct.	No.	Pct.
Acquaintance	32	45.7	38	54.3	70	100.0
Family	45	69.2	20	30.8	65	100.0
Stranger	5	55.6	4	44.4	9	100.0
Wife/Husband	47	40.5	69	59.5	116	100.0
Unknown	11	39.3	17	60.7	28	100.0
Can't Tell	40	42.6	54	57.4	94	100.0
Total	180	47.1	202	52.9	382	100.0

Source: Iqaluit Sub-Division RCMP Operational Files.

There was a good degree of variability between the Baffin Region communities in terms of the amount and proportion of violent crime that is alcohol related and in terms of residents'

perceptions of whether alcohol abuse is a problem. The figures presented here suggest that not all the communities in the Baffin Region have had a problem with alcohol related violent crime to the degree reported in the face-to-face interviews with justice system personnel and community residents. Some of the communities, however, do not appear to be too far removed from the stories told in the interviews. As is seen in the following section, there is also a good degree of variability between communities in the use of alcohol.

## **INDICATORS OF ALCOHOL USE IN THE BAFFIN REGION**

Given the general concern about alcohol abuse and the association of alcohol with violence, one might assume the use of alcohol to be as, or more, prevalent in the Baffin Region as it is elsewhere. That assumption, however, would be contrary to the available measures of alcohol usage among the Inuit of the Baffin Region. Below, figures from the 1991 Aboriginal Peoples Survey are compared with findings from national health surveys to show that a smaller proportion of Baffin Region Inuit drink alcohol than is the case among the total Canadian population and among native peoples outside the region. Then, records from the NWT Liquor Commission are analyzed to compare the amount of alcohol purchased by the residents of the Baffin Region with the amount purchased on average across Canada. Even if it serves only to combat "drunken Indian" stereotypes, this section will show that Baffin Region Inuit are less likely to drink alcohol compared to the total Canadian population, and, of those that do drink, they consume much less alcohol than does the average Canadian drinker.

### **Prevalence of Alcohol Use**

Compared with other Canadians, the average Baffin Region Inuk is less likely to be an alcohol drinker. Comparison of results from different surveys that included questions about alcohol use<sup>24</sup> shows that the proportion of the Baffin Region Inuit population that uses alcohol is smaller than (1) the proportion of Canadians that uses alcohol, (2) the proportion of all native people in Canada that uses alcohol, or (3) the proportion of all native people in the NWT that

---

<sup>24</sup> Although there are uses for alcohol other than drinking (keeping gasoline from freezing, for instance) in this dissertation the only use of alcohol of concern is for drinking. In this context, alcohol use should be seen as the same thing as alcohol drinking.

uses alcohol. In other words, Baffin Region Inuit alcohol use is less prevalent than it is in most other Canadian populations.

According to the Aboriginal Peoples Survey, three out of five adult Baffin Region Inuit reported drinking alcohol in the 12 months before the survey was administered in 1991. That 60 percent of adults were what could be considered to be current drinkers<sup>25</sup> in 1991 (Statistics Canada, 1993a). Table 24 shows the proportion of the population in each Baffin Region community that could be considered to be current drinkers in 1991. There is a good deal of variation between communities in the proportion of current drinkers. Less than half of the adults in two communities reported drinking in the 12 months prior to the survey while roughly three-quarters of the adults in three communities reported drinking in the 12 months prior to the survey. The proportion of Inuit adults that reported being current drinkers ranged from 46 percent of adults in Pangnirtung to 79 percent of adults in Resolute Bay.

**Table 24: Prevalence of Self-Reported Adult Alcohol Use, Inuit in Baffin Region Communities, and Native Peoples in the NWT and Canada, 1991.**

Community	Percent of Adults that Drank Alcohol in the Previous Year	Community	Percent of Adults that Drank Alcohol in the Previous Year
Broughton Island	56	Lake Harbour	73
Cape Dorset	62	Nanisivik	62
Clyde River	62	Pangnirtung	46
Grise Fiord	64	Pond Inlet	73
Hall Beach	71	Resolute Bay	79
Igloolik	54	Sanikiluaq	49
Baffin Region, Total	60		
NWT Native Total	68		
Canada Native Total	70		

Source: Statistics Canada, 1993a.

<sup>25</sup> In the many surveys done by Statistics Canada and Health and Welfare Canada, a "current drinker" is someone that had drank alcohol during the 12 months prior to the administration of the survey (Single, 1994). Although this might not be the best measure of whether someone is a drinker, it is a measure that has been used by Statistics Canada in survey after survey because it allows for comparisons among years and between jurisdictions.

The Aboriginal Peoples Survey also provides a means to compare the prevalence of alcohol use among the Baffin Region Inuit with the prevalence of alcohol use among other native peoples in Canada. Controlling for population size, in 1991, when the Aboriginal Peoples Survey was conducted, there were fewer drinkers among the Baffin Region Inuit than there were in the NWT native population or the Canadian native population. As is shown at the bottom of Table 24, the proportion of Baffin Region Inuit that were current drinkers in 1991 is smaller than the proportion of native people in the NWT or across Canada that were current drinkers in 1991 (Statistics Canada, 1993a).

Not only is drinking less prevalent in the Baffin Region Inuit population compared to the larger native population, it is also less prevalent than in the Canadian population. A comparison of the findings of the Aboriginal Peoples Survey concerning Baffin Region Inuit drinking with the findings from national surveys of Canadian drinking shows that a smaller proportion of Baffin Region Inuit are what can be considered current drinkers. Since 1979, the proportion of current drinkers in Canada has wavered between 78 and 81 percent of the population (Health and Welfare Canada, 1981, 1988, 1990, 1993; Single, 1994; Statistics Canada, 1987a). When compared to the 60 percent of Baffin Region Inuit that reported being current drinkers (Statistics Canada, 1993a), the average Canadian is about 20 percent more likely to report being a current drinker. In other words, the Inuit of the Baffin Region (as well as other native Canadians) are less likely than Canadians in general to drink alcohol.

#### **Levels of Alcohol Consumption**

Although it is interesting to know how many people in a given population drink alcohol, the prevalence information by itself only tells part of the story. Within the group of those identified as current drinkers in the various Statistics Canada surveys is a wide range of possible drinking experiences. Those that drink a few times a year, such as making a toast to the new year or having a few beers while watching the hockey playoffs, are considered the same as those that drink a fifth of scotch every evening after work. All three groups of people are considered to be current drinkers in those surveys. As such, prevalence measures can only tell us how many people have used alcohol within a given time frame. They do not allow us to know the amount

of alcohol that is used (i.e., the quantity of alcohol consumed) by an individual or within a population.

For comparison purposes, the volume of alcohol consumed in a population has generally been measured by the per capita consumption of absolute alcohol in that population. To calculate per capita consumption, the total volume of absolute alcohol (i.e., 100 percent pure alcohol or 200 proof alcohol) sold in a jurisdiction is divided by the population of the ages when drinking is likely to occur (generally ages 15 and above). The total volume of absolute alcohol has typically been computed by adding up the sales volume for each of the three main types of alcoholic beverages (spirits, wine, and beer), multiplying the total volume of each beverage type by a "conversion factor"<sup>26</sup> of its typical alcohol content to arrive at the total volume of absolute alcohol for that beverage type, and then finally adding up those total volumes of absolute alcohol for each beverage type to arrive at a grand total of absolute alcohol sold (Single, 1994).

Measures of per capita consumption of absolute alcohol are usually computed only at larger levels of aggregation using provincial / territorial alcohol tax or liquor sales records. It has been difficult to measure the amount of alcohol consumption at lower levels of aggregation because the tax and liquor sales records are generally not available at the municipal level. So while the current available data (e.g., Single, 1994) makes it easy to measure per capita consumption in the entire NWT, there are no readily available measures of per capita alcohol consumption in Yellowknife or Iqaluit or Tuktoyaktuk or any other community in the territory.

It is not impossible, however, to piece together alcohol consumption measures for the Baffin Region communities. In fact, the geographic isolation and sparse population combined with strict alcohol control regulation makes the Baffin Region one of the few jurisdictions across the country where it is possible to actually compute community-level measures of per capita alcohol consumption. Individual alcohol sales invoices from the Baffin Region liquor store in Iqaluit provided to the researcher by the NWT Liquor Commission were used to calculate the consumption measures discussed below. An analysis of those measures, which is provided below, showed that the Inuit of the Baffin Region consumed much less alcohol on a per capita

---

<sup>26</sup> The Canadian Centre on Substance Abuse in 1990 used conversion factors of 36.9 percent alcohol for spirits, 11.7 percent alcohol for wine, and 4.9 percent alcohol for beer to compute absolute alcohol (Single, 1994, p. 18).

basis when compared to national or territorial figures. Prior to considering those measures, however, it is necessary to take a look at (1) the alcohol distribution system in the Baffin Region and (2) the techniques used to calculate the community per capita consumption measures in order to establish the reliability of those measures.

The geographic remoteness, a relatively small population, and a closed liquor distribution system all combine to make purchasing alcohol in the Baffin Region a rather unique, drawn out process. Of the 13 communities in the region, only Iqaluit has a place to buy spirits, beer, and wine. There are no places to legally purchase alcoholic beverages in the other nine communities that allow the importation and possession of alcoholic beverages. Residents of those communities purchase their alcohol from the Territorial Liquor Store in Iqaluit. A liquor purchase begins with the buyer phoning the Iqaluit liquor store and placing his or her order. When placing the order the buyer is given a total cost for the alcohol ordered and an estimated cost for shipping. An invoice is written up for each of these individual orders listing the quantities, brands, types, and sizes of alcoholic beverages being ordered (See Appendix D). After placing the order the buyer mails to the Iqaluit liquor store a check or money order (usually the latter as there are also no banks in the region besides the one in Iqaluit) for the liquor and shipping costs. Upon receipt of payment, the Iqaluit liquor store ships the liquor order to the buyer via one of the two airlines serving the region. In short, the purchase of alcohol in the Baffin Region is not as easy as stopping at the liquor store on the way home from work to pick up a bottle of wine or case of beer. It can take anywhere from a few days to a few months in the Baffin Region to receive a shipment of liquor.

While the liquor distribution system in the Baffin Region makes it difficult for residents to obtain alcoholic beverages, the individual sales receipts from that system make it possible to actually calculate per capita alcohol consumption at the community level. Copies of each and every liquor order invoice for an entire year for the Baffin Region were provided to the author by the NWT Territorial Liquor Commission. Calculation of the per capita alcohol consumption measures involved the simple yet tedious process of entering the required information from each invoice into a spreadsheet and then doing the necessary calculations. The information required from each invoice to calculate the absolute alcohol consumption measure included the number of cases of beer or number of bottles of wine or spirits, the volume of cases of beer or bottles of

wine or spirits in millilitres, and the alcohol content of the beverage in percent based on brand of beer, wine, or spirit, wine (as recorded in the British Columbia Liquor Distribution Branch Guide to Products and Services (Myers, 1994)). The community and ethnicity (based on surname) of the buyer on each invoice were also entered into the spreadsheet in order to make comparisons between communities and to see if there were differences in Inuit and non-Inuit consumption patterns<sup>27</sup>

A few assumptions must be made to use liquor order invoices as a measure of community-level alcohol consumption. The first of these is an assumption that liquor which is purchased is liquor which is consumed. If the respondents of field interviews can be believed, this is a very safe assumption to make about alcohol use in the Baffin Region. As an Inuit woman in her early 20s put it, "when people get alcohol, they just drink until it's gone." In other words, there are not a great number of bottles of rum that sit in the cabinet for three or four years in the Baffin Region like there would be in any metropolitan home in Canada. A second point which must be made is that the liquor order invoices measure only that alcohol consumption which is legal and which is confined to beverage alcohol. There is no way to gauge the consumption of bootlegged alcohol, homemade alcohol, or denatured ethyl alcohol based products such as Lysol (which is 79 percent alcohol) or hair spray (which ranges from 50 to 85 percent alcohol). The third caveat concerning the use of this community measure of alcohol consumption is that it only accounts for the consumption of alcohol that is shipped into, and consumed in, the community. It does not account for the alcohol that is consumed when residents are, for example, away from the community at regional meetings in Iqaluit or doing government business in Yellowknife. From the standpoint of trying to compare alcohol consumption of Baffin Region residents with national averages<sup>28</sup> this could be problematic because the measure only accounts for alcohol consumed in the community thereby underestimating the total amount of alcohol consumed by community residents. However, it

---

<sup>27</sup> The buyer's surname provided an approximation of the ethnicity of the liquor orderer. It was also a good indication of the ethnicity of the individuals that are actually consuming the alcohol because Inuit and non-Inuit generally do not socialize in non-occupational settings. In the drinking establishments in Iqaluit I visited during my field research it was rare to see members of the two groups drinking together.

<sup>28</sup> Even the national measures of consumption has some 'slippage' due to alcohol consumed outside the jurisdiction. Those measures do not account for the alcohol consumed by 'snowbirds' in Florida and Arizona or the beers consumed by Blue Jays fans on trips to games in Seattle or Detroit.



may be the best available way of computing alcohol consumption for the purpose of considering its effect on violent crime at the community level because, from a theoretical standpoint, this dissertation is only interested in the effect of locally consumed alcohol on locally committed violent crime.

With these caveats in mind, it is now possible to actually take a look at how much alcohol was consumed in the Baffin Region in 1991 and to compare the amounts consumed in that region with territorial and national figures. In Table 25 the per capita absolute alcohol consumption for the nine Baffin Region communities that allow alcohol importation and usage (i.e., wet communities) are shown with similar measures for the NWT and for all of Canada. Two things clearly stand out in that comparison. First and foremost, there was much less alcohol consumed on average in the nine wet Baffin Region communities than was found across the NWT or nationally. Second, the types of alcoholic beverages generally consumed in the Baffin Region were of much higher alcohol content compared to the alcoholic beverages consumed elsewhere in the country.

The residents of the Baffin Region drank a lot less alcohol compared to the rest of the NWT or the nation. Consumption of absolute alcohol in 1991 for all nine of the wet Baffin Region communities (at 1.59 litres per person aged 15 and up) was five times smaller than the national rate (of 8.65 litres per person aged 15 and up) and about 7 times smaller than the rate for the NWT (at 11.05 litres per person aged 15 and up) in 1991. Put into real terms, the average Baffin Region adult in 1991 drank the equivalent in absolute alcohol of 8 cases of beer<sup>29</sup> compared to the equivalent in absolute alcohol of roughly 42 cases per Canadian adult. Even the community with the highest per capita absolute alcohol consumption rate, Nanisivik, had a rate that was less than half the national average and about a third of that for the territory.

Although the residents of the Baffin Region consume relatively little alcohol, the alcoholic beverages they do consume generally have a high alcohol content. The total per capita absolute alcohol consumption is broken down in the three right hand columns of Table 25 according to the type of alcoholic beverage for the nine wet Baffin Region communities, the

---

<sup>29</sup> In Canada, a case of beer is 12 bottles or cans containing anywhere from 341 to 355 millilitres for each can or bottle

NWT, and Canada. Across the country in 1991, more absolute alcohol was consumed through the type of beverage with the lowest alcohol content, beer (56 percent), than through spirits (29 percent) or wine (15 percent), which contain much more alcohol. Throughout the Baffin Region in 1991, most absolute alcohol was consumed through the drinking of spirits (71 percent) — the beverage type with the highest alcohol content — than through beer (25 percent) or wine (4 percent). Given the fact that most all of the alcohol shipped into the wet Baffin Region communities comes by air, it is not surprising that most of the absolute alcohol residents consumed came in the form of spirits. These residents probably did not have a particular liking for hard liquor, but rather, they were interested in shipping the most amount of alcohol for the least amount of money. Of the three types of alcoholic beverages, shipping alcohol in its hard liquor form is the most cost effective because the costs of flying goods from Iqaluit into the outlying communities are computed by the weight of the goods. As such, it is cheaper to ship a bottle of 40 percent alcohol rum than it is to ship a case of 5 percent alcohol beer because you get more alcohol per pound shipped when shipping the rum. It is not cost effective to ship beer by air because, in essence, you are just shipping water.

A comparison of Inuit (see Table 26) and non-Inuit (see Table 27) consumption rates in the nine wet Baffin Region communities shows that the non-Inuit residents of the region consumed much more alcohol than the Inuit residents of the region. Overall, the non-Inuit consumption rate in 1991 of 4.62 litres of absolute alcohol per capita was more than 4 times the Inuit consumption rate of 1.11 litres of absolute alcohol per capita. Even though in some communities, such as Clyde River or Resolute Bay, the Inuit and non-Inuit consumption rates were somewhat similar, the non-Inuit consumption rate was higher than the Inuit consumption rate in all nine of the wet communities. In terms of the types of beverages consumed, Inuit residents were more likely to consume spirits than beer or wine. By contrast, the non-Inuit residents of the region consumed almost equal amounts of absolute alcohol from spirits and from beer.

**Table 25: Volume of Absolute Alcohol Per Capita (ages 15 and up) Purchased, Inuit and non-Inuit Residents, Nine 'Wet' Baffin Region Communities, the NWT, and Canada, 1991.**

Community	Per Capita Litres of Absolute Alcohol Purchased (and Percent of Total)			
	Total	Spirits	Beer	Wine
Broughton Island	0.50	0.47 (94%)	0.03 ( 6%)	0.00 ( 0%)
Cape Dorset <sup>†</sup>	1.50	1.27 (85%)	0.22 (14%)	0.01 ( 1%)
Clyde River	0.92	0.81 (88%)	0.09 (10%)	0.01 ( 2%)
Grise Fiord	0.75	0.65 (87%)	0.08 (11%)	0.02 ( 3%)
Hall Beach	1.28	1.16 (91%)	0.11 ( 9%)	0.01 ( 1%)
Igloolik	1.52	1.18 (78%)	0.25 (16%)	0.09 ( 6%)
Nanisivik	3.65	1.60 (44%)	1.85 (51%)	0.20 ( 5%)
Pond Inlet	1.15	1.00 (87%)	0.07 ( 6%)	0.08 ( 7%)
Resolute Bay	1.67	1.43 (86%)	0.22 (13%)	0.02 ( 1%)
Nine 'Wet' Communities	1.59	1.12 (71%)	0.40 (25%)	0.07 ( 4%)
NWT	11.05	4.96 (45%)	5.30 (48%)	0.80 ( 7%)
Canada	8.65	2.51 (29%)	4.83 (56%)	1.31 (15%)

Sources Baffin Region figures compiled from NWT Liquor Commission Liquor Order Invoices.  
NWT and Canadian figures as reported by Single (1994, p. 34).

**Table 26: Volume of Absolute Alcohol Per Capita (ages 15 and up) Purchased, Inuit Residents Only, Nine 'Wet' Baffin Region Communities, 1991.**

Community	Per Capita Litres of Absolute Alcohol Purchased (and Percent of Total)			
	Total	Spirits	Beer	Wine
Broughton Island	0.46	0.43 (93%)	0.03 ( 7%)	0.00 ( 0%)
Cape Dorset	1.45	1.23 (85%)	0.21 (14%)	0.01 ( 1%)
Clyde River	0.91	0.82 (90%)	0.08 ( 9%)	0.01 ( 1%)
Grise Fiord	0.67	0.59 (88%)	0.07 (10%)	0.01 ( 2%)
Hall Beach	1.09	1.01 (93%)	0.08 ( 7%)	0.00 ( 0%)
Igloolik	1.29	1.06 (82%)	0.20 (16%)	0.03 ( 2%)
Nanisivik	1.13	0.84 (73%)	0.28 (25%)	0.02 ( 2%)
Pond Inlet	1.05	0.94 (89%)	0.04 ( 4%)	0.07 ( 7%)
Resolute Bay	1.64	1.50 (91%)	0.13 ( 8%)	0.01 ( 1%)
Nine 'Wet' Communities	1.11	0.95 (86%)	0.14 (12%)	0.02 ( 2%)

Sources Compiled from NWT Liquor Commission Liquor Order Invoices.

While it is necessary to use the above measures of community-level alcohol consumption with some prudence, it is also important to point out that the method used in this dissertation to calculate the amount of absolute alcohol used in the Baffin Region is, in at least one way, superior to methods used on a national scale. Specifically, the method of calculation used here was an improvement over other methods because the alcohol content of beverages used in computing the amount of absolute alcohol was based upon the actual known brand of beverage (e.g., Bacardi Rum or Moslon Dry Beer) rather than upon a conversion factor that was estimated for the type of beverage (i.e., spirits, beer, or wine). Use of the Canadian Centre on Substance Abuse's conversion factors (36.9 percent alcohol content for spirits, 11.7 percent alcohol content for wine, and 4.9 percent alcohol content for beer (Single, 1994, p. 18)) would have led to a 7 percent underestimation of all absolute alcohol used in the Baffin Region and, due to a high proportion of 151 proof (75.5 percent alcohol content) rum sales, a 9 percent underestimation of absolute alcohol from the consumption of spirits.

**Table 27: Volume of Absolute Alcohol Per Capita (ages 15 and up) Purchased, non-Inuit Residents Only, Nine 'Wet' Baffin Region Communities, 1991.**

Community	Per Capita Litres of Absolute Alcohol Purchased (and Percent of Total)			
	Total	Spirits	• Beer	Wine
Broughton Island	1.23	1.16 (94%)	0.01 ( 1%)	0.05 ( 5%)
Cape Dorset	1.93	1.57 (81%)	0.31 (16%)	0.05 ( 3%)
Clyde River	1.06	0.78 (73%)	0.20 (19%)	0.08 ( 8%)
Grise Fiord	1.11	0.95 (86%)	0.10 ( 9%)	0.06 ( 5%)
Hall Beach	3.46	2.93 (85%)	0.49 (14%)	0.04 ( 1%)
Igloolik	4.35	2.71 (62%)	0.86 (20%)	0.78 (18%)
Nanisivik	7.84	2.85 (36%)	4.48 (57%)	0.51 ( 7%)
Pond Inlet	2.44	1.79 (73%)	0.47 (19%)	0.19 ( 8%)
Resolute Bay	1.72	1.31 (76%)	0.39 (23%)	0.02 ( 1%)
Nine 'Wet' Communities	4.62	2.19 (47%)	2.11 (46%)	0.32 ( 7%)

Sources: Compiled from NWT Liquor Commission Liquor Order Invoices.

When the prevalency figures and the measures of consumption are looked at together, a number of conclusions can be made about patterns of alcohol use in the Baffin Region. First of all, in proportion to the size of the population, fewer Baffin Region Inuit drink than most other population groups. The results of census and national social survey research show that the average Baffin Region Inuit was less likely to be a drinker than was the average native person in the NWT, the average native Canadian, or the average Canadian. The second conclusion concerning the use of alcohol in the Baffin Region is that less alcohol was consumed in the region per person than was consumed per person in the NWT or across the country. A comparison of per capita absolute alcohol consumption rates shows that for the year 1991 the average amount of alcohol consumed in the Baffin Region was about five times less than the average amount consumed nationally and about seven times less than the average amount consumed in the NWT. The third conclusion that can be made about drinking in the Baffin Region is that the non-Inuit residents of the region consumed, on average, much more alcohol than the Inuit residents of the region. In terms of per capita absolute alcohol consumption in 1991, the Inuit residents were outdrank by the non-Inuit residents by a ratio of four to one. A final conclusion which can be made regarding the use of alcohol in the Baffin Region is that the alcoholic beverages consumed generally had a high alcohol content. Since most of the alcohol consumed in the region is shipped to the communities by air at the drinkers' expense on the basis of weight, it is much more cost effective to purchase alcohol in the form of hard liquor rather than in the form of beer or wine.

Compared with people outside the region, native and non-native alike, the Inuit of the Baffin Region are less likely to drink alcohol, those that do drink on average consume less alcohol, and when they drink they generally drink hard liquor. But while there is relatively less drinking in the Baffin Region than elsewhere, the drinking that does occur is apparently cause for concern. As was shown in the first part of this chapter, some residents and justice system service providers see the use of alcohol as a primary contributor to violent crime in the Baffin Region and an analysis of police records shows that a good deal of violent crime in those communities is indeed alcohol related. In the remainder of this chapter different factors surrounding the use and control of alcohol at the community level are considered to further examine why some Baffin Region communities have more violent crime than others.

## LOCAL ALCOHOL CONTROL LEGISLATION AND VIOLENT CRIME

Legislators in the NWT have not just sat idly by and watched as alcohol related violence has impacted communities throughout the territory. Legislation has been passed to allow communities in the NWT to attempt to deal with the alcohol related social problems through the regulation of sale and possession of alcoholic beverages. Using a plebiscite process<sup>30</sup> sanctioned under the *Northwest Territories Liquor Act* (R.S.N.W.T. 1988, c. L9, s. 48 to 50)<sup>31</sup>, many communities have exercised their local option to prohibit or restrict the sale or possession of alcohol in the area within and immediately surrounding their municipality or hamlet. This section considers the different ways that Baffin Region communities have chosen to control alcohol use and, especially, the effect that those controls have had upon violent crime.

### Types of Local Alcohol Controls

The local option on alcohol control restrictions and prohibitions, as is shown in Table 28, has been exercised in one of three ways by the Baffin Region communities. Some have chosen through the plebiscite process to prohibit the "consumption, possession, purchase, sale or transport of liquor" (*Liquor Act*, s. 48(2)(e)) in and around their communities. These communities that have chosen to prohibit alcohol, as shown in the right hand column of Table 28, are commonly referred to as 'dry' communities. Other communities in the region have chosen not to control or restrict the use or possession of alcohol at the local level. These unrestricted communities, which are shown in the left hand column of Table 28, are "subject only to the general liquor laws of the Territories" (*Liquor Act*, s. 48(2)(a)) and are more commonly referred to as 'wet' communities. Voters in the majority of the communities in the Baffin Region have chosen a middle ground between the total prohibition of alcohol and its unrestricted availability. These communities, shown in the middle column of Table 28, have instead decided upon a using an elected alcohol education committee to try to control alcohol use and abuse. The committees, upon election, decide "who may consume, possess, purchase" or import and "the amount of liquor that a person may possess, purchase, transport, or import" into the community" (*Liquor Act*, s. 48(2)(d)). For those individuals whose use of alcohol is

---

<sup>30</sup> Change in local liquor controls under the *Liquor Act* is by a 60 percent supermajority. See Appendix E for an example of an actual ballot used in one Baffin Region community's plebiscite.

<sup>31</sup> Referred to as '*Liquor Act*' hereafter.

problematic, the alcohol education committees can ban them from purchasing, importing, or even consuming alcohol within the community for periods of up to a year (*Liquor Act*, s. 50(1)(a))

Although they are more commonly referred to as being 'controlled' rather than 'wet' or 'dry,' the communities which attempt to limit alcohol use and abuse through alcohol education committees should also be seen, at least for the purposes of this dissertation, as being 'wet' communities. While there is no way to be certain that the system of local alcohol control by committee is wholly ineffective, there is a good deal of skepticism over *some* committees' will and ability to actually control individual drinkers. In one community the alcohol education committee was called "invisible" (by an Inuk social worker) while in another community it was seen as serving as a "rubber stamp" in approving orders (by the senior administrative officer). In a couple of other communities there was concern expressed that the individuals on the alcohol education committee were the ones needing the most education about drinking; one committee was characterized (by a non-Inuit airline agent with 3 years of community residency) as being the "biggest pack of drunks in [the] whole town." An RCMP officer in that same community felt that the alcohol education committee was not doing its job of forbidding those individuals that caused trouble while intoxicated. He reported that his detachment would "supply them with information on people who have caused problems when they have been drinking. [In] the majority of cases that we refer[red] to them they continue[d] to provide them with their liquor permits "

There is some evidence to be gleaned from the records of at least one alcohol education committee to suggest that some alcohol education committees are but a "rubber stamp" in the process of obtaining liquor. Rasing (1994, p. 258), in his ethnography of social conformity in Igloolik, found that community's alcohol education committee to have refused only 28 of the 1442 liquor applications it processed in the 8 years between 1980 and 1987. He chalked their two percent refusal rate up to a variety of factors including the committee's "familiarity with the people who appear before them, a sensitivity to community reaction, and the underlying aversion to interfere with people's lives" (Rasing, 1994, p. 259).

**Table 28: Types of Local Option Alcohol Controls, Baffin Region Communities, 1991**

'Dry' Communities	'Wet' Communities	
Alcohol Possession Prohibited	Restricted by Local Alcohol Education Committee	Unrestricted
Lake Harbour	Arctic Bay	Grise Fiord
Pangnirtung	Broughton Island	Nanisivik
Sanikiluaq	Cape Dorset	
	Clyde River	
	Hall Beach	
	Igloolik	
	Iqaluit	
	Pond Inlet	
	Resolute Bay	

Source: GNWT Government Services, 1992.

Even in communities where the committees are effective in keeping problem drinkers from importing alcohol, there is no guarantee that those individuals restricted from ordering alcohol are not getting their booze from another source. In one community, where the alcohol education committee did refuse a relatively higher number of orders, there were still doubts as to the real effects of local control because, as some argued, those forbidden from importing alcohol would just get it from friends or relatives. As an RCMP officer in that community pointed out

they can always drink with their neighbors or drink with their brother when he gets his order in. It's not like they are cut off for good because somebody else can go and get an order. Maybe a wife or whatever. A lot of times, you see the orders in women's names

Given both points of contention concerning the ability of the alcohol education committees to actually make a community a 'controlled' community, it is difficult to see them as really being all that different than the unrestricted 'wet' communities. Although they are controlled 'on paper,' the refusal of some committees to reject orders and the ability of drinkers, in other communities to get alcohol from family and friends when committees do reject orders makes one question the *de facto* existence of alcohol control.



## Violent Crime in 'Wet' and 'Dry' Communities

If one can agree that there really is no difference between the 'wet' and 'controlled' communities in terms of individuals' ability to obtain alcohol, then it is possible to move on and finally take a look at the effect that alcohol prohibition has had upon the amount of violent crime in a community. Below, a comparison is made between violent crime rates in communities that prohibit alcohol possession and those that allow alcohol possession and consumption. If there is any merit to Giacomassi and Stitt's (1991) distribution of consumption hypothesis (see Chapter 3), that policies allowing for greater alcohol consumption lead to greater amounts of alcohol related damage such as violent crime, it would be expected that the communities that use local option legislation to prohibit the possession and use of alcohol would have less violent crime than those communities that allow residents to possess and use alcohol.

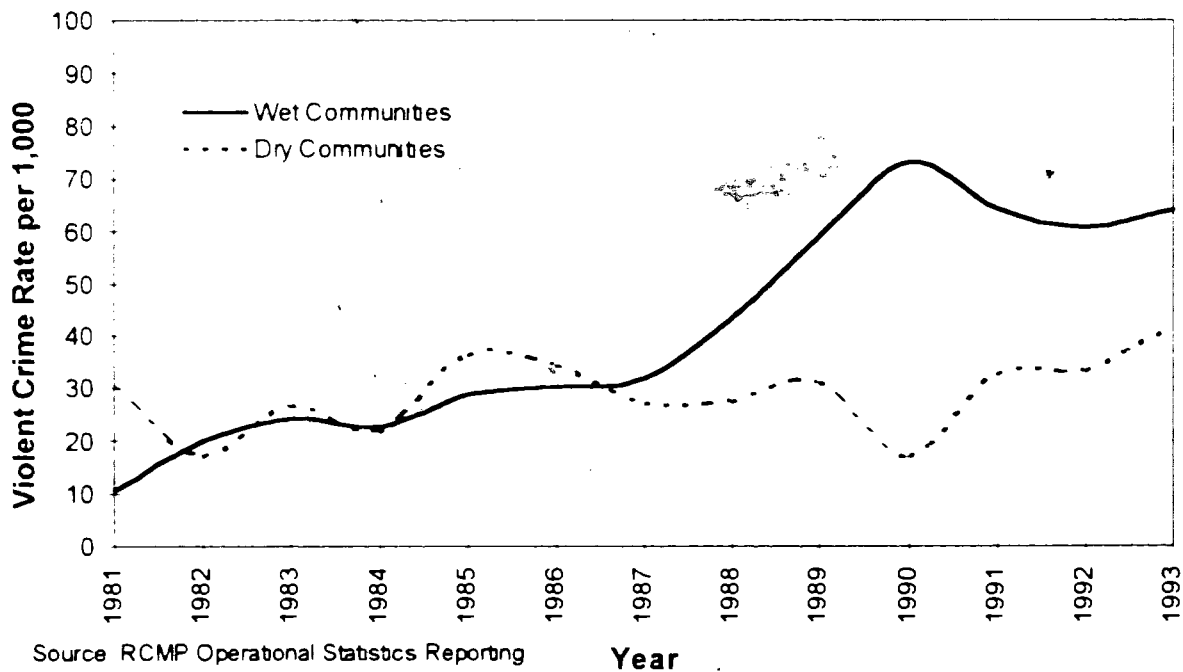
The RCMP violent crime rates over the 13 year period of 1981 to 1993 ("G" Division RCMP, 1982-1994) for the 'wet' and 'dry' communities are presented in Figure 11. As that figure shows, the differences between the two types were not always in the direction that corresponds with the objectives of the *Liquor Act* local option prohibitions. In four of the six years prior to 1987 the violent crime rate of 'dry' communities was actually greater than that of 'wet' communities. It has only been since 1987 that the violent crime rate for 'dry' communities has been less than the rate for 'wet' communities. Although the violent crime rate for the 'dry' communities has not always been less than for the 'wet' communities, the overall growth in violent crime for the two community types was less for the communities where alcohol is prohibited than in the communities where alcohol is permitted. From 1984, when the violent crime rate for both types of communities was 22 per 1,000 population, until 1993, the violent crime rate in the 'wet' communities increased by 190 percent while the rate for 'dry' communities increased 86 percent.

As done elsewhere in this study, nonparametric statistical techniques were used to make comparisons between the 'wet' and 'dry' communities' violent crime rates. A rank-sum test was first conducted to compare violent crime rates in the two different types of communities. Median tests were then performed to determine the correspondence between a community being a 'dry' and having relatively lower violent crime rates. Exact tests of statistical significance were conducted for both analyses to determine if the differences between the types of communities

were likely to be the result of sampling or other chance variability or if the differences were an indication of a probable relationship.

The violent crime rates for the two different types of communities were compared using the rank-sum test. Violent crime rates for each community were first ranked and then the mean rank for each type of community as a group (i.e., for the group of 'wet' communities and for the group of 'dry' communities) was calculated. In Table 29 the mean violent crime rate ranks between 1985 and 1992 for 'wet' and for 'dry' community types were compared and the exact significance level of the differences between the two community types is presented. The differences between the mean ranks of the two community types generally correspond with the differences between the types seen above in Figure 11 based upon offence rates. Contrary to the desired results of the local control legislation, the mean violent crime rate ranks of the 'dry' communities were actually higher than those of the 'wet' communities in 1985 and 1986. After that point, however, from 1987 to 1992, the mean violent crime rate ranks for the 'dry' communities, as would be expected given the aims of the prohibition ordinances and what is predicted by the distribution of consumption hypothesis, were lower than those of the 'wet' communities.

**Figure 11: Violent Crime Rates for 'Wet' Communities and 'Dry' Communities, Baffin Region, 1981 to 1993.**



Source: RCMP Operational Statistics Reporting System Detailed Crime Report, 'G' Division

**Table 29: Mean Rank of RCMP Violent Crime Rates (3 Year Running Average Rate) by Community Alcohol Regulation Type, Baffin Region, NWT, 1985 to 1992.**

Year	Mean Rank of Community Type		Exact Significance Level
	Dry	Wet	
1985	7.33	6.22	.727
1986	6.67	6.44	1.000
1987	5.33	6.89	.600
1988	4.67	7.11	.373
1989	3.33	7.56	.100
1990	2.67	7.78	.036
1991	2.00	8.00	.009
1992	3.67	7.44	.146

Although there has been a reversal in the trends of violent crime rate ranks between the 'wet' and 'dry' communities, the differences between those ranks were, more often than not, not statistically significant. For the first four years looked at (1985 to 1988), it appears as though the differences between the groups' mean ranks are generally not large enough to anticipate that those differences are the result of something besides chance. However, the differences between the mean ranks were large enough in three (1989 to 1991) of the last four years examined (1989 to 1992) to have had a 1 in 10 probability of likely being the result of something besides random chance.

The patterns found in the results of the median tests were comparable to the patterns found in the results of the rank-sum test and in the graphic comparison of 'wet' and 'dry' communities' violent crime rates. Prior to 1988, as seen in Table 30, a third to two-thirds of the 'dry' communities had violent crime rates that were actually higher than the Baffin Region median. It was not until 1988 that all of the 'dry' communities' violent crime rates were below the regional median violent crime rate. It is difficult to attribute the correspondence between communities having relatively low violent crime rates and their being 'dry' to the effects of alcohol prohibition because the median tests used here were only able to demonstrate that the three 'dry' communities were among the six communities below the median crime rate. As such,

there is roughly a one in five likelihood ( $p = .182$ ) that it is only because of chance events that those 'dry' communities are among the lowest in violent crime.

**Table 30: Proportion of Dry Communities Below the Median RCMP Violent Crime Rate (3 Year Running Average Rate), 1985 to 1992. All Baffin Region Communities**

Year	Proportion of Dry Communities Below Median Violent Crime Rate	Exact Significance Level
1985	1 out of 3	1.000
1986	1 out of 3	1.000
1987	2 out of 3	1.000
1988	3 out of 3	.182
1989	3 out of 3	.182
1990	3 out of 3	.182
1991	3 out of 3	.182
1992	3 out of 3	.182

This examination of the relationship between community alcohol prohibition and violent crime has done little to settle the question of the impact that those prohibitions have on the alleviation of violence. Likewise, it is difficult to accept or to reject Giacomassi and Stitt's (1991) distribution of consumption hypothesis in light of the results obtained in these analyses. The comparisons of violent crime in 'wet' and 'dry' communities over a eight year stretch provided results which can only be described as contradictory. 'Dry' communities had a higher violent crime for the first two years looked at and then a lower crime rate in the last six years examined. In only three of the six years when the 'dry' communities had less violent crime did the results of the nonparametric analysis appear to lend support to the idea that the prohibition of alcohol in a community made it less prone to violence. Otherwise, the results do not provide reason to argue either for or against the merits of local alcohol prohibitions.

## **ALCOHOL USE AND VIOLENT CRIME**

The contradictory results of the analysis comparing violent crime rates in 'wet' and 'dry' communities suggest that it is necessary to look beyond the questionable impact of legislative attempts to control alcohol related violence to account for variations in inter-community violent crime rates. Instead of trying to understand the effects of alcohol prohibitions on violent crime,

this chapter now takes a look at the degree to which there is an association between the amount of alcohol use and the amount of violent crime. How much alcohol is used, rather than whether alcohol use is allowed, is the question which will now be considered in an attempt to account for differences in violent crime between Baffin Region communities.

As is shown in Table 24 through Table 27 above, there are some differences between the communities according to the prevalency of alcohol use and between the nine 'wet' communities in the volumes of alcohol consumed. In this section of this chapter the relationship between the community-level indicators of alcohol use and the community-level measures of violent crime is considered. An attempt is made here to determine the degree to which variations in alcohol consumption and variations in the prevalency of alcohol use coincide with variations in violent crime.

The bio-social explanations of alcohol related violent crime among native peoples are the primary basis for this examination of the association between the indices of alcohol use and violent crime. Rather than attempting to measure at the community level the different socio-cultural stressors said to combine with alcohol use to create violent crime in individuals, this section considers the latter half of the equation, namely the alcohol use. Given that alcohol use is a necessary component of the causal chain in all of the bio-social explanations, holding the other factors constant could mean that there would be a direct relationship between the amount of alcohol use and the amount of violent crime committed. Without the alcohol the other factors might not come into play.

The examination of the association between violent crime and the indicators of alcohol use allows for a consideration of what Giacomassi and Stitt (1991) termed the constant proportion hypothesis. If that hypothesis, which holds that the proportion of excessive drinkers and the amount of alcohol related damage (such as violent crime) in a population are directly related to the amount of consumption in a population, has any merit, one would expect (1) a direct relationship between the proportion of drinkers in a community's population and the violent crime rate and (2) a direct relationship between the per capita alcohol consumption rate in a community and the violent crime rate. Each of these expected relationships is explored below.

### Prevalence of Alcohol Use and Violent Crime

The only available measure of the number of alcohol users in Baffin Region communities, the percentage of the Inuit population that are current drinkers (see Table 24), comes from the 1991 Aboriginal Peoples Survey (Statistics Canada, 1993a). The violent crime measure used to examine the relationship between the number of people that drink alcohol and the amount of violent crime in a community is the mean RCMP violent crime rate for the years 1990 through 1992. As in the latter part of the previous chapter, the analyses in this section were completed using nonparametric statistics with exact tests of statistical significance because of the small number of cases available for study.

The rank-order (Spearman) correlation between the 1990-92 violent crime rate measure and the percentage of the Inuit population that reported being a current drinker in 1991 was computed first. As is shown in the first row of Table 31, the rank-order correlation (Spearman's  $r = .40$ ) between the two variables was what can be considered to be indicative of only a weak to moderate relationship (Patten, 1997). The relationship was certainly not strong enough to be relatively certain that the result is statistically significant and not the result of chance alone.

**Table 31: Rank-Order (Spearman) Correlations Between the 1990-92 RCMP Violent Crime Rate and 1991 Prevalence of Alcohol Use Measure, 'Wet' and 'Dry' Baffin Region Communities.**

Community-level Prevalence of Alcohol Use Measure	1990-92 RCMP Violent Crime Rate	Exact Significance Level
Percentage of Inuit Population that are Current Drinkers	.40	.201

To further explore the relationship between the number of people that drink and the amount of violent crime in a community, the mean rank for the 1990-92 RCMP violent crime rate of communities with a proportion of drinkers above the regional median was compared to the mean rank of the same violent crime measure for communities with a proportion of drinkers below the regional median. That comparison, displayed in the first row of findings in Table 32, shows that the mean violent crime rate rank for the communities below the median of percentage of current drinkers was smaller than the mean violent crime rate rank for the communities above

the median percentage of current drinkers. Again, as with the rank-order correlation considered above, it is difficult to say that the relationship is attributable to anything other than chance.

**Table 32: Mean Rank of 1990-92 RCMP Violent Crime Rate for Communities Above and Below the Median on 1991 Prevalency of Alcohol Use Measures, 'Wet' and 'Dry' Baffin Region Communities.**

Community-level Prevalence of Alcohol Use Measure	Mean Rank of 1990-92 Violent Crime Rate for Communities on Prevalence of Alcohol Use Measure		Exact Significance Level
	Below Median	Above Median	
Percentage of Inuit Population that are Current Drinkers	5.83	7.17	.5887

Finally, a "median test" was used to examine the relationship between the number of drinkers and the amount of violent crime in a community. Use of the "median test" technique involved grouping communities on two different variables and then examining the correspondence between the groups on those variables. Communities were first grouped according to whether they were above or below the median on the proportion of drinkers variable and then they were grouped according to whether they were above or below the violent crime rate variable. A crosstabulation of the two grouped variables was then computed to see if communities above the median on one measure were also above the median on the other measure. In this case the crosstabulation was computed to find out, as hypothesized, if the communities that were above the median of percentage of the population that reported drinking were also above the median violent crime rate. The computed crosstabulation, as reported in the first row of findings in Table 33, shows that three out of the six communities above the median of percentage of population that were current drinkers were also above the median violent crime rate. Those communities above the median percentage of the population that were current drinkers were just as likely to be below the median violent crime rate as they were to be above it. In essence, this median test brings into question the relationship between the proportion of a population that are alcohol drinkers and the violent crime rate in that population. When taken together, the three tests conducted to examine the relationship between the number of drinkers in a community and violent crime bring into question the idea that the greater the number of drinkers there are in a community the more violent crime there should be. There is very little to

indicate that there is an association between those two variables for the twelve Baffin Region communities studied in this dissertation.

**Table 33: Proportion of Communities Above the Median Values for the 1990-92 RCMP Violent Crime Rate and the 1991 Prevalence of Alcohol Use Measures, 'Wet' and 'Dry' Baffin Region Communities.**

Community-level Prevalence of Alcohol Use Measure	Proportion of Communities Above Median Values for Violent Crime Rate and Prevalence of Alcohol Use Measure	Exact Significance Level
Percentage of Inuit Population that are Current Drinkers	3 out of 6	1.000

**Per Capita Consumption of Alcohol and Violent Crime**

It is necessary to examine the relationship between drinking and violent crime with a more precise indicator of alcohol use because the measure of the proportion of drinkers in a community used above is a rather crude measure of alcohol use. A more accurate method of measuring alcohol use in a community is to calculate the per capita consumption of absolute alcohol. Rather than just counting the number of 'current drinkers' in a community — a crude measure which puts individuals that have a glass of champagne at a wedding once a year in the same category as those that drink a case of beer a night — the per capita consumption measure provides an indication of how much alcohol is used in a jurisdiction. This portion of the study examines the relationship between the per capita consumption of absolute alcohol and violent crime. As predicted by the constant proportion hypothesis, which holds that the amount of alcohol related damage such as violent crime is a result of the amount of alcohol consumed in a population, it was expected that there would be a direct relationship between per capita consumption of absolute alcohol and the violent crime rate in a community.

The measures and methods used to examine the consumption / violent crime relationship in this section are similar to those found elsewhere in the study. The violent crime measure, the 1990 to 1992 mean RCMP violent crime rate, was the same as used elsewhere. A few different measures of per capita consumption of absolute alcohol, all of which were computed from the Iqaluit liquor store invoices, were used in the analysis. The total consumption rate (see Table 25), the Inuit consumption rate (see Table 26), the non-Inuit consumption rate (see Table 27)



spirits, beer, and wine for each 'wet' community in 1991 were all used to consider the relationship between the amount of alcohol consumed and the amount of violent crime. As has been the case elsewhere in this dissertation, the small number of cases available to analyze made the use of nonparametric statistical techniques and exact tests of statistical significance a necessity for the analyses found in this section.

Rank-order correlations were the first type of nonparametric statistics calculated to examine the alcohol consumption / violent crime relationship. The rank-order correlations between the 1990-92 RCMP violent crime rate and each of the six different measures of per capita consumption of absolute alcohol are shown in Table 34. A couple of different points can be made about the relationship between consumption and violent crime, each of which is dependent upon the measure of consumption used. First, the results indicate that there was no apparent relationship between the total per capita consumption of absolute alcohol in a community and the violent rate in the community for the year 1991. The value for the rank-order correlation (Spearman's  $r = .03$ ) denotes a nearly complete absence of a relationship between those two variables. When the consumption figures are broken down according to whether the purchaser was Inuit or non-Inuit and then the relationship is examined a couple of relationships appears to emerge. The weak negative relationship between non-Inuit consumption and the violent crime rate (Spearman's  $r = -.13$ ) is offset by the weak to moderate positive relationship between Inuit consumption and the violent crime rate (Spearman's  $r = .40$ ). Of all the rank-order correlations the strongest is that between the Inuit per capita consumption of spirits (i.e., hard liquor) and the violent crime rate (Spearman's  $r = .55$ ). However, as the values for the exact significance level show, even that relationship was not strong enough ( $p = .13$ ) for it to be considered to be likely to be the result of something besides chance events.

**Table 34: Rank-Order (Spearman) Correlations Between the 1990-92 RCMP Violent Crime Rate and 1991 Absolute Alcohol Consumption Measures, 'Wet' Baffin Region Communities.**

Community-level Absolute Alcohol Consumption Measure	1990-92 RCMP Violent Crime Rate	Exact Significance Level
Total Per Capita Consumption of All Beverages	.03	.948
Non-Inuit Per Capita Consumption of All Beverages	-.13	.743
Inuit Per Capita Consumption of All Beverages	.40	.291
Inuit Per Capita Consumption of Spirits	.55	.132
Inuit Per Capita Consumption of Beer	-.13	.743
Inuit Per Capita Consumption of Wine	-.42	.269

The second type of nonparametrical analysis conducted to examine the relationship between alcohol consumption and violent crime was the "rank-sum" test. In that test the mean rank of violent crime rates for communities above the median of the per capita consumption measure were compared with the mean rank of violent crime rates for communities at or below the median of the per capita consumption measure. The results of comparisons calculated for each of the consumption measures, as presented in Table 35, were similar to those resulting from the rank-order analysis. Those communities above the median in total per capita consumption and those above the median in Inuit per capita consumption had only slightly higher mean ranks on the violent crime rate when compared with the communities at or below the median of total per capita consumption or communities at or below the median of Inuit per capita consumption. As was the case with the rank-order analysis, the strongest support for the expected relationship between consumption and violent crime was that between the Inuit per capita consumption of spirits and the violent crime rate, those communities above the median of the Inuit per capita consumption of spirits measure had a much higher mean rank on the violent crime rate compared to the communities at or below the median of the Inuit per capita consumption of spirits measure. Of all the findings supporting the idea of a direct relationship between alcohol consumption and violent crime, only that for the Inuit spirits consumption

approached a probability level ( $p = .11$ ) that was almost close enough to have led one to have felt relatively safe to have rejected the null hypothesis.

**Table 35: Mean Rank of 1990-92 RCMP Violent Crime Rate for Communities Above and Below the Median on 1991 Absolute Alcohol Consumption Measures, 'Wet' Baffin Region Communities.**

Community-level Absolute Alcohol Consumption Measure	Mean Rank of 1990-92 Violent Crime Rate for Communities on Each Alcohol Use Measure		Exact Significance Level
	Below Median	Above Median	
Total Per Capita Consumption of All Beverages	4.60	5.50	.7302
Non-Inuit Per Capita Consumption of All Beverages	5.80	4.00	.4127
Inuit Per Capita Consumption of All Beverages	4.60	5.50	.7302
Inuit Per Capita Consumption of Spirits	3.60	6.75	.1111
Inuit Per Capita Consumption of Beer	4.60	5.50	.7302
Inuit Per Capita Consumption of Wine	6.60	3.00	.0635

Finally, as was done above in the examination of the effect of the number of drinkers in the population upon violent crime, median tests were conducted to examine the relationship between each of the alcohol consumption variables and the violent crime variable. For each of the six measures of consumption, communities were put into one of two groups based upon their being above or below (and equal to) the median value for that measure. The communities were also put into one of two groups based upon their being above or below (and equal to) the median violent crime rate for 1990-92. A 2 X 2 crosstabulation of the groups for each of the consumption measures with the groups for the violent crime rate measure was then computed. Those crosstabulations were then checked to determine if those communities that were above the median on the alcohol consumption measures were also the communities that were above the median on the violent crime rate measure. The results of the crosstabulations are presented in Table 36 as the proportion of the communities that were above the median for the alcohol

consumption variable and also above the median for the violent crime rate variable. Only half (2 out of 4) of the communities above the median for the consumption measure were also above the median violent crime rate for three of the consumption measures: the total per capita consumption, the Inuit per capita consumption of all beverages, and the Inuit per capita beer consumption. The closest correspondence of measures above the median is for the Inuit per capita spirits consumption measure where 3 out of 4 communities that were above the median value of Inuit per capita spirits consumption were also above the median value of the violent crime rate. Even that relationship, however, cannot be considered to be statistically significant and should be viewed as having at least a 1 in 5 likelihood ( $p = .20$ ) of being the result of chance events.

Taken together, the results reported in Table 34 through Table 36 provided little evidence indicative of a direct relationship between the total volume of alcohol consumption and the amount of violent crime in a community. Even with the use of three different types of nonparametric analyses no relationship was found between the 1990-92 violent crime rate and the total per capita consumption of absolute alcohol in 1991 by Inuit and non-Inuit together or as groups of their own. That lack of a relationship between the total volume of consumption and the amount of violent crime brings into question the constant proportion hypothesis for the nine 'wet' Baffin Region communities in 1991.

**Table 36: Proportion of Communities Above the Median Values for the 1990-92 RCMP Violent Crime Rate and the Above the 1991 Absolute Alcohol Consumption Measures, 'Wet' Baffin Region Communities.**

Community-level Absolute Alcohol Consumption Measure	Proportion of Communities Above Median Values for Violent Crime Rate and Alcohol Use Measure	Exact Significance Level
Total Per Capita Consumption of All Beverages	2 out of 4	1.000
Non-Inuit Per Capita Consumption of All Beverages	1 out of 4	.523
Inuit Per Capita Consumption of All Beverages	2 out of 4	1.000
Inuit Per Capita Consumption of Spirits	3 out of 4	.206
Inuit Per Capita Consumption of Beer	2 out of 4	1.000
Inuit Per Capita Consumption of Wine	0 out of 4	.047

However, an interesting trend between the violent crime rate measures and the per capita consumption measures for each beverage type did arise. In all three analyses the two strongest outcomes were for (1) the direct association between the per capita consumption of spirits (i.e., "hard liquor") and violent crime and (2) for the inverse association between the per capita consumption of wine and violent crime. These results seem to indicate that different types of alcoholic beverages have different associations with violent crime: high rates of spirits consumption are associated with high rates of violent crime; high rates of wine consumption are associated with low rates of violent crime.

There are, however, reasons why these results can only be viewed with a great deal of caution. The relationship between the Inuit per capita spirits consumption variable and the violent crime rate is tenuous at best because in all three analyses there was never less than a 1 in 10 probability of the relationship being the result of random chance. Even though the relationship between the Inuit per capita wine consumption variable and the violent crime rate was statistically significant at the  $p < .10$  in all but the rank-order analysis, it too must be seen as only being suggestive due to the fact that on the basis of volume of consumption very little wine was actually consumed in 1991 (see Table 26).

## MODELS OF DRUNKEN BEHAVIOR AND VIOLENT CRIME

Thus far the two explanations of the alcohol / violent crime relationship looked at in this chapter have not proven to be particularly enlightening in terms of explaining why some Baffin Region communities have more violent crime than others. Although there is some evidence that might possibly support the proposition that communities with the least amount of violent crime are also the communities which prohibit the importation, possession, and consumption of alcohol, the relationship between the amount of alcohol consumed in a community and the amount of violent crime reported there appears to be more of a function of the type of alcoholic beverage consumed than of the total amount used. It is therefore necessary to look beyond the amount of alcohol consumed and to consider other factors related to the use of alcohol to understand why some of the 'wet' communities have more violent crime than others. One such factor focused upon in this section is the role of the models of drunken behavior that have been provided to the Inuit of the Baffin Region. The amount of violent crime in some 'wet' communities whose models of drunken behavior have been especially poor is compared with the amount of violent crime in the other 'wet' communities whose models have been somewhat better. Specifically, this section will determine if communities with a large transient non-Inuit workforce whose purpose in the arctic has no connection to the Inuit population, a group of individuals thought to be particularly bad models of drinking behavior, have had more violent crime than those without such a population of non-Inuit.

The idea that different models of drinking behavior could account for variations in the amount of violent crime in Baffin Region communities rests upon the presumption that an individual's behavior when intoxicated is not governed by his or her physiology but is instead determined by social norms of how one can and should act when drunk. This presumption, in turn, is expressed best in the work of MacAndrew and Edgerton (1969) who showed that "drunken comportment" varies widely across cultures and that in some societies it is unheard of for people to become violent when intoxicated.<sup>32</sup> The diversity of drunken behavior, they argued, is the result of culturally specific socialization which imparts upon individuals the

---

<sup>32</sup> The comparative cross-cultural examination of alcohol consumption dates back to the 1940s (Bunzel, 1940; Horton, 1943) while specific interest in how people learn to behave while intoxicated can be traced to the early 1960s (Lemert, 1964; Simmons, 1960)

socially known ways of acting when intoxicated (MacAndrew & Edgerton, 1969, p. 88). In short, people act the way they do when they are drunk because of the models of drinking behavior available to them in their social world.

Although the use of alcohol has historically been a part of all but a few cultures across the globe, it was not until contact with Europeans that the native peoples in what is now Canada and the US were introduced to the intoxicating beverages (Smith, 1973, p. 15).<sup>33</sup> Given their lack of experience in dealing with alcohol when it was first introduced, the native people looked to the Europeans for "lessons" about how to act when intoxicated. By most accounts (e.g., Bach & Bornstein, 1981; Winkler, 1966), the models of intoxicated behavior that were provided to the native people at the time were among the worst possible. As Smart points out:

Indian and Inuit drinking shows many of the characteristics of drinking found among 'frontier' men: loggers, trappers, oil rig workers, pipeline workers, and probably early traders, soldiers, sailors, and others with whom Native peoples originally and currently come into contact (1986, p. 105).

Rather than being exposed to models of restrained drinking, native peoples only indication of acceptable intoxicated behavior came from those who behaved without restraint while intoxicated

#### **Drinking Models of the Baffin Region Inuit**

Like the other native peoples of North America, the Baffin Region Inuit were not exposed to alcoholic beverages until the arrival of the Europeans. Whaling crews, which operated off the coast of Baffin Island as early as 1820 (Millward, 1930, p. 35), were probably first Europeans to introduce alcohol to the Inuit of the region (Lyon, 1824 [Cited in Brody, 1977]). That early introduction, however, was probably sporadic and touched the lives of only a few Inuit. It was not until the 1960s that the Baffin Region Inuit contact with alcohol became widespread.

The introduction of alcohol to the Inuit came in the same period of time that they were being moved into permanent communities. Prior to then, when the Inuit were on the land, they

---

<sup>33</sup> Indians from Mexico to South America did produce and consume alcoholic beverages before contact with Europeans. The original islanders of Polynesia are the only other main cultural group besides aboriginal North Americans that historically did not use alcohol prior to contact with European colonialists (Lemert, 1964).

had little to do with alcohol. This point is bluntly made in an interview done with Orville Troy, the first Crown Attorney in the Baffin Region:

Interviewer: A lot of the Mounties' who were up there in the 50s were telling us that there wasn't really a lot to do in those communities, there wasn't a lot of crime anyway.

Troy: There wasn't because they all lived on the land and there was no booze

Even if they would have had the money to import alcohol from the south and the time to drink instead of working to survive on the land, the Inuit would not have been able to purchase alcohol because until 1960 it was illegal for native people in Canada to do so. Like the other native cultures before them, the Baffin Region Inuit had no knowledge of how to deal with alcohol once they were fully exposed to it. As one Inuk RCMP officer put it, "We [the Inuit] don't have a liquor experience." One interview respondent pointed out that "their mother and father never drank," and then she rather rhetorically asked "so who's going to teach them how to drink properly?"

Without indigenous examples to teach them how to act when intoxicated, the Inuit turned to the closest available models, namely the non-Inuit in the region. According to anthropologists Honigmann and Honigmann (1965b), both of whom were doing field work in Iqaluit at the time when alcohol was first being introduced, the Inuit who were living in town at that time learned drinking patterns and beliefs that resembled those of their non-Inuit neighbors. These adopted patterns and beliefs were anything but refined. The Honigmanns observed that the "people in Frobisher Bay . . . have not had a chance to observe the style of drinking that goes on at the Lord Elgin (a popular hotel in Ottawa) but only the kind that construction workers do" (1965b, p. 79)

Not only did they begin to drink like the non-Inuit of the area, but they also reportedly began to accept non-Inuit ideas about drinking. Even at that early date, the Honigmanns suggested, the Iqaluit Inuit "share[d] the North American's traumatized, puritanical attitudes toward alcohol, attitudes that picture drinking as a special category of behavior because it is fraught with menace or connotes depravity" (1965b, p. 78). Almost immediately, only a few years after the introduction of alcohol, the Inuit began to see its use as being related to violence.



According to the Honigmans, "a stereotype in Eskimo ideology connects drinking with violent aggression. People blame it for a murder that took place in 1963" (1965b, p. 79)

Given the models of drinking the Inuit were first exposed to, the drinking of construction workers and military personnel, it is no wonder they have come to see alcohol use as "fraught with menace" or full of "depravity." Research from the US shows that drinking among construction workers and military personnel tends to be marked by higher daily consumption levels (Hitz, 1973). These transient types of individuals are more likely to drink more at any one sitting, more likely to binge drink, more likely to drink for the expressed purposes of intoxication, and more likely to have problems because of drinking (Burt, 1982; Parker & Harford, 1992). The RCMP officers which served in the outlying communities in the 1960s reported problems with the construction workers and their drinking. For instance, one RCMP officer's story of the "two white fellows who came into town on a survey for the airport, and they got a young girl all drunked up" is typical. Another RCMP officer who served in the Baffin Region in the early 1970s characterized many of the construction and maintenance workers in the region at that time in a not so positive light:

There were a lot of "white trash," I guess would be the best term for it, that came in, and they brought alcohol. They brought less than acceptable standards to these people and introduced them. Unfortunately, that happens all the time when opening up an area like that. If I could have, I would have kept those kind of white people down south where they belong.

Some of the military personnel who have served in the region could probably be characterized in a similar light. The shenanigans of two American servicemen stationed at the United States Air Force Strategic Air Command air base at Iqaluit in the early 1960s, as described in a letter from the head government administrator in the eastern arctic to the commander of the SAC base,<sup>34</sup> are characteristic of the type of model provided to the Baffin Region Inuit when alcohol was first introduced:

... [d]uring February and March, 1961, we had some complaints from the Eskimo residents at Apex Hill about two American servicemen whom we later identified as \_\_\_\_\_ and \_\_\_\_\_. They said that these men spent a great deal of time at Apex Hill in search of women. ... During the early part of March the

---

<sup>34</sup> Confidential Letter from J. P. Pelante, Regional Administrator, Frobisher Bay, NWT to Lt. Col. R. L. Weniger, Commanding Officer, 4085th Air Base Squadron (SAC), April 21, 1961. Obtained from NWT Archives, Yellowknife.

Rehabilitation Centre<sup>35</sup> Superintendent had a report that these two men had gone to house No. 60, which is the dormitory for single girls residing in the Rehabilitation Centre. They had apparently brought along a considerable amount of beer and two of the girls obtained some of this beer and became quite intoxicated. It is against the rules of the Rehabilitation Centre for the single persons to consume alcoholic beverages in their quarters. It is also against the rules of the Centre for the single girls to have men visiting them at night. . . . It has been reported that these two men have entered several of the Eskimo residences and asked to use the telephone. It is believed that they used this as an excuse to get into the houses to look for women. We have had one report that \_\_\_\_\_ entered a private dwelling and asked if there were any women to be obtained.

The drinking, and more importantly, the intoxicated behavior, of the construction workers and the military personnel that served in the Baffin Region during the first decade-and-a-half of local alcohol availability provided everything except a model of rectitude and refinement to the region's Inuit population.

#### **Violent Crime in Transient and Non-Transient Communities**

Over the years the models of non-Inuit drinking behavior found in Baffin Region communities have diverged according to the type of non-Inuit population present in the community. Today there are three main types of non-Inuit present in Baffin Region communities. First, there are the non-Inuit that have a service commitment to the Inuit population. This group of non-Inuit includes civil servants (such as nurses, hamlet administrators, teachers, and police officers), store managers, and members of the clergy. A second group of non-Inuit residing in Baffin Region communities are the seasonal construction workers. These construction workers' contact with the local Inuit population is usually limited to instances where Inuit and non-Inuit are on the job together. The first two types of non-Inuit are found in all communities across the region. The third group of non-Inuit present in the Baffin Region, a type found only in certain communities, is composed of transient individuals whose purpose in the arctic is wholly unrelated to the provision of services to the Inuit population and whose local residence is separate from that of the Inuit population. Employees

---

<sup>35</sup> Besides being an institution which taught disabled Inuit hunters the skills necessary for living in permanent settlements, the Rehabilitation Centre also held "promiscuous girls whom the court recommended to the Centre" (Honigmann & Honigmann, 1965, p. 74).

of the Distant Early Warning (DEW Line) radar sites (which are located adjacent to two Baffin Region communities) are examples of these transient employees. Their only purpose in the arctic is the year-round maintenance and operation of the DEW Line sites; they eat, sleep, work, and socialize among themselves and apart from the Inuit community they are located adjacent to.<sup>36</sup> In general, the Inuit of the Baffin Region have the most contact with the first group of non-Inuit (i.e., the civil servants, store managers, clergy). During their daily lives the Inuit have little contact with the construction workers or with those individuals that are a part of the transient population. That lack of contact is probably for the best as the drunken behavior of the construction workers and the transient workers has not always been the best.

It is likely that all of the communities have, at one time or another, had some problems with the seasonal construction workers in their midst. Since the workers' stays in the communities are usually short term and because they generally have a job to do, those problems have tended to be isolated and to have come and gone with the summer construction season. However, the problems that have come with transient workers' drinking have been present throughout the entire year and, despite those workers' being housed and employed apart from the Inuit, the problems probably have occurred much more frequently. Given that the communities with the year-round transient non-Inuit population are continuously exposed to the worst models of intoxicated behavior, it is expected that they should also have more criminal behavior compared to communities without the year round non-Inuit transient population.

The idea that the transient communities (i.e., the communities with year-round transient non-Inuit populations), have had the worst models of drinking was shared by some of the individuals interviewed for the Baffin Region Crime and Justice Study. In fact, at least part of the credit for the idea that the *transient* communities might be the ones which were exposed to the worst of the models of drunken behavior must be given to the longtime resident and non-Inuit proprietor of a local hotel in Resolute Bay. In an interview that hotel proprietor sensitized us to the notions that it is the transiency of non-Inuit individuals which has led them to

---

<sup>36</sup> These workers are transient in the sense that they work for two or three weeks straight and then have a week or two away from work outside the arctic. As a group they are present in the effected communities on a year-round basis.

be poor models of drunken behavior and that some communities have had large groups of the transient individuals.

- Resolute Bay is like some other transient communities like Iqaluit or Hall Beach where two groups of people live. Some call it home. Like the Inuit and myself, we call this Resolute Bay our home. But the people at the airport who are here for a certain time, their home is somewhere else; their family, wife, children, they are somewhere else. So they don't have the same values for this community.
- There are some good people there too but some not so good people. So I think occasionally there are some contacts made by the people from there for here that are not necessarily on good terms.

Others interviewed for the Baffin Region Crime and Justice Study were of the opinion that some of the transient workers were drawn to the arctic because of troubles they had in the south. For instance, one RCMP officer who served in a DEW Line community at the beginning of this decade observed that "a lot of those people [DEW Line workers] are escaping from their problems. You hear rumors of what kind of people the DEW Line is made up of, so you're not really hitting the upper echelon of society. A lot of those guys don't have any morals or whatever, and they get away from home and get worse." It is important to note, however, that for the most part, the transient workers such as those working on the DEW Line have not contributed to the violent crime rates in those communities by committing violent offences themselves. The interview data and records in the RCMP operational files indicate that the trouble the transient workers have found themselves in has generally been related to the possession of marijuana and cocaine.

As with the construction workers throughout the region and the airmen in Iqaluit, contact between the local Inuit and non-Inuit populations in transient communities oftentimes occurred in conjunction with the consumption of alcohol. According to one RCMP officer who served in one DEW Line community in the early 1980s, the transient workers there "did not have a lot of contact back and forth with the Native people. It seemed that any contact they had was liquor related." The same RCMP officer noted that "a lot of alcohol was used up there [at the DEW Line site]."

Three of the twelve communities being looked at in this study can be considered to be "transient communities." Hall Beach and Broughton Island (the two DEW line site communities in the region) and Resolute Bay (the air travel hub for high arctic petroleum and mineral

exploration) each have year-round populations of non-Inuit workers that are generally in and out of the community on a bi-weekly or monthly basis. Of all the communities in the Baffin Region, these three communities with their transient populations have had, on a permanent basis since they were settled,<sup>37</sup> poor models of how one should act when intoxicated. Given those poor models, it was expected that the transient communities would have more violent crime than the non-transient communities.

Comparisons of the transient and non-transient communities' 1990-1992 mean violent crime rates and 1991 measures of alcohol use were conducted using the nonparametrical "rank-sum" test. Those comparisons provided indications of the differences in violent crime rates and the differences in alcohol use between the two types of communities. As is seen in Table 37, the results of those comparisons were supportive of the modeling explanation of alcohol related violent crime. The comparison made in the first row of Table 37 shows that the communities that had the poorest models of drunken behavior, the transient communities, also had the most violent crime. The exact test of statistical significance conducted for that comparison indicates that there was a less than 1 in 10 chance ( $p = .095$ ) that the differences between the transient and non-transient communities' mean ranks of violent crime rates were the result of random chance.

While there was a significant difference in the amount of violent crime, there was no appreciable difference in the number of drinkers or the relative amounts of alcohol consumed in transient and non-transient communities. As seen in middle six rows of Table 37, the percentage of current drinkers and the different amounts of per capita alcohol consumption were not all that different for the two types of communities. The only other difference large enough to be considered to be *statistically* significant ( $p = .048$ ) — that between the mean ranks of Inuit per capita consumption of wine — could hardly be considered to be *theoretically* significant because very little wine was consumed in any of the communities (see Table 25, Table 26, and Table 27 on pages 99 through 102).

---

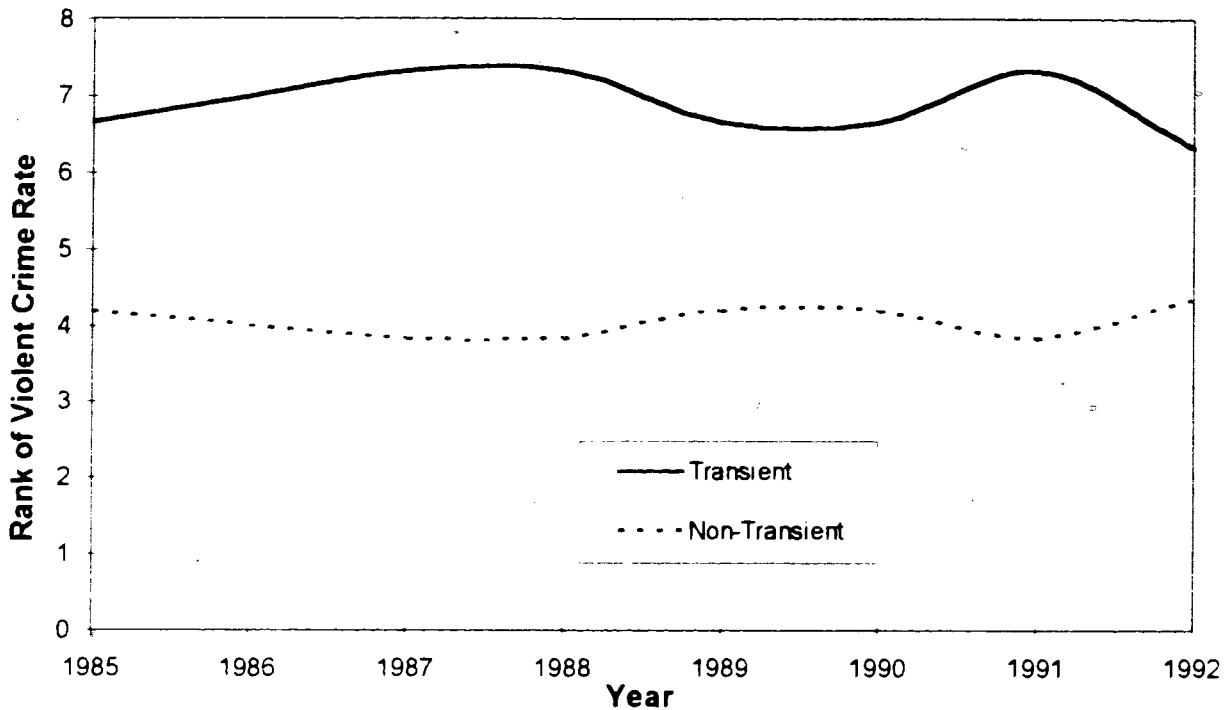
<sup>37</sup> Probably for the purposes of achieving economy of scale, all three of these communities were settled adjacent to the pre-existing non-Inuit outposts (Outcrop Publishing, 1990). In other words, when the non-Inuit were already there in these transient communities when Inuit were settled.

**Table 37: Comparison of Transient Communities and Non-Transient Communities on Violent Crime and Alcohol Consumption, 1991.**

Community-level Measure	Mean Rank of Community Type		Exact Significance Level
	Non-Transient	Transient	
1990-92 Average RCMP Violent Crime Rate	3.83	7.33	.095
Percentage of Inuit Population that are Current Drinkers	4.50	6.00	.549
Total Per Capita Absolute Alcohol Consumption of All Beverages	5.17	4.67	.905
Non-Inuit Per Capita Absolute Alcohol Consumption of All Beverages	5.17	4.67	.905
Inuit Per Capita Absolute Alcohol Consumption of All Beverages	5.00	5.00	1.000
Inuit Per Capita Absolute Alcohol Consumption of Spirits	4.83	5.33	.381
Inuit Per Capita Absolute Alcohol Consumption of Beer	5.67	3.67	.905
Inuit Per Capita Absolute Alcohol Consumption of Wine	6.33	2.33	.048

Although the mean ranking of violent crime rates in the transient communities was significantly higher than that of the non-transient communities in 1991, a comparison of the violent crime rate rankings over an 8 year period displayed in Figure 12 was only partially supportive of the expected association between the amount of violent crime in a community and their exposure to poor models of drunken behavior. In Table 38 the mean violent crime rate ranks of the transient and non-transient communities were compared for the years 1985 through 1992 using the nonparametric "rank-sum" test. The mean violent crime rate rank for the transient communities was higher than that of the non-transient communities in each of the eight years analyzed. Those differences between the two community types were large enough to be considered to be statistically significant at  $p < .10$  in 3 of the 8 years examined.

**Figure 12: Rank of RCMP Violent Crime Rates, Transient and Non-Transient 'Wet' Baffin Region Communities, 1985 to 1992.**



**Table 38: Mean Rank of RCMP Violent Crime Rates (3 Year Running Average Rate) for Transient Communities and Non-Transient Communities, Baffin Region, NWT, 1985 to 1992.**

Year	Mean Rank of Community Type		Exact Significance Level
	Non-Transient	Transient	
1985	4.17	6.67	.263
1986	4.00	7.00	.167
1987	3.83	7.33	.095
1988	3.83	7.33	.095
1989	4.17	6.67	.262
1990	4.17	6.67	.262
1991	3.83	7.33	.095
1992	4.33	6.33	.381

The results of the analyses conducted in this section do indeed provide some support for hypotheses derived from the modeling approach to explaining alcohol related violent crime in native populations. As was expected, the cross-sectional analysis conducted for the year 1991 clearly indicates that the Baffin Region communities with a transient population had an average

violent crime rate that was significantly higher than that of non-transient communities despite the fact that the amounts of alcohol consumed in both types of communities were essentially the same. Furthermore, the average violent crime rate for the transient communities was higher than that of the non-transient communities in each of the eight years examined although the differences could be considered statistically significant in only three of those years. Although there is a moderate level of support for the idea that, on average, the communities that have had the worst models of drunken behavior have also had the most violent crime, the mechanism by which those models of drunken behavior are translated into violent crime remains to be determined

## **SUMMARY**

This chapter has considered three facets of the relationship between violent crime and alcohol use. The effects of community ordinances prohibiting the possession of alcohol upon violent crime were first examined. Only recently is there support for the expectation that 'dry' communities should have less violent crime than 'wet' communities. It was not until 1987 that the average violent crime rate for the 'dry' communities was actually less than that of 'wet' communities and only in a few of those years did the differences in violent crime rates between 'wet' and 'dry' communities become large enough for them to be statistically significant. These results make it difficult to unreservedly accept the distribution of consumption hypothesis that restrictions on the distribution of alcohol will be associated with reduced amounts of violent crime

The association between community-level patterns of alcohol consumption and violent crime was considered next. Given the results of correlational analyses conducted in that section, it is possible to conclude that there was no association between the total per capita consumption of alcoholic beverages and the amount of violent crime in 'wet' Baffin Region communities in 1991. For that one year, the amount of violent crime committed in a community was not a result of the total amount of alcohol that was consumed. That lack of an association leads one to reject the constant proportion hypothesis for the year and communities examined.

In the final section of this chapter the potential impact of different models of drunken behavior upon violent crime in Baffin Region communities was examined. The amount of violent



crime in those communities that may have had particularly poor models of drunken behavior was found to be consistently higher than that found in communities which may have had somewhat less poor models of drunken behavior. Of the three hypotheses linking factors surrounding the use of alcohol to violent crime, this final hypothesis concerning the effects of models of drunken behavior upon violent crime received the most support.

## **CHAPTER 7: DISCUSSION**

This study set out to come to an understanding of the community characteristics associated with differences in community-level violent crime rates in the Inuit communities of the Baffin Region, NWT. As a jurisdiction, the Baffin Region is uniquely suited for the consideration of variations in inter-community violent crime rates among native peoples because of its geographic isolation, the fact that the communities are populated by a single native cultural group, and because there are multiple communities. Each of these factors are significant in allowing a comparison of communities in terms of violent crime and characteristics thought to be associated with violent crime, while minimizing the impact of dynamics such as inter-community migration by violent offenders and the influence of dissimilar native cultures. Together, these features made this study unlike any other which has been done.

### **Unique Features of the Study**

The 13 communities of the Baffin Region are isolated and widely scattered across an area covering about one-ninth of the entire area of Canada. Travel in and out of the region and between the communities is difficult and costly, because access is only by air, or for a few months during the summer, by sea. Although isolation in the arctic, and the great distances between communities, are important in terms of factors such as the cost of living, their main importance for this study is that they helped to rule out the influence of individuals from one community upon violent crime in another community. With the exception of violent offences committed in Iqaluit, which serves as magnet of social negativity for the eastern arctic, offenders almost never commit violent crimes outside their community of residence.

Another aspect of the Baffin Region which makes it an ideal locale for the examination of inter-community variations in violent crime, and adds to the uniqueness of the present study, is the fact that all communities in the region are primarily populated by a single native cultural group. This makes it feasible to rule out inter-cultural differences when attempting to understand variation in violent crime rates between communities. Not having to account for the effects of different cultures allowed for the examination of other possible community characteristics that might be associated with violent crime.

The final notable aspect of the Baffin Region is that it is an entire region with multiple communities that were included in the study. Rather than just considering violent crime in a single community, the presence of 12 communities allowed for the examination of community characteristics thought to be associated with violent crime within a comparative framework. Not only was this study able to address the degree to which community characteristics thought to be associated with violent crime in one community corresponded with the different violent crime rates in the other communities, it was also able to show that some communities have a lot less violence than others. The ability to compare communities is an advantage found in this study that is lacking in the largely ethnographic examinations of violent crime within a single community. For instance, Igloolik, the community that Rasing (1992) studied, does not seem quite as violent when compared with communities of similar size.

The research design used in this study provides one of the first instances in which the concept of colonization has been empirically operationalized utilizing data gathered in indigenous communities. It also represents one of the only empirical studies which has examined the role of alcohol, as operationalized on three dimensions across multiple communities, as a determinant of violent crime. The multiple sources of data used to consider those concepts, especially the alcohol consumption data and the RCMP operational file reports, allowed for the consideration of community characteristics generally only looked at when dealing with higher levels of aggregation. Very few studies have been able to bring these types of data to bear on a study of violent crime rates across multiple communities of the same native group.

### **The Focus on Violent Crime**

There are good reasons for focusing on violent crime and for why it is desirable to be able to compare the rates of violent crime across communities. A justification for why violent crime, rather than property crime, was the concentration of this study was given in Chapter 2. There it was argued that it was more important to look at violent crimes rather than property crimes, because the rates of violent crime in the Baffin Region are especially acute, because most property crimes committed in the region are of a trivial nature, and because violent crime, was the major community concern. While those are good reasons for choosing to consider violent

crimes rather than property crimes, they do not completely get to the heart of why it is important, in and of itself, to look at violent crime at the community level.

Knowing how much violent crime there is in a community is a measure of how well people are able to live together. As an aggregate index of "quality of life," the amount of violent crime in a community can be seen as an indicator of community residents' ability to live among one another, if not in peace and harmony, then at least in safety and security. If a community has high levels of violent crime, one can be fairly certain that there is a great degree of dysfunction in at least some aspects of the community. In essence, the amount of violent crime in a community provides an indication of the ability of families and communities to protect individuals from harm, and indicates the degree to which informal social controls within the community, the family, and the individual serve to keep people from beating their wives, killing their ex-lovers, and assaulting neighbors.

While it is important to assess the effectiveness of the informal social controls within any population group, their viability among the Inuit of the eastern arctic is of particular interest due to the transformation of the Inuit from a semi-nomadic hunting and gathering people, to one based in permanent settlements and maintained largely through the support of the welfare state. Over centuries in the arctic prior to settlement in permanent communities, the Inuit developed a set of non-confrontational informal social controls, based primarily upon the avoidance of others' detrimental behavior, that were especially well suited for group survival in the harsh arctic environment. However, as Ross (1992) has shown, those non-confrontational ways of dealing with anti-social behavior have not been successful in the permanent settlements the Inuit and other native Canadians inhabit today. The examination of violent crime among the Inuit allows for an understanding of the degree to which they have moved beyond the non-confrontational hunter and gatherer social controls to a set of social controls that are viable in the community context. In short, the amount of violent crime in a community is of particular interest because it provides one way to understand the degree to which the Inuit have been able to develop a culture that is conducive to living in permanent settlements.

## **Theoretical Perspective and Overview of Findings**

Based on an extensive literature review, “colonization” and alcohol use are the two constructs that have been used most often to explain high rates of violent crime among native peoples. Both perspectives were considered in this study in an attempt to arrive at an understanding of community characteristics that might have been associated with violent crime. Each of those constructs was operationalized at the community-level in different ways, leading to hypotheses about the possible associations that might have existed between alcohol and violent crime and between colonization and violent crime.

### **Colonization**

The process of colonization and its consequences for native peoples, in Canada and throughout the world, is perhaps the most widely used concept to explain the plight of indigenous and Aboriginal peoples. Research scholars and native peoples themselves have argued that, through contact with non-native settlers and governments, the cultural underpinnings of indigenous society were destroyed. This produced a number of outcomes, including sickness, disease, the loss of language, the loss of political autonomy and control, and loss of traditional land base and traditional lifestyle activities. In the published literature, the process of colonization is said to result in negative outcomes: marginal native communities afflicted by poverty, high rates of crime and disorder (including alcohol and drug abuse and suicide). This collective trauma (as identified by Kai T. Erikson in his preface to the book *A Poison Stronger Than Love*) is pervasive, generational, and reaches throughout the community to families and individuals.

Three different factors said to be the result of the process of colonization were considered. First, the relationship between socio-economic underdevelopment and violent crime was considered. Second, the possible association between community relocation and violent crime was explored. Finally, the association between the effects of changes brought to Baffin Region communities through external market forces and violent crime were observed. While the first factor has previously been considered in the research literature on violence in native communities, the examination of the other two factors can be seen as an expansion of the colonization / violent crime literature, because no study has considered them before.

The first set of hypotheses linking aspects of colonization and violent crime involved the potential associations between indices of socio-economic underdevelopment, which is said to be one result of the colonization process, and violent crime. A positive association between socio-economic underdevelopment and violent crime was expected due to the supposed detrimental effects of socio-economic underdevelopment identified in the research literature. In other words, it was expected that those communities that were the most socio-economically underdeveloped should have been the communities with the most violent crime. However, the results of the analysis employing a pooled-time series multiple regression model using measures of employment, income, education, and housing density to assess the possible association between socio-economic underdevelopment and violent crime were, if anything, contrary to expectations. The results of the analysis suggested that communities that were more socio-economically underdeveloped had less violent crime. Given that finding it appears that, at least for the years 1981, 1986, and 1991 in the 12 Baffin Region communities examined, there was little or no connection between colonization as mediated by socio-economic underdevelopment and violent crime.

A second hypothesis considered the possible connection between a community's status as a relocated community and its violent crime rate. Given the trauma said to have resulted from the relocation of native communities elsewhere in the north, it was expected that those communities that had been relocated would have had the most violent crime. Nonparametric statistical comparisons of violent crime rates in relocated and non-relocated communities provided some support for that expectation. Although somewhat lower in a few of the years examined, more often than not the relocated communities had violent crime rates that were significantly higher than those of the non-relocated communities. To the extent that the effects of relocations that occurred in the late 1950s were still being felt in the 1980s and 1990s, there is support for the hypothesis that community relocation is one aspect of the colonization process that varied across communities and that might be associated with inter-community variations in violent crime rates.

The final hypothesis pertaining to the colonization perspective considered the association between the possible impact of external market forces at the community-level and violent crime. In the case of the Baffin Region, the "shock" created by external market forces resulting from

the European Economic Community's ban on the importation of seal skins, which essentially brought the demise of the seal skin trade, was examined. Given the many negative changes brought by the end of the seal skin trade, it was expected that the violent crime rate would be higher in those communities most affected. Using nonparametric statistical techniques, it was possible to examine the association between income losses during the decline of the seal skin trade and changes in the amount of violent crime. The results of those analyses provided no support for the hypothesis. At least for the years considered in the analysis, there appeared to be no connection between colonization as mediated by the external market forces that brought the decline of the seal skin trade in the Inuit communities of the Baffin Region and violent crime.

### **Alcohol Use**

The second factor examined in this study in connection with violent crime is alcohol use. There is an extensive literature which posits that alcohol is a major precipitating factor in violent crime among native peoples. In fact, alcohol is mentioned throughout the international literature as the one factor which is directly related to crime and disorder, whether the subject population be Australian Aborigines, American Indians, Alaska Natives, or Canadian Inuit and Native Indians. By employing alcohol use as a key explanatory variable, it was possible to test the assumed relationships between alcohol use/abuse and crime.

In addition to colonization, alcohol is the explanatory factor most often used in attempts to understand violent crime among native peoples. For purposes of this study, alcohol use was operationalized in three ways: 1) whether the community in question was "wet" or "dry"; 2) levels of consumption in the communities; and 3) the particular model — transient or non-transient — of drinking behavior that Inuit in the communities were exposed to.

Prior to investigating those possible relationships, an attempt was made to determine the actual prevalence of alcohol use among the Inuit of the Baffin Region. It was determined that, in comparison to native and non-native people in other regions, the Baffin Inuit were less likely to consume alcohol, but to the extent that they did so, they most often drank high alcohol content spirits rather than other forms of lower alcohol content beverages.

It was also notable, that in spite of lower than “typical” consumption levels, there was an almost ubiquitous belief that alcohol was implicated in most of the violent crime in the region. And indeed, examination of police records corroborated that view.

Comparisons were made over a nine year period of violent crime rates in 'wet' and 'dry' communities. 'Dry' communities had higher crime rates for the first few years in the series and then lower crime rates for the last five years examined. However, in only three of those five years did the results of the nonparametric analysis lend definitive support to the idea that the prohibition of alcohol in a community made it less prone to violence. Otherwise, the results did not provide a strong basis to argue either for or against the merits of local alcohol prohibitions.

Consideration next turned to the issue of the amount of alcohol consumed on a per capita basis within the “wet” communities. Various nonparametric analyses were undertaken, but none showed strong relationships between per capita alcohol consumption and violence. Some associations between crime rates and types of alcohol consumed were suggested, but these did not appear to be consequential.

The final hypothesis derived from the literature, focused on potential community exposure to models of inappropriate drinking behavior as a result of the historical association of the community with “outside” influences in the form of transient elements. As was anticipated, Baffin Region communities with a transient population had an average violent crime rate that was notably higher than that of non-transient communities, despite the fact that the amount of alcohol consumed in both types of communities was essentially the same. While this provides modest support for the idea that communities that have had poorer models of drunken behavior have also had the most violent crime, the process whereby such exposure results in increased violent crime is yet to be determined.

### **Conceptual/Theoretical Implications of the Study**

A number of the findings of the study suggest a need to reconsider some of the constructs typically used when trying to understand violent crime in native communities.



## **"Colonization"**

In its present form in the published literature, the concept of colonization is vague and ill-defined. Although it has use as a historical tool, the results of this study suggest that it has little explanatory power in considering the dynamics of contemporary Inuit communities.

With the possible exception of the association between community relocation and violent crime, the factors said to result from the process of colonization appear not to tell us much about why some Baffin Region communities have more violent crime than others. In terms of violent crime as an indicator of the "quality of life" in the Baffin Region, those factors appear to not make a difference in the ability of communities to keep their members safe from violence. The findings of this study suggest that the things that allow individuals from being the victim of a violent crime have nothing to do with how much income there is, how well educated people are, how many people have jobs, or how crowded homes are. Given what was found for the Baffin Region in the 1980s and early 1990s, socio-economic underdevelopment may be a result of the colonization process, but it does not appear to have anything to do with whether people are able to live together without assaulting and raping one another.

The inability of the measures for the factors said to be the result of colonization to account for differences in violent crime between the Inuit communities of the Baffin Region raises an issue surrounding the use of indicators of constructs such as socio-economic underdevelopment that make sense from a non-native point of view but might have no meaning within the native cultural context. A good example involves the question of the possible relationship that might exist between crowded housing and measures of violent crime. From a non-native point of view it would probably seem logical to think that the high housing densities that have resulted from the tremendous population growth in the Baffin Region could have possibly, through the stresses said to result from crowding, have played a criminogenic role in violent crime. However, some of the information gathered in the face-to-face interviews anecdotally suggested that crowding within a home might not be so stressful for the Inuit and that the houses occupied by the Inuit in permanent settlements are not any more crowded than the cramped quarters they lived in while on the land. What might seem stressful and a source of violent behavior among non-Inuit might be seen to have, from a traditional Inuit standpoint, no influence on violent behavior among the Inuit.

The difficulties surrounding the operationalization of the concept of colonization call into question the manner in which it has an effect upon native peoples. The process of colonization, if it does impact life in contemporary Inuit communities, is not a linear process, but one in which there are undoubtedly a number of intervening variables. And while the operationalization is difficult, scholars who attempt to utilize colonization in an explanatory framework should be expected to empirically test their constructs and to do so within a comparative context.

### **Alcohol Use**

As was the case for the colonization constructs, the factors traditionally identified in the literature implicated in the relationship between alcohol use and violence were not shown to be operative in this study. Research which makes claims about the link between presence of alcohol, amount of alcohol consumed, and associated violence, should utilize variables which have been operationalized at an appropriate level of aggregation, and again, be examined within relevant structural contexts.

### **Policy/Program Implications**

The results presented in Chapter 6 pertaining to the potential impact of the existence of community alcohol prohibitions upon violent crime might at first seem to support those policies as a means of hindering violence and of making communities more livable. The figures there show that the 'dry' communities do have less violent crime than the 'wet' communities. The problem is, however, that there was a continual increase in violent crime rates for both the 'wet' and 'dry' communities over the years examined. Even with alcohol prohibitions, the violent crime rates in the 'dry' communities almost doubled (an 86 percent increase) over a 10 year period. And while the rates have remained lower than those of the 'wet' communities, the average violent crime rate for the 'dry' communities remains three to four times higher than the national violent crime rate.

The continuing increase in violent crime in the 'dry' communities leads to questions of whether formal, legal prohibitions are the answer to dealing with the violent crime that follows the consumption of alcoholic beverages. Just because community residents have voted for the legal prohibition of alcohol does not necessarily mean that they are going to stop using it in the community. Many different measures show that people in prohibited communities continue to

consume alcohol despite its prohibition. The results of the Aboriginal Peoples Survey indicate that many people in 'dry' communities still consume alcohol. Respondents to field interviews in 'dry' communities freely admitted that alcohol use was still quite prevalent. As a result the community by community tally of arrests for alcohol related violent offences continues to show that a large part of the violence in 'dry' communities is still alcohol related.

Besides the questionable effect of community alcohol prohibitions upon violent crime, there is reason to suspect that the restrictive alcohol distribution system might be doing more harm than good in terms of its effect on violent crime. Due to the fact that alcohol cannot be purchased in any of the communities, and because there are high minimum air freight costs from Iqaluit, drinkers usually purchase hard liquor in large quantities, presumably to achieve cost-effectiveness. Those two factors, combined with traditional values surrounding the necessity of sharing, leads to "partying" once the liquor arrives in the community, and binge drinking until all the liquor is consumed. Indeed, the RCMP members' numerous tales about the violence that followed the arrival of "a planeload of booze" coincide with the results of the analysis conducted in this study, that indicates that hard liquor (rather than beer or wine) is most closely associated with violent crime. In short, methods other than the restrictive distribution system or legal prohibition might be found to reduce alcohol related violence in Baffin Region communities.

One thing that is clear, is that those who will attempt to find solutions must remember that not all of the communities are the same. As well as variations in rates of violent crime, the communities differ on a number of characteristics related to violent crime, which must be taken into account in the formation of policies and planning of programs. Otherwise, the same predictable result of increasing rates of violence, and, more importantly, a greatly declining "quality of life" will result.

This study attempted to provide insights into the dynamics which result in high rates of violent crime in some Baffin Region communities. It had only limited success in doing so. This work has, however, cast doubt on the utility of some factors which have traditionally been assumed to be important contributors to the problem of violence. It has also, hopefully, provided some guidance for future research in the area, particularly with respect to the operationalization

of indicators, and the selection of research sites which are structurally appropriate for the testing of theoretical formulations.

## WORKS CITED

- Aberle, D. F. 1983. Navajo Economic Development. In Ortiz, A. (Ed.) *Handbook of North American Indians: Southwest*. Washington, DC: Smithsonian Institution, pp. 641-658.
- Adamyk, M. 1987. *Northern Industrialization: Resistance and Change*. Unpublished M.A. Thesis. Ottawa, Ont.: Carleton University.
- Anders, G. C. 1980. Theories of Underdevelopment and the American Indian. *Journal of Economic Issues*, 14, 681-701.
- Anderson, A. 1981. *Roughnecks & Wildcatters*. Toronto, Ont. Macmillan.
- Anderson, E. O. 1971. *Eskimo Ethnic Identity: A Synthesis of Problems and Approaches*. Unpublished M.A. Thesis. Winnipeg, Man.: University of Manitoba.
- Auger, D. J., Doob, A. N., Auger, R. P., and Driben, P. 1991. *Crime and Control in Three Nishnawbe-Aski Nations Communities: An Exploratory Investigation*. Thunder Bay, Ont.: Nishnawbe-Aski Legal Services Corporation.
- Auger, D. J., Doob, A. N., Auger, R. P., and Driben, P. 1992. Crime and Control in Three Nishnawbe-Aski Nation Communities: An Exploratory Investigation. *Canadian Journal of Criminology*, 34, 317-338.
- Avksentyuk, A. V., Nikitin, Y. P., Kurilovich, S. A., Segal, B., Duffy, L. K., Astakhova, T. I., Khramtsova, L. A., and Voevoda, M. I. 1994. Drinking and Genetic Factors Among Russians and Chukotka Natives in Siberia. *Drugs & Society*, 8(2), 3-48.
- Bach, P. J. and Bornstein, P. H. 1981. A Social Learning Rationale and Suggestions for Behavioral Treatment with American Indian Alcohol Abusers. *Addictive Behaviors*, 6, 75-81.
- Bachman, R. 1992. *Death and Violence on the Reservation: Homicide, Family Violence and Suicide in American Indian Populations*. Westport, CT: Auburn House.
- Baunach, P. J. 1985. *Bureau of Justice Statistics Bulletin: Jail Inmates 1983*. Washington, DC: US Bureau of Justice Statistics.
- Bayley, J. U. (Chair) 1985. *Task Force on Spousal Assault*. Yellowknife, NWT: Government of the Northwest Territories.
- Beck, A. J. 1991. *Bureau of Justice Statistics Special Report: Profile of Jail Inmates, 1989*. Washington, DC: US Bureau of Justice Statistics.
- Beck, A. J., Kline, S. A., and Greenfeld, L. A. 1988. *Bureau of Justice Statistics Special Report: Survey of Youth in Custody, 1987*. Washington, DC: US Bureau of Justice Statistics.
- Bell, J. 1993. Royal Commission Exiles Inquiry Unfair, Says Bureaucrat Who Planned the Move. *Nunatsiaq News*, 21 (19 — June 4), pp. 1, 2, 9.
- Berger, T. R. 1991. *A Long and Terrible Shadow*. Vancouver, BC: Douglas and McIntyre.

- Berry, W. D. and Feldman, Stanley. 1985. *Multiple Regression in Practice*. Newbury Park, CA: Sage Publications.
- Brody, H. 1977. Alcohol, Change, and the Industrial Frontier. *Etudes Inuit Studies*, 1(2), 31-46.
- Brokensha, D. and Scudder, T. 1968. Resettlement. In Rubin, N. and Warren, W. M. (eds.) *Dams in Africa: An Inter-Disciplinary Study of Man-Made Lakes in Africa*. London, England: Frank Cass & Co. pp. 20-62.
- Bunzel, R. 1940. The Role of Alcoholism in Two Central American Cultures. *Psychiatry*, 3, 361-387.
- Burt, M. R. 1982. Prevalence and Consequences of Alcohol Use Among US Military Personnel, 1980. *Journal of Studies on Alcohol*, 43, 1097-1107.
- Canadian Centre for Justice Statistics. 1978-1993. *Final Crime Statistics, 1977-1992*. (Annual Report) Ottawa, Ont.: Statistics Canada.
- Caswell, S. 1989. Alcohol-Related Casualties in Oceania. In Giesbrecht, N., González, R., Grant, M., Österberg, E., Room, R., Rootman, I., and Towle, L. (eds.) *Drinking and Casualties: Accidents, Poisonings and Violence in an International Perspective*. London, England: Tavistock. pp. 112-129.
- Cawsey, R. A. 1991. *Justice on Trial: Report of the Task Force on the Criminal Justice System and its Impact on the Indian and Metis People of Alberta*. Edmonton, Alta: Attorney General of Alberta.
- Central Intelligence Agency, 1996. *The World Factbook, 1995*. Hypertext Document: (<http://www.odci.gov/cia/publications/95fact/index.html>).
- Coates, K. S. 1985. *Canada's Colonies: A History of the Yukon and Northwest Territories*. Toronto, Ont.: James Lorimer and Company.
- Coates, K. S. and Morrison, W. R. 1988. *Land of the Midnight Sun: A History of the Yukon*. Edmonton, Alta: Hertzig.
- Coates, K. and Powell, J. 1989. *The Modern North - People, Politics and the Rejection of Colonialism*. Toronto, Ont.: James Lorimer and Company.
- Cochran, W. G. 1954. Some Methods for Strengthening the Common Chi-Square Tests. *Biometrics*, 10, 417-451.
- Condon, R. G. 1987. *Inuit Youth: Growth and Change in the Canadian Arctic*. New Brunswick, NJ: Rutgers University Press.
- Conover, W. J. and Iman, R. L. 1981. *Nonparametric Statistics*. Short Course Presented at the 1981 Annual Meeting of the American Statistical Association, August 8-9, 1981, Detroit, Michigan.
- Cookson, H. M. 1992. Alcohol Use and Offence Type in Young Offenders. *British Journal of Criminology*, 32, 352-360.
- Crowe, K. J. 1974. *A History of the Original Peoples of Northern Canada*. Montreal, Que.: Arctic Institute of North America, McGill-Queen's University Press.

- Curley, R. T. 1967. Drinking Patterns of the Mescalero Apache. *Quarterly Journal of Studies on Alcohol*, 28, 116-131.
- Deloria, V. Jr., and Lytle, C. M. 1983. *American Indians, American Justice*. Austin, TX: University of Texas Press.
- Dickinson Gibbons, Jean. 1993. *Nonparametric Statistics: An Introduction*. Newbury Park, CA: Sage Publications.
- Driben, P. and Trudeau, R. S. 1983. *When Freedom is Lost: The Dark Side of the Relationship Between Government and the Fort Hope Band*. Toronto, Ont.: University of Toronto Press.
- Dunbar-Ortiz, R. 1979. Sources of Underdevelopment. In Dunbar-Ortiz, R., (ed.) *Economic Development in American Indian Reservations*. Albuquerque, NM: Native American Studies, University of New Mexico, pp. 61-75.
- Fenna, D., Mix, L., Schaefer, O., and Gilbert, J. A. 1971. Ethanol metabolism in various racial groups. *Canadian Medical Association Journal*, 105, 472-475.
- Finkler, H. W. 1976. *Inuit and the Administration of Criminal Justice in the Northwest Territories: The Case of Frobisher Bay*. Ottawa, Ont.: Indian and Northern Affairs.
- Fisher, A. D. 1987. Alcoholism and race: The Misapplication of Both Concepts to North American Indians. *Canadian Review of Sociology and Anthropology*, 24, 81-98.
- Fleras, A. and J. L. Elliott. 1992. *The Nations Within*. Toronto, Ont.: Oxford University Press.
- "G" Division, RCMP. 1982-1994. *Operational Statistics Reporting System Detailed Crime Report, 1981-1993*. (Annual Report) Yellowknife, NWT: "G" Division, RCMP, Infomatics Section.
- Giacopassi, D. J. and Stitt, B. G. 1991. Per Capita Alcohol Consumption and Crime: An Unexamined Relationship. *International Journal of Comparative and Applied Criminology*, 15, 269-275.
- GNWT Bureau of Statistics. 1984a. *1984 NWT Labor Force Survey: Overall Results & Community Detail*. Yellowknife, NWT: Bureau of Statistics, GNWT.
- GNWT Bureau of Statistics. 1984b. *Personal income statistics: Northwest Territories: 1976 to 1981*. Yellowknife, NWT: Bureau of Statistics, GNWT.
- GNWT Bureau of Statistics. 1989. *1989 NWT Labor Force Survey: Overall Results & Community Detail*. Yellowknife, NWT: Bureau of Statistics, GNWT.
- GNWT Bureau of Statistics. 1991. *Northwest Territories Community Profiles*. Yellowknife, NWT: Bureau of Statistics, GNWT.
- GNWT Bureau of Statistics. 1996a. *Northwest Territories Community Profiles*. Yellowknife, NWT: Bureau of Statistics, GNWT. Hypertext Document: [www.stats.gov.nt.ca/Bureau/StatInfo/CommProfiles/\\_CommProf.html](http://www.stats.gov.nt.ca/Bureau/StatInfo/CommProfiles/_CommProf.html)

- GNWT Bureau of Statistics. 1996b. *Northwest Territories Statistics Quarterly, September 1996*. Yellowknife, NWT: Bureau of Statistics, GNWT. Hypertext Document: [www.stats.gov.nt.ca/Bureau/StatInfo/StatsQuarterly/\\_StatQ.html](http://www.stats.gov.nt.ca/Bureau/StatInfo/StatsQuarterly/_StatQ.html)
- GNWT Government Services. 1992. *Status of Liquor Restrictions by Community, January 1992*. Yellowknife, NWT: Government Services, GNWT.
- Gray, J. H. 1995. *Booze: When Whisky Ruled the West*. (2nd ed.) Saskatoon, Sask.: Fifth House Press.
- Greenberg, S. W. 1981. Alcohol and Crime: A Methodological Critique of the Literature. In Collins, J. J. Jr. (ed.) *Drinking and Crime: Perspectives on the Relationships Between Alcohol Consumption and Criminal Behavior*. New York, NY: Guilford Press. pp. 70-109.
- Griffith, D. A. 1987. *Spatial Autocorrelation: A Primer*. Washington, DC: Association of American Geographers.
- Griffiths, C. T., Wood, D. S., Zellerer, E., and J. Simon. 1994. *Aboriginal Policing in British Columbia*. Report prepared for Commission of Inquiry, Policing in British Columbia. Victoria, B.C.: Ministry of Attorney General.
- Griffiths, Curt T., Zellerer, E., Wood, D. S., and Saville, G. 1995. *Crime, Law, and Justice Among Inuit in the Baffin Region, N.W.T., Canada*. Burnaby, BC: Criminology Research Centre, Simon Fraser University.
- Groth, P. G. 1982. Values and the Measurement of Unemployment. *Social Science Quarterly*, 63, 154-159.
- Grygier, T. 1948. Psychiatric observations in the Arctic. *British Journal of Psychology*, 14, 84-96.
- Hagen, E. E., and Schaw, L. B. 1960. *The Sioux on the Reservation: An American Colonial Problem*. Cambridge, MA: Center for International Studies.
- Hagey, J. N., Larocque, G., and McBride, C. 1989. *Highlights of Aboriginal Conditions 1981-2001: Part I, Demographic Trends*. Ottawa, Ont.: Finance and Professional Services, Indian and Northern Affairs Canada.
- Hague, R. 1990. Alcohol and Criminal Violence in the Nordic Countries. In Snare, A. (ed.) *Criminal Violence in Scandinavia: Selected Topics* (Scandinavian Studies in Criminology, Vol. 11). Oslo, Norway: Universitetsforlaget AS. pp. 65-75.
- Hamer, J. H. 1965. Acculturation Stress and the Functions of Alcohol among the Forest Potawatomi. *Quarterly Journal of Studies on Alcohol*, 26, 285-302.
- Hamilton, Associate Chief Justice A. C., and Sinclair, Associate Chief Judge C. M. 1991. *Report of the Aboriginal Justice Inquiry of Manitoba. The Justice System and Aboriginal People*. Vol. 1. Winnipeg, Man.: Queen's Printer.
- Hanushek, E. A. and Jackson, J. E. 1977. *Statistical Methods for Social Scientists*. New York, NY: Academic Press.



- Harding, J. 1978. Development, Underdevelopment and Alcohol Disabilities in Northern Saskatchewan. *Alternatives: Perspectives on Society and Environment*, 7(4), 30-39.
- Harding, J. 1988. *Aboriginal Rights and Government Wrongs: Uranium Mining and Neocolonialism in Northern Saskatchewan*. Regina, Sask.: Prairie Justice Research, University of Regina.
- Hayner, Norman S. 1942. Variability in the Criminal Behavior of American Indians. *American Journal of Sociology*, 47, 602-613.
- Health & Welfare Canada, 1981. *The Health of Canadians - Report of the Canada Health Survey*. Ottawa, Ont.: Health and Welfare Canada and Statistics Canada.
- Health & Welfare Canada, 1988. *Canada's Health Promotion Survey*. Ottawa, Ont.: Health and Welfare Canada.
- Health & Welfare Canada, 1990. *National Alcohol and Other Drugs Survey*. Ottawa, Ont.: Health and Welfare Canada.
- Health & Welfare Canada, 1991. *Health Status of Canadian Indians and Inuit - 1990*. Ottawa, Ont.: Minister of Supply and Services.
- Health & Welfare Canada, 1993. *Canada's Health Promotion Survey 1990 - Technical Report*. Ottawa, Ont.: Health and Welfare Canada.
- Heath, D. B. 1964. Prohibition and Post-Repeal Drinking Patterns among the Navaho. *Quarterly Journal of Studies on Alcohol*, 25, 119-135.
- Hitz, D. 1973. Drunken Sailors and Others: Drinking Problems in Specific Occupations. *Quarterly Journal of Studies on Alcohol*, 34, 496-505.
- Hobart, C. W. 1978. Economic Development, Liquor Consumption and Offence Rates in the Northwest Territories. *Canadian Journal of Criminology*, 20, 259-278.
- Hodgkinson, C. J. 1972. *Socio-Cultural Change and Continuing Education Among the Eskimo in Frobisher Bay, N.W.T.* Unpublished M.Ed. Thesis. Edmonton, Alta.: University of Alberta.
- Hollin, C. R. 1983. Young Offenders and Alcohol: A Survey of the Drinking Behaviour of a Borstal Population. *Journal of Adolescence*, 6, 161-174.
- Honigmann, J. J., and Honigmann, I. 1965a. *Eskimo Townsmen*. Ottawa, Ont.: Canadian Research Centre for Anthropology, University of Ottawa.
- Honigmann, J. J. and Honigmann, I. 1965b. How Baffin Island Eskimo Have Learned to Use Alcohol. *Social Forces*, 44, 73-83.
- Horton, D. 1943. The Functions of Alcohol in Primitive Societies: A Crosscultural Study. *Quarterly Journal of Studies on Alcohol*, 4, 199-320.
- Hyde, M. and LaPrairie, C. 1987. *Amerindian Police Crime Prevention*. Ottawa, Ont.: Ministry of the Solicitor General.
- Innes, C. A. 1988. *Bureau of Justice Statistics Special Report: Profile of State Prison Inmates, 1986*. Washington, DC: US Bureau of Justice Statistics.

- Irwin, C. 1988. *Lords of the Arctic: Wards of the state*. Ottawa, Ont.: Health and Welfare Canada.
- Jacob, H. 1984. *Using Published Data: Errors and Remedies*. Newbury Park, CA: Sage Publications.
- Jayewardene, C. H. S. 1975. Violence Among the Eskimos. *Journal of Canadian Criminology and Corrections*, 17, 307-14.
- Jilek-Aall, L. 1988. Juvenile Alcohol Use and Self-Destructive Behavior in Northern Populations: A Cross-Cultural Comparison. *Arctic Medical Research*, 47, 604-10.
- Jorgensen, J. G. 1971. Indians and the Metropolis. In Waddell, J. O. and Watson, O. M., (eds.) *The American Indian in urban society*. Boston, MA: Little, Brown & Company, pp. 67-113.
- Jorgensen, J. G. 1972. *The Sun Dance Religion*. Chicago, IL: University of Chicago Press.
- Jorgensen, J. G. 1978. A Century of Political Economic Effects on American Indian Society, 1880-1980. *Journal of Ethnic Studies*, 6(3), 1-82.
- Kellough, G. 1980. From Colonialism to Imperialism: The Experience of Canadian Indians. In J. Harp and J. R. Hopley (eds.) *Structured Inequality in Canada*. Scarborough, Ont.: Prentice-Hall. pp. 343-377.
- Kemp, W. B. 1984. Baffinland Eskimo. In Sturtevant, W. C. and Damas, D. J., (eds.) *Handbook of North American Indians, Volume 5: The Arctic*. Washington, DC: Smithsonian Institute, pp. 463-475.
- Kenney, G. I., 1994. *Arctic Smoke & Mirrors*. Prescott, Ont.: Voyageur Publishing.
- Kidder, L. H. 1981. Qualitative Research and Quasi-Experimental Frameworks. In Brewer, M. B. and Collins, B. E. (eds.) *Scientific Inquiry and the Social Sciences: A Volume in Honor of Donald T. Campbell*. San Francisco, CA: Jossey-Bass, pp. 226-256.
- Klausner, S. Z. and Foulks, E. F. 1982. *Eskimo Capitalists: Oil, Politics and Alcohol*. Totowa, NJ: Allanheld, Osmun & Co.
- LaDuke, W. and Churchill, W. 1985. Native America: The Political Economy of Radioactive Colonialism. *Journal of Ethnic Studies*, 13(3), 107-132.
- Lal, R. 1969a. From Duck Lake to Camp 10: Old-Fashioned Relocation. *Musk-Ox*, 6, 5-13.
- Lal, R. 1969b. Some Observations on the Social Life of the Chipewyans of Camp 10, Churchill and their Implications for Community Development. *Musk-Ox*, 6, 14-20.
- LaPrairie, C. 1991. *Justice for the Cree: Communities, Crime and Order*. Chisasibi, Quebec: Grand Council of the Crees.
- LaPrairie, C. 1992. *Exploring the Boundaries of Justice: Aboriginal Justice in the Yukon*. Ottawa, Ont.: Justice Canada.
- Leach, C. 1979. *Introduction to Statistics: A Nonparametric Approach for the Social Sciences*. Chichester, England: John Wiley & Sons.

- Lemert, E. M. 1964. Forms and Pathology of Drinking in Three Polynesian Societies. *American Anthropologist*, 66, 361-374.
- Lenke, L. 1984. Alcohol and Crimes of Violence: A Causal Analysis. *Contemporary Drug Problems*, 10, 355-365.
- Levy, J. E. and Kunitz, S. J. 1974. *Indian Drinking: Navajo Practices and Anglo-American Theories*. New York, NY: John Wiley & Sons.
- Lewis-Beck, M. S. 1980. *Applied Regression: An Introduction*. Newbury Park, CA: Sage Publications.
- Lewontin, R. C. 1972. The Apportionment of Human Diversity. *Evolutionary Biology*, 6, 381-396.
- Lowman, J. and Palys, T. S. (1991). Interpreting criminal justice system records of crime. In Griffiths, C. T. and Jackson, M. A. (Eds.) *Canadian Criminology: Perspectives on Crime and Society*. Toronto, Ont.: Holt - HBJ. pp. 349-369.
- Lurie, N. 1971. The World's Oldest On-Going Protest Demonstration: North American Indian Drinking Patterns. *Pacific Historical Review*, 40, 311-332.
- Lyon, G. F. 1824. *The Private Journal*. London, England: J. Murray.
- MacAndrew, C. and Edgerton, R. B. 1969. *Drunken Comportment: A Social Explanation*. Chicago, IL: Aldine Publishing Company.
- Marcus, A. R. 1990. *Out in the Cold: The Legacy of Canada's Inuit Relocation Experiment in the High Arctic, 1953-1990*. Cambridge, England: Scott Polar Research Institute, University of Cambridge.
- Marcus, A. R. 1991. Out in the Cold: Canada's Experimental Inuit Relocation to Grise Fiord and Resolute Bay. *Polar Record*, 27, 285-96.
- Marenin, O. 1992. Explaining Patterns of Crime in the Native Villages of Alaska. *Canadian Journal of Criminology*, 34, 339-368.
- May, P. A. 1975. Arrests, Alcohol, and Alcohol Legalization Among an American Indian Tribe. *Plains Anthropologist*, 20(68), 129-134.
- May, P. A. 1981. Susceptibility to Substance Abuse Among American Indians: Variation Across Sociocultural Settings. In *Problems of Drug Dependence, 1981*. N.I.D.A. Research Monograph, No. 41. Washington, DC: US Department of Health and Human Services, pp. 34-44.
- May, P. A. 1982. Contemporary Crime and the American Indian: A Survey and Analysis of the Literature. *Plains Anthropologist*, 27, 225-238.
- May, P. A. 1989. Alcohol abuse and alcoholism among American Indians: An overview. In Watts, T. D. and Wright, R., Jr. (eds.) *Alcoholism in Minority Populations*. Springfield, IL: Charles C. Thomas Publishing Co. pp. 95-119.
- May, P. A. 1992. Alcohol Policy Considerations for Indian Reservations and Bordertown Communities. *American Indian and Alaska Native Mental Health Research*, 4(3), 5-59.

- May, P. A. and Smith, M. B. 1988. Some Navajo Indian Opinions About Alcohol Abuse and Prohibition: A Survey and Recommendations for Policy. *Journal of Studies on Alcohol*, 49, 324-334.
- McCone, R. C. 1966. Cultural Factors in Crime Among the Dakota Indians. *Plains Anthropologist*, 11, 144-151.
- Mehta, C. R. and Patel, N. R. 1996. *SPSS Exact Tests 6.1 for Windows*. Chicago, IL: SPSS Inc.
- Millar, H. A. 1990. *Judicial Reasoning in the Northwest Territories: An Exploratory Study of Sexual Assault Sentencing Decisions, 1983-1986*. Unpublished MA Thesis. Burnaby, B.C.: School of Criminology, Simon Fraser University.
- Mills, D. K. 1989. Alcohol and Crime on the Reservation: A 10-Year Perspective. *Federal Probation*, 53(4), 12-15.
- Millward, A. E. 1930. *Southern Baffin Island: An Account of Exploration, Investigation and Settlement During the Past Fifty Years*. Ottawa, Ont.: North West Territories and Yukon Branch, Department of the Interior.
- Minnis, M. S. 1963. The Relationship of the Social Structure of and Indian Community to Adult and Juvenile Delinquency. *Social Forces*, 41, 395-403.
- Minor, N. K. M. 1979. *Converts and Customers: Traditional Inuit Shamanism and Its Destruction by Christian Missionaries*. Unpublished paper. Available from the Northern Justice Society Resource Centre, Simon Fraser University, Burnaby, B.C.
- Myers, L. 1994. *BCL Guide: Summer '94*. Vancouver, BC: British Columbia Liquor Distribution Branch.
- National Commission on Employment and Unemployment and Unemployment Statistics. 1979. *Counting the Labor Force*. Washington, DC: US Government Printing Office.
- Northend Ferguson, F. 1968. Navaho Drinking: Some Tentative Hypotheses. *Human Organization*, 27(2), 159-167.
- Norušis, M. J. 1993. *SPSS for Windows Base System User's Guide Release 6.0*. Chicago, IL: SPSS Inc.
- NWT Federation of Labour. 1991. Politicians Ignore Pollution Heading North. *Nunatsiaq News*, 19 (23 — June 28), p. 7.
- Nunavut Implementation Commission, 1995. *Footprints in New Snow*. Iqaluit, NWT: Nunavut Implementation Commission.
- Odlund, J. 1988. *Spatial Autocorrelation*. Beverly Hills, CA: Sage Publications.
- Outcrop Publishing, 1982. *NWT Data Book 1982 83*. Yellowknife, NWT: Outcrop Publishing.
- Outcrop Publishing, 1984. *NWT Data Book 1984 85*. Yellowknife, NWT: Outcrop Publishing.
- Outcrop Publishing, 1986. *NWT Data Book 1986 87*. Yellowknife, NWT: Outcrop Publishing.
- Outcrop Publishing, 1990. *NWT Data Book 1990 91*. Yellowknife, NWT: Outcrop Publishing.

- Owens, N. J. 1976. *Indian Reservations and Bordertowns: The Metropolis-Satellite Model Applied to the Northwestern Navahos and the Umatillas*. Ph.D. Dissertation, University of Oregon.
- Paine, R. 1977. The Nursery Game - Colonizers and Colonized in the Canadian Arctic. *Etudes Inuit Studies*, 1, 5-32.
- Parker, D. A. and Harford, T. C. 1992. The Epidemiology of Alcohol Consumption and Dependence Across Occupations in the United States. *Alcohol Health and Research World*, 16, 97-105.
- Patten, M. L. 1997. *Understanding Research Methods: An Overview of the Essentials*. Los Angeles, CA: Pyrczak Publishing.
- Peak, K. 1989. Criminal Justice, Law, and Policy in Indian Country: A Historical Perspective. *Journal of Criminal Justice*, 17, 393-407.
- Peak, K. and Spencer, J. 1987. *Crime in Indian country: Another "trail of tears."* *Journal of Criminal Justice*, 15, 485-494.
- Pernanen, K. 1991. *Alcohol in Human Violence*. New York, NY: Guilford Press.
- Peterson, K. R. 1992. *The Justice House: Report of the Special Advisor on Gender Equality*. Yellowknife, NWT: Department of Justice, GNWT.
- Pretes, M. 1988. Underdevelopment in Two Norths: The Brazilian Amazon and the Canadian Arctic. *Arctic*, 41(2), 109-116.
- Rasing, W. C. E. 1994. *'Too many people:' Order and Nonconformity in Iglulingmuit Social Process*. Nijmegen, Netherlands: Recht & Samenleving.
- Rea, K. J. 1968. *The Political Economy of Northern Development*. Ottawa, Ont.: Information Canada.
- Rives, N. W. Jr and Serwo, W. J. 1984. *Introduction to Applied Demography: Data Estimation Techniques*. Beverly Hills, CA: Sage Publications.
- Robbins, R. H. 1973. Alcohol and the Identity Struggle: Some Effects of Economic Change on Interpersonal Relations. *American Anthropologist*, 75, 99-122.
- Room, R. 1978. Evaluating the Effects of Drinking Laws on Drinking. In Ewing, J and Rouse, B. (eds.) *Drinking: Alcohol in American Society, Issues and Current Research*. Chicago, Ill: Nelson-Hall, pp. 267-290.
- Ross, R. 1992. *Dancing With a Ghost: Exploring Indian Reality*. Markham, Ont.: Reed Books.
- Rush, B., Gliksman, L., and Brook, R. 1986. Alcohol Availability, Alcohol Consumption and Alcohol Related Damage. I. The Distribution of Consumption Model. *Journal of Studies on Alcohol*, 47, 1-10.
- Sackett, L. 1988. Resisting Arrests. Drinking, Development and Discipline in a Desert Context. *Social Analysis*, 24, 66-84.
- Sammons, M. S. 1985. *Inuktitut in Rankin Inlet*. Unpublished Ph.D. Dissertation. Ann Arbor, MI: University of Michigan.

- Says, L. W. 1989. *Pooled Time-Series Analysis*. Newbury Park, CA: Sage Publications.
- Schaefer, J. M. 1981. Firewater Myths Revisited: Review of Findings and Some New Directions. *Journal of Studies on Alcohol, Suppl. 9*, 99-117.
- Schechter, E. J. 1986. Alcohol Rationing and Control Systems in Greenland. *Contemporary Drug Problems, 13*, 587-620.
- Schroeder, L. D., Sjoquist, D. L. and Stephan, P. E. 1986. *Understanding Regression Analysis: An Introductory Guide*. Newbury Park, CA: Sage Publications.
- Scudder, T., and Colson, E. 1982. From Welfare to Development: A Conceptual Framework for the Analysis of Dislocated People. In Hansen, A. and Oliver-Smith, A. (eds.) *Involuntary Migration and Resettlement: The Problems and Responses of Dislocated People*. Boulder, CO: Westview Press. pp. 267-287.
- Scudder, T. 1982. *No Place to Go: Effects of Compulsory Relocation on Navajos*. Philadelphia, PA: Institute for the Study of Human Issues.
- Seigel, S. and Castella, N. J. 1988. *Nonparametric Statistics for the Behavioral Sciences* (2nd ed.). New York, NY: McGraw-Hill.
- Shields, G. F., Schmiechen, A. M., Frazier, B. L., Redd, A. Voevoda, M. I., Reed, J. K., Ward, R. H., Hecker, K., and Reed, J. 1993. Mitochondrial DNA Sequences Suggest a Recent Evolutionary Divergence for Beringeans and Northern American Populations. *American Journal of Human Genetics, 53*, 549-563.
- Shiskin, J. 1976. Employment and Unemployment: The doughnut or the hole? *Monthly Labor Review, 99*(Feb), 3-10.
- Shkilnyk, A. M. 1985. *A Poison Stronger Than Love: The Destruction of an Ojibwa Community*. New Haven, CT: Yale University Press.
- Simmons, O. G. 1960. Ambivalence and the Learning of Drinking Behavior in a Peruvian Community. *American Anthropologist, 62*, 1018-1027.
- Single, E. 1994. *Canadian Profile: Alcohol, Tobacco & Other Drugs*. Ottawa, Ont.: The Canadian Centre on Substance Abuse.
- Smart, R. G. 1979. A Note on the Effects of Changes in Alcohol Control Policies in the Canadian North. *Journal of Studies on Alcohol, 40*, 908-913.
- Smart, R. G. 1986. *Northern Spirits: Drinking in Canada, then and now*. Toronto, Ont.: Addiction Research Foundation.
- Smith, L. J. 1973. *Beer, Wine and Spirits: Beverage Differences and Public Policy in Canada*. Ottawa, Ont.: Brewers Association of Canada.
- Soberman, D. 1991. *Report to the Canadian Human Rights Commission on the Complaints of the Inuit People Relocated from Inukjuak and Pond Inlet to Grise Fiord and Resolute Bay in 1953 and 1955*. Kingston, Ont.: Author.
- Snipp, C. M. 1986a. American Indians and Natural Resource Development. *American Journal of Economics and Sociology, 45*(4), 457-474.

- Snipp, C. M. 1986b. The Changing Political and Economic Status of the American Indians: From Captive Nations to Internal Colonies. *American Journal of Economics and Sociology*, 45(2), 145-157.
- Spence, M. 1991. Upper Base Clean-Up Starting Soon. *Nunatsiaq News*, 19 (23 — June 28), pp. 1-2.
- Stahl, S. M. and Hennes, J. D. 1980. *Reading and Understanding Applied Statistics: A Self-Learning Approach*. St. Louis, MO: C. V. Mosby Company.
- Statistics Canada, 1982. *Census Divisions and Subdivisions: Population, Occupied Private Dwellings, Private Households, Census Families in Private Households: Selected Characteristics — Northwest Territories*. Ottawa, Ont.: Minister of Supply and Services, Canada.
- Statistics Canada, 1983. *Census Divisions and Subdivisions: Population, Occupied Private Dwellings, Private Households, Census and Economic Families in Private Households: Selected Social and Economic Characteristics — Northwest Territories*. Ottawa, Ont.: Minister of Supply and Services, Canada.
- Statistics Canada, 1987a. *General Social Survey Analysis Series, Health and Social Support, 1985*. Ottawa, Ont.: Minister of Supply and Services, Canada.
- Statistics Canada, 1987b. *Population and Dwelling Characteristics — Census Divisions and Subdivisions: Northwest Territories: Part 2*. Ottawa, Ont.: Minister of Supply and Services, Canada.
- Statistics Canada, 1988. *Population and Dwelling Characteristics — Census Divisions and Subdivisions: Northwest Territories: Part 2*. Ottawa, Ont.: Minister of Supply and Services, Canada.
- Statistics Canada 1992. *Profile of Census Divisions and Subdivisions in the Northwest Territories — Part A*. Ottawa, Ont.: Minister of Industry, Science and Technology.
- Statistics Canada, 1993a. *Aboriginal Peoples Survey: Language, Tradition, Health, Lifestyle and Social Issues*. Ottawa, Ont.: Minister of Industry, Science and Technology.
- Statistics Canada, 1993b. *Profile of Census Divisions and Subdivisions in the Northwest Territories — Part B*. Ottawa, Ont.: Minister of Industry, Science and Technology.
- Stewart, O. 1964. Questions Regarding American Indian Criminality. *Human Organization*, 23, 61-66.
- Swiderski, A. 1985. *Images of an Inuit Community: Cape Dorset, N.W.T.* Unpublished M.A. Thesis. Edmonton, Alta.: University of Alberta.
- Swinscow, T. D. V. 1978. *Statistics at Square One* (3rd ed.). London, England: British Medical Association.
- Szabo, D., Finkler, H. W., and Parizeau, A. 1973. *Deviance and Social Control: Manifestation, Tension and Conflict in Frobisher Bay*. Montreal, Que.: Centre International de Criminologie Comparée, Université de Montréal.

- Szathmary, E. J. E. and Reed, T. E. 1972. Caucasian Admixture in Two Ojibwa Indian Communities in Ontario. *Human Biology*, 44, 655-671.
- Tester, S. J. and Kulchyski, P. 1994. *Tammarniit (Mistakes): Inuit Relocation in the Eastern Arctic, 1939-1963*. Vancouver, B.C.: UBC Press.
- Thatcher, R. W. 1986. The Functions of Minority Group Disrepute: The Case of Native Peoples in Canada. In MacLean, B. D. (ed.) *The Political Economy of Crime: Readings for a Critical Criminology*. Scarborough, Ont.: Prentice-Hall. pp. 272-294.
- Tobias, J. L. 1976. Protection, Civilization, Assimilation: An Outline History of Canada's Indian Policy. *Western Canadian Journal of Anthropology*, 6, 39-55.
- Trevethan, S. 1993. *Police-Reported Aboriginal Crime in Calgary, Regina and Saskatoon*. Ottawa, Ont.: Canadian Centre for Justice Statistics.
- Turner-Ruffing, L. 1979. Dependence and Underdevelopment. In Dunbar-Ortiz, R., (ed.) *Economic Development in American Indian Reservations*. Albuquerque, NM: Native American Studies, University of New Mexico, pp. 91-113.
- Van Dyke, E. 1982. *Between Worlds - Problems in Culture Transition*. Unpublished paper. Available from the Northern Justice Society Resource Centre, Simon Fraser University, Burnaby, B.C.
- VanStone, James W. 1965. *The Changing Culture of the Snowdrift Chipewyan*, National Museum of Canada, Bulletin 209, pp. 96-102.
- Vold, G. B. and Bernard, T. J. 1986. *Theoretical Criminology*, (3rd ed.) New York, NY: Oxford University Press.
- Waldram, J. B. 1980. Relocation and Political Change in a Manitoba Native Community. *Canadian Journal of Anthropology*, 12(2), 173-178.
- Waldram, J. B. 1987. Relocation, Consolidation, and Settlement Pattern in the Canadian Subarctic. *Human Ecology*, 15(2), 117-131.
- Wenzel, G. 1985. Marooned in a Blizzard of Contradictions: Inuit and the Anti Sealing Movement. *Etudes Inuit Studies*, 9, 77-91.
- Wenzel, G. 1989. Sealing at Clyde River, N.W.T.: A Discussion of Inuit Economy. *Etudes Inuit Studies*, 13, 3-22.
- Whyte, K. J. 1976. *A Study of the Value Orientations of People of the Inuit and Eurocanadian Cultures Within a School Setting in the Northwest Territories*. Unpublished Ph.D. Dissertation. Eugene, OR: University of Oregon.
- Wilkinson, K. P., Thompson, J. G., Reynolds, R. R., Jr., and Ostresh, L. M. 1984. Violent Crime in the Western Energy-Development Region. *Pacific Sociological Review*, 27, 241-256.
- Winkler, A. M. 1966. Drinking on the American Frontier. *Quarterly Journal of Studies on Alcohol*, 26, 413-45.



- Wolf, A. 1980. Homicide and Blackout in the Alaska Native. *Journal of Studies on Alcohol*, 41, 456-62.
- Wolff, L. 1991. *Crime in Aboriginal Communities, Saskatchewan 1989*. Ottawa, Ont.: Canadian Centre for Justice Statistics.
- Wood, D. S. 1991. *Demographic Change, Relocation, and Patterns of Crime in the Baffin Region, Northwest Territories, Canada*. Paper presented at the annual meeting of the Academy of Criminal Justice Sciences, Pittsburgh, PA.
- Wood, D. S. and Griffiths, C. T. 1996. Patterns of Aboriginal Crime. In Silverman, Robert, Teevan, James J., Jr. and Sacco, Vincent (eds.) *Crime in Canadian Society* (5th ed.). Toronto, Ont.: Butterworths.
- Wood, D. S. and Trostle, L. C. In Press. The Nonenforcement Role of Police in Western Alaska and the Eastern Canadian Arctic: An Analysis of Police Tasks in Remote Arctic Communities. *Journal of Criminal Justice*, 25(3).
- Yatsushiro, T. 1963 *Frobisher Bay, 1958*. Ottawa, Ont.: Northern Co-ordination and Research Centre, Department of Northern Affairs and National Resources.
- Zaslow, M. 1971 *The Opening of the Canadian North, 1870-1917*. Toronto, Ont.: McClelland and Stewart Ltd.
- Zaslow, M. 1984 *The Northwest Territories, 1905-1980*. Ottawa, Ont.: Canadian Historical Association.
- Zion, J. and Zion, E. B. 1996. Hazho's Sokee' — Stay Together Nicely: Domestic Violence Under Navajo Common Law. In Nielsen, M. O. and Silverman, R. A. (eds.) *Native Americans, Crime, and Justice*. Boulder, CO: Westview Press pp 96-112.

## **Appendix A: Interview Schedules.**

## **INTERVIEW SCHEDULE FOR BAFFIN REGION COMMUNITY RESIDENTS**

### **A. Personal Information**

1. Name of community?
2. What is your name?
3. How long have you made this community your home?
4. Sex?
5. How old are you?
6. Are you married?
7. Do you have children?
8. How many children do you have?
9. How many people live in your house?
10. Is anyone else in your house being interviewed for this study?
11. In what community did you grow up?
12. Where did you go to school?
13. What grade did you complete?
14. What is the ethnic origin of your parents?

### **B. Community Life**

15. Are you employed?
16. What do you do?
17. Are there other activities in which you participate in your community?
18. If so, what are they? (e.g., recreational activities, community committees such as youth justice committees, etc.).
19. How do you feel about your community?
20. What do you like about your community?
21. What changes have you seen in your community in the past twenty years?
22. What effect have these changes had in your community?
23. Is this a relocated community?
24. If yes, then how has this affected community life?
25. Did you have a traditional upbringing?
26. What were the traditional things that were part of your family life?
27. What do you think about the youth in your community?
28. What do you see happening with the youth in your community in the next ten years?
29. What role do the elders play in this community?
30. Do you seek the advice of elders?
31. Do you think others seek the advice of elders?
32. How has this changed over the years?

**C. Community Problems**

33. What kind of disputes or problems arise in your community?
34. Who is involved is involved in these disputes or problems?
35. What do you think are the causes of these disputes or problems?
36. How are these disputes or problems settled in this community?
37. What can you tell me about the following issues in your community?
  - drug abuse
  - assault
  - sexual assault
  - solvent abuse
  - spousal assault
  - child sexual abuse
  - theft
38. Is this problem worse now than before? (Name identified problem).
39. If yes, why do you think it is worse? (causes such as economic circumstances, bad families, etc.).
40. Are the problems in your community caused by a specific group (e.g., boys, girls, certain age groups, etc.).
41. What do you think is the best way to deal with this problem?
42. How would you respond if your child got beat up at school?
43. How would you respond if you saw someone being assaulted?
44. How would you respond if your saw someone causing a disturbance?

**D. Personal Experiences and the Justice System**

45. Have you ever been the victim of any disputes or problems in the Baffin?
46. If yes, in which community?
47. If yes, did you contact the police?
48. If the police were involved, what did they do?
49. Do you feel that the police helped solved the problem?
50. If no, did you try to solve the problem by yourself?
51. If no, why did you not contact the police?
52. Have you ever been involved in any conflicts with the law?
53. If yes, what happened?
54. Did you go to court?
55. What happened in court?
56. How well do you think you were represented in court?
57. Do you think the circuit court should be changed?
58. If yes, how should it be changed?
59. Are you aware of cases being delayed in court?
60. If yes, what do you think about this?
61. Should court sentences be different than what they are now?
62. If yes, how should they be different?
63. How do you think this would have been handled years ago?
64. What do you think about defence lawyers?
65. How well do you think the lawyers understand the types of issues in your community?
66. What do you think about crown attorneys?

67. How well do you think the crown attorneys understand the types of issues in your community?
68. Have any of your family or friends had contact with the law?
69. If yes, were they a victim or an offender?
70. As far as you can remember, what happened?

# **INTERVIEW SCHEDULE FOR RCMP OFFICERS CURRENTLY SERVING**

## **1. Personal**

- 1.1 What is your name?
- 1.2 When were you born?
- 1.3 Where did you grow up?
- 1.4 What was your education when you joined?
- 1.5 When did you join the RCMP?
- 1.6 How old were you?
- 1.7 Where have you been stationed and for how long?
- 1.8 Where have you served in the North?
- 1.9 What were the years of your service in the North?
- 1.10 Was a Northern assignment your choice?
- 1.11 If so, why?
- 1.12 Could you speak Inuktitut?
- 1.13 If yes, did you speak any before you arrived?
- 1.14 Did the RCMP provide any language training?
- 1.15 Have you learned any of the Inuktitut language since you have arrived?
- 1.16 How did you learn the language?
- 1.17 Is it necessary for you to use an interpreter for normal police work?
- 1.18 What kinds of problems have arisen as a result?
- 1.19 Has the RCMP provided any cross-cultural training for living in an Inuit community? (e.g., family customs, lifestyles, importance of hunting/gathering).
- 1.20 Has there been any on-going support by the RCMP provided to deal with cross-cultural issues? (e.g., available information about cultural taboos).
- 1.21 Do you think officers should be selected to work in the North?
- 1.22 If so, what criteria should be used?
- 1.23 Has your experience in the Baffin influenced your career?
- 1.24 Has the reality of transfers, organizational factors (e.g., work space, available transportation, quotas) influenced how you police?

## **2. Family and Community**

- 2.1 What was your marital status? Do you have children?
- 2.2 How does your family feel about going to and living in the Baffin?
- 2.3 Describe the relationship your family has with the community (e.g., participate in community activities inclusion/exclusion). Do you feel welcomed?

## **3. Police Work**

- 3.1 Were you provided with a job description for the North?
- 3.2 If no, what did you expect your job to be in the North?
- 3.3 How does the reality of working in the North meet your expectations?
- 3.4 What responsibilities do you take on that did not fall within your expectations?
- 3.5 Are there responsibilities that were particular to the North?
- 3.6 If you have worked in more than one Northern community, are there differences in your responsibilities.

- 3.7 Have your responsibilities changed during your appointment in the North?
- 3.8 If so, how and why?
- 3.9 Describe your daily activities?
- 3.10 Are there any routine or emergency duties (e.g., food and mail deliveries, evacuations) that are part of your job?

**4. Types of Trouble**

We would like to know about the kinds of cases you deal with. What can you tell us about the following?

- 4.1 Fighting
- 4.2 Spousal Assault
- 4.3 Sexual Assault
- 4.4 Child Sexual Abuse
- 4.5 Verbal or Physical Threats
- 4.6 Child Neglect
- 4.7 Break and Enter
- 4.8 Mischief and Vandalism
- 4.9 Drug Dealing and Drug Abuse
- 4.10 Bootlegging
- 4.11 Making and Selling of Home Brew
- 4.12 Alcohol Abuse
- 4.13 Substance and Solvent Abuse
- 4.14 Other Criminal Code Offences (i.e., Robbery, Weapons, Homicide)
- 4.15 Other Problems, Non-Criminal (e.g., Over-Hunting, Not Sharing Food, Gossiping)

**Responses to Question 4**

To each of the above in question 4, ask the following:

- 4.16 How frequently are you called to investigate \_\_\_\_\_?
- 4.17 What do you normally do about this?
- 4.18 Do you think \_\_\_\_\_ is occurring that you are not called in to investigate?
- 4.19 If yes, then how frequently?
- 4.20 Does the community have its own ways of dealing with this problem (e.g., elders, hamlet council, family pressure, back to the land programs, a dry/wet community policy)
- 4.21 If yes, what were they?
- 4.22 Is nothing done? (if so, why?)
- 4.23 Is there a procedure for dealing with this problem (e.g., refer to nurse/social worker for therapy, youth justice committees, alternative sentencing measures)

**5. Contributors to Trouble**

How much does the following contribute to trouble in each of the communities?

**Economic**

- 5.1 Problems of a Hunting and Fishing Economy (e.g., Game Laws, Difficulty Making a Living)
- 5.2 Availability of Housing
- 5.3 Availability of Employment

**Social/Cultural**

- 5.4 Pressures on Inuit Values and Lifestyles
- 5.5 New Technologies (e.g., Television, Telephones, Skidoos, Air Travel)
- 5.6 Residential Schools
- 5.7 Availability of Education
- 5.8 Jealousy and Family Feuds
- 5.9 Availability of Alcohol

**Demographic and Environmental Issues**

- 5.10 Relocation of Communities
- 5.11 Age Distribution
- 5.12 Pollution
- 5.13 Scarcity of Game and Fish
- 5.14 Impact of the Environmental Movement

**6. Criminal Justice System Initiatives and Responses**

- 6.1 Is there a person or committee who liaised between the community and RCMP?
- 6.2 Are any Inuit people involved in delivering justice services (e.g., Inuit special constable program, Justice of the Peace, youth justice committee)?
- 6.3 Are the elders in the communities given a voice and role in the administration of justice?
- 6.4 What has been the impact of the Young Offenders Act upon the administration of youth justice in the Baffin Region communities?
- 6.5 What crime prevention activities are you involved with?
- 6.6 Are there sufficient resources provided for crime prevention work in the community?
- 6.7 Are the concerns and needs of the victims of criminal acts met by the criminal justice system in the Baffin Region?
- 6.8 How often does the court come to the community?
- 6.9 Does the court play a useful role in administering justice in the community?
- 6.10 How does the court perform in the community? Do you think that the court does what the community wants it to do (e.g., lenient/too severe sentences)?
- 6.11 If not, what is the court doing that the community doesn't like?
- 6.12 If so, what is the court doing that the community approves of?
- 6.13 What changes would you make to improve the justice system serving the citizens of the Baffin Region?



## **Appendix B: Sample Screens from RCMP Occurrence Reports Database**

Our Report No.: 3062                      Community Name: [REDACTED]                      Year: 1991  
Report Entered By: Evalyn

\*\*\*\*\* PIRS Code Information From Front of File \*\*\*\*\*

Line 1: A11AA43                      Line 5:                      Line 9:  
Line 2: A2 AC43                      Line 6:                      Line 10:  
Line 3: M1                              Line 7:  
Line 4:                                  Line 8:

-----  
Occurrence Report No.: 91|      62      Date: 05-12-1991      Time: 14:30

Nature of Event: sexual assault

Location: Airport

Occurred Between: 05-11-1991 at 18:20 and                      at

\*\*\*\*\* Information on Suspect/Offender \*\*\*\*\*

Suspect No.: 1      Last Name: [REDACTED]                      Sex: M      D.O.B.: [REDACTED]  
Given Name: [REDACTED]                      Race: INUIT

VIEW----- Record : 45 ----- Page : 1 -----

\*\*\*\*\* Details of Offence \*\*\*\*\*

Offence Discovered By: Victim                      Was Alcohol a Factor?: n  
Victim/Offender Relationship: Can't tell                      Suspect Under Influence?: n  
Victim Under Influence?: n

\*\*\*\*\* More Charge(s) Detail(s) \*\*\*\*\*

Was Suspect Charged?: y      If not, why not?: N/A  
Charges: Sexual Assault      Breach Undertaking  
Number of Previous Convictions: 23  
Were others accused in THIS occurrence report?: n      If so, how many?: 0

\*\*\*\*\* Charge 1 Information \*\*\*\*\*

Official 1st Charge: Sex. Ass. Changed Assault      Charge Date: 05-13-1991  
Plea to 1st Charge: Guilty                      Disposition of 1st Charge: Convicted  
1st Sentence for 1st Char: PRISON                      Amount of 1st Sent: 3 months consec  
2nd Sentence for 1st Char: N/A                      Amount of 2nd Sent:  
3rd Sentence for 1st Char: N/A                      Amount of 3rd Sent:  
Date of Plea: 05-30-1991                      Date of Disposition: 05-30-1991  
Date of Sentences: 05-30-1991  
Presiding Judge: Davis                      Type of Court: Territorial/Supreme

VIEW----- Record : 45 ----- Page : 2 -----

\*\*\*\*\* Charge 2 Information \*\*\*\*\*

Official 2nd Charge: Breach Of Undertaking Charge Date: 05-13-1991  
Plea to 2nd Charge: Guilty Disposition of 2nd Charge: Convicted  
1st Sentence for 2nd Char: PRISON Amount of 1st Sent: 1 month consec  
2nd Sentence for 2nd Char: N/A Amount of 2nd Sent:  
3rd Sentence for 2nd Char: N/A Amount of 3rd Sent:  
Date of Plea: 05-30-1991 Date of Disposition: 05-30-1991  
Date of Sentences: 05-30-1991  
Presiding Judge: Davis Type of Court: Territorial/Supreme

\*\*\*\*\* Charge 3 Information \*\*\*\*\*

Official 3rd Charge: Charge Date:  
Plea to 3rd Charge: N/A Disposition of 3rd Charge: N/A  
1st Sentence for 3rd Char: N/A Amount of 1st Sent:  
2nd Sentence for 3rd Char: N/A Amount of 2nd Sent:  
3rd Sentence for 3rd Char: N/A Amount of 3rd Sent:  
Date of Plea: Date of Disposition:  
Date of Sentences:  
Presiding Judge: Type of Court: N/A

\*\*\*\*\* Charge 4 Information \*\*\*\*\*

Official 4th Charge: Charge Date:  
Plea to 4th Charge: Disposition of 4th Charge:  
1st Sentence for 4th Char: Amount of 1st Sent:  
2nd Sentence for 4th Char: Amount of 2nd Sent:  
3rd Sentence for 4th Char: Amount of 3rd Sent:  
Date of Plea: Date of Disposition:  
Date of Sentences:  
Presiding Judge: Type of Court:

-----  
Any special comments which might really be of interest later?:

Accused went to airport terminal where victim works as an airport observer (age 28), she was closing up office. Accused offered her a ride and then grabbed her from behind, lifted and carried her out of office and pulled her on top of him on a chair. He

Any more special comments which might really be of interest later?:

asked for sex, said he had a "rubber", and tried to pull her into washroom. She got away, locked herself in office. 4 years ago, they had a short relationship, victim scared of accused. Copied some info. Plead guilty to lesser charge assault. Other chgs.

**Appendix C: Letters of Ethics Approval and University Support for Baffin Region  
Crime and Justice Study**

# SIMON FRASER UNIVERSITY

VICE PRESIDENT  
RESEARCH AND INFORMATION SYSTEMS



BURNABY, BRITISH COLUMBIA  
CANADA V5A 1S6  
Telephone: (604) 291-8152  
Fax: 291-4045

October 5, 1988

Professor Curt Taylor Griffiths  
School of Criminology  
Simon Fraser University  
Burnaby, B.C.

Dear Professor Griffiths:

**Re: Crime and Criminal Justice Among the Inuit:  
A Cross-National Inquiry**

This is to advise that the above referenced application has been approved on behalf of the University Ethics Review Committee.

Sincerely,

Thomas W. Calvert, Chair  
University Ethics Review  
Committee

# SIMON FRASER UNIVERSITY

VICE PRESIDENT  
RESEARCH AND INFORMATION SYSTEMS



BURNABY, BRITISH COLUMBIA  
CANADA V5A 1S6  
Telephone: (604) 291-4152  
Fax: 291-4045

October 10, 1989

Marion King  
Director  
Social Sciences and Humanities Research  
Council of Canada  
Box 1610  
Ottawa, Ontario  
K1P 6G4

Dear Ms. King:

The proposed research study "Crime, Law, and Justice in the Baffin Region, Northwest Territories, Canada" submitted by Professor Curt T. Griffiths *et al.* for funding under the Major Research Grants program has the support and approval of Simon Fraser University. The research team is eminently qualified to undertake and successfully complete the study and will have at their disposal resources in the School of Criminology. Simon Fraser University agrees to 1) administer the grant monies for the three-year period, July 1, 1990 - June 30, 1993, 2) contribute to the direct costs of the research, and 3) provide normal services and facilities.

Yours sincerely,

Thomas W. Calvert  
Vice President, Research and  
Information Systems

cc: C. Griffiths, Criminology

**Appendix D: Sample Liquor Commission Mail Order Invoice**

NORTHWEST TERRITORIES LIQUOR COMMISSION  
 IQUALUIT, N.W.T.

MAIL ORDER STATEMENT

6766

TO:

Clyde River

Rec'd on Account: \$ 250.00		<u>cheque</u> money order cash	
1	Black Velvet 0154048	31.55 ea	31.55
1	Silk Tassel 750 0162044	21.35 ea	21.35
1	Tia Maria 2417044	27.65 ea	27.65
1	Dubonnet 3204044	12.75 ea	12.75
2	Blue 9107063	18.20 ea	36.40
		ea	
		S/T. ea	129.70 ✓
	Beer Surcharge @ 2.70/Doz	ea	5.40
	Freight 16kg @ 4.76/kg.	ea	76.16 ✓
	GST on Freight	ea	5.33
	Packaging + Delivery	ea	5.00
		S/T. ea	221.59
		ea	
		ea	28.41
			250.00

Shipped per:

First Air

TOTAL

Date: \_\_\_\_\_



**Appendix E: Sample Local Option Liquor Plebiscite Ballot.**

**LAKE HARBOUR  
LIQUOR FLEBISCITE  
BALLOT**

DO YOU AGREE THAT THE LAKE HARBOUR ALCOHOL EDUCATION COMMITTEE SHOULD BE ESTABLISHED AND GIVEN THE POWER TO DECIDE:

- 1) WHO MAY PURCHASE LIQUOR OR BRING LIQUOR INTO THE COMMUNITY, AND WHO MAY MAKE BEER OR WINE IN THE COMMUNITY,
- 2) THE AMOUNT OF LIQUOR A PERSON MAY PURCHASE OR BRING INTO THE COMMUNITY, AND THE AMOUNT OF BEER OR WINE A PERSON MAY MAKE IN THE COMMUNITY.

YES

ALCOHOL

NO

NO ALCOHOL

P4724  
ΔΓΔ54 J 0740  
0740

ΔΓΔ54 C44 ΔΓΔ54-1240 604740 P4724 ΔΓΔ54-1240, ΔΓΔ54-1240  
D440.....

- 1/ Pa ΔΓΔ54P440, P4724 Pa ΔΓΔ54P440, ΔΓΔ54, CL6 P4724.
- 2/ Pa ΔΓΔ54P440 ΔΓΔ54P440 ΔΓΔ54, Pa ΔΓΔ54P440 ΔΓΔ54P440 ΔΓΔ54, CL6 P4724.

Δ

ΔΓΔ54

Δ44

ΔΓΔ54





L