SOCIAL SUPPORT, MATERIAL CIRCUMSTANCE AND HEALTH: UNDERSTANDING THE LINKS IN CANADA'S ABORIGINAL POPULATION

Chantelle Anne Marie Richmond

Department of Geography
McGill University, Montreal

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ABSTRACT

Societies that foster high quality social environments and integration produce healthier populations. The mechanisms underlying the protective effect of social integration appear to be through various forms of social support. In the Canadian Aboriginal context, few authors have explored the relationship between health and social support. This gap in understanding is significant because Aboriginal frameworks of health point to the salience of larger social structures (i.e., family), yet patterns of population health point to distinctly social causes of morbidity and mortality (e.g., violence, alcoholism). An interesting paradox emerges: patterns of Aboriginal health suggest that social support is not working to promote health. This dissertation explores this paradox through a mixed-methods approach to describe the value of social support for Aboriginal health, and to critically examine the social-structural processes and mechanisms through which social support influences Aboriginal health at the community level.

Principal components analyses of the 2001 Aboriginal Peoples Survey (APS) identified social support as a consistent dimension of Métis and Inuit health, and multivariable logistic regression modelling of the 2001 APS identified social support to be a significant determinant of thriving health among Indigenous men and women (e.g., those reporting their health as excellent/very good *versus* good/fair/poor). The results also indicate a distinct social gradient in thriving health status and social support among Aboriginal Canadians.

Narrative analyses of 26 interviews with Aboriginal Community Health Representatives point to two key explanations for the health-support paradox: i) social support is not a widely accessible resource; and ii) the negative health effects of social support can outweigh the positive ones. The formation of health behaviours and cultural norms – which underpin social supports - are inextricably tied to the poor material circumstances that characterize Canada's Aboriginal communities. The thesis concludes with a critical examination of the processes through which environmental dispossession has influenced the determinants of Aboriginal health, broadly speaking. Effects are most acute within the material and social environments of Aboriginal communities. More research attention should focus on identifying the pathways through which the physical, material and social environments interact to influence the health of Aboriginal Canadians.

RÉSUMÉ

Les sociétés qui favorisent l'intégration et les milieux sociaux de qualité supérieure bénéficient de populations plus en santé. Les mécanismes qui sous-tendent l'effet de protection de l'intégration sociale semblent comprendre différentes formes de soutien social. Dans le contexte des Autochtones du Canada, peu d'auteurs ont exploré les rapports entre la santé et le soutien social. Ce manque de compréhension est grave étant donné que les cadres de la santé des Autochtones soulignent la prépondérance de structures sociales plus importantes (c.-à-d. la famille) tandis que les modèles de la santé de la population mettent en évidence les causes sociales distinctes de morbidité et de mortalité (p. ex. violence, alcoolisme), ce qui crée un paradoxe important : d'après les modèles de la santé des Autochtones, le soutien social ne permet pas de promouvoir la santé. La présente thèse aborde ce paradoxe par le biais d'une méthodologie mixte afin de définir la valeur du soutien social pour la santé des Autochtones et d'étudier de façon éclairée les processus et mécanismes sociaux-structurels par le biais desquels le soutien social influe sur la santé des Autochtones au niveau de la communauté.

Selon l'analyse des principales composantes de l'Enquête auprès des peuples autochtones (EAPA) réalisée en 2001, le soutien social est une caractéristique propre à la santé chez les Métis et les Inuits et la modélisation de la régression logistique à variables multiples de l'EAPA 2001 indique que le soutien social constitue un important déterminant d'une bonne promotion de la santé chez les femmes et les hommes autochtones (p. ex. les personnes qui estiment avoir une excellente/très bonne santé par rapport aux personnes ayant une bonne/faible/mauvaise santé). Les résultats indiquent également un gradient social distinct entre la bonne santé et le soutien social chez les Autochtones du Canada.

Des analyses narratives de 26 entrevues réalisées auprès des représentants autochtones en santé communautaire nous ont permis d'isoler deux principales causes au paradoxe soutien-santé : i) le soutien social n'est pas une ressource largement accessible et ii) les effets négatifs du soutien social sur la santé peuvent l'emporter sur les effets positifs. L'adoption de comportements sains et de normes culturelles, qui appuient le soutien social, est inextricablement liée aux mauvaises conditions matérielles qui caractérisent les communautés autochtones du Canada. La conclusion de la thèse portera sur l'examen critique des processus par le biais desquels la dépossession du milieu a influencé de façon générale les déterminants de la santé des Autochtones. Les effets sont plus marqués au sein du milieu physique et social des communautés autochtones. Un plus grand nombre de recherches porter sur le recensement des moyens par lesquels les milieux physique, matériel et social interagissent pour influencer la santé des Autochtones du Canada.

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Contribution of Authors for Empirical Chapters

This thesis is a collection of five manuscripts, all of which have been, or will be, submitted to peer-reviewed books or journals for publication. In the paragraphs below, I name co-authors on each manuscript and detail their contributions.

Chapter 3: Exploring Indigenous concepts of health: The Dimensions of Métis and Inuit Health (Co-Authors: Nancy A. Ross, Julie Bernier)

Julie Bernier and Jean-Marie Berthelot (mentioned in the acknowledgments) of the Health Analyses & Measurement Group of Statistics Canada encouraged me to undertake the analyses of this manuscript. Discussions with Julie Bernier, Nancy Ross and Cameron Macintosh (also mentioned in the acknowledgments) were helpful for determining which variables to incorporate in the principal components analyses. Julie Bernier aided in the development of the SAS programming, and I performed all analyses. Julie Bernier and Nancy Ross provided comments on drafts of the manuscript.

Chapter 4: Societal Resources and Thriving Health: A New Approach for Understanding the Health of Indigenous Canadians (Co-authors: Nancy A. Ross and Grace M. Egeland)

I conceived of the study, and worked closely with Nancy Ross and Grace Egeland to construct the models explored in the analyses of this manuscript. I performed all analyses. Nancy Ross and Grace Egeland helped to conceptualize ideas, interpret findings, and review drafts of the manuscript.

Chapter 6: Narratives of Social Support and Health in Aboriginal Communities

I am sole author of this manuscript.

Chapter 7: Supportive Behaviour, Social Structure and Material Condition: Confounding Influences on Canadian Aboriginal Health (Co-author: Nancy A. Ross)

The concepts explored in this manuscript grew from numerous discussions between myself and Nancy Ross, and are based on the findings of earlier manuscripts (notably the previous one). I performed all data analyses. Nancy Ross reviewed and made intellectual and editorial suggestion on previous drafts of this manuscript.

Chapter 8: The Determinants of Aboriginal Health in Canada: A Critical Population Health Approach (Co-author: Nancy A. Ross)

The concepts explored in this manuscript grew from discussions with Nancy Ross. I developed the thematic framework for analyses and analyzed the data. Nancy Ross reviewed and made intellectual and editorial suggestion on previous drafts of this manuscript.

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CHAPTER ONE

Introduction

1.1 Research Context

In the past decade, the literature on Canadian Aboriginal people's health and social conditions has grown considerably (Young, 2003). This is due in large part to recommendations of the report of the Royal Commission on Aboriginal Peoples (1996), who outlined the importance of continued research into the health and social conditions of Aboriginal peoples.[1] Grave disparities in health and social conditions between the Aboriginal population and other Canadians warrant that such research is desperately needed.

Compared with the general population of Canada, Aboriginal people experience a significantly higher burden of morbidity and mortality (Frohlich et al., 2006; Codon, 2005; Adelson, 2005; MacMillan et al., 1996), the roots of which lie in a legacy of colonial relations, dispossession from traditional lands and territories, rapid cultural change and dependency (Waldram et al., 2006; Bartlett, 2003). Like other vulnerable populations (Krieger, 2001; Navarro, 1990), factors such as material deprivation and a low social position have strongly influenced

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[1] The growth of Aboriginal health research is also related to the creation of the Institute of Aboriginal Peoples Health (of the Canadian Institutes of Health Research), which was founded in 2000 to actively pursue development of Aboriginal health capacity that will lead to the reduction of the health and social disparities borne by the Canadian Aboriginal population (Reading and Nowgesic, 2002).

patterns of Aboriginal health. As Adelson (2005; S45) notes, health disparities are directly and indirectly associated with social, economic, cultural and political inequities; the end result of which is a disproportionate burden of ill health and social suffering upon Aboriginal populations of Canada.

In the past few decades, researchers have attempted to explain these inequalities through the study of the larger societal conditions that influence health outcomes among the Aboriginal population, in particular those related to material disadvantage, urbanization, and political and environmental marginalization (Frohlich et al., 2006; Richmond et al., 2005; Waldram et al., 2006; Peters, 2001). Amidst this flurry of academic pursuit into the determinants of Aboriginal health, however, few researchers have examined how Aboriginal health may be influenced as features of the broader societal context (e.g., poverty) interact with more proximal health determinants, such as social support.

Societies that foster high quality social environments, trusting relationships and social support produce healthier populations. The health benefits of social affiliation have been widely evidenced (House et al., 1988), and we now know that those who are socially isolated face increased risk of premature mortality, reduced survival after major illness, and poor mental health (Berkman, 1995). The mechanisms underlying the protective effect of social integration appear to be through access to various forms of social support (Kawachi, 1999), such as affection and intimacy, emotional support, and positive social interaction (House, 1981).

In the context of Aboriginal Canadians, very little is known about how social support is created, sustained or accessed within this population, nor has its direct influence on health been measured in any meaningful way. This gap in understanding is significant, primarily because Aboriginal frameworks of health point to the salience of larger social structures (i.e., family, community), yet patterns of illness and mortality overwhelmingly reflect social dysfunction (e.g., family violence, suicide, alcoholism) (Adelson, 2005). An interesting paradox emerges. Despite the tight-knit, socially cohesive social structures which historically characterized Aboriginal families and communities across Canada (Waldram et al., 2006; Barsh, 1994; Burch, 1986), population-level patterns of health suggest that these social relationships are not working to promote Aboriginal health as they once did (RCAP, 1996). Potential explanations relate explicitly to Aboriginal people's experience of colonialism and the sociocultural disruption and material deprivation that have ensued in so many Aboriginal communities following years of environmental dispossession (Waldram et al., 2006; Adelson, 2005; Kirmayer et al, 2000). As we have learned from the social epidemiological literature, lower social position reduces access to kinds of interpersonal resources embodied in the concepts of social support and social networks (Link and Phelan, 1995) and it can negatively impact on adult behaviour and psychosocial characteristics (Lynch et al., 1995).

This thesis is driven by Aboriginal conceptions of health and well-being, those which recognize that the health of individuals is intimately connected to the health of their families, communities and Creator. This thesis explores the conceptual and empirical value of the social environment for Aboriginal health in Canada, and critically examines the social-structural processes and mechanisms through which social support influences health in the every day lives of Aboriginal people.

1.2 Research objectives

This thesis is written as a collection of five manuscripts, each which explores a unique aspect of the health influence of the social environment among the Canadian Aboriginal population. There are five main objectives. The objectives of this thesis build succeedingly on one another in a narrative detailing the connections between Aboriginal health and social support:

1. To empirically 'unpack' the dimensions of Aboriginal health;
2. To examine the relative role of social support and other health determinants for determining thriving health among the Aboriginal population;
3. To identify sources of social support, and examine the mechanisms that determine access to social support at the community level;
4. To explore the health-enhancing and health-damaging influences of social support;
5. To critically examine the processes through which environmental dispossession has affected social support and other determinants of Aboriginal health.

This thesis uses a mixed-methods approach. The first two objectives of this thesis are addressed in Chapters 3 and 4, and they are based on statistical analyses of the 2001 Aboriginal Peoples Survey (APS). The APS is the only federal survey[2] of Aboriginal people in Canada (Canada, 2001), and its purpose is to identify the needs of self-identifying Aboriginal people through focus on issues such as health, language, employment, income, schooling, housing, and mobility.

Objectives 3, 4 and 5 are addressed in Chapters 6, 7 and 8, respectively, and they draw from narrative analyses of in-depth interviews with a national group of 26 Aboriginal Community Health Representatives (CHR's), which were

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[2] The National Aboriginal Health Organization has designed and conducted its own national survey, the 'Regional Health Survey' (RHS).

completed during the summer months of 2005. The Community Health Representatives Program (CHRP) was established in 1962 by Health Canada (then called the Medical Services Branch). Since that time, the CHRP has grown from 12 to approximately 900 CHR's, representing 577 First Nations and Inuit communities across Canada. At the community level, CHR's are front-line health workers who perform a broad range of in-house, health-related functions including environmental health, health delivery, medical administration, counseling and home visits, education and community development, and mental health. Such health services are necessary in communities who do not have a permanent doctor (e.g., doctors are regularly flown into some isolated communities). The interview tool used in this thesis was designed to probe CHR's perceptions of the links between health and the social environment of their respective communities, and to highlight the social and economic processes through which health is affected at the community level. The interview focused on three key areas: (1) perceptions of community health and changes over time; (2) the nature of and access to social support; (3) how social supports can impact health. Depth interviews with the CHR's provide us a source of well-grounded, rich descriptions and explanations of the social, economic, political, cultural and environmental processes that determine health in their local communities.

1.3 Thesis Outline

Chapter 2 reviews three main literatures to which this thesis draws from and contributes: health geography, Aboriginal health, and the social determinants of health.

In **Chapter 3**, Canadian Indigenous health concepts are unpacked using a series of Principal Components Analyses on the 2001 APS. This chapter is informed theoretically by Aboriginal health frameworks such as the Medicine Wheel, a First Nation model of health, and *inuuqatigiittiarniq*, an Inuit model of health. Both models recognize that the health of an individual is intimately connected to the larger social context, including one's family and community (Kenny, 2004; Svenson and Lafontaine, 1999; Boyd and Associates, in progress). Because such profound disparities exist between Aboriginal and non-Aboriginal populations in Canada, there has been a tendency to conceptualize the Aboriginal population – and its health – as a homogenous unit, with little consideration given to the various languages, environments and traditions that shape Aboriginal peoples, as a collective. Rarely has attention been paid to the diversity of health concepts *within* the Aboriginal population itself. Chapter 3 therefore responds to a recent call by Canadian Aboriginal health researchers (Bartlett, 2003; Wilson and Rosenberg, 2002; Kirmayer et al., 2000) to explore health concepts from within the Indigenous population, in particular those that may be useful for the development of Aboriginal health policy.

Chapter 4 builds upon the conceptual frameworks identified in Chapter 3 to examine the relative role of social support for determining thriving health among Indigenous Canadians. Researchers have displayed an overwhelming tendency to examine those determinants of health that best highlight inequality with the non-Aboriginal population, such as poverty. Such emphasis on the determinants of disparity means that few authors have sought to model thriving health (i.e., those who self-report their health as excellent or very good versus those who report their health as good, fair or poor) and in particular, how societal resources like social support can influence health status. In addressing this gap in knowledge, Chapter 4 examines the role of social support for determining thriving health among Indigenous Canadians. This chapter draws from a multivariable logistic regression analyses of the 2001 APS to explore the relationship between thriving health status and levels of social support among Indigenous men and women.

The three remaining empirical chapters (6, 7 and 8) shift to intensive research methodologies to examine Aboriginal perceptions of *mechanism* and *meaning* in the relationship between the social environment and health. As a means of introducing these three chapters, **Chapter 5** provides a prelude to the qualitative work. One of the key limitations to writing a manuscript style thesis is that the manuscripts are often restricted in their word lengths due to journal style and formatting. This is particularly challenging for qualitative research, as editorial decisions often prompt researchers to shorten descriptions of their methodologies and concentrate instead on the substantive results (Baxter and Eyles, 1997). Chapters 6, 7 and 8 use a qualitative approach that draws from interviews with 26 Aboriginal Community Health Representatives (CHR's) to provide interpretation into the everyday processes that impact on the relationship between social support and health. These three qualitative chapters have been written for specific scientific journals, and as such, their word lengths and stylistic formatting reflect those journal limitations, and are relatively 'short' in their detailing around the theoretical frameworks and methodological rigour through which this intensive stage of the research unfolded. Chapter 5 draws from a more personal, ethnographical approach to discuss the underlying theoretical frameworks and assumptions guiding the methods and data analysis of chapters 6, 7 and 8, including the ethics involved in doing research with Aboriginal peoples, and the strategies employed in recruiting CHR's. This chapter also examines the importance of one's positionality to the research process (i.e., in this case, my positionality as an Aboriginal woman and health researcher).

Consistent with a greater movement that seeks social explanations for health and disease (Conrad and Kern, 1990; Marmot, 2001), **Chapter 6** seeks to shed light on understanding how *access* to social support is determined by the interaction of large-scale processes (e.g., government paternalism) and features of the local social context (i.e., trust).

Chapter 7 examines the health-enhancing and health-damaging impacts of social support. The epidemiological evidence of social support has tended to emphasize the positive, health enhancing effect of social support. However, certain aspects of our societal ties can also have negative consequences for health status. That one's social ties may cause harm forms a significantly under-emphasized dimension of the social support and health relationship (Rook, 1984; Barrera, 1986; Thoits, 1995). Chapter 7 employs a critical lens to explore how the supportive behaviours of one's social ties may have both health-enhancing and health-damaging effects. Some authors suggest that the assumption that tight-knit social structures always lead to improved health is misleading (Gottlieb, 1984; Uchino, 2001; Kawachi and Berkman, 2001). This chapter also examines the social structures through which social supports impact health, and critically examines the assumption that tight-knit social relationships are always health-promoting.

Chapter 8 draws from a critical population health approach (Labonte et al., 2005) to conceptualize the *processes* through which environmental dispossession (i.e., reduced access to environmental resources) has influenced the determinants of Aboriginal health, including social support. This chapter explores CHR's perceptions of the determinants of health, and examines the pathways through which environmental dispossession and socio-economic and cultural change have affected the determinants of health among Aboriginal communities. Improvements in population health necessitate more critical reflection of the pathways through which health inequalities are created and sustained over time.

Chapter 9 outlines the findings of this thesis, and contextualizes them in terms of their theoretical and methodological contributions to current academic scholarship on the social determinants of Aboriginal health. This chapter also details the limitations of the analytical approaches used in the thesis.

CHAPTER TWO

Review of the Literature:

Contextualizing the social determinants of Canadian Aboriginal health

2.1 Introduction

There are three main literatures from which this thesis draws and contributes to academic scholarship: Aboriginal health, health geography, and the social determinants of health. In this chapter, I provide a review of the current knowledge and theoretical frameworks within these literatures as they relate to the objectives of this thesis. I conclude by summarizing how the research of this thesis will enhance these literatures in the advanced understanding of the relationships between social support and Aboriginal health.

2.2 Canadian Aboriginal Health Indicators

The Aboriginal population of Canada is composed of three legally identified groups: Indian, Inuit and Métis. 1.3 million Canadians reported some Aboriginal ancestry to the 2001 Canadian Census, and approximately one million Canadians reported Aboriginal identity (608, 850 First Nations, 292, 310 Métis, and 45, 070 Inuit) (Canada, 2001)[3]. Just about half the Aboriginal population

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[3] The available health and social statistics on Aboriginal conditions are not without their limitations, and the reader must be cautioned about these data issues. There are many ways of defining the Aboriginal population, and it is this inconsistency in definition which can result in estimates that vary with respect to the size of the population, and its health and social conditions. For instance, Canada's 2001 Census data are based on the definitions of ethnic origin (ancestry), Aboriginal

resides on Indian reservations and in other rural areas (i.e., Inuit communities, Métis settlements), and the other half of the population lives in urban areas.

The Aboriginal population is young and growing quickly. The median age of the Aboriginal population is 24, compared with 36 among the non-Aboriginal population, and the proportion of the First Nation population under 30 years of age was 61.1% in 2000, compared with 38.8% for the Canadian population in 2001 (Canada, 1999). The difference in age-structure is primarily driven by a high birth rate in the Aboriginal population. In 2000, the First Nations birth rate was 23.4 births per 1,000 population (more than twice the Canadian rate at 11.0 per 1,000 population), and over half of First Nations women who gave birth in 1999 were less than 25 years old (Canada, 2003).

Life expectancy is considerably lower among Aboriginal peoples than it is in the non-Aboriginal population (68.9 for Aboriginal males and 76.6 for Aboriginal women versus 78 among non-Aboriginal males and 81 for non-Aboriginal women) (Canada, 2003). There is variation within life expectancy estimates across the Aboriginal population, however. While life expectancy has increased among the First Nation and Métis populations, it appears to be declining among Inuit, and Wilkins et al. (in press) estimate the disparity in life expectancy between Inuit and the general population may be as much as 12

Identity, Registered Indian, and Band membership. This may be problematic for Aboriginal people who do not self-identify their Aboriginal status or identity on the Census, and further challenging among those Aboriginal peoples who do not respond to the Census at all. These issues may be further complicated as certain segments are over-represented in the available literatures on Aboriginal health and social conditions. For instance, a Medline search of 254 journal articles published during 1992-2001 found that the majority of research on Canada's Aboriginal population does not reflect the demographic composition of Aboriginal people in Canada, as there is severe under-representation of Métis, urban Aboriginal people, and First Nations people not living on reserves and over-representation of the Inuit (Young 2003). In terms of data representativeness, we must therefore be cautious about misrepresenting statistics to groups who may not, in fact, be captured in these estimates. In the Canadian estimates, First Nations (specifically those living on-reserve) and Inuit populations have been well represented in national level data, while the Métis population have not. The statistics provided in this literature review do not waver significantly from this trend; the health and social statistics provided in this literature review, for the most part, reflect that of on-reserve Indians and Inuit living in Arctic areas.

years. Part of this difference may be explained by high rates of infant mortality, a key contributor to overall life expectancy. Among First Nations, infant mortality is 16 percent higher than the national average (6.4/1000 versus 5.5/1000 in the Canadian population) (Canada, 2003), and recent estimates on infant mortality rates among Inuit are about four times as high as that of the general population (approximately 19/1000) (Inuit Tapiriit Kanatami, in progress). In 2000, the First Nation and Canadian population had similar proportions of low birth-weight births; however, almost twice as many First Nations babies were classified as high birth weight than in Canada as a whole (Canada, 2000).

Combined, circulatory diseases and injury account for nearly half of all mortality among First Nations (23% and 22% of all deaths, respectively). Among Inuit, all external causes form the leading cause of death (Age-standardized mortality rate (ASMR) of 166/100,000). Nearly 44% of Inuit mortality due to this cause relates to suicide, and the remaining deaths are caused by accidents, violence and poisonings (Richmond and Ross, in progress). Among the general population of Canada, mortality due to all cancers forms the leading cause of death (ASMR of 63/100,000), followed closely by all diseases of the circulatory system (ASMR of 57/100,000), which includes ischaemic heart disease and cerebrovascular diseases.

In terms of First Nation mortality, there is variation by age group. The most common cause of death among ages 1 – 44 is injury and poisoning. Among children under ten, these deaths were primarily unintentional. Among youth and adults up to age 44, suicide and self-injury were the leading causes of death; in 1999, the suicide rate among First Nations was 27.9 deaths per 100,000, compared with the Canadian population's rate or 13.2 per 100,000 (Canada, 2003). These numbers are even higher for Inuit, and the differences may be related to variation across the Arctic regions of Canada. For instance, the suicide rate in the area composing the former Northwest Territories was six times greater than Southern Canada, and the Baffin Region (of what is now Nunavut territory) had the highest male and female rates at 133.9/100, 000 and 47.1/100, 000, respectively (Tester and McNicoll, 2004). With respect to suicide, all First Nations and Inuit groups up to age 65 are at increased risk, in comparison with the Canadian population. While males are at a higher risk than females, the greatest disparity with non-Aboriginal rates is for females aged 15-24 and 25–29, for whom the rates of suicide are eight and five times non-Aboriginal rates (Adelson, 2005; Tester and McNicoll, 2004). For First Nations aged 45 years and older, circulatory disease was the most common cause of death. Motor vehicle collisions were a leading cause of death over all First Nations age groups.

Like other Indigenous populations in the world, Aboriginal Canadians have undergone "epidemiologic transition," a process characterized by the precipitous decline in the incidence of infectious diseases and followed by the rise of chronic, non-communicable diseases, accidents and violence (Young, 1994). The most significant of these chronic, long-term diseases is diabetes. Rates of diabetes among First Nations are 3 to 5 times the national average, with rates higher among women and highest among those living on-reserve. While increased surveillance and new health initiatives have contributed to the dramatic decline in many infectious diseases since the Second World War (Waldram et al., 1995), they have not ceased to exist among the Aboriginal population. Aboriginal people also experience a disproportionate burden of infectious disease, including pertussis, chlamydia, hepatitis A, shillegosis, and tuberculosis (Canada, 2003). The Inuit rate for tuberculosis is almost 14 times that of the rate for all Canadians

(Inuit Tapiriit Kanatami, in progress). The number of AIDS cases within the Aboriginal community is also on the rise (Wood et al., 2000); the proportion of total AIDS cases in the Aboriginal population climbed from 1.0% in 1990 to 7.2% in 2001 (Canada, 2003). Aboriginal peoples today experience the kinds of health problems most closely associated with poverty; patterns of Aboriginal mortality and morbidity are biological reflections of marginalization.

2.2.1 Concepts of health among Aboriginal peoples

Indigenous peoples vary widely in terms of their geographic location and local ecosystems, the languages they speak, and the social, cultural and political institutions by which they live. Despite the complexities and diversity of Indigenous cultures however, one area of convergence relates to the way in which health is conceptualized by Indigenous societies from around the globe. Indigenous peoples hold strong ties to their ancestral lands and share a worldview characterized by harmonious relationships with the natural environment, and in fact, various creation stories of indigenous peoples link them to both natural and spiritual worlds, often symbolically understood as 'mother earth.' Concepts of health among Indigenous peoples place particular emphasis on the larger social and physical environments within which the individual lives, and are governed by notions such as balance, holism and interconnectedness (Australia, 2004; New Zealand, 2003; Thompson and Gifford, 2000; Casken, 2001; Durie, 1994; Svenson and Lafontaine, 1989; Boyd and Associates, in progress).

Indigenous perspectives on health are generally understood in a holistic sense, meaning that the physical component of an individual's health (i.e., the body) cannot be viewed independently from other parts of a person, such as the mental, emotional and spiritual elements of that person. The critical principle of this perspective is to achieve and maintain a state of balance that integrates these four main components. In the North American context, the physical, mental, emotional and spiritual dimensions may be conceptualized by the medicine wheel, a First Nation model of health (Figure 2.1). A major paradigm among First Nations and some segments of the Métis population of Canada, the sacred circle encompasses a wide conceptual understanding of life and the inter-relatedness of all its functions. The circle explains how "life, time, seasons, cosmology, birth, womb, and earth are intrinsically located in the symbology of the circle" (Bird, 1993). The lines intersecting at the centre of the circle signify order and balance, and helps people examine experience by breaking down complex situations into constituent parts, while at the same time recognizing that each is part of a whole system.

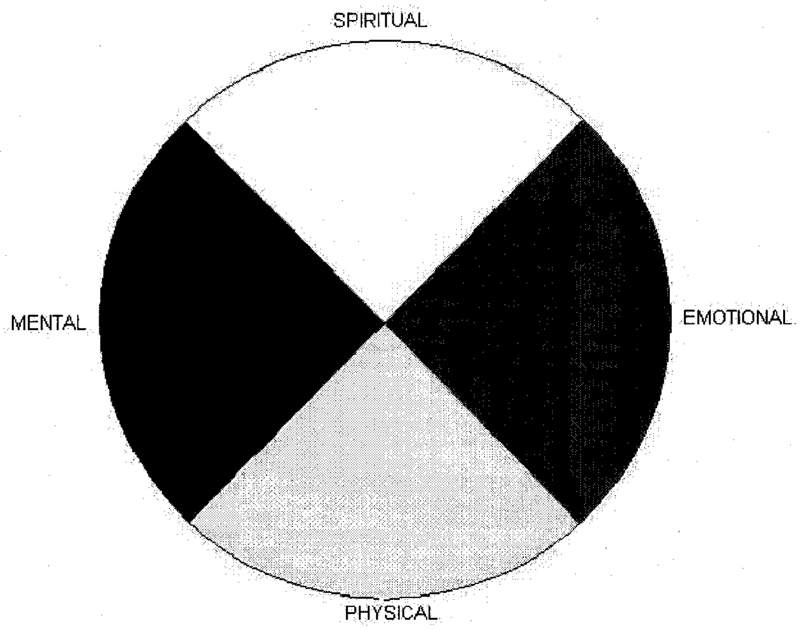

Figure 2.1: The Medicine Wheel

Although the medicine wheel is a construction of First Nations' symblogy, it well represents four main aspects of health and healing among Aboriginal peoples (i.e., spiritual, emotional, physical and mental), and while there are varying interpretations of the medicine wheel and of its components and their respective meanings across and within Aboriginal nations, typically the understanding is that each person has a physical part (the body and its physical functioning) and a spiritual part (the spiritual realm, connection to the spirit world), both which are mediated by the emotional and mental capacities of the individual (Svenson and Lafontaine, 1999). The emotional dimension reflects the mental state of the individual (e.g., happiness, sorrow, love, loneliness) and the mental dimension reflects the intellectual capacity of the individual.

In a study on the dimensions of Métis women's well-being, Bartlett (2004) drew from focus group methodology with 17 Métis women (of both urban and rural communities), and results indicated that 'the terms mental/intellectual, physical, emotional, spiritual were clearly and spontaneously described as important components of health and well-being among Métis adult and elder women' (109-110). It is important to note, however, that conceptualizations of health do vary within and between Indigenous societies. Recently, Scott et al. (1999) explored the dimensions of health among the three main ethnic groups of New Zealand (i.e., Indigenous Maori, Pacific Islanders and New Zealand Europeans). Their results revealed different conceptualizations of health across the three groups. Specifically, the discrepancies were among older Maori (45 years and older) and Pacific people, for whom the conceptualizations did not clearly differentiate physical and mental health components as it did among younger Maori (<45 years) and European New Zealanders. That is, among the elderly Maori and Samoans, health was conceptualized as a one-dimensional concept. These findings may provide evidence to substantiate the lack of a straightforward mind-body dualism in traditional Maori and Pacific models of health, as opposed to Western (i.e., European) constructions of health, which tend to compartmentalize health as such (Ware et al., 1999). These results further suggest that while traditional views of health still prevail among older Maori, they have been largely replaced by Western European views of health among younger Maori. This study raises important questions about the impact of cultural and acculturative effects on conceptualizations of health, and moreover, about the transferability of these conceptualizations across different contexts and cultures.

Conceptualizations of health within Indigenous societies also place important emphasis on the larger system within which the individual lives, such as the physical environment, including the waters, plants, animals, fish, birds, air and seasons. Among Inuit for instance, *inuuqatigiittiarniq* represents a holistic worldview of Inuit health (Boyd and Associates, in progress). *Inuuqatigiittiarniq* symbolizes the balance and harmony of social, cultural, economic, environmental and biological factors, and at the individual level this concept manifests as *inummarik* – a most genuine person – one who respectfully interacts with other people, animals and community and environment in a lifelong process (Boyd and Associates, in progress). As captured in the report of the Royal Commission on Aboriginal Peoples (1996), many Aboriginal nations that occupy ancestral homelands describe their presence in those locations as ordained by the Creator, and emphasizing that the gift of land and life comes with responsibility, as the following respondent outlines:

> Mushkegowuk of James Bay ancestry dating back 10,000 years hold a belief that the Creator put them on this land, this garden, to oversee and take care of it for those that are not yet born. The law of maintenance or just maintaining that garden means taking care of the physical environment. It also means maintaining a harmonious relationship with other people and the animals depended on for survival.

The individual is one part of a greater being that includes their family, community, nature and Creator (Svenson and Lafontaine, 1999). Balance must therefore be maintained not only on an individual level, but s/he must also consider the results of his/her life and actions within that greater scope of life and being. Likewise, the health of the individual similarly depends on the wellness of those who surround him or her, or more accurately, on community context and/or environmental factors that may shape the way health is experienced. Thus, following more holistic and socially constructed conceptualizations of health, Aboriginal health may be influenced by individual level and community level factors, both of which affect and mediate wellness among Indigenous peoples (Thompson and Gifford, 2000). In a social context, illness in Aboriginal communities may be viewed as an indication that the proper order within the community has been violated, and that the community is falling out of harmony with the traditional order and values necessary for good health. In fact, the Aboriginal Nurses of Canada (1993:14, cited in Waldram et al., 2006) suggest that "illness is not necessarily a bad thing.... It is often sent to help people re-evaluate their lives."

Indigenous communities have historically been highly integrated places (Barsh, 1994), and the role of the family has been of critical importance to personal and community well-being (RCAP, 1996). In the most traditional sense, family signifies the biological unit of parents and children living together in a household, but it also encompasses an extended network of grandparents, aunts, uncles, cousins and adopted kin as well. In many First Nations communities, members of the same clan are considered family, linked through kinship ties that may not be clearly traceable, but stretch back to a common ancestor in mythical time (RCAP, 1996). Under the rules of clan membership, individuals are required to marry outside the clan to which they belong. Over generations, this resulted in every family in a community being related by descent or marriage to every other family in the community (RCAP, 1996), thereby tightening the base of economic and social resources available to these families, and underscoring the need to maintain good relations within communities.

The tightly knit social structures that have historically characterized First Nations, Inuit and Métis communities are therefore mediated in important ways by the responsibility of Aboriginal peoples to their immediate social and physical environments, those which contribute to the balance of good health (Burch, 1996; Barsh, 1994; Kirmayer et al., 2003). As Ernest Bunch (1986) writes, Caribou Inuit society was entirely lacking in politically, economically, or other specialized institutions, such as governments, businesses, churches or schools. Instead, he writes, almost all of the functions required to sustain life were performed within the extended family context. The life of a Caribou [Inuk] revolved around the family — from the moment a person was born until the time one died (Burch, 1986). The effect of these diverse, overlapping bonds was to create a dense network of relationships within which sharing and obligations of mutual aid ensured that an effective safety net was in place (Collings et al., 1998). These cultural values and social practices are an important means for maintaining family and community cohesion.

2.3 Health Geography

Geographers are, admittedly, not that widely known for their work on human health despite the long history of the sub-discipline of 'medical geography' (Mayer and Meade, 1993). It was in 1854 that medical doctor John Snow identified the city of London's Broad Street pump as the source of an intense cholera outbreak by plotting the location of cholera deaths on a dot-map. While authors in other health-related disciplines focus on Snow's "shoe-leather epidemiology," the Broad Street story forms part of medical geography's disciplinary identity. Medical geography involves spatial and ecological perspectives on disease and health care delivery (Meade et al., 1988). Traditionally, work in this discipline has utilized positivist, empirical methods to address two primary questions: 1) the spatial patterning and diffusion of disease, and 2) health care provisions and use (Gatrell, 2002; Curtis and Taket, 1996).

Since the time of John Snow, medical geography has transformed considerably and researchers now draw from varying epistemologies and methods to better understand the links between place and health. Perhaps the biggest change has been a re-emerging interest in culture (Kearns, 1993), and a changing conceptual understanding of place (Eyles, 1985). Early medical geographers adopted a fixed mathematical conception of space, treating it as 'container' of human and biological phenomena (Andrews et al., 2004). In the past few decades however, geographers interested in health have begun to incorporate more intensive (i.e., qualitative) methods and to look 'behind the numbers' to better understand the contextual factors and social-structural processes that shape interactions between place and health (Dyck, 1995; Eyles and Smith, 1988).

In recent years, engagement with social theory and applications for public health policy have become a foci of medical geographers (Litva and Eyles, 1995; Kearns, 1993), thereby widening the discourse into more critical approaches that seek to explore the sociocultural, economic and political processes that can underpin health and health care (Gesler and Kearns, 2002). As Brown and Duncan (2002) point to, the reinvention of medical geography as 'health geography' and an allied engagement with theory has facilitated new and more critical understandings of the determinants of health of societies (e.g., that health may be affected by multiple, interacting determinants, such as in the population health discourse, a theoretical framework used increasingly by health geographers (Elliott, 1999)).

Though some argue that the critical perspective remains limited among health geographers (Cutchin, 1999; Parr, 2002; Kearns and Moon, 2002), recent research on social capital (Wakefield et al., 2005), Aboriginal peoples (Wilson and Peters, in press; Richmond et al., 2005; Wilson and Rosenberg, 2002), gender (Dyck, 2006) and vulnerability (Craddock, 2000) illustrate a strong desire to build on these limitations in the formation of a more critical health geography. Such works turn a critical gaze toward the otherwise 'normalized' processes by which varying determinants shape health in the context of everyday living.

2.3.1 Toward a mixed-methods approach in health geography

Elliott (1999) has argued that the contemporary role of geographers in health research is the result of a tripartite revolution that involves the evolution of models and definitions of health, the evolution of medical to health geography, and the rise of the population health perspective. Contemporary health geography is a broad and dynamic discipline that seeks not only to measure the health of individuals and societies, but also to understand how one's experience of health reflects a situated culture of place and time (Dyck, 1999; Eyles, 1985). In the quest to enhance geographical ways of understanding health and wellbeing, health geographers therefore draw from qualitative and quantitative approaches in their studies, and in some cases both approaches simultaneously (i.e., mixed-methods).

Given the stark contrasts between the established philosophical principles underpinning positivist (i.e., quantitative) and humanist (i.e., qualitative) approaches[4], a methodological purist would argue that the theoretical differences between the two approaches makes them irreconcilable under a mixed-methods approach (Tashakkori and Teddlie, 1998). However health geographers, along with researchers from many other disciplines (Tashakkori and Teddlie, 1998; House, 1994; Reichardt and Rallis, 1994) claim that the differences between the two theoretical paradigms are not as estranged as has been portrayed. For instance, House (1994: 20) states that this theoretical polarization is a result *not* of disparate philosophical principles, but from a "misunderstanding of science," and states furthermore that "there is no guaranteed methodological path to the promised land." Advancing the argument further, Reichardt and Rallis (1994) contend that, in fact, there are enough similarities in fundamental values between qualitative and quantitative inquiries to form an enduring partnership under a

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[4] Traditional positivist approaches in medical geography are based epistemologically upon quantitative methods, including the collection of population-level data on health-related variables that may be analyzed mathematically. Philosophically rooted in the work of August Comte, the axiomatic principle of a positivist approach emphasizes that inquiry is value-free, and makes generalizations across temporal and contextual factors. Ontologically, positivism follows that there is but a single reality (e.g., presence *or* absence of health) that is external to the researcher, and knowable *only* through direct observation. This empirical process is deductive in nature, and therefore attempts to develop theories about health and disease that are capable of verification (Tashakkori and Teddlie, 1998). A humanist draws from interpretive approaches to explore, describe and understand the social world (Eyles, 1998), to understand the personal, lived experience of an individual, and recognizes that both time and context are attributing factors to the creation of multiple constructed realities. Interpretive approaches are important in answering exploratory and descriptive questions. The basic tenet predicating humanist inquiry to health is that knowledge may be gained subjectively (Kearns and Gesler, 2002), through qualitative methods that include in-depth interviews, focus groups, participant observation, or other qualitative techniques such as oral histories, journal-keeping, autobiography, photographs, and textual analysis (Dyck, 1999). In the context of understanding health, humanists seek to understand the 'situated' experiences of health and health care health, and the meaning people attach to them (Kearns, 1991; Eyles, 1985). The axiomatic principle of a humanist approach recognizes both the interplay between the humanity of the people they study and of their own humanity as well, thereby acknowledging that researchers are not independent from the *researched*, but instead that they are a vital *part* of the research process (England, 1994).

pragmatic (i.e., mixed-methods) approach[5]. Following this line of thought, scientific inquiry (whether quantitative, qualitative or mix-methods) is ultimately guided by the values, biases and worldviews held by the investigator(s). Indeed, Eyles (1998: 2) writes 'as scientists, we must recognize that we do not construct the real world in a vacuum'; this is undeniably true in health geography. The breadth of health geography's field of inquiry necessitates that we address, first and foremost, the importance of the research question – particularly our pre-occupation with *place* – and, secondarily the methods through which the research question shall be addressed.

A mixed-methods approach to health research is one that rejects the forced choice between positivism and humanism with regard to methods, logic and epistemology. The mixed methods approach embraces both points of view (Tashakkori and Teddlie, 1998), thereby recognizing that, as researchers, we must focus our concerns more on *asking good questions* than on limiting ourselves to paradigms amenable to our methodological capabilities (Patton, 1990; emphasis added). As Patton (1990:39) writes:

> Rather than believing that one must choose to align with the one paradigm or another, I advocate a paradigm of choices. A paradigm of choices rejects methodological orthodoxy in favour of methodological appropriateness as the primary criterion for judging methodological quality. The issue then becomes whether one has made sensible decisions given the purpose of the inquiry and the questions being investigated.

In geographic approaches to health research, a mixed methods approach is appealing as it broadens our way of knowing and interpreting health and well-being. For example, Ford et al. (1997) illustrate a mixed-methods approach to identifying the critical interacting factors which shape the HIV/AIDS epidemic in

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[5] These similarities include: belief in the value-ladenness of inquiry, belief in theory-ladenness of facts, belief that reality is multiple and constructed, belief in the fallibility of knowledge, and belief in the underdetermination of theory by fact (Reichardt and Rallis, 1994).

South Sulawesi, Indonesia. Quantitative results indicated that HIV/AIDS was on the rise due mainly to sexual contact and low knowledge and widespread misinformation about AIDS among three vulnerable populations: commercial sex workers (CSW's), mobile population often in contact with sex workers (e.g., merchant seamen, businessmen and traders, Sulawesian circular migrants, truck drivers), and the young and unmarried sections of the population. A second qualitative stage explored avenues for enhancing public health and AIDS awareness in South Sulawesi, and findings of this stage identified that such a program was being undermined by the resistance to condom use within the commercial sex industry, the island's crucial position within the Indonesian archipelago's patterns of (primarily maritime) mobility, increasing trend towards pre-marital intercourse, and the existence of strong socio-cultural barriers that make it difficult for the young to acknowledge being sexually active, particularly amidst Indonesia's 'reproductive revolution[6]' (Ford et al., 1997). In this specific study, the use of a mixed-methods approach revealed that cultural norms and larger socio-political structures were impacting significantly on health promotion efforts surrounding HIV/AIDS in South Sulawesi (Ford et al., 1997).

Using mixed methods within a single project can significantly enhance the rigour of the findings as the convergence of data provides increased measurement reliability and validity. Quantitative research is strong on reliability (i.e., findings can be replicated) but low on validity (Scarcapi, 1993; Kirk and Miller, 1986). At the same time, qualitative research has high validity but low reliability (i.e., contextual studies are variable) (Babbie, 1989). As such, using a mixed-methods approach may result in a more rigorous and thorough study, particularly as one method highlights the methodological and epistemological

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[6] A model, national family planning program.

deficiencies related to the other (Tashakkori and Teddlie, 1998). While positivist strategies are quite capable of producing the correlations between a number of health variables, they are less capable of providing contextually informed interpretations of those relationships. By emphasizing time and process, an interpretive approach can isolate explanatory factors that might otherwise be opaque in a quantitative design (Eyles, 1998), thereby highlighting the utility of pragmatic approaches that draw upon both.

A pragmatist approach is also particularly appealing within the sphere of public health, as it can give human agency to health issues when other scientific approaches provide evidence that might otherwise disconfirm public perceptions of particular events. As Cole (1986) notes, such situations are often found in the field of environmental health where outbreaks of concern may affect small populations with low doses and physiological outcomes that are perceived by those at risk, rather than diagnosed by health professionals. The importance of perceived exposure to environmental contamination events derives from evidence that the impacts of environmental contamination are every bit as 'real' as the impacts of actual contamination (Dunn et al., 1994). In such cases, qualitative methods can follow quantitative approaches in attempt to place human experience as legitimate and worthy of professional attention (Eyles, 1998).

2.4 The Geographies of Aboriginal Health in Canada

Within the health geography literature, just a small base of research has explored the place-based dimensions of Aboriginal health in Canada. Drawing from the 1991 Aboriginal Peoples Survey (APS), Wilson and Rosenberg (2002) explored the role of traditional activities in enhancing health, and concluded that

First Nations' health is significantly enhanced by culture. Though Wilson and Rosenberg (2002) found few statistically significant relationships between health status and traditional activities, they argue that limitations of the APS and other conceptual issues warrant the need for more nuanced analyses (i.e., qualitative studies) to explore the links between health, cultural attachment, and place.

Newbold (1998) also drew from the 1991 APS to explore the health status of Canadian Aboriginal peoples (North American Indian, Métis and Inuit), along with their perceived community health problems and proposed solutions to these issues. Newbold's (1998) results indicate that geographic location (reserve, urban, rural and North) is a significant factor in terms of self-rated health status and use of physician services, and that these are sensitive across group identity. Perceived community health problems include drugs, cancer and arthritis, and the corresponding solutions included education, counseling and service access. Newbold (1988) concludes that provision of health services is insufficient to remove health disparities on its own; broader social-welfare provisions must be considered.

In 2003, Wilson (2003) expanded the literature on therapeutic landscapes (e.g., places with 'an enduring reputation for achieving physical, mental, and spiritual healing' (Gesler, 1991)), as she qualitatively explored the everyday lives of the Anishinabek (Ojibway and Odawa) of Northern Ontario, Canada. Wilson (2003) demonstrated that culture is an important component of the link between health and place in everyday life, and she concluded that Anishinabek have distinct cultural conceptions of health that emphasize the importance of balance between all aspects of life, including the land, which represents more than just the physical or symbolic spaces in which community members carry out their daily lives. In 2003, Benoit et al. (2003) explored 'healing places' for urban

Aboriginal women in downtown Vancouver's Eastside. Benoit et al. (2003) sought to give agency to homeless Aboriginal women who indicated that in order for healing places to be effective, a balance must be struck between Aboriginal and Western ways of healing practices and holistic practices.

As approximately half of Canada's Aboriginal population now lives in urban areas, it has become increasingly important and necessary for health policy that we understand characteristics of urban environments, in particular how Aboriginal populations 'fit' within this environment. Peters (2001; 2000a; 1996a; 1996b) has examined the challenges of Canada's growing urban Aboriginal population, including barriers of access to social services, and strategies for coping with poverty and marginalization in Prairie cities. Peters has also explored the concept of Aboriginal self-government across varying contexts, including its usefulness in maintaining food security in the North (2000b), and in urban contexts as well (1992).

2.5 The Social Determinants of Health

The World Health Organization defines health as "a complete state of physical, mental, social and emotional well-being... it is a resource for living that enables people of all ages to realize their hopes and needs, and to change or cope with the environments around them" (WHO, 1946). The evolution of conceptualizations of health - from more than simply the absence of disease - set the stage for a critical reflection of the biomedical paradigm and the emerging interest in non-medical determinants of health (i.e. the social environment) (Rootman and Raeburn, 1994).

This thesis is framed empirically within the population health framework (Evans and Stoddart, 1994). Population health is a framework for understanding that economic, social and environmental structures can both support and constrain the health of community members (Raphael, 2001), thereby moving conceptual understandings of health and disease beyond the traditional domains of genetics and access to health care. Population health was founded in the 1980's by an interdisciplinary group of economists and health policy analysts of the Canadian Institutes for Advanced Research (Frank, 1995). Conceptually, population health emerged as a framework for thinking about why some people, and peoples, are healthier than others – that is, a conceptual framework for the determinants of health at individual and population levels (Frank, 1995; Evans et al., 1994). The main tenets of this framework are three-fold. First, the major determinants of human health status, particularly among advanced, capitalist societies, are not those of medical care inputs and utilization, but cultural, social and economic factors – at both the population and individual levels (Evans and Stoddart, 1994). The effect of these factors is expressed universally through profound social gradients in health status (Wilkinson, 1997). Second, at the population level, societies with both a high level and a relatively equitable distribution of wealth enjoy higher levels of health status (Kaplan and Lynch, 1997). Third, at the individual level, one's immediate social and material environments and the way that these environments interacts with one's psychological resources and coping skills are important determinants of health (Frank, 1995).

Throughout the world, people who are vulnerable and socially disadvantaged have less access to health resources, get sicker, and die earlier than people in more privileged social positions (Evans et al., 2001). The greatest share of health problems is attributable to the social conditions in which people live and work, referred to as the social determinants of health (Marmot and

Wilkinson, 1999). Perhaps the best empirical evidence linking mortality with social determinants of health comes from the Whitehall Study of British Civil Servants (Marmot et al., 1984). In the Whitehall study, 17 530 civil servants were classified according to their social position (i.e., grade) within the United Kingdom's government hierarchy (from lowest grade to highest grade) and their mortality was recorded over ten years. Marmot et al. (1984) found a steep inverse relationship between social position and mortality. Compared with those in the highest grade, men in low-grade positions had 3 times the mortality rate from coronary heart disease, from a range of other causes, and from all causes combined. Between 1985 and 1988, Marmot et al. (1991) repeated these methods in the Whitehall II Study, to examine the degree and causes of the social gradient in morbidity in a new cohort of 10,314 civil servants (6900 men, 3414 women) aged 35-55. Despite the 20 years separating the two studies, Marmot et al. (1991) found no decrease in social class difference in morbidity. Results indicated an inverse association between employment grade and prevalence of a number of diseases, including angina, electrocardiogram evidence of ischaemia, and symptoms of chronic bronchitis.

Since the Whitehall Studies, literally hundreds of studies have identified the association between one's health and their social position. Poverty, social exclusion, poor housing and poor health systems are among the main social causes of ill health, those to which Rose (1992) refers to as the 'cause of the causes.' These refer to the social conditions that give rise to high risk of non-communicable disease, whether acting through unhealthy behaviours or through the effects of impossibly stressful lives (Marmot, 2004). Increase in social position means increased access to resources, such as money, power, prestige and the kinds of interpersonal resources embodied in the concepts of social support and social networks. Link and Phelan (1995: 87) point to these resources as the ‘fundamental’ cause of health and disease. Increased access to these resources means that those in higher levels of social standing are better able to avoid health risks or to minimize the consequences of disease once it occurs (Link and Phelan, 1995). Clearly then, there is a strong relationship between one’s health and the social resources to which one has access, such as income, housing and socially supportive ties.

2.6 The Social Determinants of Aboriginal Health

Aboriginal peoples endure a disproportionate burden of disparity related to workforce participation, poverty, education and sub-standard living conditions. The Aboriginal Peoples Survey (Canada, 1991) indicated that in 1990, 28% of all Aboriginal people (greater than 15 years old) relied on social assistance for at least part of the year, marking a three-fold difference from the non-Aboriginal rate at 8.1%. Moreover, the Aboriginal unemployment rate was 19.4%, twice that of the general population of Canada (Canada, 1991), and the rate of on-reserve unemployment was even higher at 31%. The highest unemployment rate in the Aboriginal population is among Inuit males in the region of Nunatsiavut (Newfoundland/Labrador), where rates were 41.5%. Comparisons between on and off reserve Indians and the non-Aboriginal Canadian population indicates that, overall, Aboriginal household incomes are substantially lower than their non-Aboriginal counterparts (Adelson, 2005). The average income for the total on and off reserve Indian population was $12,800 in 1991, approximately one half of the reference population income of $24,100. In 2001, the median income for Inuit adults was much lower than that for all Canadians: $13,699 compared to

$22,120. Considering that costs of living are significantly higher in the North, these lower incomes have to go a long way (Inuit Tapiriit Kanatami, in progress).

With regard to education, while First Nations children are staying in school longer than in the recent past,[7] there remains an across-the-board lag in completion rates at all levels of education when compared to the non-Aboriginal population (Adelson, 2005), and Inuit people's educational attainment is either lower than or comparable to First Nation's rates, with proportionately fewer Inuit attaining a university degree. 48% of off-reserve Aboriginal children are completing Grade 12 (Canada, 2001), and school drop-out rates are two to four times higher than in the general population (Goulet, 2003).

Inadequate and insufficient housing also remains a problem across Aboriginal Canada, as many Aboriginal communities lack basic sanitary infrastructure. Comparing Aboriginal and non-Aboriginal Canadian housing indicators, homes lived in by Aboriginal individuals/families are twice as likely to be in need of major repair (19.6% versus 9.8%), 90 times more likely to have no piped water supply (9.4% versus 0.1%), 5 times more likely to have no bathroom facilities (3.2% versus 0.6%), and 10 times more likely to have no flush toilet (5.3% versus 0.5%) (Canada, 1991). Moreover, 17% of off-reserve Aboriginal people and 53% of Inuit live in crowded conditions (defined as 1 or more people per room), compared to 7% of all Canadians (Canada, 2001).

Scholars argue that the burden of health and social disparities borne by Aboriginal Canada are rooted fundamentally in colonialism and a historically marginalized position within the Canadian social system (Waldram et al., 2006; Adelson, 2005; Warry, 1998). These health disparities manifest from a long history of oppression, systemic racism, and discrimination, all which are

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[7] In 1997-98, 74% stayed in school until grade 12 versus 37% a decade earlier.

inextricably linked to unequal access to resources such as education, training and employment, social and health care facilities, and limited access to and control over lands and resources. At the individual level, social and material deprivation interacts with one's psychological resources and coping skills to form important health determinants (Frank, 1995). At the population level, widespread poverty is embodied as social upheaval, mental illness, violence, crime and suicide (Adelson, 2005), and is a fundamental contributor of disease, crises, and social suffering experienced by the Aboriginal population (Fontaine, 2005).

Broadly defined, social suffering results from what political, economic and institutional power does to people and, reciprocally, from how these forms of power influence responses to social problems (Kleinman and Kleinman, 1997). Elias (1996) investigated the relationship between acute social problems – what he calls 'social pathologies' – and worklessness in Aboriginal communities. Elias (1996) found that unemployment is linked to feelings of powerlessness and dependency on government. Along the same lines, Warry (1998) states that current patterns of social suffering experienced by Aboriginal peoples are not only the result of poor economic conditions, but directly attributable to low cultural esteem, and lack of cultural identity, which is critical to feelings of self-worth (Warry, 1998). These feelings of dependence and low self-worth persist, and manifest as health and social problems over time (e.g., family violence, alcoholism, suicide). Among the outcomes of such a loss of control over one's life results in a plethora of social suffering such as structural violence (Farmer, 1999), including suicide, self-injury and other self-destructive and violent behaviours (McKeown et al., 2004; Adelson, 2005). In relation to the problem of youth suicide among Inuit, O'Neil (1986) advocates a detailing of what he calls 'colonial stress.' Specifically, he utilizes a narrative approach to detail elements of the colonial stress he associates with the problem, including the following elements: (1) the stress of definition, (2) the stress of isolation, (3), the stress of transition, (4) the stress of timing (i.e., timing the transitions from one phase of life and personal development to another) and (5) the stress of consolidation (strengthening the identities an coping styles adapted to deal with the stresses of transition into adulthood at a particular historic moment). O'Neil (1986) advocates these are useful categories that suggest a relationship between stress experienced by individuals and the social and historical contexts in which individuals are located. Suicide in Aboriginal Canada is the tragic end result of social suffering – a toxic mix of poverty, powerlessness, depression, and increasingly, young age (Tester and McNicoll, 2003; O'Neil, 1986). Social suffering, in this respect, can be understood in terms of the psychosocial pathways from economic inequity to health disparities (Frohlich et al., 2006).

2.7 Social Support: New Directions for Aboriginal health

Over the last 30 years there have been hundreds of articles and books on issues related to social support and their connections to health (Berkman, 1995). It is now widely recognized that social relationships have powerful effects on physical and mental health. In fact, research suggests the health effect of social relationships may be as important as established risk factors such as smoking, obesity and high blood pressure (House et al., 1988; Berkman and Syme, 1979).

Some of the best evidence to substantiate this link comes from the INTERHEART study, a global study incorporating data from greater than fifty countries, which identified that 90% of the risk for initial myocardial infarction (i.e., heart attack) can be explained by 9 risk factors (Yusuf et al., 2004). Of these 9 risk factors, nearly 33% of the global Population Attributable Risk was due to psychosocial factors, which includes stress, social isolation and social support. The global effect of these psychosocial variables was less than that for smoking, but comparable with hypertension and abdominal obesity. The INTERHEART study therefore makes a substantive case for the importance of psychosocial factors, including social support, in the maintenance of health and risk of disease and mortality.

The mechanisms by which social relationships influence health and mortality remain one of the most important and least understood aspects of research on social ties and individual well-being (Umberson, 1987). In a review of the pathways through which social ties are linked to mortality, Umberson (1987: 307) describes four general categories: (1) individual attributes (e.g., personality characteristics, stress-coping strategies, and psychological impairment); (2) behavioural mechanisms (e.g., health enhancing or health-damaging health behaviours); (3) physiological or biological mechanisms (e.g., neuroendocrine responses); and, (4) buffering (e.g., prevention of situational factors such as chronic strain, life events, or environmental stressors).

As described in previous sections of this review, impressive gains have been made in describing and understanding the links between measures of material deprivation and health outcomes among the Aboriginal population of Canada. It is well understood that the health inequalities endured by Aboriginal Canadians reflect varied “upstream” determinants of health (Frohlich et al., 2006; Waldram et al., 2006; Bartlett, 2003; Kirmayer et al., 2003) such as the legacies of colonialism and its resultant socioeconomic, political and environmental marginalization. What is not well understood, however, is the means by which these upstream determinants of health have interacted with the more proximal, social determinants of health, such as social support, to influence patterns of

Aboriginal health at the community level. Very little is known about the mechanisms that link social support and health within the Aboriginal population, nor of the processes through which social support is created, sustained or accessed by this population.

Within the literature on Indigenous health, few authors have examined the connections between social support and health outcomes. Iwasaki et al. (2005) drew from a series of focus group interviews to better understand the ways in which Aboriginal peoples with diabetes cope with stress. A key emerging theme was that of interdependence/connectedness. Their results indicate that social supports provide opportunity for “sharing” problems and feelings, and for gaining encouragement and strength. In the context of youth suicide among British Columbia’s First Nations (*n* = 196), Chandler and Lalonde (1998) illustrated how incidence of suicide is variable across communities, and linked closely to the existence of local social institutions (e.g., land claims, self-government, cultural facilities), which the authors identify as markers of ‘cultural continuity.’ Chandler and Lalonde’s (1998) work demonstrates the protective role of cultural continuity upon prevalence of youth suicide, as they found rates of youth suicide to be significantly lower, and in some cases non-existent, in communities that shared such markers of cultural continuity.

In an American study, Chong and Lopez (2005) assessed the relationship of social networks and social support to the psychosocial functioning (i.e., self-efficacy, self-esteem, anxiety, depression, and hostility) of 159 American Indian women undergoing residential substance abuse treatment. Their results indicated that social support and active participation by clients’ families during treatment was significantly related to improved psychosocial functioning. Chong and Lopez (2005) concluded that interventions for substance abuse should aim to include family and friends in clients' treatment, and they also identified the need for further research to study other types of social networks (i.e., beyond family), and explore further how different positive social networks can be developed to counteract the impact of negative social networks that represent the client's real world. Another American study evaluated the efficacy of 15 years of a public health–oriented suicidal-behavior prevention program among youths living on an American Indian reservation. Over the years, the program evolved into a broad, community-wide systems suicide prevention model that solicited active involvement from key constituencies— tribal leadership, health care providers, parents, elders, youths, and clients—in its design and implementation (May et al., 2005). During the course of the program, all suicides, suicide attempts, and suicidal gestures were monitored. Results indicated a substantial drop occurred in suicidal gestures and attempts. Suicide deaths neither declined significantly nor increased, although the total number of self-destructive acts declined by 73% (P=.001). May et al. (2005) note that community involvement in the program was critical for developing strategies through which to address issues identified in a culturally, environmentally, and clinically appropriate manner. Combined, these studies make the point that connections between the individual, family and greater community – and the resources implicated by, and shared within this social network – appear to have important protective properties for health.

The literatures reviewed in earlier sections of this chapter point to a significant paradox in terms of the role played by social support in determining Aboriginal health. Despite the tight-knit, socially cohesive social structures which historically characterized Aboriginal families and communities across Canada (Waldram et al., 2006; Barsh, 1994; Burch, 1986), population-level patterns of health suggest that these social relationships are not working to promote Aboriginal health as they once did (RCAP, 1996). Given what we know about the health protective qualities of social support (House et al., 1988; Berkman and Syme, 1979), why is it that current patterns of Aboriginal health reflect such distinct markers of social dysfunction, such as suicide, abuse, and mass unemployment? Potential explanations relate explicitly to Aboriginal people's experience of colonialism and the sociocultural disruption and material deprivation that have ensued in so many Aboriginal communities following years of environmental dispossession (Waldram et al., 2006; Adelson, 2005; Kirmayer et al, 2000). As we have learned from the social epidemiological literature, lower social position reduces access to kinds of interpersonal resources embodied in the concepts of social support and social networks (Link and Phelan, 1995) and it can negatively impact on adult behaviour and psychosocial characteristics (Lynch et al., 1995).

What is not well understood in the Canadian Aboriginal context however, are the pathways and mechanisms through which material circumstance, and other such effects of colonialism, has been embodied in concepts of social support to affect patterns of Canadian Aboriginal health. Drawing from a mixed-methods approach including quantitative analyses of the 2001 Aboriginal Peoples Survey and qualitative analyses of interviews with 26 First Nation and Inuit Community Health Representatives, this thesis moves the examination of health and social support beyond description, and into a more critical analysis of the social-structural processes through which social support influences health in the every day lives of Aboriginal people. In the following chapters, this thesis addresses the paradox raised above to provide some understanding into the social, political and cultural complexities that can impact on the ability of social support to determine health among Canadian Aboriginal peoples.

CHAPTER THREE

Exploring Indigenous concepts of health: The Dimensions of Métis and Inuit Health

Chantelle A.M. Richmond[1] Nancy A. Ross[1] Julie Bernier[2]

1. Department of Geography, McGill University, Montreal, Canada
2. Health Analysis & Measurement Group, Statistics Canada, Ottawa, Ontario, Canada

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3.1 Abstract

Health is an intangible, multidimensional construct that is culturally variable. Informed by cultural frameworks, our analyses explore Canadian Indigenous health concepts. Drawing from the 2001 Aboriginal Peoples Survey, we address two objectives: to explore dimensions of health for Métis and Inuit populations; and, to examine the stability of these dimensions across and within cultural and geographical contexts. Principal components analysis on the full Métis sample (n=14,127) resulted in four dimensions (social support, physical function, physical fitness, psychosocial wellness), explaining 64% of the variance. For the full Inuit sample (n=3,979), four dimensions emerged (social support, personal wellness, physical function, community wellness), explaining 59% of the variance. These patterns were consistent across numerous sub-analyses (age, gender, geographic region) with the exception of Inuit elderly and Nunatsiavut Inuit, for whom patterns emphasized 'social limitations due to physical function' and 'personal wellness,' respectively. While our most profound finding pointed to the universality of social support, these findings also affirm the multidimensionality of Métis and Inuit health concepts. Contrary to the current 'individual-based' system, Indigenous health policy must encourage a multidimensional approach, one that connects individuals to their communities. Improving Indigenous peoples' quality of life requires policy that is community-based and informed by Indigenous perspectives.

3.2 Introduction

A wealth of research illustrates the inequitable burden of health and social disparities endured by Indigenous[8] Canadians (Adelson, 2005; Shah, 2004; Young, 2003; Tjepkema, 2002; MacMillan et al., 1996). Current patterns of health and social suffering reflect the combined effects of colonial oppression, systemic racism and discrimination, as well as unequal access to human, social and environmental resources (Frohlich et al., 2006; Waldram et al., 2006; Iwasaki et al., 2005; Richmond et al., 2005; Bartlett, 2003; Wilson and Rosenberg, 2002; Thouez et al., 1989). Because such sizeable disparities exist between Indigenous and non-Indigenous populations, health conditions of the Indigenous population have generally been described in relation to the non-Indigenous population. It is arguable that these kinds of comparisons are irrelevant, however, as Indigenous and non-Indigenous concepts of health are shaped by distinct worldviews and cultures of experience – those which are undeniably different between the two populations. Rarely has attention been paid to the diversity of health concepts *within* the Indigenous population itself. Recently, there has been a call for research to explore health concepts from within the Indigenous population (Bartlett, 2003; Wilson and Rosenberg, 2002; Kirmayer et al., 2000) while drawing upon health frameworks that integrate Indigenous perspectives that may be useful for Aboriginal health policy development (Bartlett, 2005; Kenny, 2004; Castellano, 2002; Dei et al., 2002). In response, we draw upon Canada's 2001 Aboriginal Peoples Survey (APS) to address the following objectives: 1) to explore the dimensions of health for Canada's Inuit and

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[8] The federal government of Canada legally recognizes Indigenous peoples of Canada through the *Constitution Act* (1982) as 'Aboriginal,' a population encompassing "First Nations, Métis and Inuit." In referring to Aboriginal peoples, we choose to use the term 'Indigenous,' the exception being in cases wherein we refer explicitly to federal terms and references (as in the federal survey, the Aboriginal Peoples Survey, from which the data of this manuscript originate).

Métis populations; and, 2) to examine the stability of these dimensions across and within cultural and geographical contexts.

3.3 Indigenous Concepts of Health

The frameworks guiding our research on Indigenous health concepts recognize that health is shaped by larger social structures, including family, community, nature and the Creator (Svenson and Lafontaine, 1989; Bird, 1993; Little Bear, 2000; Boyd and Associates, in progress). Health is achieved by maintaining a balance of physical, mental, emotional and spiritual elements (Svenson and Lafontaine, 1989). A major paradigm within First Nations and some segments of the Métis population of Canada is the medicine wheel, which encompasses a wide conceptual understanding of life and the inter-relatedness of all its functions; "life, time, seasons, cosmology, birth, womb, and earth are intrinsically located in the symbology of the circle" (Bird, 1993). Though the medicine wheel originates from Plains Indian philosophy, Little Bear (2000) argues there is enough similarity among Indigenous philosophies to apply these concepts generally, though differences in concepts and emphases may be held by certain Indigenous nations. A recent study by Bartlett (2004) identified mental/intellectual, physical, emotional and spiritual dimensions to be important concepts of health among Métis adult and elder women. Typically, the understanding is that each person has a physical part (the body and its physical functioning) and a spiritual part (connection to the spirit world), both of which are mediated by the emotional and mental capacities of the individual (Svenson and Lafontaine, 1989). Among Inuit, similar concepts are captured within *inuuqatigiittiarniq*, a holistic worldview of Inuit health (Boyd and Associates, in progress). Beyond the social dynamics of a community, *inuuqatigiittiarniq* also depends on the balance and harmony of economic, cultural, environmental and biological factors (Boyd and Associates, in progress). A careful balance of factors manifests as *inummarik* – a most genuine person – in a continuous lifelong process of developing interaction with people and animals, community and environment (Boyd and Associates, in progress). Our theoretical approach is informed by these ideologies and recognizes that Indigenous concepts of health reflect individual level attributes (e.g., chronic disease, physical activity limitations) *and* broader societal factors (e.g., social supports, community wellness).

Concepts of health among Indigenous societies around the globe place marked emphasis on the larger social system within which the individual lives (Australia, 2004; New Zealand, 2003; Casken, 2001; Durie, 1994), and incorporate three familiar concepts: holism, balance and interconnectedness. In New Zealand, the Maori Public Health Action Plan summarizes three Maori models of health: *Te Pae Mahutonga* (Southern Star Cross constellation), *Whare Tapa Whā* (health as a house), and *Te Wheke* (the octopus) (New Zealand, 2003). Of these three models, *Whare Tapa Whā* provides a multi-dimensional concept of Maori health and wellbeing that extends beyond physical health to recognize the dependence of health on a balance of four main dimensions – *taha wairua* (the spiritual side); *taha hinengaro* (thoughts and feelings); *taha tinana* (the physical side); and *taha whanau* (family) (Durie, 1994). Represented by four walls of a house, the fundamental crux of this metaphor for health holds that if one of these walls should fall, the house will collapse. From Australia, the National Aboriginal Health Strategy Working Party defines health as not just the physical well-being of the individual, but the social, emotional and cultural wellbeing of the whole community (Australia, 2004). This definition incorporates a *whole-life* view, including the cyclical concept of life-death-life. The concept of holism is central to ideas of health and wellness among native Hawaiians, as are dimensions of spirituality and culture (Casken, 2001). Traditional native Hawaiian concepts of health encompass cultural values of *lokahi* (balance), *pono* (doing the right thing), and *kokua* (working without expecting reward), and aim to strengthen and protect the family (extended family) or *ohara* and larger community, thereby conceptualizing health not as a personal burden, but one that is shared by the whole community (Casken, 2001).

3.4 Data and Methods

Our analyses draw from the 2001 Aboriginal Peoples Survey (APS), a rich source of data on the demographic and life conditions of Indigenous Canadians. The APS was first conducted in the fall of 1991 and its principal purpose is to identify the needs of Indigenous people through focus on issues of health, language, employment, income, schooling, housing, and mobility. Following the release of the report of the Royal Commission on Aboriginal Peoples (Canada, 1996) – which drew heavily on the 1991 data – Statistics Canada was mandated to coordinate a second APS in conjunction with numerous national Aboriginal organizations, and federal departments representing Aboriginal interests (Canada, 2001). The survey was born from the realization by that Aboriginal people's health and social conditions will not improve if we cannot adequately quantify them, and the formidable effort that went into producing and carrying out the APS must be commended as it is the first national survey of its kind.

For the 2001 APS, four surveys were developed to capture the cross cultural variation that exists among the greater Aboriginal population, including (i)

Core Survey (all Aboriginal adults 15+ years of age), (ii) *Children's Survey* (all children <15 years of age), (iii) *Métis Supplement* (Aboriginal adults identifying Métis status), and (iv) *Arctic Supplement* (Aboriginal adults residing in Arctic communities) (Canada, 2001). The content of the health section of the core survey of the APS was informed largely from pre-existing surveys used by the federal government, in particular the Canadian Community Health Survey. The Métis and Arctic supplements were designed through the input of Aboriginal groups, communities and national organizations with regard to survey content, geographic areas to be covered, and subpopulations to be included. Pre-testing of the core survey and supplements occurred in 2000, and following months of discussion between various groups involved its development, Statistics Canada approved the final instruments in early 2001. Regarding the development of the Arctic supplement, Usher et al. (2003: 191) comment that "few other large-scale surveys, whether administered by a public or a private agency, have been as cooperatively developed and carefully pre-tested as this one, although the practice is becoming more common." The 2001 APS was translated into 17 Aboriginal languages, and achieved a response rate of 84.1% across 219 communities (Canada, 2001).

Principal Components Analyses (PCA) methods (Fabrigar et al., 1999; Shadbolt et al., 1997; Hatcher, 1994) were used to explore the dimensions of Métis and Inuit health. Similar methods have been used to explore health dimensions in other populations (Bernier et al., 2004; Scott et al., 2000). In the context of our study, these methods were used to explore correlations between a number of health-related variables of the Métis and Inuit supplements of the 2001 APS (see Table 3.1), thereby allowing us to examine the broader dimensions of

Métis and Inuit health. All analyses were undertaken on the APS master file at Statistics Canada using SAS software.

One major design issue surrounding the use of PCA methods relates to variable selection. If a researcher inadequately samples measured variables from the domain of interest, there is a risk of failing to uncover important common factors. Conversely, if measured variables irrelevant to the domain of interest are included, then spurious common factors might emerge or true common factors might be obscured (Hatcher, 1994). The theoretical frameworks guiding the selection of variables is therefore of paramount significance to the relevance of the findings. The variables selected for analyses include those recognized by Indigenous health concepts (Svenson and Lafontaine, 1989; Bird, 1993; Little Bear, 2000; Boyd and Associates, in progress) such as the medicine wheel and *inuuqatigiittiarniq*, and they relate to: health function and disability, social function, social relationships, mental health, community participation and wellness, leisure activity, and spirituality (*Table 3.1*).

Our analyses drew heavily from the Métis and Arctic supplements, and also incorporated common variables from the Core Survey. In determining the number of health dimensions to retain in each analysis, we drew from four criteria: the eigenvalue-one criterion, the scree test, the proportion of variance accounted for, and the interpretability criterion (Hatcher, 1994). Of these four criteria, the interpretability criterion was deserving of the most weight as this stage of analysis aids in determining the conceptual validity of the resulting pattern of dimensions, and provides the analyst with the opportunity to refer back to the theoretical frameworks that guided initial variable selection to ensure that the patterns make sense, conceptually. *Figures 3.1* and 3.*2* display the geographic regions covered by our analyses.

Table 3.1: Health-related variables from Arctic and Métis supplemental surveys[a]

Métis supplement variables	**Arctic supplement variables**
1. *functional difficulty*	1. *functional difficulty*
2. *disability*	2. *disability*
3. *chronic condition*	3. *chronic condition*
4. *positive social interaction*	4. *positive social interaction*
5. *emotional support*	5. *emotional support*
6. *tangible support*	6. *tangible support*
7. *affection & intimacy*	7. *affection & intimacy*
8. *perceived social problems*	8. *perceived social problems*
9. self-assessed depression	9. feelings of nervousness
10. self-assessed spirituality	10. feelings of calm
11. number of leisure activities	11. "blue" feelings
12. maximum leisure expenditure	12. feelings of happiness
	13. "down" feelings"
	14. community participation

[a] Variables in italics are those drawn from the Core Survey.

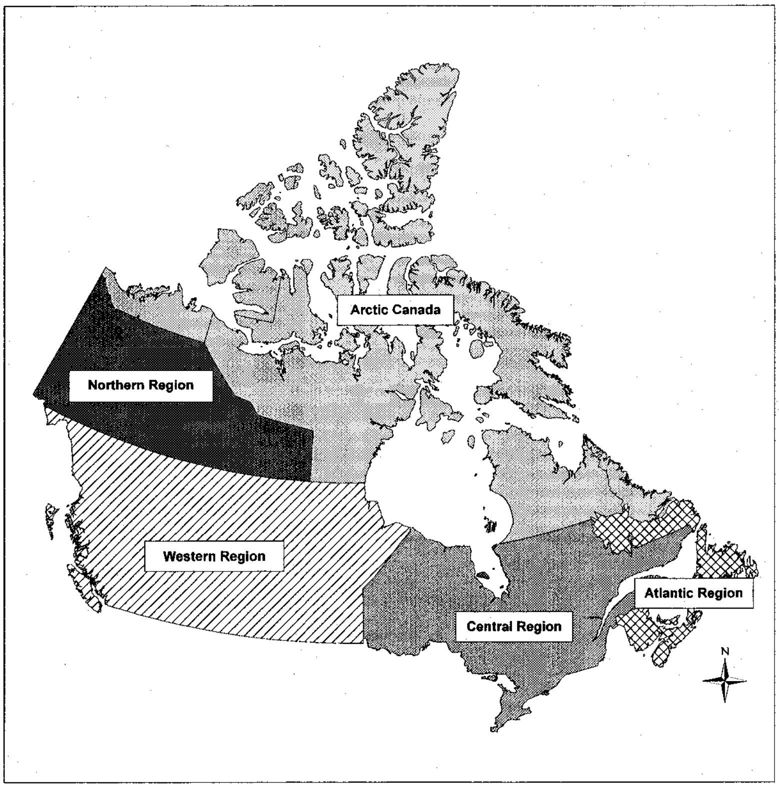

Figure 3.1: Métis Regions of Canada as delineated by geographical response

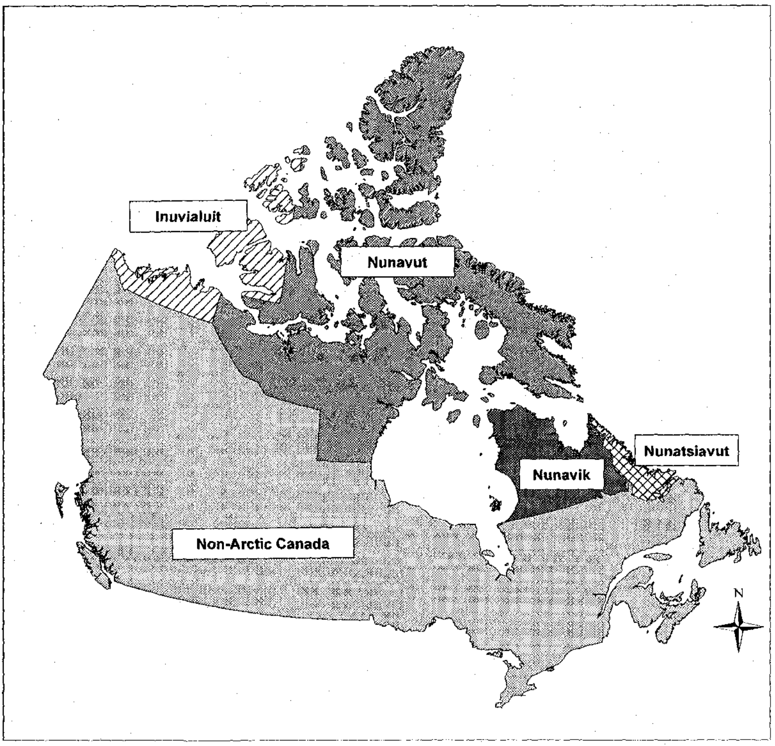

Figure 3.2: Arctic Regions of Canada

3.5 Results

Our analyses resulted in 11 and nine PCA's on Métis and Inuit samples, respectively (*Table 3.2*). These results are presented in two general sections. Section one describes the dimensions of health for the full Inuit and Métis samples, and section two describes results of the sub-analyses, which considered the effects of age, gender and geographic location on Métis and Inuit health dimensions.

Table 3.2: Sample sizes of the Métis and Inuit analyses

Unit of analysis	n	Unit of analysis	n
Métis Full sample	14127	**Inuit Full sample**	3979
Métis by gender		**Inuit by gender**	
Males	7035	Males	1976
Females	7092	Females	1991
Métis by age		**Inuit by age**	
15-29	5256	15-29	1796[b]
30-59	7927	30-59	1932
60+	944	60+	236
Métis by geographic region		**Inuit by geographic region**	
Atlantic (Maritime provinces)	877	Nunatsiavut	315
Central (Quebec and Ontario)	1919	Nunavik	957
Western (Provinces west of Ontario)	10867	Nunavut	1993
Northern (North of 60 latitude)	410	Inuvialuit	385
Geographic Region 2		**N/A**	
Urban	6786		
Rural	7178		

[b] Not all sub-analyses add up to the total sample sizes; these reflect cases or partial non-response

3.5.1 Full Inuit Sample

Four health dimensions[9] emerged from the full Inuit sample (n=3,979), explaining 59% of the total variance: (1) social support, (2) personal wellness, (3) physical function, and (4) community wellness (*Table 3*). Social support, the primary dimension, explained 24.6% of the total variance in the observed variables and contained four variables measuring four types of social support: social interaction, emotional support, tangible support, affection & intimacy. The second dimension, personal wellness, explained 14.4% of the total variance, and was formed by five variables designed to elicit one's mental health (i.e., how often in the past month respondents have felt down, blue, nervous, calm, and happy). The third dimension, physical function, explained 12.9% of the total variance, and included disability, functional difficulty, and chronic condition. The

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[9] Labels for the dimensions of Métis and Inuit health are consistent with the language used in the 2001 APS.

fourth dimension, community wellness, explained 7.8% of the total variance and drew upon the community social problem index and the community participation index. The dimension of community wellness represents one's perceptions about the social wellbeing of their community, and the resulting extent to which they participate in community life.

Table 3.3: Inuit Dimensions of health (n=3,979)

	Social support (23.9%, 3.35)[c]	Personal Wellness (14.4%, 2.01)	Physical Function (12.9%, 1.81)	Community Wellness (7.8%, 1.09)
Emotional support	0.86	0.01	0.01	0.06
Positive interaction	0.84	-0.07	-0.06	-0.04
Affection &intimacy	0.82	-0.01	-0.01	-0.03
Tangible support	0.77	0.06	0.05	0.00
Feeling blue	0.06	0.72	0.04	0.10
Feeling nervous	0.10	0.70	-0.02	0.02
Feeling down	-0.02	0.65	0.05	-0.02
Feeling calm	0.07	-0.67	0.07	0.04
Feeling happy	0.11	-0.67	0.02	0.05
Disability	0.00	0.00	0.89	-0.07
Functional difficulty	-0.01	0.00	0.86	-0.07
>1 Health condition	0.00	-0.02	0.67	0.20
Community participation	-0.03	-0.14	0.00	0.78
Perceived social problems	0.01	0.17	0.02	0.69

[c] The first number represents the percentage of total variance explained by this component. The second number refers to the component's eigenvalue, which represents the amount of variance captured by the component. In a PCA, the first component extracted can be expected to account for a fairly large amount of total variance, and each succeeding component will account for progressively smaller amounts of variance (Fabrigar et al., 1999).

3.5.2 Full Métis Sample

Four dimensions emerged from the full Métis sample (n=14,127) explaining 64.4% of the total variance in the observed variables: (1) social support, (2) physical function, (3) physical fitness and (4) psychosocial wellness (*Table 4*). As in the Inuit pattern, social support was the primary dimension, explaining 26.7% of the total variance, and was characterized by four variables: positive social interaction, emotional support, tangible support, and affection & intimacy. The second dimension, physical function, explained 16.3% of the total variance, and consisted of three variables: disability, functional difficulty, and incidence of chronic condition. The third dimension, physical fitness, explained 12.1% of the total variance in the observed variables, and reflects a strong correlation between two variables that provide a proxy for one's level of energy expenditure: number of physical activities and maximum expenditure spent on physical activities. The fourth and final dimension of Métis health was psychosocial wellness, consisting of spirituality, depression, and perceived social problems in the community. It explained 9.2% of the variance.

3.5.3 Sub-analyses by age, gender and geographic region

Numerous sub-analyses tested the reliability of these full-sample patterns against the effects of age, gender and geographic region. With the exception of elderly Inuit and Nunatsiavut Inuit, the four-dimension patterns observed in the full sample analyses were stable. The effects of age and geographic region were observed in only two of the 18 sub-analyses, and the influence of gender was not significant.

Table 3.4: Métis Dimensions of Health (n = 14,127)

	Social Support (26.7%, 3.21)	Physical Function (16.3%, 1.96)	Physical Fitness (12.1%, 1.46)	Psychosocial Wellness (9.2%, 1.10)
Positive social interaction	0.86	-0.02	0.02	-0.04
Emotional support	0.86	-0.01	0.02	0.02
Affection & intimacy	0.83	0.01	-0.01	0.04
Tangible support	0.78	0.03	0.01	-0.02
Disability	-0.02	0.90	0.06	-0.01
Functional difficulty	0.01	0.90	0.02	-0.08
Chronic condition	0.03	0.57	-0.14	0.17
Number physical activities	0.05	0.07	0.92	0.02
Maximum expenditure	-0.02	-0.09	0.89	0.00
Perceived social problems	-0.01	-0.12	0.05	0.72
Self-assessed spirituality	0.11	0.06	-0.09	0.60
Self-assessed depression	-0.15	0.16	0.08	0.53

The patterning of health dimensions among Inuit of the Nunatsiavut region (n=315) was the only pattern for which social support was not the primary dimension *(Table 5)*. In its place was the dimension of personal wellness, explaining 26.2% of the variance in the observed variables. The second dimension was social support, explaining 12.9% of the variance. The remaining dimensions – physical function and community wellness – loaded in a fashion similar to that of other Inuit component solutions, explaining 11% and 7.9% of the variance in the observed variables, respectively.

Three dimensions of health emerged from the Inuit 60+ (n=236) sample: (1) social support, (2) personal wellness, and (3) social limitations due to physical function (*Table 6*). This matrix compressed 14 variables into three dimensions instead of four (as was the case among the full Inuit sample), thereby influencing the conceptual meaning of the resulting health dimensions.

Table 3.5: Dimensions of health for Inuit 60+ years (n=236)

	Social Support (21.6%, 3.02)	Personal Wellness (15.7%, 2.2)	Social limitations due to physical function (11.7%, 1.63)
Emotional support	0.86	-0.01	-0.08
Affection & intimacy	0.83	0.00	0.07
Positive social interaction	0.78	-0.04	-0.13
Tangible support	0.69	-0.04	0.10
Feeling blue	-0.07	0.67	0.08
Feeling nervous	0.12	0.63	-0.04
Feeling down	-0.14	0.39	0.02
Perceived social problems	0.25	0.36	-0.03
Feeling happy	0.11	-0.61	-0.01
Feeling calm	0.10	-0.68	0.11
Disability	0.02	0.02	0.91
Functional difficulty	0.03	0.04	0.85
> 1 chronic condition	0.24	0.31	0.32
Community participation	0.16	0.17	-0.56

While the first two dimensions mirrored those found in the full Inuit sample, the third dimension, social limitations due to physical function, demonstrate the limitation that aging places on the ability of this population to be an active part of their community. There is a negative association between physical function and community participation.

Table 3.6: Dimensions of Health for Inuit in the Nunatsiavut region (n=315)

	Personal Wellness (26.2%, 3.67)	Social Support (12.9%, 1.81)	Physical Function (11%, 1.53)	Community Wellness (7.9%, 1.11)
Feeling nervous	0.81	0.17	0.01	0.10
Feeling blue	0.75	-0.04	0.09	0.03
Feeling down	0.72	0.08	0.07	-0.31
Feeling calm	-0.52	0.31	0.08	-0.19
Feeling happy	-0.60	0.27	0.18	-0.10
Positive interaction	0.05	0.88	-0.03	-0.13
Affection & intimacy	-0.04	0.78	0.00	-0.03
Emotional support	-0.02	0.78	-0.07	0.22
Tangible support	0.01	0.48	-0.04	0.41
Disability	0.11	0.02	0.84	-0.01
Functional difficulty	0.05	-0.04	0.82	0.00
>1 chronic condition	-0.17	-0.05	0.69	0.16
Community participation	-0.02	0.04	0.07	0.69
Perceived social problems	0.11	0.00	0.08	0.58

3.6 Discussion

Guided by Indigenous perspectives on health (Svenson and Lafontaine, 1989; Bird, 1993; Little Bear, 2000; Castellano, 2002; Boyd and Associates, in progress) our analyses describe the patterning of health dimensions among Métis and Inuit populations as they were captured by principal components analyses of the 2001 APS, and reveal important similarities and differences in these patterns across age, gender and geographic location. To begin, we focus on the profound and unifying force of the dimension of social support in shaping concepts of health among Métis and Inuit. Conceptualized by four types of social support (positive social interaction, emotional support, tangible support, and affection & intimacy), this dimension reliably explained a substantial amount of variance among observed variables, even when taking into consideration age, gender and geographic location. Though social support is a well-recognized dimension of health in Western (Berkman and Syme, 1979; Cohen and Syme, 1985; Wills, 1985; Lin et al., 1986; Berkman, 1995; Kawachi et al., 1996; Berkman et al., 2000) and other Indigenous societies (Durie, 1994; Cummins et al., 1999; Casken, 2001; Hofboll et al., 2002; Hofboll et al., 2002; Mohatt et al., 2004) but a few examples have empirically captured this relationship among Canadian Indigenous peoples (Iwasaki et al, 2005; Daniel et al., 2004; Mignone, 2003; Mignone and O'Neil, 2005).

Our results also indicate important differences in patterns of health dimensions for Métis and Inuit. For instance, physical fitness and psychosocial wellbeing formed dimensions unique to Métis, while dimensions of personal wellness and community wellness were exclusive to Inuit. Part of this difference may be accounted for by the measures available in the survey tool. In comparison to the pointed nature of the Arctic supplement variables, which probed known Inuit-related topics (e.g., relationship with physical environment), variables of the 1991 and 2001 Métis supplements were relatively exploratory. In comparison with First Nations and Inuit, there is a scarcity of data on Métis demographics and conditions (i.e., health, education, employment, etc) (Adelson, 2005; Young, 2003). In terms of our analyses, the substantive difference across that APS survey supplements meant that only a small number of health variables from the Core Survey were available for comparative analyses. As with any principal components analysis, the resulting patterns of our analyses were undeniably structured by the available variables of the APS survey tool (i.e., what you put in is what you get out). While variable availability was influential on the emergent pattern of health dimensions, careful thought went into selecting variables that were consistent with our conceptual frameworks, and these results are informative for the development of future surveys into the dimensions of Aboriginal health, in particular those seeking to understand the social dimensions. Indeed, while the health constructs measured by the APS may be limited in their cross-cultural applicability, we must be empathetic to the fact that the APS is in its infancy (i.e. relative to other national surveys of Statistics Canada), meaning that the conceptual validity of the health measures will become more precise and accurate with greater use of the data, and with each passing revision of the survey items. Currently, the strength of the APS lies in the large sample of Aboriginal people's life conditions it was able to capture (approximately 122,000, roughly 10% of the population), and with succeeding time and experience, we are optimistic that the APS will greatly improve our understanding of the life conditions of the Aboriginal peoples of Canada.

While most intra-status analyses indicated fairly homogeneous patterning of health dimensions (i.e., within Inuit *or* within Métis), the ordering of the health dimensions for Inuit of the Nunatsiavut region was different, as personal wellness loaded as the primary dimension of health. This difference reflected the significance of mental health among Inuit in the Nunatsiavut region, as opposed to social support, which formed the principal dimension among all other regionally-defined Inuit analyses. While our analyses do not permit an explanation of the meaning behind the ordering of the dimensions of health among Inuit in the Nunatsiavut region, and why the Inuit patterns differ across geographic region, *that there is* difference across Inuit regions serves to highlight the geographic and cultural heterogeneity within Inuit peoples. That is, despite having a common Inuit status, the populations of each arctic region (i.e., Nunavik, Nunavut, Nunatsiavut, and Inuvialuit) are independent political bodies covering vast geographic space, each with unique physical, cultural and social environments. Given the massive disparities in measures of health and social status between the Inuit population and the general population of Canada, it is critical that researchers continue to describe the nature of these differences. In line with the results of these analyses, part of the answer may come from analyses that describe difference in measures of health status and mortality from *within* the Inuit regions.

While the most profound finding of our results point to the universal importance of social support, our analyses also affirm that conceptualizations of health within these two populations are multidimensional (Rootman and Raeburn, 1994). Métis and Inuit conceptualizations of health and healing are shaped by individual, physical characteristics (e.g., chronic condition, disability, physical fitness, mental health), and also by characteristics of their families and communities (e.g., social support, social problems in community, community wellness). The permeability between individual and societal characteristics was demonstrated in the third dimension of elderly Inuit health 'social limitations due to physical function' as their failing physical bodies constrain them from being active members of community. Such fluidity of health constructs was also demonstrated in the Métis dimension of psychosocial wellness, which encompassed spirituality, depression and community social problems.

In the context of Indigenous health policy, there is a great need for health promotion efforts that encourage the interaction of these multiple dimensions (Rootman and Raeburn, 1994), in particular those which connect individuals to their communities (Kenny, 2004; Castellano, 2002; Dei et al., 2002). Canadian health policy has made little effort in designing programs that promote health via social supports or community connections. As Bartlett (2005) argues, the majority of Indigenous health policy stems from an 'illness-based health care system' that attempts to treat individuals rather than populations. Such policies strive to modify individual behaviours and actions, rather than aiming at community or population-level behaviours. This approach fails to recognize that it is within the larger community context that health behaviours are learned and normalized (Coleman, 1990). Much work remains in making health policy and research that is grounded in the societal contexts of Indigenous communities (Kenny, 2004; Castellano, 2002; Dei et al., 2002).

3.7 Conclusion

Indigenous health research has tended to examine the population as a relatively homogeneous one, with little recognition of its broad cultural and geographic variation. Because of sizeable disparities between Indigenous and non-Indigenous populations however, and also because of data limitations on Inuit and Métis populations, researchers have been more or less validated in this descriptive, difference-based approach. Our paper moves beyond this paradigm, as it explores the dimensions of health for Canada's Inuit and Métis populations, and considers the stability of these dimensions across and within cultural and geographical contexts.

Informed by cultural frameworks of health (Bird, 1993; Svenson and Lafontaine, 1989; Little Bear, 2000; Boyd and Associates, 2000; Dei et al., 2002; Kenny, 2004) and based on data from the 2001 APS, the results of our analyses support four dimensions of Métis health (social support, physical function, physical fitness and psychosocial wellness), and four dimensions of Inuit health (social support, personal wellness, physical function, and community wellness). Perhaps the greatest contribution of this work points to the significance of the dimension of social support, which consistently emerged as the principal health dimension among numerous analyses of Métis and Inuit. While no difference emerged as a result of gender, key differences emerged in analyses testing age (i.e., elderly Inuit) and geographic location (i.e., among Inuit of the Nunatsiavut region).

In terms of their health and social conditions, Canada's Indigenous peoples continue to fare among the worst in Canada (Frohlich et al., 2006; Waldram et al., 2006; Adelson, 2005; Young, 2003). Improving quality of life among Canada's Indigenous population requires health policy and programs that are inclusive (Castellano, 2002; Dei et al., 2002), community-based, and informed by holistic models that recognize the multiple, interacting dimensions of Indigenous people's health (Kenny, 2004; Bird, 1993; Svenson and Lafontaine, 1989; Little Bear, 2000; Boyd and Associates, in progress). Piece-meal health policy that enables individuals, rather than communities, is just not sufficient (Bartlett, 2005), and our analyses provide some evidence to substantiate this. In all but one pattern of health dimensions, social support was the main dimension of health. Amidst the extreme social dysfunction we witness in so many Indigenous communities across Canada today, it is meaningful that our analyses should result in this finding. Despite a legacy of colonialism, it is remarkably *hopeful* that concepts and ideals central to Indigenous worldviews remain so strong today. Now is the time to put action behind words. Improving quality of life among Canadian Indigenous peoples requires more than the identification of health problems and risk factors. By working *with* and respecting the worldviews of Indigenous peoples, public policy can play a vital role in mobilizing Indigenous communities from suffering to equality and health.

Based on the exploratory nature of the analyses presented in this primary empirical chapter of the dissertation, it is clear that there is a strong link between Aboriginal health and social support. The conceptually-based analysis of this first chapter has highlighted the potential importance of social support as a key indicator of Inuit and Métis health, and has paved the direction for the remaining chapters of this dissertation, all of which address varying aspects of the relationship between health and social support among Aboriginal Canadians. The next empirical chapter draws from these results to estimate the capacity of social support for predicting self-rated health among the three groups that comprise Canada's Aboriginal populations (First Nations, Métis, and Inuit). Based on qualitative methods, later chapters of this dissertation (Chapters 6, 7 and 8) build on these analyses further to explore Indigenous-specific sources and meanings of social support, and to critically examine the mechanisms that structure this relationship.

CHAPTER FOUR

Societal resources and thriving health: A new approach for understanding the health of Indigenous Canadians

Chantelle AM Richmond, MA (PhD Candidate)
Nancy A Ross, PhD
Grace M Egeland, PhD

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4.1 Abstract

Objective: To examine the role of social support for thriving health among Indigenous Canadians.

Methods: Drawing from the 2001 Aboriginal Peoples Survey, the self-reported health status of 31,625 adults was categorized into thriving (excellent, very good) and non-thriving (good, fair, poor). Social support was measured through indices of positive interaction, emotional support, tangible support, affection & intimacy. Multivariable logistic regression analyses estimated the odds of reporting thriving health among Indigenous men and women, using social support as the key independent variable, controlling for socioeconomic conditions.

Results: Relative to women reporting low levels of social support, those reporting high levels of positive interaction (OR=1.4; 95% CI: 1.2-1.6), emotional support (OR=2.1; 95% CI: 1.8-2.4) and tangible support (OR=1.4; 95% CI: 1.2-1.5) were significantly more likely to report thriving health. Among men, only emotional support was significantly related to thriving health (OR=1.7; 95% CI: 1.5-1.9). These relationships were mediated by age, gender, Aboriginal status, and socioeconomic status.

Conclusions: Social support is a strong determinant of thriving health, particularly among women. There is a strong material basis to Indigenous health. Research emphasizing thriving represents a positive and necessary turn in the Indigenous health discourse.

4.2 Introduction

The early 1990's were a politically turbulent time for Canada's Indigenous peoples. What began as one community's struggle over land rights quickly escalated into nation-wide frustration related to Canada's colonial legacy, and the environmental, economic, and social marginalization that has transformed the health status of First Nations, Métis and Inuit populations. The Indigenous population comprises 3.4% of Canada's population and copes with a standard of living far below the non-Indigenous population (Waldram et al., 2006; Adelson, 2005; Richmond et al., 2005). Over time, these disparities have manifested into a broader process of social suffering, indicated by staggering rates of youth suicide, family violence, and other self-destructive and violent behaviours (Tester and McNicoll, 2004; Canada, 2003). Researchers have taken keen interest in the determinants of Indigenous health (Young, 1994) including poverty (Frohlich et al., 2006; Moffat and Herring, 1999; MacMillan et al. 1996; Tookenay, 1996; Thouez et al., 1989), violence (Muhajarine and D'Arcy, 1999) and access to health care (Waldram et al, 2006; Newbold, 1998). Given the wide health and social adversities faced by Indigenous Canadians, identification of their associated health outcomes has been useful for some policy development (i.e., Aboriginal Head Start, an early childhood development program), particularly in recognition that Indigenous concepts of health are shaped by larger social dynamics, including family, community, nature and Creator (Svenson and Lafontaine, 1999; Boyd & Associates, in progress).

Researchers, however, have so devoted their efforts on the determinants of disparity, that few have sought to model *thriving* health and in particular, how societal resources like social support can shape health status. In addressing this gap, we draw upon Canada's 2001 Aboriginal Peoples Survey to explore the following objectives: 1) to describe thriving health status within the Indigenous population; 2) to describe levels of social support within the Indigenous population; and, 3) to explore the relative role of social support in determining thriving Indigenous health status.

4.2.1 Thriving Health

The concept of 'thriving' originates from the resiliency literature, and refers to one's ability to flourish in response to adversity (Rutter, 1985). In the context of health and well-being, a human resiliency framework is useful for identifying characteristics that may be associated with positive health outcomes among those who experience increased risk (Carver, 1995). As O'Leary and Ickovics (1998) state, knowledge of the factors that promote thriving can provide impetus for a paradigm shift away from illness-based research toward one that understands, explains, and nurtures health. Such an approach represents a critical turn for Indigenous health researchers.

4.2.2 Health and Social Support

In Canada and around the world, the health-protective properties of social support are well-established (Cohen and Syme, 1985; House et al., 1988; Berkman et al, 2000; Marmot and Wilkinson, 1998). Social support refers to four broad classes of supportive behaviour or acts (House, 1981). *Positive interaction* refers to support received from spending time with others in social settings. *Emotional support* refers to guidance/feedback that may provide solution to a problem. *Tangible support* refers to material aid, such as having someone take you to the doctor. Finally, *affection & intimacy* relates to caring, love and empathy. These supportive behaviours operate on the level of the individual

(Marmot and Wilkinson, 1998) and community (Felton and Shinn, 1992) and it is the nature of these societal resources that provide opportunity for the development of social supports (Berkman et al., 2000). The caring and respect related to our social ties, and the resulting sense of satisfaction and well-being, can buffer against health problems (Cohen et al., 2000; Cohen and Wills, 1985) and in fact, research suggests the health effect of social relationships may be as important as established risk factors such as smoking, obesity and high blood pressure (Kawachi et al., 1996; Kaplan et al., 1988; Orthgomer et al., 1987; Schoenbach et al., 1986; Welin, 1985; House et al., 1982; Berkman and Syme, 1979).

Though many studies tend to focus on the positive effects of social supports for health, certain aspects can also be harmful (Rook, 1985; Thoits, 1985). For instance, obligatory social ties can produce stressful demands that cancel out or outweigh the positive consequences for self-esteem, competence or identity (Thoits, 1995). Our social ties can also impact on health through enforcing social pressure to engage in negative health behaviours (Burg and Seeman, 1994) (e.g., alcoholism, risky sexual activity).

4.2.3 Social Support and Indigenous Health

Few studies have explored the relationship between social support and health in the context of Canada's Indigenous population. Based on a series of principal components analyses of Canada's 2001 Aboriginal Peoples Survey, Richmond et al. (in press) found social support to be a significant dimension of Métis and Inuit health, even when controlling for cultural and geographic heterogeneity. In an exploration between smoking status and psychosocial measures among a British Columbia First Nation community, Daniel et al. (2004)

found a positive relation between social support and mastery (i.e., degree to which individuals feel in control of their lives), although it was lower for smokers than non-smokers. Another study used a series of focus group interviews to better understand the ways in which Aboriginal peoples with diabetes cope with stress (Iwaski et al., 2005). A key emerging theme was that of interdependence/connectedness; social supports provide opportunity for "sharing" problems and feelings, and for gaining encouragement and strength (Iwasaki et al., 2005). In exploring and measuring concepts related to the *structure* of social relationships in First Nation's communities (e.g. norms of reciprocity), Mignone (2003) developed a social capital framework. Mignone & O'Neil (2005) applied this framework in the context of mental health, and conceptualized the plausible mechanisms linking social capital to suicide risk/protective factors among First Nation youth. Their theoretical framework points to rates of suicide and suicide attempts that should decrease with higher degrees of social capital.

Similar connections have been established among Indigenous populations from around the globe (Hofboll et al., 2002; Cummins et al., 1999; Mohatt etr al., 2004; Hofboll, 2002; Durie, 1994; Casken, 2001; McRae et al., 1998; McFarlane et al., 1994), pointing to conceptualizations of Indigenous health that are dependent on wider social processes, and connections between individuals, families and communities (Boyd & Associates, in progress; Svenson and Lafontaine, 1999; Durie, 1994). In recognition that the structure and function of one's social relationships can impact the development of community norms and values (Coleman, 1990; Geronimus, 2000), it is critical to understand how such societal resources can shape health status.

4.3 Methods and Analyses

We used a series of multivariable logistic regression analyses on a large sample of adults (n=31,625) who participated in Canada's 2001 Aboriginal Peoples Survey (APS) to explore thriving health and the role of social support. The APS is a post-censal survey designed to describe the demographic and social conditions of participating Indigenous Canadians. The 2001 APS was translated into 17 (of approximately 50) Canadian Indigenous languages, and achieved a response rate of 84.1% across 219 Indigenous communities, including 8 Métis settlements, 53 Inuit communities, 120 First Nations communities, 9 selected large urban centres, and 35 communities with a high concentration of Indigenous people (Canada, 2001). Approximately 7% of Canada's Aboriginal population was surveyed by the 2001 APS. Informed by a series of principal components analyses indicating social support to be a powerful dimension of Indigenous health (Richmond et al., in press), we used an incremental modeling approach to explore the *relative role* of social support in explaining thriving health. By thriving health, we mean those who self-reported their health as excellent/very good in the 2001 APS. Although not a direct measure of health status, self-assessed health is a well-established proxy (Idler and Lemke, 1990; Kaplan and Comacho, 1993) and is highly correlated with mortality, morbidity, and health care utilization (Hoeyymans et al., 1997; Miilunpalo et al., 1997).

Social support, our key independent variable, was measured by indices (high/low) measuring four types of social support: positive interaction, emotional support, tangible support, affection & intimacy (see *Appendix* for specific measures). There were three measures each for positive interaction and emotional support, and one each for tangible support and affection & intimacy.

Respondents indicated how often each type of support was available to them when needed. Low levels included those whose responses corresponded with 'some of the time' and 'almost none of the time.' High levels included responses of 'most of the time' and 'all of the time.' Our approach tested three models, each one controlling for an incrementally expanded set of population health variables. We hypothesized that thriving health would be associated with high levels of social support, even when considering effects of other known determinants of health, such as socioeconomic status, health care utilization and health behaviours. Our descriptive analyses (*Tables 1* and *2*, below) identified male and female responses on measures different enough to suggest separate models for men and women.

4.4 Results

4.4.1 Thriving Health Status

Just over half of the Indigenous population (54%) reported thriving health status. While this rate is comparable with the Canadian rate at 58.4%, there is considerable difference in the structure of the Indigenous and non-Indigenous populations (for instance, in 2001 the median age of the Indigenous population was 24.7 compared to 36 among the non-Indigenous population). Men were more likely than women to report thriving health, as were those in younger age groups (*Table 1*). Métis and Inuit were significantly more likely to report thriving health than First Nations. Those living in urban areas were more likely to report thriving health than those in rural and northern areas. We saw high proportions of thriving health status among those with increased education and labour force status. Nearly 70% of those who had not seen a doctor or nurse in the past twelve months reported thriving health, and just over half of those with access to traditional medicines reported thriving health. Non-smokers were significantly more likely than smokers to report thriving health, and non-drinkers were significantly less likely than drinkers to report thriving health.

4.4.2 Social Support

APS respondents reported high levels of all types of social support (*Table 2*). Young adults reported significantly higher levels of social support than older adults - this was most pronounced for emotional support wherein elderly rates were 12% lower that those of young adults. Though men and women reported identical rates of positive interaction and tangible support, women reported higher rates of emotional support and affection & intimacy. Differences across Aboriginal status were observed. Métis consistently reported the highest rates of all types of social support, followed by First Nations. Inuit had lowest rates for all types of social support. The greatest difference (between Métis and Inuit rates) was for tangible support and emotional support, wherein Inuit rates were 14% and 11% lower, respectively. Those living in urban areas reported higher levels of all types of social support than those in northern/rural areas. A distinct social gradient in social support was noted. Those employed and with higher levels of education reported significantly higher levels of all types of social support than did those unemployed, not in the labour force or with lower levels of education.

4.4.3 Social Support determines Thriving Health among Indigenous Women but not Men

Differences in the relationship between thriving health and social support were observed among Indigenous men and women. For women (*Table 3*), all types of social support were related to thriving health, even when effects of numerous other determinants were considered. Relative to women reporting low levels of social support, those reporting high levels of positive interaction (OR=1.4; 95% CI: 1.2-1.6), emotional support (OR=2.1; 95% CI: 1.8-2.4) and tangible support (OR=1.4; 95% CI: 1.2-1.5) were significantly more likely to report thriving health. Surprisingly, a high level of affection & intimacy was negatively associated with thriving health (OR=0.9; 95% CI: 0.7-0.99). Among men (*Table 4*), only emotional support was significantly related to thriving health. Men with high levels of emotional support were 1.7 times more likely to report thriving health than those with low levels (95% CI: 1.5-1.9).

4.4.4 Determinants of Health

In terms of the wider determinants of thriving health (Epp, 1986; Evans et al., 1994) (*Tables 3 and 4*) our analyses reinforce relationships between self-rated health and a number of socio-demographic factors, environmental conditions and health behaviours previously identified in the Indigenous (Wilson and Rosenberg, 2002) and general Canadian population (Ross, 2002). Thriving health decreased with increased age. In terms of Aboriginal status, Métis women had slightly higher odds of reporting thriving health than First Nations women, and Métis men had slightly lower odds of reporting thriving health than First Nations men. Higher levels of education and participation in the work force were significantly related to thriving health, and notably, the effect of post-secondary education was stronger for women (OR=2.3; 95% CI: 2.0-2.7) than men (OR=1.7; 95% CI: 1.4-2.0). Lower incidence of perceived social problems in the community (i.e., suicide, unemployment, family violence, sexual abuse, drug abuse, alcohol abuse) was positively associated with thriving health. In terms of environmental determinants, the effect of having no major home repairs to do (i.e., roofing, other structural components) was significantly related to thriving health. Availability of traditional medicines was associated with thriving health only among women. Smoking was negatively associated with thriving health only among women, and drinkers were significantly more likely to report thriving health than non-drinkers.

4.5 Discussion

Our analyses demonstrate significant relationships between thriving Indigenous health and a number of determinants, including social support. Age was a vital determinant of both thriving health and social support. Younger Indigenous peoples were significantly more likely to report thriving health than were older Indigenous peoples, and they also exhibited higher levels of all types of social support. Although this finding disputes those from the non-Indigenous Canadian population (Ross, 2002) these differences may be related to the relatively young age of the Indigenous population, and reflective of a shift in social support toward a burgeoning younger population.

Considerable difference in the relationship between social support and thriving health was found between men and women. The stronger effect of social support on health for women has also been documented in the general Canadian population (Denton et al., 2004) however the causal pathways through which gender mediates the relationship between social support and health are not well understood (Schumaker and Hill, 1991). Studies show (Thoits, 1992; Turner and Marino, 1994; Umberson et al., 1996) that women either report more perceived support than men, or that men and women do not differ in this resource. Involvement in social networks varies by social status, and while men may have a larger pool of weak ties (related to increased employment opportunities), women tend to invest more in their relationships (Belle, 1987), thereby resulting in stronger, more intensive ties (Thoits, 1992). Other explanations (de Vries and Watt, 1996; Turner and Avison, 1987) suggest that women are exposed to higher levels of demands and obligations as a result of their social roles, and experience more stressful life events than do men, both which can affect health. Clearly, the gender influences underpinning the relationship between health and social support are important, and deserving of further exploration.

Another important finding relates to the negative association between high levels of affection & intimacy and thriving health among women. That the nature of one's social ties can cause harm forms an under-emphasized dimension of the social support and health relationship (Thoits, 1985; 1995). Because we form our sense of self or identity in the context of meaningful social ties (Stryker and Burke, 2000) negative influences can be equally damaging to identity-formation as can positive influences. This phenomenon becomes increasingly complex in populations which exhibit high levels of social support, but for whom the effect of such integration on its members is *not* protective for health (i.e., partner abuse, gang violence).

Beyond the importance of age and gender in mediating the relationship between social support and thriving health, a strong material basis (Link and Phelan, 1995) to these relationships was also evident. A positive relationship between thriving health and measures of socio-economic status consistently emerged. Among Indigenous peoples, thriving health relies on strong social supports, meaningful employment and educational attainment. Despite variations in context between Canadian Indigenous peoples and those communities from which the classic social support-health studies originate (e.g., Berkman and Syme, 1979; House et al., 1982; Schoenbach et al., 1986), the results indicate a strong parallel; social support enhances health.

These analyses are among the first health data published from the 2001 APS. Limitations relate to the nature of using secondary data, particularly in the usefulness of social supports as were defined and measured in the APS. Key differences in social support across Aboriginal status were noted, and we cannot discount the possibility that translation/interpretations of interview questions across linguistic groups may have altered the meaning of the measures, for instance among Inuit, many of whom are unilingual Inuktitut speaking. Concerning low rates of tangible support among Inuit, the discrepancy may also be related to the content validity of the measure, which asks 'How often do you have someone to take you to the doctor if you need it?' Many Arctic communities have no permanent health professional, thereby necessitating air travel to seek medical attention and making it prohibitively expensive for one to be accompanied. This measure may more accurately reflect the impact of geographic isolation on access to health service than it does tangible support. A more culturally and geographically-informed measure is necessary for the measurement of this type of social support among Inuit.

Indigenous health research has focused largely on the determinants of disparity, revealing wide health and social adversities endured by Indigenous Canadians. Our analyses examined the influence of social support and other health determinants in shaping thriving health among Indigenous men and women. Men reported thriving health significantly more than women, and women reported higher levels of emotional support and affection & intimacy than men. In terms of the relationship between thriving health and social support, all types of social support were related to thriving health among women, while only emotional support was significantly related to thriving health among men. Though we can only speculate on the causal pathways through which gender mediates the relationship between health and social support, our analyses demonstrate the influence of social support, above and beyond traditional health determinants. We are hopeful that these results may draw greater research attention to the gender effects on the health-social support relationship. Finally, our results emphasize the material basis of health, and validate population health approaches for better understanding patterns of Indigenous health.

4.6 Conclusion

In the years following the United Nation's Decade of Indigenous Peoples (1995-2004), Indigenous health research that emphasizes thriving represents a positive and necessary turn in the discourse. Many of the health disparities borne by Indigenous peoples – from around the globe – represent systemic forces that sever Indigenous peoples' connections to their traditional environments, while simultaneously disrupting social systems integral to maintenance of identity, culture and health (Durie, 2003). Public programs may produce a greater health effect by supporting initiatives that build upon positive social interactions at the community level. By focusing on the strength and utility of societal resources for health, we set the stage for a paradigm that empowers Indigenous communities to focus less on disparities with non-Indigenous populations, and more on the spirit of the people to thrive, unified, well into the future.

To better understand the determinants of thriving health, more intensive (i.e., qualitative) methods are needed to explore these relationships, with emphasis on mapping the mechanisms through which functions of our societal resources may be embodied as health outcomes (Adelson, 2005; Krieger, 2001; Berkman et al., 2000). Among Canadian Indigenous peoples, richer exploration may illuminate the means by which one's social ties mediate *or* exacerbate the effects of larger, structural forces on health (i.e., colonialism, racism). Such methods are critical for contextualizing health and social issues in terms of time and place, and for informing public health interventions and policy that makes sense to local people. It is in this direction that the dissertation moves in the following empirical chapters.

TABLES

Table 4.1 Percentage of Aboriginal population reporting thriving health, by selected health determinants
(n = 31,625)

	n	%		*n*	%
Gender			**Aboriginal status**		
Male	15389	60[a]	Métis	10195	61[a]
Female	16236	56	Inuit	2782	59
			First Nations	18604	56
Age			**Geographic Location**		
15-24	9035	69[a]	Urban	11159	60[a]
25-39	11417	62	Rural & North	20466	57
40-64	10324	47			
65+	823	27			
Labour Force Status			**Education**		
Employed	19396	61[a]	Post-secondary	1683	68[a]
Unemployed	3448	56	High school	3918	65
Not in labour force	8467	54	Trades	12701	59
			Less than high school	13315	54
Health Behaviours			**Access to Health Services**		
Non-smoker	14300	62[a]	Seen doctor/nurse last 12 months	23861	55[a]
Smoker	17325	55			
			Not seen doctor/nurse in past 12 months	7764	67
Non-drinker	9935	54[a]			
Drinker	21690	60			
			Traditional medicines in community	12402	57[b]
			Traditional medicines unavailable	19223	59

[a] P-value < .001, obtained using chi-square test
[b] P-value <.01, obtained using chi-square test

Table 4.2 Percentage of Aboriginal population reporting high levels of social support, by selected health determinants (n = 31,625)

	Positive Interaction (%)	Emotional (%)	Tangible (%)	Affection & Intimacy (%)
Sex				
Female	91	89[a]	85	91[a]
Male	91	86	85	88
Age				
15-24	93[a]	90[a]	87[a]	91[a]
25-59	90	87	83	90
40-64	89	85	84	88
65+	82	78	83	84
Aboriginal status				
Métis	92[a]	91[a]	89[a]	92[a]
First Nations	90	86	84	89
Inuit	89	80	75	85
Geographic Location				
Urban	91[b]	90[a]	87[a]	91[a]
Rural & North	90	86	84	89
Education				
Post-secondary	92[a]	93[a]	88[a]	93[a]
Secondary	92	90	88	91
Trades	91	89	86	91
< High school	89	84	82	88
Labour Force Status				
Employed	92[a]	89[a]	86[a]	91[a]
Not in labour force	89	85	83	88
Unemployed	90	84	81	88

[a] P-value < .001, obtained using chi-square test

[b] P-value <.01, obtained using chi-square test

Table 4.3 Adjusted odds ratios for reporting thriving health among Aboriginal women, by social support and other determinants of health (n = 16,236)

Variable	OR	95% CI	Variable	OR	95% CI
Social Support			**Age**		
Low positive interaction	1.00	...	15-24	1.00	...
High positive interaction	1.35	(1.16--1.57)	25-39	1.00	(0.91--1.10)
			40-64	0.76	(0.60--0.84)
Low emotional support	1.00	...	65+	0.32	(0.24--0.44)
High emotional support	2.10	(1.80--2.44)			
			Aboriginal Status		
Low tangible support	1.00	...	First Nations	1.00	...
High tangible support	1.38	(1.23--1.54)	Métis	1.16	(1.08--1.25)
			Inuit	1.08	(0.90--1.29)
Low affection & Intimacy	1.00	...			
High affection & intimacy	0.85	(0.72--0.99)	**Education**		
			< High school	1.00	...
			High school	1.40	(1.25--1.57)
Community Social problems			Trades	1.44	(1.32--1.57)
≥2 Social problems	1.00	...	Post Secondary	2.34	(2.02--2.71)
< 2 Social problems	1.16	(1.07--1.23)			
			Labour Force Status		
Geography			Unemployed	1.00	...
Rural & North	1.00	...	Employed	1.15	(1.0--1.31)
Urban	1.04	(0.96--1.12)	Not in labour force	0.96	(0.83--1.10)
Physical health			**Environmental**		
At least one chronic condition	1.00	...	Water unsafe for drinking	1.00	...
No chronic conditions	2.42	(2.25--2.60)	Water safe for drinking	1.00	(0.92--1.09)
Any disability	1.00	...	Major house repairs needed	1.00	...
No disability	3.79	(3.35--4.28)	No major house repairs	1.25	(1.15--1.36)
Health Services			**Behaviours**		
No contact health professional past 12 months	1.00	...	Drinker	1.00	...
Contact health professional past 12 months	0.64	(0.58--0.70)	Non-Drinker	0.89	(0.82--0.97)
No traditional medicines in community	1.00	...	Smoker	1.00	...
Traditional medicines in community	1.12	(1.04--1.21)	Non-Smoker	1.41	(1.31--1.51)

Note. CI = Confidence Interval

Table 4.4 Adjusted odds ratios for reporting thriving health among Aboriginal men, by social support and other determinants of health (n = 15,389)

Variable	OR	95 % CI	Variable	OR	95% CI
Social Support			**Age**		
Low positive interaction	1.00	...	15-24	1.00	...
High positive interaction	1.17	(0.99--1.37)	25-39	0.68	(0.61--0.76)
			40-64	0.42	(0.38--0.46)
Low emotional support	1.00	...	65+	0.32	(0.24--0.42)
High emotional support	1.67	(1.45--1.92)			
			Aboriginal Status		
Low tangible support	1.00	...	First Nations	1.00	...
High tangible support	1.12	(0.99--1.28)	Métis	0.88	(0.81--0.94)
			Inuit	1.01	(0.83--1.21)
Low affection & Intimacy	1.00	...			
High affection & intimacy	0.94	(0.81--1.09)	**Education**		
			< High school	1.00	...
			Trades	1.23	(1.13--1.34)
Community Social problems			High school	1.26	(1.21--1.41)
≥2 Social problems	1.00	...	Post Secondary	1.69	(1.43--2.03)
< 2 Social problems	1.11	(1.02--1.20)			
			Labour Force Status		
Geography			Unemployed	1.00	...
Rural & North	1.00	...	Not in labour force	0.68	(0.75--0.99)
Urban	1.03	(0.95--1.12)	Employed	1.32	(1.17--1.48)
Physical health			**Environmental**		
At least one chronic condition	1.00	...	Water unsafe for drinking	1.00	...
No chronic conditions	2.48	(2.30--2.68)	Water safe for drinking	0.97	(0.88--1.07)
Any disability	1.00	...	Major house repairs needed	1.00	...
No disability	2.81	(2.49--3.17)	No major house repairs	1.33	(1.22--1.45)
Health Services			**Behaviours**		
No contact health professional past 12 months	1.00	...	Drinker	1.00	...
Contact health professional past 12 months	0.97	(0.90--1.05)	Non-Drinker	0.96	(0.88--1.05)
No traditional medicines in community	1.00	...	Smoker	1.00	...
Traditional medicines in community	0.93	(0.86--1.01)	Non-smoker	1.63	(1.51--1.76)

Note. CI = Confidence Interval

CHAPTER FIVE

Prelude to the Qualitative Chapters

5.1 Introduction

One of the key limitations to writing a manuscript style thesis is that the manuscripts are often restricted in their word lengths due to journal style and formatting. This is particularly challenging for qualitative research, as editorial decisions often prompt researchers to shorten descriptions of their methodologies and concentrate instead on the substantive results (Baxter and Eyles, 1997). In the three chapters following this one, I build on the findings of the two previous chapters to examine the social support-health relationship using a qualitative approach that draws from interviews with 26 Aboriginal Community Health Representatives (CHR's). These three qualitative chapters have been written for specific scientific journals, and as such, their word lengths and stylistic formatting reflect those journal limitations, and are relatively 'short' in their detailing around the theoretical frameworks and methodological rigour through which this intensive stage of the research unfolded. In this prelude to the qualitative chapters, I therefore take the liberty of discussing, at length, how I went about 'doing' the qualitative research. I discuss my positionality, as an Aboriginal woman and health researcher, and I explain the logic I used in analyzing, interpreting, and presenting the research. I also describe the strategies employed in recruiting CHR's, the underlying theoretical frameworks and assumptions guiding this work, and the ethics involved in doing research *with* Aboriginal peoples.

5.2 Identifying the Need for a Qualitative Approach

The first two empirical chapters of this thesis draw from a positivist philosophical approach, and are based on quantitative analyses of the 2001 Aboriginal Peoples Survey (APS), undertaken while I was on internship with the Health Analysis and Measurement Group of Statistics Canada (May 2004 – February 2005). Traditional positivist approaches to health research are based epistemologically upon quantitative methods, including the collection of population-level data on health-related variables that may be analyzed mathematically. The axiomatic principle of a positivist approach emphasizes that inquiry is value-free, and makes generalizations across temporal and contextual factors. Ontologically, positivism follows that there is but a single reality (e.g., thriving health versus non-thriving health, as in the previous empirical chapter) that is external to the researcher, and knowable *only* through direct observation. This empirical process is deductive in nature, and therefore attempts to develop theories about health and disease that are capable of verification (Tashakkori and Teddlie, 1998).

During the course of the APS data analyses and interpretation, I often found myself asking questions that went beyond the methodological reaches and philosophical assumptions of the quantitative approaches drawn from in Chapters 3 and 4, those which could not be answered through further analysis of this data set. My questions were interpretive in their scope. For instance, I sought to better understand the processes through which gradients in Aboriginal health and social support come to be, how some individuals have greater access to social support than others, and what this means for the health of Aboriginal communities. I realized soon enough that these questions could not be answered through quantitative methodologies alone, and the deductive approaches I had employed in the APS analyses. As Gesler (1991) points to, quantitative approaches to health have been less useful in *interpreting* or *explaining* the role of human agency and/or culture in the construction of health and well-being. I recognized the need to draw from a humanist approach, framed by qualitative methods, that which allows us to understand how experiences of health reflect a situated culture of place and time (Dyck, 1999; Eyles, 1985).

Epistemologically, a qualitative researcher employs interpretive or hermeneutic approaches to explore, describe and understand the social world (Eyles, 1998). What makes a study qualitative is that it usually relies on inductive reasoning processes to interpret and structure the meanings that can be derived from data. Qualitative researchers seek to understand the personal, lived experience of an individual, and recognize that both time and context are important attributing factors to the creation of multiple constructed realities. Interpretive approaches enable the humanist to answer, as Rist (1984:161) has written, "...the question 'what is going on here?' at once disarmingly simple and incredibly complex." That is, interpretive approaches are important for answering exploratory and descriptive questions. The basic tenet predicating humanist inquiry to health is that knowledge may be gained subjectively (Kearns and Gesler, 2002), through qualitative methods that include in-depth interviews, focus groups, participant observation, or other qualitative techniques such as oral histories, journal-keeping, autobiography, photographs, and textual analysis (Dyck, 1999). In the context of my own work, I realized the need to draw from qualitative approaches with Aboriginal people, to listen to their experiences, and their theories and perceptions about health and its determinants, in particular as it relates to features of the social environment, and features of social support.

5.3 Making contact with the National Indian and Inuit Community Health Representatives Organization

In October 2004, I informed my committee of my intent to do some qualitative work. Given the scope of my thesis was to better understand how social support works at the community level to impact health, my committee members and I discussed the possibility of interviews with members of the National Indian and Inuit Community Health Representatives Organization (NIICHRO). We came to agreement that in-depth interviews with various First Nation and Inuit Community Health Representative's (CHR's) from across the country would provide rich perspectives about how social support impacts health within the unique contexts of their communities.

The Community Health Representatives Program (CHRP) was established in 1962 by Health Canada to strengthen and enhance existing health education programs and other activities carried out in rural and remotely located First Nation and Inuit communities. In its early days, the program oversaw 12 CHR's. Today, roughly 1000 Aboriginal Community Health Representatives (CHR's) are present in 577 First Nation and Inuit communities across Canada, and they are 90% women. CHR's receive training through the Native Community Care: Counseling and Development Diploma Program (NCC: CD), a one-year college program accredited by the Ministry of Colleges and Universities (Common and Hayward, 1993). In 1986, NIICHRO was formed following the first national CHR conference and is accountable to the political leaders of First Nations and Inuit communities through their own CHR's.

At the community level, CHR's are front-line health workers who perform a broad range of in-house, health-related functions including environmental health, health delivery, medical administration, counseling and home visits, education and community development, and mental health. These services are indeed necessary in communities that do not have a permanent doctor (e.g., doctors are regularly flown into some isolated communities), and also in providing more culturally-relevant health services. The NCC: CD program is comprised of both Native–specific courses, such as traditional Indian health practices, and others that incorporate Native concepts (e.g., the medicine wheel teachings) and/or emphasis on health conditions that occur more frequently in Native communities, such as diabetes (Common and Hayward, 1993).

CHR's were selected as the interviewees for this qualitative study through a purposive sampling strategy. Purposeful sampling targets a specific group of people. The power of this sort of sampling lies in selecting information-rich cases (i.e., the CHR's) for in-depth analysis related to the central issues being studied (Miles and Huberman, 1994). Qualitative samples tend to be more purposive than random (i.e., as in quantitative studies) for three reasons: first, the pointed nature of qualitative studies tends to limit the population base from which a sample may drawn; second, social processes have a logic and coherence that purposive sampling enhances (and random sampling tends to reduce); and third, because samples in qualitative studies can change (Miles and Huberman, 1994).

In the context of this research, CHR's were chosen for a variety of reasons. First, CHR's have a very wide occupational context – not only does a CHR focus her efforts on disease prevention, but she also focuses on health and health promotion. Second, CHR's are well integrated within the community's everyday context as they work with community members of varying ages, income levels and genders. Third, CHR's are Aboriginal women and men who have unique cultural, political, economic and social perspectives on health and wellness. Finally, as NIICHRO would be hosting their Annual General Meeting in Dorval, Quebec (approximately twenty kilometers from downtown Montreal) in spring 2005, the place and timing of the NIICHRO conference meant that I would have access to a wide national group of CHR's over a three-day period. During the course of this meeting, I would have the opportunity to interact with hundreds of Aboriginal Community Health Representatives (CHR's) from various communities, regions and Aboriginal nations from across Canada. Given the significant links between the CHR's supportive roles and responsibilities in their communities (e.g., as providers of social support), and the objectives of this dissertation, the prospect of attending the NIICHRO meeting was very exciting.

An early concern I had about drawing from CHR's as the sample for this study, is the fact that they play a dual role in their community; not only are they employed members of the community, but they are also individual community members. I was concerned that this dual role would colour the CHR's stories and perceptions in a way that would make personal experiences inseparable from occupational experiences. After many discussions with my thesis advisor however, we came to the conclusion that it, in fact, it would be impossible to disentangle these dual roles, and that disentangling these perceptions actually was not important for the purposes of the thesis. Rather, the complexity of the social context of these communities is an important part of the story, and indeed, research questions around access to, and health benefits of social support might be better understood by drawing from a sample such as CHR's, whose personal and private lives interact in a way that likely affects their abilities to provide and accept social support. As such, the research proceeded on the assumption that the dual roles of CHR's would be an important feature of the social landscape of the Aboriginal communities, and that their experiences would enable rich and contextualized stories about how social support works in their communities, including their own roles in the process.

5.4 Research *with* Aboriginal peoples: Positionality, Protocol and Participation

In the context of understanding health, qualitative researchers seek to understand the 'situated' experiences of health and health care, and the meaning people attach to them (Kearns, 1991; Eyles, 1985). The axiomatic principle of a humanist approach recognizes both the interplay between the humanity of the people they study and of their own humanity as well, thereby acknowledging that researchers are not independent from the *researched*, but instead that they are a vital *part* of the research process (England, 1994). For example, the \`positionality' of the researcher and her/his often power-laden relationships with the researched has been recently discussed (Philips and Rosenberg, 2002; Katz, 1994; Miles and Crush, 1993). Parr (1998) has also discussed the politics of particular encounters which may occur within the process of research (e.g., in his case, as a researcher among mental patients who sought his confirmation that they were 'okay'). He argues that these politics are intimately bound up within the way we construct our geographic knowledges (Parr, 1998).

In the context of my research, I recognized early that my positionality as a Native woman would play an important role in the development of my interactions with NIICHRO, and in my subsequent interactions with the CHR's. As had been my experience in past research with various First Nations and Métis communities, I perceived there would be an immediate bond, and a sense of trust between the NIICHRO staff, CHR's and myself. This perception was framed by my own experiences and understandings as a Native person, and also by the nature and goals of the research, which are to improve Aboriginal health and social conditions. As an Aboriginal woman, I perceived there would be less need for the cultural introductions that might have been necessary if I had not had the knowledge and experiences that come along with my status as an Aboriginal woman. Still, I was very attentive to the fact that Aboriginal communities vary greatly in terms of their social, cultural and political contexts and I was careful to make no assumptions about cultural homogeneity, for instance that conditions in these varying communities would be the same as those I have grown to understand in my own experience.

In the fall of 2004, I formally approached NIICHRO's Executive Administration with an e-mail proposition to interview CHR's as part of my dissertation. This e-mail turned into a number of telephone calls with Debbie Dedam-Montour, NIICHRO's Executive Director, wherein I spoke with her about the results of the first two chapters of my dissertation, and how valuable I perceived interviews with CHR's would be for providing a much-needed interpretation into the everyday social, cultural, economic and political processes that work to shape health and wellness in Canadian Aboriginal communities. These telephone calls formed the means through which we developed a research protocol – meaning the rules and expectations to which I would abide in carrying out the research. We discussed the sorts of research questions I would include in my interview checklist, and the rights of the CHR's as participants in this study (i.e., that there would be strict confidentiality and that they could withdraw from the process at any time). NIICHRO was very supportive of me and my academic advancement as a Native woman. They expressed a deep satisfaction that this research would promote a two-way capacity-building process, in that that I would learn from my interviews with the CHR's (and gain my Ph.D. in the process), and in return, the research I would produce would have potential benefit for health research and policy among Aboriginal communities in Canada. NIICHRO supported my request to conduct research with the CHR's, and they invited me to attend their AGM the following spring. They outlined the following conditions to their support:

- A full ethical review of my qualitative research intents from McGill University's Review Ethics Board;
- My recruitment efforts would not compromise CHR's abilities to participate at the 2005 Annual General Meeting;
- My research questions would not overlap with NIICHRO's current research on CHR responsibilities and variation in salary.

The development of this research agreement was important as there is no golden-rule that determines best ethical practices for research with Indigenous peoples. Despite a long history of research on Indigenous peoples, geographers have only recently begun to explore Indigenous health issues, and as a result, I had little practical direction (but for my own common sense and cultural beliefs, as an academic and a Native woman) to the expectations and guidelines through which to proceed in developing a research protocol with NIICHRO. The development of these agreements are exceedingly important for ensuring that research with Aboriginal communities promotes a process of learning and sharing that benefits both researcher and the *researched* (KSDPP, 2007; Castellano, 2002; Martin-Hill, 2002; Smylie, 2000).

In the past few decades, Indigenous communities have raised significant critiques about the way research has been done in their communities, highlighting significant moral and ethical concerns about the motivations and implications of such research (Castellano, 2001; Little Bear, 2000; Deloria, 1995). Many purport that such approaches serve to perpetuate the colonial agenda of the nation-state, which seeks to control and regulate the wellbeing of Indigenous peoples (Smith, 1999; 2005; Dei et al., 1999). Indigenous communities often speak about being 'researched to death,' as they participate in numerous studies, yet see little benefit from the numerous reports, theses and journal articles that are produced. An important paradox emerges: Indigenous peoples are among the most studied population in the world, yet they continue to bear a disproportionate burden of health and social disparity. Indeed, the history of research from many Indigenous perspectives is so deeply embedded in colonization that it has been regarded as a tool only of colonization and not as a potential tool for self-determination, development or autonomy for indigenous communities (Smith, 1999; 2005; Smylie, 2005; Deloria, 1995).

In the context of my research with NIICHRO, I was very conscious of these critiques and made efforts to draw on an approach of mutual understanding and respect, and to ensure that my research would contribute to a greater goal – that of improving understanding patterns of health and social well-being among Aboriginal peoples of Canada (Castellano, 2002). On the Canadian research landscape, the last five years have witnessed a distinct growth in the number of Aboriginal faculty and graduate students funded to do research in Aboriginal communities, and it is within this changing climate that my experience has been framed. This growth has been driven by the need for more responsible research in the area of Aboriginal health, and in particular, of the need for Aboriginal peoples to draw from their cultural knowledges and epistemologies to guide and direct the research (KSDPP, 2007).

5.5 Ethical Considerations

In the months leading up to the conference, I applied for and won a research allowance from the Indigenous Health Research Development Program (CIHR-IAPH). At this stage, I knew I would interview a national group of CHR's, but I did not know if the interviews would occur face-to-face or over the telephone. Initially, I felt that I should leave that decision up to the CHR's who would become involved in the study, but I was cognizant of the fact that I was limited financially and would likely be unable to do face-to-face interviews with CHR's in far-away places, and particularly not with CHR's in many of the isolated, northern communities, wherein flights alone can cost upward of $1500. Given the broad geographic dispersion of the CHR's to be interviewed as part of my thesis, conducting face-to-face interviews was simply not feasible.

I therefore decided that all interviews would occur over the telephone, with the exception of those CHR's in communities in Ontario and Quebec who I could reach by car. The major advantage of telephone interviews over face-to-face interviews is cost efficiency (Grooves, 1988; Marcus and Crane, 1986; Fenig et al., 1993). Telephone interviews have also been described as a methodologically and economically valuable data collection technique in qualitative research (Sweet, 2002), in particular when they follow initial face-to-face interviews and/or meetings (Marcus and Crane, 1986). It is difficult to establish trust via telephone interviews, which can affect the breadth and depth of information that interviewees may be willing to share. As such, the initial face-to-face meeting (e.g., at the NIICHRO meeting in June 2005) was critical for building trust and rapport with the interviewee prior to the telephone interview. Telephone interviewing is also logistically simpler, especially if the participant resides in a geographically distant location. Marcus and Crane (1986) note that when the focus of the interview is on subgroups of the population that have both low telephone coverage and higher rates of non-response (e.g., low income and low education respondents), telephone interviews should be used more cautiously however.

The strength of using telephone interviews as the key data collection strategy for the qualitative component of this dissertation lay in the ability to capture a breadth of CHR's voices from numerous First Nation and Inuit communities across Canada. The use of telephone interviews was also important as it gave the CHR's a relative blanket of anonymity. Though I had met all CHR's prior to the actual interview, the physical distance between myself and the interviewees during the telephone call translated into increased security for the CHR's and increased willingness to discuss more sensitive topics (i.e., individual health behaviours, such as obesity or alcoholism, many of which the CHR's reported had affected them or their families at one point or another) without the glare or judgement of the researcher. In a sense then, this type of interviewing allows the interviewer and interviewee a sense of distance, in both relative and absolute contexts, thereby permitting enhanced security for the interviewee, and contributing to a less invasive interview process.

Prior to winning the research allowance, one of my concerns was that I would not have an honorarium to offer my participants. As a tradition among Native people, it is good etiquette to make an offering when asking someone to do something for you. Traditionally, this would be tobacco, which is considered a sacred medicine among First Nations people. In my experience, the offering of tobacco has always coincided with asking someone to engage in a cultural and/or spiritual activity with you, such as asking for spiritual advice on an issue, or with preparation for a cultural celebration, such as a naming ceremony. I was therefore very pleased to have won the research allowance as it allowed me to provide a monetary honorarium to all CHR's who would take part in this study. I chose to provide monetary honorariums (rather than tobacco or other cultural gifts) because I wanted to provide all of the CHR participants with a meaningful and useful gift, regardless of their Aboriginal status and/or spiritual beliefs.

As a native person working with First Nation and Inuit CHR's, I felt that offering the honorarium was not only a cultural practice, but also an ethical one. I wanted the CHR's to understand that I appreciated the time they would take to talk to me, and that the stories and experiences they would share with me concerning the local contexts of their communities were of value. There was no assumption that I was 'paying' for their stories; the honorarium was simply a way for me to show my gratitude to them for their time and efforts spent on the interview. During the research of my Masters degree, wherein I did research with community members of 'Namgis First Nation (Alert Bay, BC), I did not have the capacity to provide gifts or money to the interviewees who participated in the study. However, I ensured that I always brought something to share with the interviewees, often food or coffee. As a way of giving back to the community, I volunteered my free time with various departments of the Band Council during the six weeks of my MA research. For instance, one afternoon I spent kayaking with the Recreation Director and a number of youths, and I also spent time with Namgis' Geographic Information Systems team to help in producing maps of the natural resources in their land claim area. This practice, of integrating with the community in a way that was divorced from my research intents, was important for me, in the sense that I was giving back to the people of 'Namgis in a meaningful way.

In the spring of 2005, leading up to the NIICHRO conference, I applied to McGill University's Review Ethics Board (REB). In the application, I addressed a number of issues regarding the research, the involvement of the CHR's, and my perceptions of the risks involved with carrying out this research. In my application to the REB, I deemed the risk to CHR's to be very low. A number of safeguards would be implemented to ensure a risk-free process: voluntary participation; informed consent, and confidentiality and anonymity. As part of the REB process, I created an ethics consent form (see Appendix D), which would be distributed to all CHR's prior to the research. This consent form described the objectives of the research project and outlined the rights of the CHR's as participants of this study, namely: (i) that their participation was confidential; (ii) that their participation was voluntary (iii) that were under no obligation to answer questions they did not feel comfortable answering; (iv) that the interview could be terminated at any time; and, (v) that they would be provided a $30.00 honorarium for their participation.

5.6 Meeting the CHR's

Prior to the conference in May 2005, I prepared a poster and pamphlets that described who I was, what my research was about and why I wanted to interview CHR's as part of my doctoral thesis. Given the conditions placed on my recruitment of the CHR's (e.g., recall that NIICHRO asked that my recruitment efforts not interfere with the CHR's' participation in the Conference proceedings), I was able to formally speak about my research with CHR's *only* during breaks. NIICHRO provided me with access to a 'conference booth,' where I set up my poster and laid my pamphlets with a sign-up sheet for CHR's who were interested in participating in this work. It was during the breaks when most CHR's would stop by to chat with me, often with friends they had met during the conference, or fellow CHR's they had traveled to Montreal with.

During the three days of the conference, I had the opportunity to interact with many CHR's from across Canada as I attended various training sessions and focus groups organized as part of the AGM. During the first few days, I took on the role of participant observer. I sat in on various conference sessions and observed CHR's as they talked about their work, their perceptions about the communities they lived in, and challenges to healthy living. I found these few days incredibly rewarding as it allowed me to develop a rapport with many of the CHR's I would later interview, and it also gave me insight into how the interview questions would be received by the CHR's. These few days were also important for building trust, and establishing a relationship with the CHR's.

By the end of the third day of the conference, my sign-up sheet contained contact information for 39 CHR's from various First Nation and Inuit communities representing every province, territory and Arctic region of Canada. In the two weeks following the conference, I contacted all who had provided me their contact information. Of the 39 CHR's who expressed interest in participating in this research, I scheduled interviews with 30 CHR's. Copies of the interview checklist and ethics consent form were sent to all 30 participants in advance of their interviews. All CHR's signed the faxed forms back to me prior to their interviews.

5.7 The Interview Checklist

The interview checklist, the qualitative measure I would use to interview the CHR's, was developed in the months leading up to NIICHRO's AGM. The content of the interview checklist was informed theoretically by the academic literatures on social support, population health, and Indigenous health. The development of the checklist was also powerfully shaped by the results of the quantitative stage. The findings of the quantitative stage were important in that they identified social support as an important concept of health, and also as a strong predictor of self-rated health.

Insight to the Aboriginal-specific sources and meanings of social support, and ideas about how social supports impact health at the family and community levels could not be gleaned from the quantitative stage however. The objective of the qualitative stage, therefore, was to explore issues of *mechanism* and *meaning* in the social support and health relationship, and to provide some more interpretation – and critical thinking – about the social, economic, cultural, political and environmental processes that fundamentally undermine this relationship. Rather than describing these relationships, as was the objective in the quantitative chapters, the intent of the qualitative stage was to think more critically about the processes and mechanisms that determine interactions between health and social support, and generate some form of theoretical framework for understanding them.

The interview checklist was developed around four topics to examine: (1) the determinants of health, including social support; (2) the provision of, and accessibility to social support; (3) the types and sources of social support; and, (4) the interaction between health and social support. The first section sought CHR's definitions of health, and their ideas of the determinants of health (at the community and individual level). This section prompted CHR's to provide interpretations for change in the health of their communities over time. In the second section, CHR's were asked to define what social support means to them, who they (and their community members) rely on in times of need, and to explain the individual and community-level issues that determine access to social support. The third section delved more deeply into understanding the types and sources of social support, the processes that have shifted social support over time, and what this shift has meant for community well-being. The fourth and final section of the interview checklist prompted CHR's to describe the more direct links between social support and health, and of the ways through which the health of their communities is related to social environmental influences (e.g., cultural norms) and geographic location.

5.8 The Interview Process

From June – September 2006, I conducted interviews with twenty-six Aboriginal CHR's. Twenty-five of these interviews occurred on the telephone and one occurred face-to-face. My interviewees included twenty-five women and one man. The interviews were conducted with CHR's from 24 First Nation and 2 Inuit communities, in varying rural and remote locations (see **Table 5.1** for the community characteristics). All interviews occurred while the CHR's were at work, and they lasted for 45 minutes on average. All interviews, except one, were tape-recorded (with permission).

CHR's have a hectic schedule that combines in and out-of office activities which vary from day-to-day and month-to-month. Their fluctuating schedules made it difficult, at times, to arrange interview times, and on more that one occasion, interviews had to be re-scheduled as the women would be called to emergencies out of their offices. Another complicating factor was related to the timing of the research. During the summer months, many CHR's take holidays and work reduced hours. On-going scheduling conflicts reduced the number of

CHR's who agreed to participate (i.e., from 30 to 26). Interviews often occurred in the mornings, before the CHR's days got too busy.

CHR's were provided with copies of the interview checklist before the actual interview, and many expressed during their interview that they had considered their responses in advance. A few CHR's told me that they had discussed the interview questions with their family members or co-workers. At first, I was surprised by the fact that so many CHR's had prepared for their interview, but after considering their tight timelines and busy days, it made quite a lot of sense to me that the CHR's would want this process to occur as efficiently as possible.

To maintain consistency, all CHR's were asked the same questions in the same order. It was important for the interview to maintain consistent structure and objectives, but I also wanted the CHR's to feel they could step outside the limits of the interview schedule to ensure their perspectives and stories were being heard. Marshall and Rossman (1989) indicate that this is an assumption fundamental to qualitative research; the participant's perspective on the social phenomenon of interest should unfold as the participant views it, *not* as the researcher views it. As such, CHR's were given the freedom to describe their experiences, perceptions and stories in a fashion that veered from the checklist.

With the exception of one CHR, none of the CHR's had participated in research before. It was in this context that I became distinctly aware of the power relations that had formed (e.g., researcher versus researched). At the outset of the interviews, I carefully recited to each CHR that there were no right answers to any of the interview questions, and that they should answer the questions in any way they felt appropriate. I wanted the CHR's to feel at ease in the interview, and I encouraged them to speak freely about the issues that would arise. I sensed initial nervousness from some of the CHR's, but this appeared to dissolve within minutes of conversation, and by the end of the interview, most women were quite open and talkative about their experiences and understandings of the issues discussed in the interview. Still, at the termination of more than one interview, CHR's ask the question: 'How did I do?' This question kept me on task as researcher, and reminded me that despite the friendships I had developed with some of these women, it was critical to the research process that I never lose sight of the responsibilities and ethical considerations related to my positionality as a researcher (Parr, 1998; Miles and Crush, 1993).

5.8 Analysis and interpretation of the interview data

In October 2005, the audiotapes of the interviews were sent for transcription. Once transcribed into electronic format, hard copies of the interviews were mailed to all participating CHR's for their input or clarification. Three CHR's responded by e-mail with positive remarks about the content of the interviews, but none proposed changes. Recall that the content of the interview checklist was informed theoretically by the academic literatures on Indigenous health, social support and population health. The interviews sought to understand the three following objectives:

1. To identify sources of social support, and examine the mechanisms that determine access to social support at the community level;
2. To explore the health-enhancing and health-damaging influences of social support;
3. To critically examine the processes through which environmental dispossession has affected the determinants of Aboriginal health.

These objectives led the qualitative stage of this dissertation, and it was critical that the original problem and purpose drove the analysis so that the conclusions would be linked to the objectives (Miles and Huberman, 1994). In the initial stage of analysis, I read through the transcripts a number of times to familiarize myself with the data and respondents. Once I felt familiar with the data, I began to identify a list of themes and ideas through which the stories and perceptions of the CHR's were emerging in the interviews. There were three main themes around which the social support-health relationship was linked to the three objectives of the qualitative stage:

a) Canada's colonial legacy
b) Health behaviours-material circumstance-cultural norms
c) Environmental change

At the outset of the data analyses, my thesis advisor and I met to discuss my preliminary thoughts about the major emergent themes and to devise a plan of action for the analysis. It became quickly apparent that the data were very rich and that it would be necessary to create a consistent system for analyzing the data. We made a joint decision that each of three major themes would be explored as individual studies, meaning that the qualitative stage would result in three manuscripts. Though the three studies would draw from the same data set, each manuscript would examine a different process or nuance (i.e., how access to support is undermined by the colonial legacy, or how the material circumstances of communities can shape supportive behaviours at the individual level, etc) that contributes to the health-social support relationship, as it is understood by the CHR's.

The data were organized through the method of coding, which is a technique used to connect data, issues, interpretations, data sources and report writing (Miles and Huberman, 1994). Coding has also been labeled as content or narrative analysis (Berg, 1998). In making the connections between individuals, their communities and the everyday context within which social supports exist, there is tremendous potential in the use of narrative analysis (Wiles et al., 2005; Williams, 2003; Popay et al., 1998; Kearns, 1997). Narrative analysis is a form of interpreting a conversation or story in which attention is paid to the embedded meanings and evaluations of the speaker and their local context. Through narrative analysis, researchers can understand 'the contingent, the local, and the particular' (Wiles et al., 2005), thereby connecting the speaker to varying levels of context at once. Narratives of experience and life-story enable a more nuanced understanding of the cultural and geographic processes that can shape the way societal resources are understood and accessed by Aboriginal people (Brown and Smye, 2004). Further, narrative analysis provides an approach through which to contextualize the growing statistical base on Aboriginal people's economic, social and health conditions – and better understand the meaning attributed to these processes in the production of health.

To facilitate coding of the three manuscripts, the first step entailed careful labeling and sorting of the data into various Microsoft Word documents. Once the three major themes had been established, for example, it was necessary to read through the 26 interviews and highlight sections of text that corresponded with each of the three major themes and the original objectives. In the example of the first theme 'colonial legacy,' all text relating to this theme was highlighted as it related to access to social support. The highlighted passages reflected those relating to the original topics planned in the study (e.g., the original objectives), and they also reflected sub-themes. These sub-themes merged as components or fragments of ideas or experiences, which often are meaningless when viewed alone (Miles and Huberman, 1994). It was in this stage of analysis wherein the utility of the narrative approach shone as a key analytic strategy for understanding how the relationship between social support and Aboriginal people's health reflect varied social, political and economic processes, many of which can seem diametrically opposed to one another when not analyzed through such a multi-level, interpretive approach.

The themes that emerged from the informants' stories were pieced together to form a comprehensive picture of their collective experience. During this part of the analysis, I carefully selected a number of unedited phrases from the interviews that most appropriately described the respondents' insights about varying issues. These quotations are those which were included into Chapters 6, 7 and 8. This process was repeated for each major theme. This means that each of the interviews were analyzed at least three times, thereby giving me plenty of opportunity to identify nuances in the text that I had not picked up on in earlier rounds of analysis, and to begin to understand how these three overarching objectives would link to one another in a logical and well-evidenced story about how social support and health interact in the context of the 26 First Nation and Inuit communities, as perceived by the CHR's interviewed.

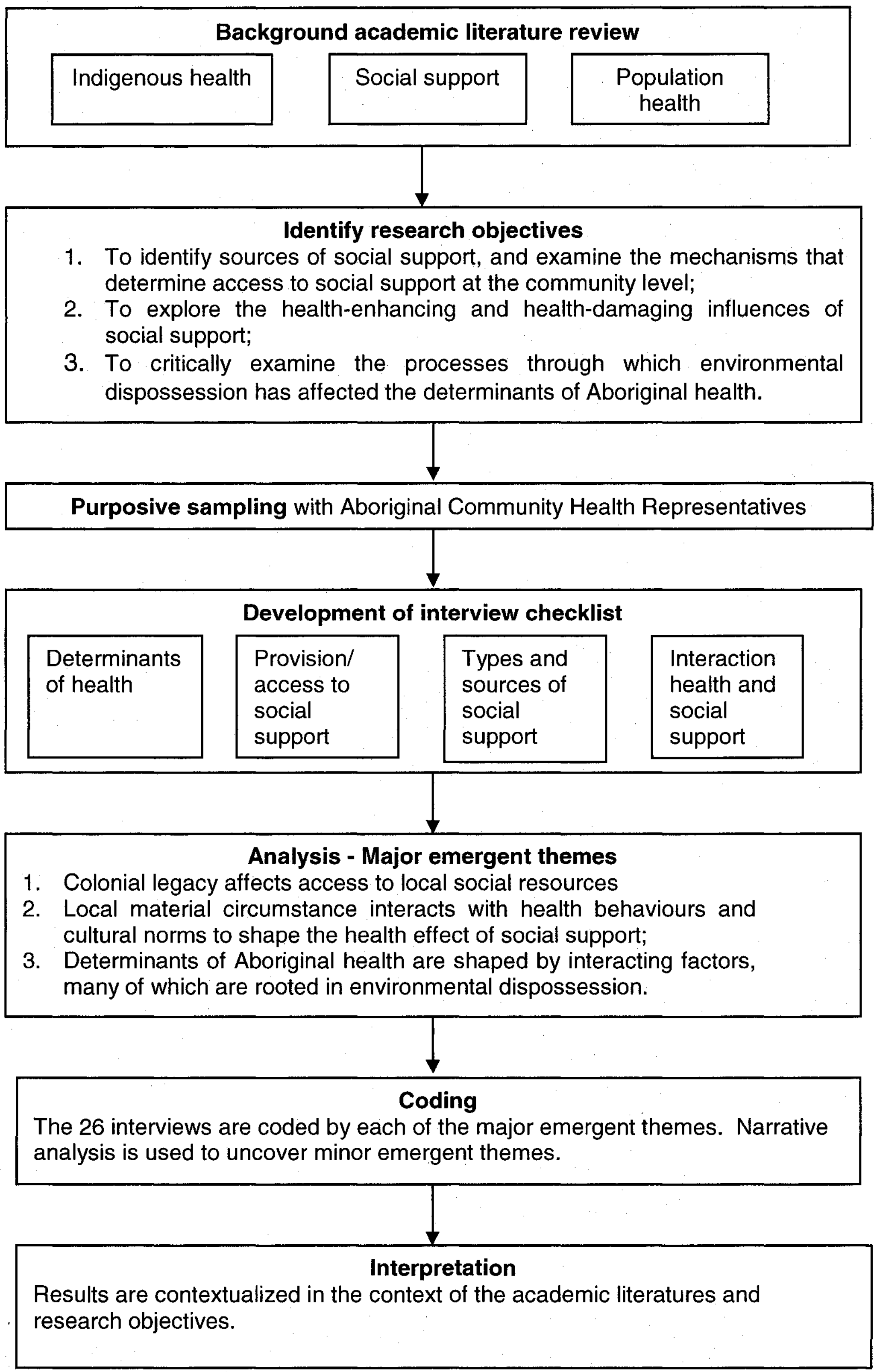
In my previous experience in qualitative data analysis, I had used the program N.VIVO, a qualitative analysis software package that enables the researcher to develop sophisticated levels of coding. In the context of my PhD dissertation, I decided to use my own system of coding. Compared with my experience using the software, I felt that using the 'old-fashioned' method of coding allowed me to gain a more thorough appreciation for the data and its varying levels of interpretation, without getting pre-occupied with software limitations.

Interpretation of the data was closely related to the data coding. As themes and sub-themes were identified, the various pieces of the puzzle began to fall into a more understandable pattern through which I could draw connections from the data and back to the initial objectives. In this stage, I found it useful to discuss my interpretations with fellow students (i.e., at conferences, or over coffee breaks, telephone calls), as well as with my thesis advisor. After four months of analysis, I found this process an important forum through which to 'step back' or 'decompress' from the data analysis. I found it beneficial to hear others' perspectives and ideas for interpreting and understanding the emerging patterns. I also found it useful to refer back to the three academic literatures from which this work was conceptualized (i.e., Indigenous health, social support, population health). This process of 'appealing to the literature' (Baxter and Eyles, 1999) helped me to build a valid argument for choosing the themes. By referring back to the literature, I gained more information and ideas through which to make inferences from the interviews and to weave them into a story that stands with merit and credibility.

Table 5.1 Community Characteristics of CHR's

Geographic Region	First Nation/ Inuit[1]	Location[2]
Nunavut	Inuit	remote
Labrador	Inuit	remote
Manitoba	First Nation	remote
Yukon	First Nation	remote
Northwest Territories	First Nation/ Métis	remote
Northwest Territories	First Nation/ Inuit / Métis	remote
Ontario	First Nation	remote
Quebec	First Nation	remote
Quebec	First Nation	remote
British Columbia	First Nation	rural
British Columbia	First Nation	rural
British Columbia	First Nation	rural
Alberta	First Nation	rural
Alberta	First Nation	rural
Alberta	First Nation	rural
Saskatchewan	First Nation	rural
Ontario	First Nation	rural
Ontario	First Nation	rural
Ontario	First Nation	rural
Quebec	First Nation	rural
Quebec	First Nation	rural
Quebec	First Nation	rural
New Brunswick	First Nation	rural
Nova Scotia	First Nation	rural
Prince Edward Island	First Nation	rural
Quebec	First Nation	rural/urban

1. Refers to the community area served by the CHR
2. Rural areas as sparsely populated lands lying outside urban areas (i.e. those with population densities lower than 400/square kilometer), and remote areas refer to communities in the territories, and/or those CHR's who work in nursing stations or outpost settings. Urban areas are those adjacent to and/or connected (via transit, commuter patterns and economic exchange) with census metropolitan area or metropolitan area.



Background academic literature review

Identify research objectives

1. To identify sources of social support, and examine the mechanisms that determine access to social support at the community level;
2. To explore the health-enhancing and health-damaging influences of social support;
3. To critically examine the processes through which environmental dispossession has affected the determinants of Aboriginal health.

Purposive sampling with Aboriginal Community Health Representatives

Development of interview checklist

Analysis - Major emergent themes

1. Colonial legacy affects access to local social resources
2. Local material circumstance interacts with health behaviours and cultural norms to shape the health effect of social support;
3. Determinants of Aboriginal health are shaped by interacting factors, many of which are rooted in environmental dispossession.

Coding

The 26 interviews are coded by each of the major emergent themes. Narrative analysis is used to uncover minor emergent themes.

Interpretation

Results are contextualized in the context of the academic literatures and research objectives.

Figure 5.1 Framework of Qualitative Analysis

CHAPTER SIX

Narratives of Social Support and Health in Canadian Aboriginal Communities

Chantelle AM Richmond

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6.1 Abstract

Societies that foster high quality social relationships and social support seemingly produce healthier populations. Existing research identifies social support as a significant dimension and determinant of Canadian Aboriginal health, yet patterns of morbidity and mortality overwhelmingly reflect social causes (e.g., violence, suicide), thereby suggesting that social support may not be widely accessible within this population. This paper seeks to understand how broader societal factors (e.g., colonialism) work to influence access to social support in the everyday social environments of Aboriginal communities. This chapter draws from narrative analysis of interviews with 26 Aboriginal Community Health Representatives (CHR's) from across Canada. Sources of social support were defined as institutional (e.g., employed) and intimate (e.g., family). In terms of access to social support, CHRs' stories reflected a narrative detailing the post-colonial context. Key elements of this narrative include the child-parent relationship, group-belonging, trust, socioeconomic dependence, and the changing nature of help. Findings suggest that features of the broader societal context (e.g., poverty) have manifested as local social conditions (e.g., help is seen as a source of income) thereby reducing access to social support. Access to this resource is also affected as institutional and intimate supports tend to overlap in Aboriginal communities, many of which are small in terms of size and population. Socially integrated places are not necessarily functionally supportive, health promoting places. Research and policy options must recognize the post-colonial influences that affect the everyday realities of Aboriginal communities and study the complex interactions between these influences, and how access to health determinants – like social support – play out in local places as a result of this legacy.

6.2 Introduction

Societies that foster high quality social relationships and social support seemingly produce healthier populations. The health benefits of social affiliation are widely evidenced (House et al., 1988), and we know that those who are socially isolated face increased risk of premature mortality, reduced survival after major illness, and poor mental health (Berkman, 1995). The mechanisms underlying the protective effect of social integration appear to be through access to various forms of social support (Kawachi, 1999), such as affection and intimacy, emotional support, and positive social interaction (House, 1981). It has been illustrated elsewhere that social support is a key dimension (Richmond et al., 2007) and determinant (Richmond et al., in press) of health among Aboriginal Canadians, yet patterns of morbidity and mortality overwhelmingly reflect social causes (Adelson, 2005; Karmali et al., 2005; Wheately, 1998; Barsh, 1994) (e.g., violence, suicide), thereby suggesting that social support may not be widely accessible within the Aboriginal population. Aboriginal health researchers have described the health effects of varied 'upstream' health determinants (Waldram et al., 2006; Adelson, 2005; Richmond et al, 2005) (i.e., structural processes, such as those linked to colonialism), yet little is known about how the broader societal context can interact with local social conditions to shape access to health determinants, such as social support. Consistent with a greater movement seeking social explanations for health and disease (Conrad and Kern, 1990; Marmot, 2005; Link and Phelan, 1995) this paper draws from narrative analysis of interviews with 26 First Nation and Inuit Community Health Representatives (CHR's) to addresses the following objectives: 1) to explore the types and sources of social support in First Nation and Inuit communities, and 2) to identify the mechanisms that determine access to social supports at the community level.

6.2.1 Community Health Representatives

In Canada there are approximately 633 First Nation and 45 Inuit communities. These communities vary widely in terms of their population, size and geographic location. All First Nation communities are south of 60 degrees latitude, and they are typically bigger in both geographical size and population than are Inuit communities, all of which are located in the Arctic. First Nations and Inuit communities have relatively small populations (i.e., typically less than 1000 people), and while First Nations communities vary between remote, rural and urban locations, Inuit communities are all remotely located.

There are roughly 1000 Aboriginal Community Health Representatives (CHR's) across Canada – approximately one per First Nation and Inuit community – and they are 90% women. The CHR program was conceived in the 1960's by the Medical Services Branch of Health Canada (later renamed the First Nation and Inuit Health Branch) to practice health promotion activities in Aboriginal communities, with emphasis on programs such as such as pre-natal health, healthy eating and smoking cessation. Other duties of the CHR include assisting health professionals by translating medical instructions to clients, dispensing medication, home visitations and some treatment (McCulla, 2004). However, with the high turnover – and in some cases, non-existence – of health professionals in Aboriginal communities today (Newbold, 1998), the CHR is often the only source of stable health care provided in Aboriginal communities (McCulla, 2004).

6.2.2 Population health in the post colonial context

Post colonial societies are those who endure the on-going and continually evolving 'aftereffects' of colonial relations (Hall, 1996; Gandhi, 1998, cited in Browne and Smye, 2004). Globally, Indigenous peoples share a common history of oppression and marginalization. With colonialism came loss of ancestral lands and forced migration of Indigenous peoples to isolated regions, wherein truncated lands were often insufficient to support a familiar way of life. This loss of land significantly disrupted the socio-cultural and economic activities that had tied Indigenous peoples to their physical environments, significantly shifting patterns of health and well-being (Richmond et al., 2005). The aftereffects of these assimilationist policies – which manifest as internal colonialism, neocolonialism, and dependency – contribute to the ongoing legacy of social and health inequalities that we witness among many Indigenous populations today (Browne and Smye, 2004). The effects, which are remarkably consistent in Indigenous populations around the globe, include lowered life expectancies, elevated infant mortality, infectious disease, non-communicable diseases, accidents and violence (Waldram et al., 2006; Cunningham and Condon, 1996; MacMillan et al., 1996). Indigenous peoples experience the kinds of health problems most closely associated with poverty (Warry, 1998). Levels of education and workforce participation among Indigenous people lags far behind that of their non-Indigenous counterpart (Adelson, 2005). Current patterns of health and social suffering reflect the combined effects of colonial oppression, systemic racism and discrimination as well as unequal access to human, social and environmental resources (Frohlich et al., 2006; Adelson, 2005).

6.2.3 Social support and health

Social support refers to four broad classes of supportive behaviour or acts, including positive interaction, emotional support, tangible support, and affection and intimacy (House, 1981). Social support operates on the level of individual and community (Felton and Shinn, 1992) and it is the nature of one's social integration (i.e., the existence or quantity of social ties) that provides opportunity for the development of social support. There are two broad measures of social support – structural and functional support (Cohen and Syme, 1985). Measures of structural support describe the nature and structure of one's interpersonal relationships or social networks, as in the number of friends one has, the breadth of one's social ties, or level of social integration (House et al., 1988). Measures of functional support, on the other hand, represent the functions that a relationship or network actually serves the individual, for example by providing feelings of love and belonging, advice on an issue, or material aid (Cohen and Syme, 1985). Our social relationships can affect health because they regulate human thoughts, feelings and behaviours in ways that shape health (House, 1981) Take as examples, a persuasive union leader or a controlling husband. At the community level, widespread recognition of values and cultural beliefs may translate into normalized understandings about how the resources of our social ties (i.e., social supports) are organized, and expectations regarding what can be derived from them.

Because social support is as a property of both individuals and communities (Thoits, 1995; Felton and Shinn, 1992) it is crucial to locate the mechanisms that shape opportunities for accessing social support. Access to social support is determined not only through an individual's support-seeking behaviour, however, (e.g., downstream), but also through greater societal conditions that work at the level of the community, and beyond (e.g., upstream) (Turner and Marino, 1994). For instance, an individual's geographic isolation may reduce his/her access to social support, as the individual is physically unable to reach the help he/she needs (e.g., in the example of a fly-in community). For another individual, their support-seeking behaviour may be limited by a lack of trust in those providing social support at the community level. In each example, access to social support may be limited by factors that may be perceived as characteristic of the individual (i.e., because they choose to live in an isolated area, or because they lack trust).

As in the case of so many health-related behaviours (e.g., overeating, engaging in promiscuous sex, driving too fast), there is a propensity to assume that individual choices are the sole predictor of individual behaviour (e.g., actively choosing not to access social supports) (Knowles, 1990). Such thinking places responsibility for health exclusively within the context of the individual, thereby disregarding the influence of social, environmental, cultural and political forces within which individuals are located, and masking the societal influences that can shape individual behaviour. Such health behaviours are rarely the result of individual choices alone. Rather, these actions are responses to widely-held social norms and values, and the everyday contexts within which individuals live their lives. In reality, however, such factors may be part of a set of upstream, structural processes that shape local social conditions (e.g., community politics, widespread poverty), and can actually limit an individual's opportunities for support. In examining the nature of and access to social support, it is necessary to critically evaluate how individual actions and behaviours are shaped by the upstream contextual features of their communities.

6.3 METHODS

6.3.1 The Interviews

The research was the result of a partnership between the author and the National Indian and Inuit Community Health Representatives Organization (NIICHRO), a not-for-profit non-governmental organization to whom most CHR's hold active memberships[10]. The author approached NIICHRO in the fall of 2004 and she was subsequently invited to their annual general meeting in May 2005. CHR's were initially approached at this annual general meeting, and in the three months following, twenty-five First Nation and Inuit CHR's from Aboriginal communities across Canada were interviewed over the telephone and one CHR was interviewed face-to-face. Twenty-five of the CHR's were women. All but one of the interviews were tape-recorded (with permission), and once transcribed into electronic format, hard copies of the interviews were mailed to all participating CHR's for their input or clarification. In order to protect identities of those interviewed, pseudonyms have been assigned.

6.3.2 Narrative as a means of understanding

In making the connections between the CHR's, their communities and the everyday context within which social supports operate, there is tremendous potential in the use of narrative analysis (Wiles et al., 2005; Williams, 2003; Popay et al., 1998; Kearns, 1997). Narrative analysis is a form of interpreting a conversation or story in which attention is paid to the embedded meanings and evaluations of the speaker and their context (Wiles at al., 2005; Kearns, 1997). Through narrative analysis, researchers can understand 'the contingent, the

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[10] Refer to Chapter five for a more in-depth discussion concerning the development of the qualitative component of this thesis.

local, and the particular (Wiles et al., 2005), thereby connecting the speaker to varying levels of context at once. In terms of the current analyses, for example, the use of narrative analysis provides a medium for understanding how people feel about their communities, and how access to social support may be implicated in the larger structural forces underpinning everyday social life and supportive behaviours.

Narratives of experience and life-story enable a more nuanced understanding of the social, cultural, geographic processes that can shape the way societal resources are understood and accessed by Aboriginal people. Narrative analysis provides an approach through which to contextualize the growing statistical base on Aboriginal people's economic, social and health conditions (Brown and Smye, 2004), and to better understand the meaning attributed to these processes in the production of health. In the context of Aboriginal health research, particularly that which aims to understand the nature of and access to social supports in Aboriginal communities, we must cautiously frame the analyses within the post colonial context of these communities. Such a reframing of questions related to the societal nature of Aboriginal communities is vital, particularly as we aim to improve Aboriginal conditions beyond the endless 'circles of disadvantage' (Kendall, 2001), and into positive discourses on Aboriginal health and wellness.

6.3.3 Data coding

The interview schedule, the qualitative tool through which the research was collected, focused on three key areas: (1) the nature of, and factors that determine access to social support; (2) perceptions of individual and community health; (3) how social supports can impact health. The analyses described here relate to the first key area. The initial stage of analysis entailed a number of careful readings of the interview transcripts. This allowed the research to gain familiarity with the data and respondents. In the next stage, a list of themes and ideas through which the stories and perceptions of the CHR's were emerging in the interviews was identified. This phase of the analysis was facilitated through the method of coding, which is a technique used to connect data, issues, interpretations, data sources and report writing (Miles and Huberman, 1994). The first step of the coding process entailed careful labeling and sorting of the interview data into various Microsoft Word documents. Sections of text that correspond with each of the major themes was highlighted; these passages reflect those relating to the original topics planned in the study (e.g., the original objectives), and they also reflected sub-themes. These sub-themes merged as components or fragments of ideas or experiences, which often are meaningless when viewed alone (Miles and Huberman, 1994). The themes that emerged from the informants' stories were pieced together to form a comprehensive picture of their collective experience. During this part of the analysis, a number of unedited phrases that most appropriately described the respondents' insights about varying issues were selected from the interview data.

6.4 RESULTS

6.4.1 Sources of social support

Types of social support in the CHR's communities were categorized as institutional and intimate. Institutional types of support reflect those who are *paid* to provide support in the community, and the main professions mentioned were: CHR's, social workers, and members of the band council. Intimate types of support were defined as family members, friends, and fellow community members. Though a clear distinction was made between types of social support as either institutional or intimate, sources of support did not coincide with the discrete physical locations at which we might expect to find these types of supports (e.g., social services building, band office, homes). Rather, CHR's pointed to community events and activities, or 'third places' (Oldenburg, 1997, cited in Baum and Palmer, 2002) wherein these sources of social supports are realized on an every day basis. With the exception of a few set places (e.g., medical clinic, rehabilitation centre) CHR's did not talk about these 'third places' of support as fixed geographical places. Rather they talked about these sources as larger social structures, as non-spatial resources that tie individuals through everyday activities, such as learning, celebrating, culture, community-building, and so on.

In many of the CHR's communities – most which are small in terms of space and population – there is often a significant overlap between these two types and sources of social support. The result of overlap in types of support (i.e., intimate and institutional) leads to high levels of social integration in the community, and it also leads to tension around the supportive *roles* community members are expected to fill. For example, the Chief of a community negotiates tricky terrain wherein he or she is not only a salaried, political representative for the community, but also a parent, friend, family member and neighbour. At the same time, an overlap in sources of social support can lead to tension around the 'third places' wherein supports are provided. The ease at which the types and sources of social supports can confound one another was observed by 'Dolly' who remarked that she could not escape her role as a CHR, even while not working:

> When you work in your community you can get called any time. I can be in the grocery store getting my groceries, and a person will come over and talk to me about their problem. It can be very hard because sometimes when you leave your job you like to go home and forget about your job, but you live here, you face it. That phone will ring and somebody will say, 'hey I need a wheelchair right now, or I need this or I need that,' because they know your number **(Dolly)**.

Indeed, such tensions around the types and sources of support can significantly complicate one's access to social supports, as they intensify issues such as trust, community divisions, and social hierarchies – all of which may be exacerbated in such small communities where privacy can be hard to come by.

6.4.2 The post-colonial context and access to social support

Collectively, CHR's stories about social support emerged around a broad narrative describing the post-colonial context of their communities and the varying mechanisms that operate within this context to determine access of their fellow community members to social support. CHR's described the post-colonial context of their communities as the most pervasive issue underpinning access to social support. The effects of colonialism extend from historical times and well into the contemporary social fabric of communities, thereby shaping the way people make a living, community access to educational and cultural opportunities, and the means through which families relate to one another socially. Among their fellow community members, CHR's described a shared experience of trauma related to forced assimilation (i.e., through attendance at residential schools), loss of lands, and rapidly changing culture, all of which CHR's described to be at the root of many current-day social problems in their communities, including mass unemployment, feelings of apathy, government dependence, and loss of control. CHR's narratives made explicit connections between the effects of the post-colonial context access to social support by their fellow community members. The mechanisms through which this reduced access to social support including the child-parent relationship, socio-economic dependence, trust, group belonging, and the changing nature of help.

6.4.2.1 Child-Parent Relationship

The effect of the post-colonial context of First Nations and Inuit communities was described by the CHR's as a vicious and continually-evolving cycle, one that perpetuates trauma from one generation to the next, mainly through the child-parent relationship. Up until the early 1980's, forcibly removing Aboriginal children from their homes and communities was a strict mandate of the *Indian Act*. Through the assimilative efforts of residential schools, all things familiar, including one's identity were significantly disrupted including their culture, language, family, and place in the world. CHR's linked the residential school experience and various types of abuse endured at residential schools (e.g., mental, physical and sexual abuse) by some of their fellow community members with a lack of current-day parenting skills:

> This community had a residential school, and it was here for many years. A lot of them [students] were pretty young when they went in there...They had a really traumatic experience. ***And so a lot of children that attended these residential schools now have children themselves?*** Yes they have children, and it depends on the cycle, you know? If they themselves have been abused, then the abuse will keep going on and on, so that makes it very sad (**Martha**).

As Martha describes, the effect of the residential school experience stayed with many of her fellow community members from childhood and into adulthood. This is so as children who attended residential schools accepted the abuses suffered in residential school as normal ways of showing love or affection. As Michelle explains, the social norms and values learned through residential school experiences have resulted in socially dysfunctional and potentially abusive parenting:

> My impression is that there has been a lot of abuse over the years, because of residential schools... So I think the affection that is shown, it's kind of like a love / hate relationship. What I mean is that there is a lot of family violence, lots of abuse of children, or even possibly sexual abuse. But people don't view it as abuse anymore, it's kind of normalized (**Michelle**).

Though CHR's were insistent that residential schools are responsible for a 'lost generation' of Aboriginal children, they were hopeful that these cycles of abuse may soon come to an end, as many residential school survivors are now addressing the abuses suffered while children through various forms of therapy, counselling, and through legal action as well.

6.4.2.2 Socio-economic dependence

As part of its assimilationist policy and regulated by the *Indian Act*, the government of Canada is fully responsible for the health and social services of First Nation (e.g. on-reserve) and Inuit communities. Over time, this fiduciary responsibility has manifested at the community level as widespread dependency, and an expectation that the community will always be 'taken care of' by the federal government. Related to the lacking economic opportunities and high rates of unemployment that characterize the post-colonial context of many of these communities, CHR's described the situation to be worsening, as higher levels of unemployment translate into more widespread dependency.

Michelle interprets that this dependence to be reflective of a process of internalized colonialism:

> ...sometimes a lot of the community members are dependant on us, and then they are kind of like disabled, they don't know how to help themselves....for so many years the whole community has been so dependant on the band and the social services, that they

> will phone here for us to make their doctor's appointments. They could just as easily phone themselves (**Michelle**).

As Michelle discusses, the post-colonial context of many Canadian Aboriginal communities has created a learned dependency on social services, and heavy expectations among those fellow community members who are employed as institutional supports. Julie, another CHR permits a similar explanation as she links the health of individual community members to feelings of dependence and a lacking initiative to take control of their lives. She interprets that these feelings of apathy have become systematically ingrained within the members of her community as a result of many years of government control and assimilationist policies that have treated Aboriginal communities like children.

6.4.2.3 Trust

CHR's also identified links between the post-colonial context of their communities, declining levels of trust, and access to social support. CHR's described how community members seek support from those with whom they feel secure in discussing personal issues, and avoid those they cannot trust. Precisely because of these issues of trust and confidentiality, there is a tendency for community members to draw upon the services of institutional supports, those who are sworn to confidentiality:

> CHR's are there if you need help, you know....If we know somebody has some illness well that's very confidential, unless the family members decide to talk about it. Confidentiality in departments is very good. Nobody talks about what's going on (**Dolly**).

Not all CHR's were convinced that one's status as an institutional support meant that they would be perceived by their fellow community members as trustworthy however. For instance, Bonnie mentioned that lacking trust, coupled with the shame associated with an illness or social problem (e.g., HIV/AIDS, family violence), can prevent community members from seeking the support they require:

> I think there is a lot of that, not trusting, with certain people. I guess departments you would say. You need to be able to earn trust. Say if they [support seekers] are not talking about something – drug abuse, or physical abuse – and you know its happening, you need to gain their trust and be willing to listen. But a lot of the time, if community members know somebody that works in the place, then they don't want anybody to recognize them. They would just rather go somewhere else where nobody knows them (**Bonnie**).

In the context of trust as a determinant of social support then, we see how the functionality of one's social supports can be reduced in small communities wherein institutional and intimate supports can overlap.

In gaining greater security, Annie claimed that some community members may prefer to seek support from 'outsiders,' or those who do not live in the community. In Aboriginal communities, wherein it can be difficult to keep private and public issues separate – in particular as intimate and institutional supports tend to overlap – community members may fear the judgement they may face from others in the community. As such, leaving the community for support services (e.g., health care, banking advice, social services) may be a more appealing option:

> If you are from the community, people are saying they can't trust you, or they have to interact with you on a daily basis which makes it more difficult because you know them, you know them inside and out, and they have trouble facing you after that (**Annie**).

6.4.2.4 Group Belonging

Aboriginal communities are typically small in geographic area and population. CHR's identified group belonging as the most powerful means through which access to social support is formed. For instance, Delores describes her community as structured by a number of families, many of whom are inter-related in one way of another:

> [Social] support comes more from just family and friends. They have their own little members. The families here, like there are a lot of relatives, we are all related here just about (**Delores**).

Group belonging is often formed through the existing social structure of families, spiritual and cultural beliefs (e.g. church, the potlatch), and individual behaviours (e.g., participation on sports teams, attendance at Alcoholics Anonymous):

> I think that social support happens more in group settings... You have to belong to the group, and if you don't belong then they are not going to support you (**Margaret**).

As Margaret alludes to, it can be very difficult to access social supports when you do not hold group 'membership.' An example of this relates to a story told by Annie about a young wife, who has had few opportunities to make connections with her fellow community members because of her home obligations. With no extended family in the community, and a husband who works long hours, the young wife carries the full responsibility of caring for her house and family.

In the group setting, community members are mutually supportive of one another, and can draw upon the resources of their contacts and social ties in order to help their friends and family members. As Stella describes, those who work in health and social services may be in a better position to aid their families as they can draw from their networking abilities and connections related to their employment. While the group context is the most concrete means of accessing social support, not all social groups share equally in the distribution of power and access to material resources. Thus, the social structures existing within a community can create barriers to social support, and inequalities in terms of 'who gets what.' CHR's expressed concern that the patterning of these social structures is exclusive and that the benefits of group- belonging may not be transferable to those of different social values or socioeconomic status:

> There are people that always put down other people, especially people that drink [alcohol] every day. It's like they are saying, "oh to hell with them, they are always drinking, they don't want to work..." But these people need help too...You shouldn't put people aside. I think they need help and support more than anyone here... There are lots of people who are crying for help, but nobody does anything to help. They don't want to listen, they just say that's how it is, that's the way they are. I think it's untrue to say that of anybody. Everybody deserves a chance in life (**Julie**).

As Julie discusses, there are many community members without access to social support, most notably those with drug and alcohol addictions. By ignoring these community members – or worse labeling them as 'drunks' – there is danger in creating labels that stigmatize and blame individuals for their health behaviours. Such stigmatization can normalize the exclusion of these community members, and further restrict them from gaining access to the support they need.

6.4.2.5 Nature of help

Related to overwhelming levels of unemployment, CHR's expressed worry that the changing nature of help in their communities means that people have less access to social support from fellow community members. This is particularly so as more emphasis is placed on help as a source of income:

> The great voluntary base that we had before... Well, you don't really see that anymore. I think this community has come to a point where you can do something to help others, but then there are always dollars attached to it. Money talks (laughs). Today, I see that my kids expect to be paid in return for their help (**Margaret**).

Indeed, the need for extra income is so great in some communities that core beliefs about sharing and reciprocation are no longer heeded as important values. When Julie moved with her husband to a new community, for instance, they were surprised to find that the selling of traditional foods (i.e., moose meat, fish) was a common practice:

> They sell traditional food! Like walleye, or moose. Like a piece of moose will cost $20, whereas in my community when somebody kills a caribou, they cut it into pieces and go and offer it to elders. I was very surprised when I came here to find that people are selling these parts, when you are supposed to offer them (**Julie**).

Though CHR's expressed concern that the material circumstances of their communities have caused a shift in the way community members relate socially to one another (i.e., decreased trust, less willingness to help), CHR's noted that in times of crisis, their communities are more closely knit than ever. It is the nature of the large families, the social interconnectedness, and the small geographic area of the communities that is protective in times of crisis. Delores speaks about how her community came together following a major flood:

> When it comes to anything, like a major crisis, I've noticed the community really helps one another... Back in 1997 we had a major flood. I had never realized how fast and how good the community members helped one another. Even families that were having squabbles, everyone just kind of pulled together here... (**Delores**).

The ways in which communities unite around times of crisis was repeated by more than half of the CHR's, particularly around funerals. CHR's stated that, among their respective communities, death and illness form the most powerful reminders of where they come from and of the importance of community belonging:

> In time of crisis, in time of need, everybody bands together like one family. And like you know how communities are politically, like how they are split in half? ***Yes.*** Okay, when anything happens to somebody in the community, it don't matter who it is...They get together and politics is put aside, and everybody is together and supportive of one another (**Maxine**).

Indeed this commitment to community was described by CHR's as central to the identity of their communities, and a fundamental feature of Aboriginal cultures more generally. Despite the numerous negative manifestations of the post-colonial context on social functioning within their communities, CHR's spoke with hope and pride about the ability of their communities to pull together in times of need.

6.5 Discussion

This paper has explored the nature of and access to social supports in Aboriginal communities through the narratives of interviews with 26 First Nation and Inuit CHR's. Two research objectives were addressed: first, to identify the types and sources of social supports, and second, to explore the mechanisms that determine access to social supports. These analyses point to two *types* of social supports, institutional and intimate, the difference between them being that institutional supports are those paid to provide support, while intimate sources are those who provide support because of the love, commitment and obligation they feel towards their spouses, family members, friends, and members of their social networks. The *sources* of social support reported by CHR's did not correspond to actual physical locations (e.g., medical office), rather they were defined more abstractly as 'third places' (Oldenburg, 1997, cited in Baum and Palmer, 2003), as events in the everyday community context that bring people together (e.g., community celebrations, cultural activities, grocery shopping). Perhaps the most important feature determining access to social support relates to the contextual characteristics of many First Nations and Inuit communities (i.e., that they are geographically small, with small populations), which can lead to tensions around the structure, function and access to social supports.

6.5.1 Social integration and functionally supportive environments

Because many First Nation and Inuit communities are small in terms of area and population, they are often highly integrated places. We saw this repeated by a number of CHR's as they identified a significant overlap in the types and sources of social supports in their communities, as community members fill a number of supportive roles in the community (e.g., teacher, sister, aunt). The extent to which these communities are social integrated can magnify how an individual's personal and public interests can intersect (i.e., as one takes on the role of institutional *and* intimate source of support). Influenced by the powerful undercurrents of colonialism, it is precisely this intersection of private and public interests (e.g., the social-structural features of the community) that can shape access to social supports in Aboriginal communities.

While the existence of these overlapping social ties may lead to increased social integration within the community, such social integration does not necessarily translate into functionally supportive environments. An important distinction emerges – *structurally* supportive environments are distinct from *functionally* supportive ones (House et al., 1988; Thoits, 1982). In these small communities, wherein most people are connected in some way or another, there may be a tendency make the erroneous assumption that being social integrated necessarily forges functionally supportive relationships, when in reality they may not. Therefore, it is also important to consider the strength – and functionality – of these ties. Indeed, social integration can provide individuals with a high level of p*erceived* support, which for some is health-protective in its own right. However, in understanding the factors that determine access to social supports, we must look beyond measures of structural support to consider the mechanisms that influence what it is we actually 'get out' of being socially integrated.

6.5.2 Access to social support in the post-colonial context

CHRs' stories about *access* to social support were embedded within a narrative of the post-colonial context. Within this narrative, access to social support was shaped by the interaction of the broader societal context (i.e., poverty, government paternalism) and local social conditions (i.e., cultural norms and behaviours at the local level, such as parenting skills, socioeconomic dependence, and trust). CHR's described a number of individual and community-level mechanisms that determine one's access to these supports. Combined, elements of the broader societal context and local social conditions represent the formation of a framework (**Figure 6.1**) that outlines the pathways through which post-colonialism manifests in the social environment, and the subsequent impact for access to social support at the community level.

Social support, then, is characterized as a property not only of individual behaviours, but also as a product of the larger social, political and economic factors that underpin community norms, values and behaviours (Felton and Shinn, 1992). As in the case of so many health-related behaviours (e.g., overeating, driving too fast), there is a propensity to assume that individual choices are the sole predictor of individual behaviour (e.g., actively choosing not to access social supports) (Knowles, 1990). Such thinking places responsibility for health exclusively on the individual, thereby masking the broader societal influences that shape health behaviour. The formation of health behaviours are rarely the result of individual choices alone; rather, these actions are responses to widely-held social norms and values, and the everyday contexts within which individuals live their lives (McKinlay, 1990). Therefore, while support infrastructures may be in place at the community level (e.g., support groups, social workers), individuals may actively choose not to use the available resources for any number of reasons, including lack of trust in institutional supports, the shame associated with illness, or the fear of being judged. Such fears, furthermore, may be exacerbated in communities wherein public and private interests often intersect. While group membership forms the fundamental basis through which an individual may become socially integrated (e.g., family, marriage, or participation in organized groups such as church or cultural societies), these social ties alone will not ensure access to *functionally* supportive environments. Therefore in gaining access to social supports that are both structurally and functionally sound, we must be cognizant that individual choices and opportunities can be masked by features of the broader societal context, many of which are reinforced in the post colonial setting. Thus, while some will argue that it is an individual's responsibility to get the support they need – particularly in the context of such highly socially integrated environments wherein so many of the supports are already 'in place' – we must be mindful of the larger upstream contextual features of communities that can restrict an individual from drawing on such resources.

6.6 Conclusion

Research into the fundamental causes of poor health among Aboriginal Canadians points to varied upstream determinants of health (e.g. colonialism, poverty), yet few researchers have explored the means through which access to health determinants, such as social support, may be influenced by factors associated with the broader societal context. In this paper, attention has been focused specifically on identifying how the large scale can *interact* with everyday community environments to shape the nature of and access to social support. Related to the contextual factors of First Nation and Inuit communities – namely that they are small places with small populations – the overlap of intimate and institutional types of social support contributes to high levels of social integration. Access to social support is determined not only by being socially integrated, however, but by a number of inter-related issues associated with the post-colonial context of Aboriginal communities, including socioeconomic dependence, trust and group belonging – all of which of CHR's described as influential for accessing social support within the unique contexts of their communities.

Opportunities for the development of social support are immeasurably shaped through the interaction of varied upstream processes and the everyday context of local places. The key to building policy that encourages the development of these supports will require acknowledgement that individual health behaviours, in and of themselves, are only part of the equation toward improved health and social conditions for Aboriginal communities. By simply making resources available (i.e., through social welfare programs that allocate money for issues), we fail to address the broader societal factors that fundamentally underpin issues of access to such resources (e.g., dependency, inequality).

It is vital that health and social policy options recognize the post-colonial influences that affect Aboriginal peoples (Waldram et al. 2006; Frohlich et al., 2006; Adelson, 2005; Browne and Smye, 2004), and study the connections between these influences and how health determinants, like social support, play out in local places as a result of this legacy. In our efforts to improve conditions among Canada's Aboriginal population, the challenge therefore remains finding ways of building on Aboriginal concepts of health (Richmond et al., 2007; Kenny, 2004; Chander and Lalonde, 1998) – the strength of community ideals, sense of commitment, and maintenance of cultural identity. Such an approach is essential for creating solutions that build upon the positive attributes of Aboriginal communities and work to make them healthy, supportive environments.

In the final two empirical chapters, the dissertation moves into a more critical direction. Chapter 7 builds on the analysis of the current chapter to further examine the health-social support paradox that was raised in the introduction of this thesis. The results of the current chapter illuminate the fact that social support has been less helpful in improving patterns of First Nation and Inuit health because it is not a widely accessible resource at the community level. The next chapter delves further into the paradox to examine if and how social support may have a negative effect on health, and to explore the role of social structure (i.e., family, community) in mediating this relationship.

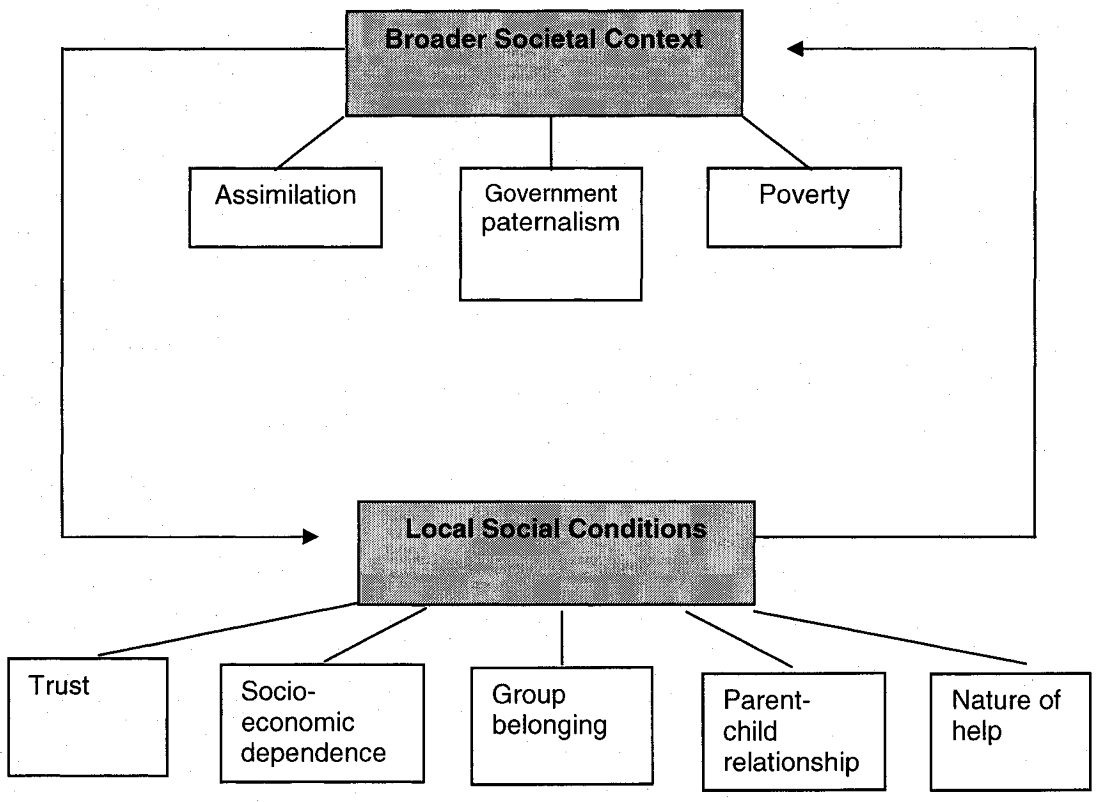

Figure 6.1 Access to social support in the post colonial context

CHAPTER SEVEN

Social Embeddedness, Health behaviours and Material Circumstance: Interacting Influences on Canadian Aboriginal Health

Chantelle AM Richmond and Nancy A Ross

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7.1 Abstract

An expansive literature describes the links between social support and health. Though the bulk of this evidence emphasizes the health enhancing effect of social support, certain aspects can have negative consequences for health (e.g., social obligations). In the Canadian context, the geographically small and socially interconnected nature of First Nation and Inuit communities provides a unique example through which to explore this relationship. Despite reportedly high levels of social support, many Aboriginal communities endure broad social dysfunction, thereby leading us to question the assumption that social support is protective for health. We draw from narrative analyses of interviews with 26 First Nation and Inuit Community Health Representatives (CHR's) to critically examine the health and social support relationship, and the social structures through which social support influences health. Findings indicate that there are health-enhancing and health-damaging properties of the health-social support relationship, and that the negative dimensions can significantly outweigh the positive ones. Social support operates at different structural levels, beginning with the individual and extending toward family and community. These social structures are important as they reinforce an individual's sense of belonging. As Gottlieb (1984) argues however, high-density networks can also exert conformity pressures and social obligations to behave in health damaging ways. The material deprivation that generally characterizes First Nation and Inuit communities adds another layer of complexity to this relationship. Limited income can cause individuals to be reliant on the resources of their family context, thereby significantly reducing the role of an individual to make choices that run counter to family beliefs and cultural values. Research and policy interventions must pay close attention to the social context within which social embeddedness, health behaviours and material circumstances interact to influence health outcomes among Indigenous communities.

7.2 Introduction

Since the late 1970's an expansive literature has grown to describe the connections between social support and health outcomes, the basic argument being that the care, respect and resulting sense of satisfaction and well-being related to our social ties can buffer against health problems and significantly reduce healing time after illness. In fact, some researchers suggest the health effect of our social relationships may be as important as established disease risk factors such as smoking, obesity and high blood pressure (House et al., 1988; Berkman and Syme, 1979). Though the bulk of the empirical evidence emphasizes the positive, health enhancing effect of social support, certain aspects of our societal ties can also have negative consequences for health status (Berkman and Melchoir, 2006; Uchino, 2001; Rook, 1992; Shuster et al., 1990). That one's social ties may cause harm forms a significantly under-emphasized dimension of the social support and health relationship (Rook, 1984; Barrera, 1986; Thoits, 1995), and some authors suggest that the assumption that tight-knit social structures always lead to improved health is misleading (Gottlieb, 1984; Kawachi and Berkman, 2001).

In the Canadian context, the geographically small and socially integrated nature of First Nation and Inuit communities provides a unique example through which to explore the health effect of social support. Despite reportedly high levels of social support (Richmond et al., in press), many Aboriginal communities continue to endure broad social dysfunction including family violence, sexual abuse, and staggering rates of suicide (Adelson, 2005). These social problems have manifested into potent predictors of morbidity and mortality among the Aboriginal population (Frohlich et al., 2006; Adelson, 2005), thereby leading us to question the assumption that social support – in particular that originating from family – is protective for health.

Consistent with other authors in the field of Aboriginal health (Browne, 1995; Svenson and Lafontaine, 1999; Kenny, 2005), we suggest that the current health and social patterns of First Nation and Inuit communities may be better understood if we draw from holistic frameworks of health, those which connect the health of individuals to the health status and behaviours of their families and communities. In the following paper, we critically examine the health and social support relationship, and the social structures through which social support influences health. We draw from narrative analyses of qualitative interviews with 26 Indigenous Community Health Representatives (CHR's) from various First Nations and Inuit communities across Canada to explore their understandings of the health effect of social support.

7.2.1 Connecting Individual to Community: Indigenous Concepts

On a global scale, Indigenous models of health and healing place a distinct emphasis on the larger social system within which the individual lives. Concepts such as balance, holism, interconnectedness and multi-dimensionality are regarded as key for healthy living among Indigenous populations and communities around the world (Svenson and Lafontaine, 1999; Durie, 2004; Australia, 2004; Casken, 2001). Indigenous conceptualizations recognize that an individual's health is shaped by larger social structures, including family, community, nature and their Creator (Svenson and Lafonatine, 1999; Bird, 1993). An individual must therefore consider the results of his/her actions and behaviours within a greater scope of life and being (i.e., their social milieu) (Casken, 2001). At the same time, an individual's health and wellbeing depends on the wellness of those who surround him or her, such as family or community social context (Durie, 1994). Patterns of Indigenous health may be better understood by examining the supportive behaviours that connect individuals to their greater social context and vice-versa.

7.2.2 Contextualizing Social Support

Social support refers to the supportive behaviours and resources of our social ties, including emotional support, intimacy, positive interaction, and tangible support (House, 1981). These supportive behaviours operate at the levels of individual and community (Thoits, 1995; Felton and Shinn, 1992). It is the nature of one's social embeddedness that provides him/her the opportunity to draw from these resources. Social embeddedness refers to the connections that individuals have to others in their social environments (Barrera, 1986). One's social ties are embedded within broader social exchanges. At the community level, for instance, increased interconnectedness leads to greater network density and a greater propensity for sharing of information and social feedback which can 'correct' individuals as they deviate from course (Gottlieb, 1984). At the same time, however, Gottlieb (1984) notes that high-density networks can exert more conformity pressures and social obligations than can low density networks.

In measuring the health-related functions of one's social embeddedness, Gottlieb (1984) defines three units of analyses from which we can understand how support affects the individual – the microlevel, the mezzolevel, and the macrolevel. The microlevel refers to an individual's most intimate relationships, those closest to the individual (e.g., intimate partner, spouse, confidant, family), who provide deep and nurturing emotional ties. The mezzolevel refers to the individual's personal community of associates. These ties are considered to be close friends of the individual, those with whom there is regular social interaction and exchange of other forms of support, such as advice, material assistance, companionship, emotional nurturance and esteem. Gottlieb (1984) defines the macrolevel as an individual's most distant social ties – these 'weak' ties are formed through one's social integration or participation in community (e.g., those ties resulting from participation in volunteer organizations, or community institutions). The presence of varying levels of social structure is an important feature of the community context. It is the interconnected nature of these social institutions that embed individuals within the social context of their families and communities.

In the greater literature on health and social support, there are two fundamental assumptions regarding the health impact of one's social ties: the first is that social embeddedness is naturally health-promoting; and the second is that tight-knit social structures (e.g., family, close friends) lead to improved health (Gottlieb, 1984; Rook, 1984; Uchino et al., 2001; Uchino, 2005). As Rook (1982:1106) points to however, negative social interaction can actually have more potent effects on wellbeing than can positive social interactions. In her seminal study on the relationship between problematic social ties and health among elderly women, for instance, Rook (1982) found that 38% of those who caused problems for the respondent were identified as friends and an additional 36% were identified as kin. Thus, we cannot assume that friends and family are uniformly supportive, or that one's increased social embeddedness will always improve health. Nor can we make assumptions about the quality of a social tie merely from knowledge of role relation (e.g., that close ties such as family will be more helpful than will weak ties such as a work colleague).

Recalling the Indigenous concepts of health reviewed earlier, we witness some important conceptual similarities from the epidemiological literature regarding the pathways through which individuals and their well-being may be influenced by their embeddedness within their social contexts. Indigenous frameworks hold that health and wellbeing are shaped in significant ways by the larger social structures to which an individual belongs. The social roles and obligations associated with this embeddedness can powerfully affect one's health behaviours and life choices, therefore influencing the development of self-esteem, competence and sense of self or identity (Stryker and Burke, 2000). Sense of identity is formed within the context of meaningful social ties, for instance in our roles as friend, employee or mentor (Stryker and Burke, 2000). Our social ties influence health as they provide feelings of love and empathy, and as they enforce social pressure to engage in health behaviours (e.g., diet, exercise). Much of the prior research on social relationships and health has assessed only this single positive dimension of health (Uchino et al., 2001). However, these ties may affect health in negative ways as well, in particular as they exert conformity pressures that may normalize health damaging behaviours (e.g., smoking, risky sexual behaviour) (Burg and Seeman, 1994). The potential for social support to negatively influence health becomes increasingly apparent in populations that exhibit high levels of social support, but for whom the effect of such integration is not health-protective on its members (e.g., gang membership).

In terms of research specific to Indigenous populations, some studies have been instructive. Richmond et al., found social support to be a strong dimension (2007) and determinant (in press) of health among Indigenous Canadians, in particular among women. Their results also led to the suggestion, however, that not all types of social support lead to improved health. Among

Indigenous women, for instance, Richmond et al. (in press) found that high levels of affection & intimacy were *negatively* associated with health. This result is surprising given that providers of affection & intimacy are likely their spouses, children or siblings – those we assume should provide the sorts of loving social ties that promote health.

Cummins et al. (1999) identified connection to family as a consistently powerful dimension of physical and emotional health among Native American youth. Results from a study on the factors that promote sobriety among Alaska Natives (Mohatt et al., 2002), point to *ellangneq* – an interdependent, constitutive, or expanded sense of self found among many Alaska Natives – which links the individual explicitly to a collective context and protects health. That individuals of 'collectivist cultures' organize their sense of self and well-being according to practices that promote connectedness with others was also demonstrated by Hofboll et al. (2002) who compared the impact of sense of self-mastery (i.e., "I am the key to my success") to that of communal-mastery (i.e., "I am successful by virtue of my social attachments") among Native American women residing on Indian Reservations in Montana. Women high in communal-mastery experienced less increase in depressive mood and anger than women who were low in communal-mastery, particularly when faced with high stress circumstances (Hofboll et al., 2002).

Iwasaki et al.'s (2005) work on how Canadian Aboriginal people with diabetes cope with stress has also been instrumental in defining the role of social support for maintenance of wellbeing. Social support is important not only for providing opportunities for sharing problems and feelings, but also for gaining encouragement and strength. In another study, Maro et al (2004) explored the factors influencing quality of life in patients with active tuberculosis. Social support and functioning emerged as a key theme. TB patients' social functioning was affected through isolation, variable social support by family and friends, and the ability to continue with social and leisure activities.

7.3 Methods

The analysis reported in this paper contributes to a larger mixed-methods study that seeks to better understand how the health the Canadian Aboriginal population is influenced by varying aspects of their social environments. The analyses described here builds on a larger quantitative phase (Richmond et al., 2007; in press) to get at issues of mechanism and meaning of the health-social support relationship. We draw from narrative analysis of interviews with a national group of 26 First Nation and Inuit Community Health Representatives (CHR's), which occurred in 2005. Depth interviews were chosen as the method through which to uncover the rich descriptions and meanings of the social processes that determine health in their local communities (Miles and Huberman, 1994).

The interview schedule was designed to probe CHR's on their perceptions of the links between health and the social environment of their respective communities. CHR's are front-line health workers whose duties range from pre-natal health to community development. Given their wide occupational context, they form a knowledgeable group from which to explore the links between social support and health, particularly given their role as providers of social support. The interview tool focused on three areas: (1) perceptions of individual and community health (2) the nature of social supports in Indigenous communities; and (3) the health impact of social support. In this paper, we focus on the third key area.

The interviewees included twenty-five women and one man, all who were employed as CHR's in their respective communities. All interviews occurred over the telephone and were tape-recorded (with permission). Once transcribed into electronic format, hard copies of the interviews were mailed to all participating CHR's for their input or clarification. None proposed changes to their interviews. In order to protect the identities of interviewees, pseudonyms have been assigned to all CHR's. Data analyses of the interviews involved the manual establishment of a working set of codes, which were organized by theme (e.g. positive versus negative forms of support) and sub-theme (e.g., behaviours, obligation to family, etc). These codes formed the framework used to describe and analyze the phenomena explored by the interviews[11].

7.4 Results

We present the results, in keeping with the objective, which is to critically examine the health and social support relationship and the social structures through which social support influences health. In particular, we describe the health impact of social support across varying social-structural levels, beginning with the individual (i.e., micro-level) and moving outward to family (i.e., mezzo-level) and community (i.e., macro-level) (Svenson and Lafontaine, 1999; Gottlieb, 1984).

7.4.1The Individual

CHR's described the influence of social support on individual health across four interconnected dimensions that work at the psychological level –

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[11] See Chapter 5 for an in-depth discussion of the methodologies and theoretical frameworks guiding the research reported in this Chapter.

physical, mental, emotional and spiritual. CHR's indicated that social support is strongly connected to mental and emotional health. Intimate (i.e., family) and institutional (i.e., paid workers) supports are significant for the development of one's psychological resources (e.g., self-esteem, confidence, and sense of purpose):

> Self-esteem is the foundation to health....in order for a person to feel good about themselves... If the person feels in their heart and soul that they have some good qualities, they are able to cope (**Annie**).

Social support also provides one with a sense of security and assuredness. Often, the mere act of talking over a problem can help one feel less burdened. Verbalizing a problem can also bring clarity to an issue, which may enable the individual with an improved sense of self-esteem and confidence in their abilities to deal with other stressors.

CHR's discussed the role of social support for improving an individual's spiritual health. Similar to the impact of social support upon mental and emotional health, CHR's expressed a strong sense of belonging and purpose related to one's spiritual orientation and the activities celebrated by those who share these beliefs. Being in the presence of other like-minded people – those who share similar goals and beliefs – can greatly enhance one's psychological well-being as the ideals of their faith are acknowledged and respected:

> I think that inner culture is really important, like people who are following more traditional ways, or traditional forms of lifestyle...They teach you how to take care of yourself first, and how to look after your family, and how to interact with different people (**Michelle**).

Finally, CHR's defined a strong connection between social support and physical health. In the majority of examples, CHR's connected improved access to health information with the development of healthy choices and behaviours among their community members. For instance, many CHR's mentioned the positive impact of hosting health education seminars in their communities (e.g., hand-washing, cooking classes):

> As CHR's, we see it all the time... People come in and they want to know how to lose weight or whatever, so we give them information on nutrition and exercise. From our support, sometimes they succeed (**Norma**).

As individuals gain access to health information, they can draw upon that knowledge to live healthier lifestyles and consequently, teach their family members and friends as well. Institutional supports (i.e., formal community institutions such as a women's support group or a teen centre) are also important for providing places wherein individuals can escape the pressures and responsibilities of their intimate social roles and obligations.

CHR's defined community events, activities and resource centres as critically safe places, those that encourage a sense of belonging and cultural identity. Such resources are especially important among individuals who endure adversity in their home environments (e.g., alcoholism, violence). Individuals may decide not to reach out to available social supports, however, because they have grown accustomed to the social context of their family environments. As Julie explains, individuals may not take the steps to learn about living healthier lifestyles because, at the psychological level, their behaviours and feelings have become normalized by their social context:

> Maybe the person doesn't want to change. Or maybe they are always [feeling] down or they think negatively because people [close to them] always put negative things in their head. Now how can that person think positive when there is all that negative stuff in their life? (**Julie**).

As this final quote indicates, no man or woman is an island in their social environments. Psychological resources are the bed upon which social structure and social supports lie.

7.4.2 Family context

Family and home are important symbols of safety, strength, comfort and unity. All CHR's described the family as the most powerful institution through which social support influences health:

> Family is the key here. A lot of them [community members] that moved off the reserve for a better life, they end up coming back home. I think it's just because they find it safer than when they are off-reserve. The world changes so fast and so much...but you always know you can go home to family (**Delores**).

The family unit provides the individual with a sense of love, affection and belonging. Being part of a family reminds the individual that they are responsible not only for their own health, but for the security of their family members as well. As Debbie explains, her decision to get sober and healthy stemmed from her motivation to be the best mother she could be:

> I grew up in an alcoholic home, and I now have children of my own. I was young when I started having my children and I thought, I don't want them going down the same path as my family and myself, so I quit drinking...It was all for my children (**Debbie**).

Beyond the love and affection received from the family unit, it is also important for pooling financial and intellectual resources, which can be critical when trying to solve problems or make decisions. As Martha explains, her family has grown closer through their abilities to communicate:

> What has really helped me and my family...is having a family conference... We just let the kids talk about any kind of issue that they have... It is good, we have good communication and that makes a big difference... That is one good way of getting involved with your family, is communicating (**Martha**).

A troubling issue raised by a number of the CHR's however, points to the fact that the family unit can permit forms of love and belonging which may be better described as dysfunctional. As is the case in many Canadian Indigenous communities, legacies of abuse and family violence significantly impact one's ability to display loving and nurturing behaviours toward their families. Over time, these behaviours can become normalized. Diane explains that because of abusive pasts, some parents are unable to openly display acts of love and affection:

> Not all families are like that [loving]... It is the way they have been brought up... I noticed a couple of families here that are not very affectionate with each other. I never see them giving them a pat, or say like if you are watching a ball game and one of these children are playing in the game, they don't say like "hey that was good, good job out there, that was a good play you did," they never say that, they just stand there and look (**Diane**).

The family context is the origin through which individuals learn social norms and behaviours. Core values, ideals and behaviours are permitted early in life through the reassurance and feedback received from those closest to the individual – typically family members. The family can therefore influence an individual's health as it normalizes and encourages health-promoting or health-damaging behaviours. The strong social institutions of a family can make it difficult for an individual to change health behaviours once they have become an entrenched feature of family life. The social bonds and sense of belonging associated with the family context, therefore, can be harmful and helpful for health. Through the example of a teen returning home from drug and alcohol rehabilitation, Laura describes how the family can actually sabotage the recovery process:

> It is a whole life change, yeah when you get sober, and then when people go away for treatment and they come back, like if it's a young person, they have to come back into the same house. And

> the people are all still doing it. They don't have the kind of support they need, they don't have a chance (**Laura**).

7.4.3 Community context

CHR's perceived the supportive behaviours of the community to influence health in both positive and negative ways. In the context of organized social events (e.g., picnics, community celebrations, dances) for instance, CHR's described these events as crucial forms of positive social interaction and important for getting people together for fun:

> They have dances for the young people, then they will have dances for the older generation like the fiddle playing and all that, then they will have concerts... We also have summer festivals...We just had one this weekend. Fun days for the kids at the beach all summer, BBQ's, and they hire a clown... So all day Sunday that's what they did, and oh, the people that showed up! (**Sandy**).

These events are not only sources of fun, however, but also important ways to promote positive lifestyle choices and to keep cultural traditions alive:

> Every now and then we have be sober dance, and that is a big hit because we specify that it is alcohol free, and drug free type of thing where everyone is welcome (**Martha**).

As Martha alludes to in the previous quote, many Indigenous communities have struggled – and continue to struggle – with alcohol and drug addictions. 'Dry' dances (e.g., drug and alcohol-free events) are fun, safe places for their communities. Events such as these are necessary in communities wherein there may not be many other 'safe' social outlets for community members. The 'recovery movement,' which refers to the process through which individuals and their families recover their lives from cycles of alcoholism, drugs, and abuse, is very strong in many Indigenous communities. As Emma explains, her community is taking the steps it needs to reconcile its social problems, therefore making the community a healthier place to live:

> We are starting to change now, and I think it is going to be for the better. We have a big struggle on our hands to make our community a better place, and we need to start with the community members, and what they want and need to have a more positive life... Things are starting to change now, slowly, very slowly, but they are changing (**Emma**).

In many communities, these positive changes are occurring through established support programs wherein individuals can learn the skills needed to live a healthier lifestyle (e.g., Alcoholics Anonymous, drug rehabilitation, nutrition and parenting classes). However, such institutional supports are not always perceived as accessible by community members. Issues such as community politics and the legacies of colonialism – those which occur within the broader social context of the community – have significantly reduced levels of trust, thereby causing the perception that individuals may be better off to cope with their problems on their own:

> If you don't trust anyone, how are you going to be able to work with the people? So that's a big thing is trusting, because a lot of people don't speak of their past unless they can trust you. Small communities always gossip. That's a major problem up here (**Martha**).

Beyond issues of lacking trust, logistical issues are also important as institutional supports are available only during work hours. This means that during evenings and on weekend, the support of the health workers and their programs may not be available:

> When they need to talk, they will come and talk to somebody that works here [health centre]. They don't really have the type of friends that they can trust. They feel more comfortable to come here and talk to somebody... But that does nothing for them on the weekend if they are in the middle of a crisis and we are closed (**Laura**).

While the community context of Indigenous communities can positively influence individual health through provision of programs and services, individuals are also exposed to the social pressures of their community ties (e.g., friends) which can support behaviours that are health-promoting *or* health-damaging. Healthy living does not occur in isolation. One's success is strongly influenced by the social norms and cultural contexts of their friendships, as well as those they interact with on an everyday basis (e.g. fellow employees):

> Let's say you and 5 friends smoke cigarettes and 1 of you decides to quit and the others don't, so then what happens? You're abandoned. You are really kind of alienated and isolated because you lose your friendships. You hear them [community members] talking about that, not just with cigarettes but with drugs or drinking, they lose their friends. They are separated from them (**Laura**).

As Emma explains, it can be easier to succumb to the pressures of our social contexts than it is to be socially isolated. However, as individuals attempt to improve their health behaviours and lifestyles, they often have no choice but to limit contact with members of their social context, which can include their friends:

> They try to have a positive lifestyle, but it's the friends around them that are doing the exact same things they are [drinking]. They don't realize that they have to change their circle of friends in order to make themselves better... You have that loyalty. They don't want to lose these friends because they have known them so long, and some of them are family members. For someone to quit doing drugs, it would practically mean leaving their families as well (**Emma**).

In some cases, this may mean physically removing one's self from their communities (i.e., moving to a new community). Nora explains how her husband had to do just that as he conquered his battle with alcoholism:

> He has had to change his lifestyle, his friends, and he found friends on the outside [off the reserve] who support him. He had to find friends that are sober like him... In his program he learned that if he wants to change his lifestyle, he has got to change his friends as well. He couldn't continue with the same friends. He misses them and he will tell them 'if you want to join me you will

> just have to abstain from alcohol and not be a bad influence,' so he's really been helping his friends too, to try and abstain (**Nora**).

7.5 Discussion

Our analysis draws from cultural (Svenson and Lafontaine, 1999) and epidemiological frameworks (Gottlieb, 1984) to critically examine the social structures (i.e., individual-family-community or micro-mezzo-macro levels) through which social support influences health in First Nation and Inuit communities. CHR's explained that social support is fundamentally connected to sense of belonging, which is established through embeddedness of individuals within the family and community context. This embeddedness is critical for the development of self-esteem (e.g., the positive feeling associated with feeling accepted) and identity formation, and also for learning the ideals, behaviours and expectations of one's social context. Associated with this context are a set of rules to which an individual obliges in the maintenance of their social embeddedness (e.g., attendance at family holiday meals, weekly telephone calls). Participation in the social activities and behaviours associated with the group/family context are important as they reinforce an individual's sense of belonging. Over time, these social activities and behaviours become normalized and a culture of expectation is created.

While sense of belonging is critical to the development of an individual's sense of identity (i.e., as a sister, friend, employee), CHR's expressed concern that not all forms of belonging are uniformly health-enhancing at the psychological level. Certain social and cultural institutions through which individuals develop sense of identity can sometimes harm health, for example in the case of domestic violence (Mitchell and Hodson, 1983; Muhajarine and D'Arcy, 1999), or smoking behaviour (Stead et al., 2001). Such institutions can set an individual on a destructive trajectory, as they idealize, promote, or 'trap' individuals within these health damaging behaviours. Because of the conformity pressure and loyalties we feel toward our families and friends, however, it can be very difficult – even impossible – to disobey the social rules associated with these relationships. In the event that an individual seeks positive change, they may be restricted by the very nature of their social embeddedness, which exerts a high level of social pressure to conform to expected behaviours and cultural norms (Gottlieb, 1984). In the example of battered women, for instance, Mitchell and Hodson (1983) suggest that separation from their husbands may mean disruption of a major portion of their social ties. As many CHR's discussed, lifestyle changes often require individuals to physically remove themselves from the social environment which had enabled these health damaging behaviours. Indeed, while these changes are viewed necessary for improved health, they can leave the individual feeling lonely and isolated.

Our results therefore contradict two assumptions around the social support-health relationship: first that social integration is always health promoting, and second that tight knit social relationships always lead to improved health. These assumptions are seriously flawed because the nature of one's social embeddedness (and the social structures through which they operate) can work to harm health for the very reasons that they improve health. That is, human beings are naturally drawn to care for and protect the ones they love. Though humans are – at the most basic level – individual, free-thinking agents, the fact remains that we are also social beings, and highly influenced by the social environments within which we grow and develop (Schaefer et al., 1981; Taylor et al., 1997). We crave love and belonging, and it is the nature of that belonging – and the cultural norms and behaviours which are valued as important within the social context of that belonging – that enables the health of individuals to be affected in both positive and negative ways.

In the context of improving health among Canadian Aboriginal communities, our results therefore emphasize that individual health behaviours are invariably reflective of the social norms, values and expectations held at the family and community levels. Changes in the health and wellness of individuals must therefore be rooted in attempts that focus on large-scale social investments, those that involve families and communities in health promotion. CHR's were adamant that local governments can play a key role in facilitating these changes through policy interventions and programs that increase opportunities for positive social interaction and health education at the family and community levels. Community wide celebrations (e.g., National Aboriginal Day), cultural events and other social events provide opportunities for community members to connect with and learn from one another in settings that will work to normalize healthy behaviours. These events are critical for improving sense of belonging at the community level, and for promoting success among those individuals currently engaged in the recovery process.

CHR's also acknowledged the dire material circumstances that characterize the self-esteem and confidence of their communities as a whole. In 2005, for instance, the unemployment rate of the Aboriginal population was 2.5 times that of non-Aboriginal population (Canada, 2007). CHR's identified the negative dimensions of social support as symptomatic of larger structural problems, including stress related to poverty, psychological stress, and dependence on government. The poor material circumstances endured by so many First Nation and Inuit communities' cascades from the community level and down to that of the individual, wherein inequality manifests as widespread social dysfunction. Part of the solution must therefore come from structural changes at the macro level. Improved health behaviours are important at the individual and family levels, but large-scale material investments are also fundamental for initiating change in the social environments of Aboriginal communities, and providing brighter futures for the growing population of Aboriginal youth. Community members can learn to live healthy lifestyles, but if the social environments of First Nation and Inuit communities continue to be marked by poverty, legacies of abuse, and inadequate employment opportunities, the success to such efforts will be gravely compromised. While CHR's admitted that social and behavioural change in their respective communities will take time, all were optimistic that positive changes are possible through determination by local decision makers and acknowledgment of the need for change by community members themselves. Community planners and advocates for health and social programming must do more to initiate and support the positive changes occurring within Indigenous communities and ensure that when individuals are ready to embark on healthy lifestyles, they have access to the social and material resources they need to succeed.

7.6 Conclusion

Previous work in this area of research has focused almost explicitly on the health enhancing dimension of social support. In this paper, we have taken a more critical look at the health-social support relationship, and its potential for affecting health in a negative way. Based on in-depth interviews with 26 Aboriginal Community Health Representatives, our findings indicate that there are health-enhancing and health-damaging properties of the health-social support relationship, and that the negative dimension can significantly outweigh the positive ones. Social support operates at different structural levels, beginning with the individual and extending toward the family and community. The social activities and behaviours associated with these varying social structures are important as they reinforce an individual's sense of belonging. As Gottlieb (1984) argues however, though increased interconnectedness may lead to greater network density and a greater tendency for sharing of information and other health-enhancing properties, high-density networks can also exert more conformity pressures and social obligations to behave in health damaging ways. We have illustrated that social support can impact health in both positive and negative ways, and the assumption that tight-knit social structures (i.e., family, partner) always lead to improved health is critically flawed.

Within the Aboriginal health literature, there has been little critical analysis of the means through which one's social ties can influence their health. First Nation and Inuit communities are highly integrated places and the social structures of these communities are often quite complex (e.g., because community members are so interconnected through family, work, politics, etc). The results of our analysis suggest it is through the normalization of negative health behaviours by family, friends and greater community that poor health is proliferated in the Aboriginal context. The poor material circumstances that characterize the Aboriginal population add yet another layer of complexity to this relationship, as it significantly reduces the role of an individual to make choices that run counter to family beliefs and cultural values (i.e., limited income may cause reliance of individuals on the resources of their family context). Research, policy and interventions must therefore pay close attention to the social context within which health behaviours and material circumstances interact to influence health outcomes among Aboriginal people. As a means of building on these results, the following chapter draws from a critical population health approach (Labonte et al., 2006) to conceptualize the pathways through which changed relationships with the physical environment have compromised the quality of health determinants, including those of the social environment, among Aboriginal Canadians.

CHAPTER EIGHT

The Determinants of Aboriginal Health in Canada: A Critical Population Health Approach

Chantelle AM Richmond

and

Nancy A Ross

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8.1 ABSTRACT

In this paper, we draw from a critical population health approach (Labonte et al., 2005) to conceptualize the pathways through which changed relationships with the physical environment have compromised the quality of health determinants among Aboriginal Canadians. The effects of environmental dispossession – the process through which access to environmental resources is reduced – have had consistently negative consequences for the population health of Indigenous Canadians, yet little emphasis has been placed on understanding the processes that produce and sustain such outcomes over time. We draw from narrative analysis of interviews with a group (n=26) of Aboriginal Community Health Representatives (CHR's). CHR's identified six determinants of health: balance, life control, education, material resources, social resources, and environmental/cultural connections. It is within the sixth determinant, that of the environmental/cultural connections, wherein CHR's descriptions of Aboriginal health determinants shows divergence from those of Canadians in general. Loss of control over environmental resources has led to life imbalance, loss of life control, changing forms of education, material disadvantage and social dysfunction. Our results illustrate that environmental dispossession has had its greatest impact within the social environment – by limiting community members' capacities to help one another and provide the sorts of supportive behaviours that promote health. Future research should focus on identifying the pathways through which the physical, material and social environments interact to influence the health of Aboriginal Canadians.

8.2 Introduction

In the years following the release of the report of the Royal Commission on Aboriginal Peoples (Canada, 1996), a national Inquiry into the general wellbeing of Aboriginal Canadians, improving patterns of population health among Canada's Indigenous peoples has become a significant priority among Canadian health researchers. The majority of this work has employed traditional positivist approaches that seek to quantify rates of disease and death in the population, for instance through investigations of the role of genetics on epidemic rates of diabetes among First Nations (Young et al., 2000), or in defining rates of gestational diabetes among Native mothers in Quebec (Gray Donald et al., 2000). While these studies have been crucial in defining the disproportionate burden of morbidity and mortality borne by the Aboriginal population, these shared observations have not transformed into common understanding of the *causes* of inequality. Little emphasis has been placed on the effects of the social, environmental, cultural, economic and political processes that have simultaneously worked to produce and sustain these inequalities over time (Waldram et al., 2006; Adelson, 2005).

In this paper, we draw from a critical population health approach (Labonte et al., 2005) and interviews with a group of Aboriginal Community Representatives to conceptualize the *processes* through which changed relationships with the environment have manifested as health inequalities among Aboriginal Canadians. In our efforts to illuminate these pathways, we focus on the disconnect between Aboriginal peoples and their physical environments. We draw from two research objectives to explore these issues: 1) to explore CHR's perceptions of the determinants of Aboriginal health, and 2) to examine the processes by which environmental dispossession has impacted the determinants of Aboriginal health.

8.2.1 Critical Population Health

The population health perspective emerged when two economists of the Canadian Institute for Advanced Research (CIAR) proposed a model for analyzing the determinants of health of populations (Evans and Stoddart, 1990). Population health refers to a conceptual framework for thinking about why some people are healthier than others (Young, 2005). Population health recognizes that economic, social and environmental structures can both support and constrain the health of community members (O'Neill and Pederson, 1994; Raphael, 2001). Perhaps most significantly, population health acknowledges that health research agendas must extend beyond health care (Frank, 1995), and into varying other determinants of health, such as education, employment and housing. Population health put the wheels in motion for an international research program that recognizes the importance of social and economic forces in determining the health of populations (Raphael and Bryant, 2002), and in fact, population health was sealed into Canadian health policy in the late 1990's when Health Canada officially adopted population health promotion frameworks for program funding and accountability in the late 1990's (Health Canada, 1998). Canada recognizes 12 official health determinants (**Table 8.1**).

The population health approach is significant in that it conceptualizes health to be determined by a broad range of interacting factors. Despite the breadth of the approach however, it is not without its critics, and perhaps the most important critique relates to an inability to consider the theoretical contexts within which the 'causes' or determinants of health and social inequalities are produced and structured (Labonte et al., 2005; Coburn et al., 1996). Some suggest, for instance, that the framework over-emphasizes the identification of socio-economic determinants (i.e., outcomes), thereby failing to account for the underlying social-structural influences that produce those particular determinants in the first place (Coburn et al., 2003), for example by focusing on income inequality as a determinant of health rather than seeking to understand the drivers of income inequality (e.g., race, class, power), and the means through which it is reproduced in society (Hayes, 1999). Critics relate these shortcomings to a fixation with positivist methods, including large scale survey analysis and categorical approaches (Labonte and Robertson, 1996). Such approaches, critics suggest, are insufficient for understanding the processes that *underlie* these determinants in the everyday realities of people's lives, thereby leaving us short on understanding how health inequalities are reproduced over time.

In the context of our research on the determinants of Aboriginal health in Canada, there are many varied and interlaced determinants, many of which are rooted fundamentally in unequal power relations and a history of colonization (Waldram et al., 2006; Adelson, 2005; Wilson and Rosenberg, 2002), those processes which are largely immeasurable or unexplainable by a traditional determinants of health framework (Evans and Stoddart, 1990). In conceptualizing the pathways from environmental dispossession to poor health among Aboriginal Canadians, we therefore turn to a critical population health approach that is based on a paper written from the discussions and work of an interdisciplinary group of researchers in the Saskatchewan Population Health and Evaluation Research Unit (SPHERU) in Canada (Labonte et al., 2005). Labonte et al. (2005: 10) outline the twinned goals of critical population health research to be (1) a thorough going deconstruction of how historically specific social structures, economic relationships and ideological assumptions serve to create and reinforce conditions that perpetuate and legitimize conditions that undermine the health of specific populations; and (2) a normative political project that, as a result of deeper understanding, seeks the reconstruction of social, economic and political relations along emancipatory lines. We focus on the first of these goals to conceptualize the pathways through which changed relationships with the environment have manifested as health determinants among Aboriginal Canadians.

8.2.2 Environmental Dispossession

Indigenous populations in Canada have experienced, and continue to experience, the health effects associated with environmental dispossession. Environmental dispossession is defined as the process through which access to environmental resources is significantly reduced. Reduced access to environmental resources by Aboriginal populations occurs through varying factors, including Canadian policy (e.g., reserve formation) and various types of industrial resource development (e.g., mining, forestry). Few researchers have examined the social, cultural and economic dimensions that connect Canada's Indigenous peoples to their physical environments, nor the consequences for health as these ties are severed (Richmond et al., 2005; Adelson, 2003; Wilson and Rosenberg, 2002; Wheately, 2000; Garro, 1995; Shiklyink, 1985; Thouez et al., 1989; Hagey, 1985). In the following paragraphs, we point to two examples -- environmental contamination and community relocations – from the Canadian Indigenous experience to illustrate how environment dispossession leads to social disintegration and poor health.

8.2.2.1 Environmental Contamination

Aboriginal communities, like other poor communities of colour, are more likely to experience the adverse health effects of government and corporate decisions that transfers toxic waste into the communities of oppressed and vulnerable populations (Krieger, 2001; Bullard, 2000). Examples wherein large-scale industry has displaced its waste upon Aboriginal communities are plentiful (LaDuke, 2002), yet one extraordinary example comes from two Ojibway communities in Northwestern Ontario: Grassy Narrows and Whitedog (Wheatley, 1997; Shkilnyk, 1985; Erikson, 1994). Grassy Narrows and Whitedog reserves are located approximately 180 kilometers downstream from the town of Dryden, wherein a chlor-alkali plant pumped greater than 10 tons of toxic, mercury-laden effluent into the English-Wabigoon River in the late 1960's and early 1970's (Canada, 1999). Residents in the two communities were exposed to methylmercury mainly through fish consumption (Canada, 1999), and some of the highest human mercury levels in Canada were found there (Wheatley and Paradis, 1995). By 1970, high levels of mercury in fish led to the closure of the commercial fishery. This had significant impacts on the community as it had long relied on the fishery as a means of food and an economic base. In the years following the contamination event, results from a ten-year mercury exposure sampling program indicated a general downward trend in Aboriginal exposure to mercury among residents of Grassy Narrows and Whitedog. However, the indirect negative effects of methylmercury on the health and wellbeing of these communities has been significant, including the disruption of lifestyle and eating patterns, and a range of socio-cultural and economic processes (Wheately and Wheately, 2000). For instance, change in traditional diet and lifestyle due to methylmercury in the environment and its real or perceived risk to health led to myriad other health problems. Change in diet, from high protein (fish and other wildlife) to high carbohydrate foods and the associated change from an active, socially cohesive lifestyle to a sedentary, less social lifestyle contribute to obesity and loss of fitness (Kuhnlein and O'Receveur, 1999; Rode and Shepard, 1994), and an increase in adult-onset diabetes (Wheatley, 2000). Perhaps the most destructive of indirect effects of the mercury contamination however, was that of the increasing number of violent acts and social suffering related to worklessness, boredom, feelings of powerlessness, and dependency (Wheately and Wheately, 2000; Elias, 1996; Shiklyink, 1985), and moreover of the loss of confidence and cultural identity associated with the severed connections to their natural environment:

> "In the years immediately preceding and following the discovery of mercury in the waterways, Grassy experienced a marked jump in its death rate to almost one in every fifty persons... Many counted in the annual toll were newborn infants and young babies, leading the people to suspect an attack by mercury on pregnant women on the reserve... However, violence and death had become as much a pattern of life at Grassy as the seasons – changeable but predictable..." (Hutchison and Wallace, 1977: 2-3).

Indeed, the health impact of mercury contamination on residents from Grassy Narrows and Whitedog were far reaching, and reflective of a much broader process of environmental dispossession and socio-economic and cultural displacement.

8.2.2.2 Community Relocations

In more recent times, the forced displacement of Aboriginal peoples from their ancestral lands has often taken the form of deliberate initiatives by governments to move particular First Nation and Inuit communities for administrative purposes. Administrative relocations are carried out for the convenience of government to administer its fiduciary responsibility to the Aboriginal population (Canada, 1996). Relocation of this type often involves centralization, for instance by moving widely dispersed or culturally different populations into a common community. Under Nova Scotia's Centralization Policy, for example, which aimed to cut the administrative costs of government services to Aboriginal people, about half the Mi'kmaq population of Nova Scotia was relocated in the 1940's to two central reserves, Eskasoni and Shubenacadie (York, 1989). Despite the government's awareness that the two reserves of Eskasoni and Shubenacadie could sustainably support a combined fifty families, thousands of Mi'kmaq were crowded on to the reserves, 'jammed between the lake and the hills,' making farming and other economic activities impossible (York, 1989: 3). Alas, there were food shortages at the designated reserves, and some of the Mi'kmaq came close to starvation. By the mid 1950's, at least three quarters of the population became dependent on welfare, showing signs of poverty and social disintegration:

> "Afton used to be a really lively place... The Indian people involved themselves in farming and growing crops, and they helped each other in planting and harvesting. But after centralization, people started changing their attitudes toward helping each other, they started drinking heavier... and they depended more and more on Indian Affairs to provide for their living..." (York, 1989: 67)

The relocation experience of the Mi'kmaq was not an isolated event however. In the years following, the Mushuau Innu of Labrador were relocated to Davis Inlet on Iluikoyak Island because government officials required a convenient location for service delivery, as they did for the Inuit of Hebron, Labrador (Brice-Bennett, 1994). The profound cultural loss triggered by relocation led to extreme stress and despair by the the Mushuau Innu and Hebron Inuit. In Makkovik, for example, young relocatees were self-conscious about their Hebron identity as it had become a synonym for low status in the community (Brice-Bennett, 1994). Despite the fact that the Hebron were relocated to communities that were home to other Inuit, they were marginalized culturally by their dialect, customs and inexperience with the new environmental surroundings. The destruction of family ties and the degrading circumstances of their lives led many Hebron Inuit to drift from community to community as permanently displaced people:

> Not only were families separated by having to live in different communities but the recurrent deaths of young people, mature adults and also elderly adults — who were often said to have died from heartbreak over leaving their homeland — broke the spirit of their surviving relatives and left them traumatized in overwhelming and silent pain (Brice-Bennett, 1994: 17).

Relocation and contamination can therefore be seen as part of a *process* of environmental dispossession by Aboriginal societies from the land, and from the cultural, spiritual, economic, political and social roots it nurtures (Canada, 1996). In the following analyses, we build on these examples to identify the pathways through which environmental dispossession and socio-cultural change have affected the determinants of Aboriginal health as they are understood by a national group of Aboriginal Community Health Representatives.

8.3 Methods and Analyses

This paper draws from narrative analysis of interviews with a national group (n=26) of Canadian Aboriginal Community Health Representatives (CHR's), which occurred June - September 2005. This analysis contributes to a larger mixed-methods study that seeks to better understand the social determinants of Aboriginal health in Canada. The interview schedule, the tool used when conducting the interviews with the CHR's, was designed to probe

CHR's perceptions of the links between health and the social environment of their respective communities, and to highlight the social and economic processes through which health is affected at the community level. The interview focused on three key areas: (1) perceptions of individual and community health; (2) the nature of, and factors that determine access to social support; (3) how social supports can impact health. The analyses described here relate to the first key area.

The interviewees included twenty-five women and one man, all who were employed as CHR's in their respective communities. All but one interview occurred over the telephone (that one interview occurred face-to-face). All interviews were tape-recorded, with permission. Once transcribed into electronic format, hard copies of the interviews were mailed to all participating CHR's for their input or clarification. None proposed changes to their interviews. In order to protect the identities of all interviewees, pseudonyms have been assigned for the names and home-communities of the CHR's.

Depth interviews with the CHR's provide us a source of well-grounded, rich descriptions and explanations of the social, economic, political, cultural and environmental processes that determine health in their local communities. Data analysis of the interviews was undertaken primarily by the lead author, who manually established the analytical framework used to explore the text of the interviews. The analyses occurred in two waves. The first wave of analysis responded to the first research objective, which was to explore CHR's perceptions of the determinants of health, and the second wave of analysis responded to the second objective, which was to examine the processes by which environmental dispossession has impacted the determinants of Aboriginal health. In this second we moved beyond description to critically examine CHR's explanations regarding the processes underlying health in their communities.

8.4 Results

8.4.1 Determinants of Health

CHR's focused on six determinants of health: balance, life control, education, material resources, social resources, and environmental/cultural connections. *Balance* refers to the maintenance of mental, physical, emotional and spiritual elements of a person:

> I have a holistic point of view on health. It's not just your physical health, but your mental, emotional, spiritual health... to me it's a balance, everything in moderation. Those are the things I try to live by. And when one is out of balance it affects the others (**Ian**).

Significant emphasis was placed on physical health status, including the importance of maintaining a healthy body weight, eating the right foods, and being physically active:

> [Good health] is about being very active. Having a healthy lifestyle and a healthy body... Being physically fit includes nutrition. That is the number one thing that we need is good nutrition, because over here we tend to eat a lot (laughs) (**Norma**).

Life Control was defined as one's ability to take care of him or herself. Respondents reported that being healthy did not necessarily mean living disease-free, but that being able to mange disease is fundamental to living a healthy life. Being mobile and having the ability to make decisions was described as synonymous to life control:

> To me it means being able to function. To complete my activities of daily living and getting around, and not necessarily being in100% good health, like physically – just being at a good level, where I can function, and do the things that I need to do. And basically as long as I am able to take care of myself (**Michelle**).

Education was also declared a vital health determinant. This determinant was broadly defined to include access to high quality educational facilitates (i.e., school and daycare), and to less formal types of education, such as health promotion activities that educate community members on the benefits of healthy eating, prenatal health, and cultural activities, for example:

> ...We have all kinds of pamphlets in our health centre that tell people about healthy living. Today there is better access to healthier lifestyles and ideas about what to do. Young mothers are being taught the 'Head start' program, and given ideas about healthy pregnancies, about cooking nutritious foods that they didn't have a few years ago (**Clara**).

Another key health determinant was *Material resources.* Respondents made reference to the importance of work, the opportunity to earn a salary and to provide for his/her family. *Social Resources* refer to the breadth and quality of one's social ties, and ability to rely on friends and family in times of need. Particular emphasis was placed on the role of social supports such as family and friends for engaging in health-promoting activities, for enhancing self-esteem and generally feeling good:

> ...Social supports are really important for health.... like if you are trying to quit drinking, or lose weight, or exercise more, like a buddy system is always good. Because those days that you don't feel like doing it, they are there to encourage you. And you know if you have a bad day, and there is someone there you can go and talk to, sometimes it helps just to talk about things at the end the day. Having good social support increases chances of living a healthier lifestyle (**Michelle**).

These five determinants reflect those found among Canadians, generally (**Table 8.1**). It was within the determinant of health described as *Environmental/Cultural connections* wherein the determinants of Indigenous health departed quite significantly from those of Canadians. CHR's conceptualized environment and culture as a single health determinant, which differs from the 'official' listing of Canadian determinants wherein culture and environment form two separate health determinants:

> In my community, we are more northern and we have traditional foods that we depend on. We travel on the land, we socialize more like together, and we know each other, and that is good. We always go on word of mouth, if somebody is going through this or that, and this means everybody gets involved. We are lucky to have that because I know more southern communities are losing that [connectedness] and its affecting them and their health (**Debbie**).

CHR's defined *environmental/cultural connections* less categorically than other determinants and more so as a *process* defining people's abilities to draw resources from the environment in the maintenance of culture and way of life:

> People here have lost their traditional way of life...Well there are still people who are following it, but there are more who don't do it anymore. We lost our traditional way of life and I think that's why people have poor health now, because we don't eat our traditional foods or do things like we used to (**Norma**).

CHR's pointed unanimously to changed access to environmental resources and shifting cultures as a source of decline across the five other determinants described above (i.e., balance, life control, education, economic resources and social resources). In the following section, we describe the pathways through which changed relationships with the physical environment have altered other health determinants.

8.4.2 Environmental Dispossession and the Determinants of Health

8.4.2.1 Life Imbalance

CHR's made explicit connections between severed ties to the physical environment and life imbalance. CHR's described how the physical, mental, emotional and spiritual elements composing health have fallen out of balance, thereby leading to poor health. In terms of the physical component of health, there was general agreement that a shift toward more sedentary lifestyles, combined with poor eating habits, and lack of exercise are leading to an epidemic of obesity and chronic illnesses, such as diabetes:

> For a long time my community was kind of isolated and didn't have access to a lot of services, because the closest town is about 80 kilometers away and so we were very self-reliant. More recently, the community has gotten away from things like gardening, and like you know, cutting wood, and all those other healthier lifestyle practices that they used to do a long time ago, that kept them active and physically in shape (**Michelle**).

Today, community members find it more and more difficult to access traditional foods (i.e., wild game such as fish, moose, and deer), and as a result there has been a significant shift to store-bought foods:

> I think in some aspects it [community health] is probably better, because we have a larger selection of food, for example, but on the other hand a lot of people don't eat traditional foods any more, or it's harder to get them because of the cost of living here. Gas is really expensive, and people don't have the means to get out on the land anymore (**Annie**).

Combined with the decreased ability to access traditional foods, in many rural and remotely located communities, the cost of fresh fruits and vegetables is prohibitively expensive, as they must be shipped by boat or plane. CHR's remarked that once these foods arrive in the communities, their quality is often much reduced. As well, some community members will 'reserve' the foods they want ahead of time (i.e., often non-Indigenous professionals who work on a contract-basis in these remote areas), thereby further reducing the quantity and quality of foods available to community members that may not have the same purchasing power:

> We live in a remote area, and the food that comes up here is very expensive. So we cannot always have fresh food, like even when vegetables do come up here, they are sometimes not even fresh. And the fresh food that does come in goes very fast sometimes. If you wait you will end up with nothing fresh. ***How long does it take for all the fresh food to go?*** A few days - and in the summer it's even faster because we have all the hunters here.

> Often groups of people will order food ahead of time. The teachers normally do that (**Julie**).

As a result, many community members will rely instead on non-perishable, processed foods – those which are inexpensive and keep for a long time.

Spirituality was mentioned as another important element in maintaining balance to one's health. Over the years, spirituality has formed a contested issue in many Indigenous communities and families. The church was originally introduced to Aboriginal people as a means of assimilating them from their 'pagan' beliefs and into mainstream Canadian values. In many communities today, the church is a key fixture of the landscape. However, traditional Aboriginal forms of spirituality, that which connects people to their lands - to mother earth - is also important. In many communities however, such traditional forms of health and healing are being practiced by smaller and smaller numbers of people and there is often a strong division within communities – as some members prefer the church over traditional ceremonies and vice-versa:

> ***Are there traditional people in your community?*** Not really no, we have to go off reserve for our traditional. There are a few people here that are practicing it, but you still more or less want the one's who know more of it. We have a traditional healer who comes to the community, and a lot of times people just go off the reserve to see the traditional healer. It is a bit controversial in my community (**Delores**).

CHR's described how the traditional songs and ceremonies are being lost or forgotten altogether, as these values are regarded as unimportant, or are not passed down by parents and other family members:

> For traditional ceremonies, or in regards to the lands, there are a group of people who are very traditional and try to incorporate our traditional culture back into the community, and I am one of those people. But again, not everybody is traditional, so it's sort of hard in a way to get people to understand. And like, some people just don't have that knowledge. Their family or their parents have not passed anything on to them, so they are without any religion or anything like that to guide them (**Emma**).

In terms of the mental and emotional aspects of balancing health, CHR's talked at length about the existence of major social problems in their communities. They expressed anxiety that fellow community members are using alcohol and drugs as a means of dealing with the stress of their changing cultures and lifestyles:

> The community has endured some really rotten stuff over the years and I don't think there is much empowerment right now to go to school or to get an education to be in a better position to get a job. Instead it seems like so many are living on social assistance and turning to alcohol or other substances to relieve those things. I think they might just feel overwhelmed with all of their problems, and feel like they can't cope with them, or can't get out of the cycle (**Michelle**).

There was also concern that these health behaviours form coping mechanisms used by community members who may harbour feelings of resentment, shame and anger related to harms they endured in their past (e.g., residential school experiences, or other abuses suffered as children).

8.4.2.2 Loss of Life Control

CHR's noted that community members have become less self-reliant over the past several years, and that dependencies on the Canadian government and local band councils for health and social services have grown immeasurably:

> At times, community members are really dependent on us [health services]...They don't know how to help themselves. We are trying to encourage people to take control of their life, and what they need, and to seek out other sources of support and assistance. We are trying to kind to give the control for their health, and their life, back to them (**Michelle**).

CHR's noted that community members were at one time fully responsible for maintenance of their health and management of disease, as they drew from the knowledge of their elders, medicine men and midwives. With the introduction of health and social services – through which the government enforced its assimilationist policy (i.e., by enforcing biomedical care and abolishing traditional forms of health care, for instance the Sun Dance, the Shaking Tent and other traditional healing ceremonies) – the role of traditional healers within Indigenous health care has been diminished:

> They [the community] were healthier before, than today. They talked with their elders and learned through those teachings. They didn't really have these illnesses before, because they were always moving, eating traditional foods, eating from the land, and they were very active (**Margaret**).

A number of interconnected factors have caused a reduction in self-esteem by individuals in their abilities to care for themselves in times of illness:

> I think there is a lack of, a sense of um, self esteem in people. A lot of times you see it from residential school, like the impacts, and the lack of parenting skills, and the addictions, and stuff like that, that have resulted from that experience (**Meghan**).

These include the shift in lifestyle from active to sedentary, decreased participation in traditional ceremonies, and the reliance on government for its health care needs. This reflects, in large part, a shift toward the medicalization of Indigenous health and health care.

8.4.2.3 Changing Forms of Education

Environmental change has reduced educational opportunities within Indigenous communities. As Indigenous communities depend less on environmental resources for food and other resources, the traditional and cultural knowledge associated with the physical environment is being slowly eroded. At one time, the greatest education students received was that associated with being out on the land. As these opportunities are reduced however, the cultural exchange, language and tradition associated with the environment are also diminished. Through the *Indian Act,* the federal government provides funding for Indigenous students to attend school in their communities. CHR's indicated concern however, that the quality of education received by students on reserve is subordinate to that of non-Indigenous communities:

> The problem I see is that, if we live on reserve our children have to go to school on reserve, and our school goes from 'Head Start' [early childhood education] to grade 8. The teachers are not as good here, and I feel that we should have that option to send our children where we want to.... I would love to send my children to school [in the nearby town], and incorporate them into mainstream society with all different cultures, rather than having them go to school on reserve and be segregated as they are (**Emma**).

Marginal opportunities for education are prompting parents to seek other options, such as bussing their children to off-reserve schools in nearby towns and cities. The problem with this option, however, is that Indigenous students can then become the target of racism and other forms of discrimination – particularly in more rural areas wherein Indigenous students can be marginalized within populations that are otherwise culturally homogeneous.

In many Indigenous communities, the Internet and other global media (e.g., radio and T.V.) have become significant sources of information and communication, particularly in more remote locations wherein travel to other communities, towns and cities is difficult. Access to the world-wide web provides opportunities for community members to learn about and communicate with people beyond their every-day realities, and this has had both positive and negative impacts on health. Such tools have invariably enhanced opportunities for learning – as teachers in remote communities may draw upon resources of the Internet to teach their students more effectively. As well, as Annie explains, the use of the radio and other media to educate community members on their health, including the promotion of a return to a more traditional lifestyle:

> We have a local radio station that we can use for radio shows and it is available at any time any day of the week, so that's a real positive thing. We also have a regional communications program, they do radio shows on a regional basis, and they also produced videos on APTN [Aboriginal People's Television Network]. More recently there was a diabetes video made by them, so they traveled to each community, interviewed people, looked at their lifestyles and related it to diabetes. We've lost some things in the process, our language, we've lost our connection to the land, people don't go out on the land as much. I think the key thing here is that people are recognizing, and are trying to do something about it, trying to bring it back. So I think that the media can be a powerful tool, that can be used to educate, and increase awareness (**Annie**).

However, the impact of the Internet has had an isolating effect on youth in many of these communities as well. In general, youth now spend more time alone on computers and less time in play and physical activity:

> People have a lot more knowledge of how to improve their health, to get better, and we are more exposed to the television and the media, so we are a more worldly I guess. But in some aspects it has its downfall is too. For instance, children are no longer respectful, like they no longer respect their elders. They are not as active; they spend a lot of time in front of the TV or playing board games (**Annie**).

CHR's indicated that there is a pandemic of obesity and overweight children these days, and that inactivity is a major source of the problem:

> No, the kids are not very active. Because they always want to play those Nintendo games, and all those games. And eating junk food. Sitting inside your house I guess, and the kids are always playing because the school year is over right. So they are just sitting inside **(Nicole).**

CHR's also spoke about the changing culture of youth, and a general decline in the practice of cultural activities that were once major forms of social cohesion and family support.

8.4.2.4 Lacking Material Resources

The clearest conceptual pathway connecting poor health with environmental dispossession arises through lacking opportunities for economic development in Indigenous communities. Indigenous communities continue to face among the highest rates of unemployment in Canada:

> The main social problem here is a lack of jobs, you know, the lack of jobs and housing would have to be the two major ones. Here in the community there is no place to work. We have the Child and Family Services building, we have the community store, we have the health centre, and we have the band office, so those are the four major employers (**Delores**).

Echoing Delores's comments regarding lack of economic opportunities, Michelle states that the social structures (e.g., family) of a community can proliferate unequal distribution of resources in the material environment, for instance as resources (e.g., jobs, money, opportunities) will flow within, but not between, families. As a result, those families with greater access to material resources are in a better position to share these resources with their family members, while those with less access to jobs and income are often trapped within a vicious cycle of unemployment:

> The main employer is the band, and there are only so many jobs for that, like full time jobs. So the people in those families are financially secure, whereas the other people have to rely on seasonal jobs for their families, and then if you have a larger family and you have a seasonal job, by the time you start paying off your bills it is time for a layoff again. It's like a vicious cycle, and our community members really struggle with that (**Michelle**).

In terms of accessing employment opportunities outside their communities, lacking education can act as a significant barrier to employment – particularly in more remote locations wherein very specialized skills and training may be necessary for the type of work available (e.g., diamond mining in the Northwest Territories). In many communities, the prevalence of unemployment – even though it may only be seasonal – has become a normalized feature of the Indigenous landscape. As mentioned in the discussion around *life control*, CHR's noted a growing tendency to rely on the government and band council for financial help. CHR's expressed concern that such dependencies can translate into explosive social environments, wherein those trapped in the cycle of unemployment can harbour feelings of competition and resentment for employed community members. This relates to the perception that many of the band-related jobs are given to friends and family members of the band council. This claim reverberated strongly among CHR's. The poor material circumstances of Indigenous communities strongly shape the way community members relate to one another in the social environment.

8.4.2.5 Social Dysfunction

It is within the social environment wherein the health effects of changing relationships with the physical environment are most evident. CHR's indicated major changes within the every day social context of their communities, as there is less trust among community members, and increased competition for scarce resources of the material and physical environments (e.g., for jobs in the Band office, or in obtaining traditional foods from the land):

> In my home community, you can still see the volunteering, the community-based or family-oriented, whereas when I came here I felt very, like it wasn't here you know, that feeling is gone.... I've been trying to make sense of that, and I'm thinking it could be because it's isolated [referring to her home community] and we were closer to the old life, and here, everything is so advanced. They are close to town, they always have activities, you know and there are always prizes or whatever. And back home when we have activities it's just to socialize and have fun, and there are not really prizes or any competition. So the competition here in the community here is very high **(Margaret)**.

There has also been a general decrease in reliance on one another, as 'help' has become more a feature of economic necessity than of community ties and cultural obligations:

> If you ask for help, people will usually come around. But I find it is different than in the past. I think help is available if you pay, rather than help just being like "I'm going to help my neighbour because that's the good thing to do" or "that's like the traditional thing to do". Now money is a factor in everything, so its not too often you won't have somebody helping an elder out like just as a good deed, it will be because you are getting money, or because one of the band programs is paying you to help the elderly (**Michelle**).

CHR's mentioned unemployment and drug and alcohol addictions as the most common social problems in their communities. CHR's noted that the break-down in the social environment is related intimately to the decreased ability for community members to generate economic opportunities. Because community members live in such poor material circumstances, the divide between families with more and less economic resources is growing, and this is leading to greater frustration and dependence by those on the lower end of the social ladder. CHR's noted that this has affected the types of activities and behaviours social groups engage in, and the health impact of these activities. Among the poorest families, for instance, CHR's reported increase in health-damaging behaviours such as over-eating, alcoholism and drug abuse. In terms of health-promoting behaviours, such as attendance at community events (e.g., health promotion workshops) however, CHR's indicated that they could expect the 'regulars' at their events (i.e., the same 'healthy' people always show up).

Colonial rules and regulations of the federal government have also caused change in the social environments of Aboriginal communities. For instance, imposition of governance structure by the federal government (i.e., the shift from hereditary Chiefs to elected Band Councils) has had detrimental affects on forms of governance, social structure and community obligations. For instance, Jean speaks about how the social obligations of community members to one another have changed over the years, in particular through the introduction of the wage-economy and imposed governance structures:

> Its only when someone dies, that's when a lot of people they (come around)... I think the government must have done that too them. In the olden days they never used to hate each other, or be divided like that. They helped each other out whenever it was needed, like a person was building a house or something; a lot of people would come along and help them. Now that doesn't happen anymore (**Jean**).

As well, the effect of residential schooling, through which thousands of Aboriginal children were forcibly taken from their families and communities, has significantly reduced the abilities of affected parents to provide loving and nurturing environments for their children. This is so as many residential school survivors still cope with the effect of numerous abuses endured as children (and which are emerging at an alarming rate in the federal courts today):

> In terms of residential school trauma, there is still a lot of stuff that needs to come out, and be dealt with. Even in my own family, for instance. My husband's parents went to residential school and they are really tough old people – like distant or something... You can't get through to them not matter what, and it's just too bad. And I know I don't understand it, so I try not to get in there too much, but it plays a big part in our community [as a whole] and the way children are raised and the values they learn (**Dana**).

8.5 Discussion

8.5.1 From environmental dispossession to social dysfunction

In this paper, we have drawn from a critical population health approach (Labonte et al., 2005) and interviews with a group of Aboriginal CHR's to conceptualize the social, economic and cultural processes through which changed relationships with the environment have manifested as health determinants among Aboriginal Canadians. In exploring these issues, we have addressed two research objectives: 1) to explore CHR's perceptions of the determinants of Aboriginal health; and, 2) to examine the processes by which environmental dispossession has impacted the determinants of Aboriginal health. These objectives, primarily the second one, were inspired by Labonte et al.'s (2005) call for critical population health research to deconstruct how specific social structures, economic relationships and ideological assumptions serve to create and reinforce conditions that perpetuate and legitimize conditions that undermine the health of specific populations over time.

CHR's described the determinants of Aboriginal health as balance, life control, education, material resources, social resources and environmental/cultural connections. The first five of these determinants (e.g., balance, life control, education, material resources, and social resources) map well onto those identified by existing population health frameworks (Evans and Stoddart, 1990) which are recognized by the federal government as official health determinants, and by which health program funding and accountability is currently maintained in Canada. However, it is within the sixth determinant, that of the environmental/cultural connections, wherein CHR's descriptions of Aboriginal health determinants shows divergence from those of Canadians in general. In their descriptions of the environmental/cultural connection, CHR's moved into more complex explanations of the pathways through which environmental dispossession has led to decline in the health and wellbeing of their communities. Loss of control over environmental resources and the impending shift away from traditional foods, economies and way of life has led to significant changes in the cultural values, belief systems, social structures and health behaviours that have traditionally structured, and maintained, health in

Aboriginal communities (Richmond et al., 2005; Wheately, 1997; Erikson, 1994; Shiklyink, 1985).

Environmental dispossession is a process that affects health in both *real* and *symbolic* ways. In some cases, for instance, Aboriginal communities have been necessarily disconnected from their environments because it poses serious risk to the health of the community (e.g., as we saw in the case of mercury contamination among Grassy Narrows and Whitedog; Shiklyink, 1985). In this instance, communities must abandon a way of life based on the environment and its resources (e.g., subsistence fishing, employment as fishing guides). The health of the community is negatively affected as key determinants (e.g., income, food, culture, and social relationships) are compromised. CHR's described environmental dispossession to affect Aboriginal people's health in more symbolic ways as well, for instance through the government's assimilative efforts to reduce, and in some cases forcibly limit, environmental knowledge to be shared through the generations. The best example of symbolic environmental dispossession relates to residential schools. Students of residential schools were removed (often forcibly taken) from the environments wherein their identities, sociocultural ties and place in the world were intimately bound. During the school year, they faced new cultures, languages, spiritual beliefs, and ways of living. Upon returning to their communities during the summer, students struggled with the shift in sense of identity, cultural insecurity, and confusion about their place in their community and family (Canada, 1996).

The cumulative effects of environmental dispossession – whether real or symbolic – have been a fundamental contributor of disease and social suffering experienced by the Aboriginal population of Canada (Fontaine, 2005), and among Indigenous peoples worldwide (Durie, 2003). Social suffering results from what political, economic and institutional power does to people and, reciprocally, how these forms of power influence responses to social problems (Kleinman and Kleinman, 1997). In the context of our results, CHR's spoke of environmental dispossession as a process that has infiltrated health through various dimensions (e.g., physically, mentally, spiritually, emotionally, economically, and socially). Lacking access to the physical environment – which results from both the colonial powers of the state, and as a result of the changing quality of local physical environments – has caused more sedentary lifestyles and limited food choices among Aboriginal people. Combined, these two factors have led to increase in obesity, diabetes and many other chronic diseases that plague Aboriginal communities. Mentally and emotionally, communities may perceive themselves as defenseless to the changes in their collective way of life, in particular as government programs have historically encouraged dependency (Warry, 1998). These changes in way of life have caused many to turn to alcohol, drugs and violence as a means of coping with their losses. At the family and community levels, these behaviours lead to the development of volatile social environments – those which are shaped by the despair of lost way of life, widespread dependence by Aboriginal communities on health and social services, and the behaviours associated with living in extreme material disadvantage. Over time, the process of environmental dispossession has led to social dysfunction and the normalization of the health and social inequalities endured by Aboriginal peoples in Canada.

Our results point to the importance and necessity of drawing from more critical, qualitative approaches to understanding how the determinants of Aboriginal health are structured in local communities, and of the social and economic processes that extend poor health over time. In this paper we have focused on the example of environmental dispossession as a process that impacts the determinants of Aboriginal health (e.g., life balance, control, education, economy, social resources). However, the processes underpinning the formation of health inequalities across these determinants cannot be narrowed to one single explanation (e.g., environmental dispossession). Rather, there is a need to look at the everyday social, economic and cultural contexts of Aboriginal communities and question how these contexts interact with one another to influence health. We argue that the usefulness of current population health frameworks and approaches for understanding the determinants of population health – and for creating policy that betters the health and social realities of Aboriginal populations – are limited to identifying health inequalities and outcomes (e.g., quantifying disease rates), and largely incapable of outlining the underlying processes through which health inequalities are created in the first place.

8.6 Conclusion

This research identifies the pathways through which environmental dispossession and socio-economic and cultural change have affected the determinants of health among Canadian Aboriginal communities: mainly through the destruction of way of life, devastated local economies and ensuing social dysfunction. Our results illustrate that environmental dispossession has had its greatest impact within the social environment – by limiting people's capacities to help one another and provide the sorts of supportive behaviours that promote health. Reducing the health inequalities endured by Indigenous Canadians requires a better understanding of the connections between various complex processes, including (but not limited to) environmental dispossession, material disadvantage and social relationships. We cannot fully understand how the health and social inequalities endured by Aboriginal peoples are formed without drawing from broad theoretical perspectives, appropriate methods, and research questions that delve deeply into the various processes that fundamentally underlie these inequalities.

Table 8.1

Official list of Canadian Health Determinants
Income and Social Status
Social Support Networks
Education
Employment and Working Conditions
Social Environments
Physical Environment
Personal Health Practices & Coping Skills
Healthy Child Development
Culture
Gender
Health Services
Biology and Genetic Endowment

Source: F/T/P Advisory Committee on Population Health, 1996.

CHAPTER NINE

Thesis Summary and Conclusions

9.1 Introduction

This thesis has drawn from mixed-methods analyses, including large-scale survey analyses of the 2001 Aboriginal People's Survey (APS) and intensive interviews with a national group of First Nation and Inuit Community Health Representatives (CHR's) to enhance understanding of the ways in which features of the larger societal context (e.g., poverty) interact with local, social resources (i.e., social support) to influence health among Aboriginal Canadians. Despite the tight-knit, socially cohesive social structures which have historically characterized Aboriginal families and communities across Canada (Waldram et al., 2006; Barsh, 1994; Burch, 1986), current patterns of health and social well-being suggest that these social relationships are not functioning to promote Aboriginal health as they once did (RCAP, 1996). This thesis has explored this paradox. This final chapter offers a summary of the key findings of this thesis, shaped by the five research objectives:

1. To empirically 'unpack' the dimensions of Aboriginal health;
2. To examine the relative role of social support and other health determinants for determining thriving health among the Aboriginal population;
3. To identify sources of social support, and examine the mechanisms that determine access to social support at the community level;

4. To explore the health-enhancing and health-damaging influences of social support;
5. To critically examine the processes through which environmental dispossession has affected social support and other determinants of Aboriginal health.

The remainder of this chapter is presented in two parts. Part one reviews the findings of each chapter and contextualizes them in terms of their substantive contributions to academic scholarship on the social determinants of Aboriginal health. The findings of this thesis are used to suggest a theoretical framework for understanding how the physical, social and material environments of Canadian Aboriginal communities interact to influence health. The second part of this chapter outlines the relevance of these findings for Canadian Aboriginal health policy, and provides direction for subsequent research into the social environmental influences of health in the Canadian Aboriginal context.

9.2 Key Findings

The objective of **Chapter 3** was to empirically 'unpack' Canadian Indigenous health concepts. Results of principal components analyses on the Métis (n=14127) and Inuit (n=3979) supplements of the 2001 Aboriginal Peoples Survey identified four dimensions of Métis health (social support, physical function, physical fitness, psychosocial wellness) and four dimensions of Inuit health (social support, personal wellness, physical function, community wellness). Social support emerged as a consistent and remarkably stable dimension of health among Métis and Inuit populations, thereby pointing to the conceptual significance of social support for Indigenous health.

While there have been studies that attempt to isolate dimensions of health in other populations using a similar analytic technique (e.g., Bernier et al., 2004; Scott et al., 2000), this work was informed theoretically by Aboriginal health frameworks (Kenny, 2004; Bartlett, 2004; Svenson and Lafontaine, 1999; Boyd and Associates, in progress). Aboriginal health frameworks conceptualize the health of individuals being intimately connected to that of the greater social context within which an individual lives. By moving the analyses *beyond* the individual level – indeed conceptualizing dimensions of health that include factors "outside the skin" – this research provides some empirical support for the conceptualization of the pathways through which Aboriginal peoples' ideas of health may be embodied as health outcomes.

These also analyses permitted and encouraged concepts of Métis and Inuit health to be shaped by cultural and geographic heterogeneity, thereby recognizing that Aboriginal peoples are a diverse and non-static population. Despite the tendency for researchers to conceptualize Aboriginal cultures as a single 'category' in their statistical analyses (e.g., Aboriginal = Métis + Inuit + First Nations), the analytical framework employed in this chapter made a conscious effort to examine Aboriginal health concepts through a lens of diversity, thereby permitting the unique contexts and realities of Métis and Inuit to surface in these conceptual analyses.

Despite the significance of the findings of this chapter, in particular as they command the need for more research into the relationship between social support and Aboriginal people's health, it is critical to note that the research of this chapter was limited by the very nature of principal components analyses. By definition, principal components analysis is a data reduction technique and the resulting pattern of components (i.e., dimensions) are necessarily structured by the variables selected for analysis. As such, it is critical that the variables selected for inclusion are conceptually valid constructs among the populations within which the data collection tool is used, and if not, the resulting patterns will not accurately clarify dimensions of health. As such, careful thought went into selecting variables that demonstrated concepts of Métis and Inuit health, and as evidenced throughout this thesis, the social support variables included in these analyses were consistently meaningful across APS respondents, and in later qualitative chapters.

Chapter 4 built upon the finding in Chapter 3 – that social support forms an important dimension of Aboriginal health – to examine the predictive capacity of social support (and other health determinants) in shaping thriving health outcomes. Recall that the concept of thriving relates to one's ability to flourish in response to adversity (Rutter, 1985). In the context of Aboriginal Canadians, this chapter therefore sought to describe those determinants of health that enable thriving health (i.e., excellent/ very good health versus good/ fair/ poor health). The analytical framework underpinning chapter 4 is novel in that makes the larger point of paradigm shift from 'disparities' to 'societal resources' or from 'needs' to 'assets.' The Aboriginal health literature has focused almost exclusively on disparities with non-Aboriginal populations, and rarely on describing the strengths and societal goods that determine health among Aboriginal peoples. By identifying models of thriving health, this thesis therefore attempts to move Aboriginal health research in a more optimistic direction, one that encourages health researchers to frame their questions around positive discourses on health and wellness.

In this chapter, a series of multivariable logistic regression analyses were employed on a large sample of Indigenous men (n=15389) and women (n=16236) to model determinants of thriving health. Results of these analyses indicated significant relationships between thriving health and a number of determinants, including perceived social problems in the community, chronic condition, access to health services, Aboriginal status and environmental conditions and health behaviours. Notably, we saw a materially-based gradient in thriving health and social support. Those employed and with higher levels of income were significantly more likely to report thriving health and higher levels of social support. In terms of the relationship between thriving health and social support, all types of social support were significantly related to thriving health among women, while only emotional support was significantly related to thriving health among men. Among women, high levels of affection and intimacy were negatively associated with thriving health, thereby suggesting that some forms of social support may not be health enhancing. Overall, the findings of chapter 4 demonstrate the influence of social support, above and beyond traditional health determinants, and they also emphasize the material basis of health. Increased social position improves access to kinds of interpersonal resources embodied in the concepts of social support and social networks (Link and Phelan, 1995).

Conceptually and empirically, chapters 3 and 4 of this thesis provide evidence that social support is a significant dimension and determinant of health. In chapter 3, Inuit and Métis identified social support as an important concept of health, and in chapter 4, all Aboriginal groups identified high levels of social support. However, the persistence of socially caused disease and mortality remains a common trend in the Aboriginal population. This phenomenon therefore begs the paradox around which this thesis is theoretically centred: *how* and *why* it is that patterns of social dysfunction continue to ravage indicators of population health, given what we know about the health protective properties of social support? In response, chapters 6, 7 and 8 draw from narrative analyses of interviews with 26 Community Health Representatives (CHR's) to examine the everyday processes and mechanisms that tie social support and health at the community level.

The CHR program was created by Health Canada in the late 1960's to provide health promotion to Aboriginal communities wherein there is no permanent health professional (i.e., as health professionals, such as doctors are flown into communities on a monthly basis). Since then, the occupational context of the CHR has changed considerably; the scope of their duties has grown from health promotion and into activities that pertain to human and social services, such as professional development, transporting community members, or organization of social events. It is precisely that the CHR's field of work is so undefined that she is expected to be everything to everyone, yet often constrained personally by low wages, excessive work-loads, and expectations from her employer and fellow community members (personal communication, Dedam-Montour). This raises the question of what role the CHR plays in relation to addressing the fundamental *health needs* of the greater community.

The breadth of the CHR's duties makes her a common fixture in the everyday community landscape. The cross-over between private and public spaces can make it very difficult for the CHR to maintain privacy in her own life, but it also means that she is acutely aware of her social surroundings and the health needs of her fellow community members (many of whom may be family members, friends or neighbours). As a result, the CHR plays a vitally supportive, yet often devalued, role within her community. Even so, 23 of 26 respondents who contributed to this study reported that they do the job because they want to help their communities. It was precisely because of the wide occupational context of CHR's and their dedicated passion to their communities – both which link so explicitly to provision of social support – that CHR's were selected as the group ideally positioned to provide detailed information about the social support-health connection in their local communities.

The objective of **Chapter 6** was to identify the types and sources of social support in Aboriginal communities as they are understood by the CHR's, and to explore the mechanisms that determine access to these sources of support. Results of chapter 6 pointed to two types of social support: institutional and intimate. Institutional supports were defined as those who are employed to provide support to their community members (e.g., Nurse, Social Worker). Intimate supports were defined as family, friends, and fellow community members. In many of these communities – most of which are small in terms of space and population – there was a significant overlap between these sources of social support, which can lead to tension in terms of *access* to social support (in particular as issues such as trust arise).

Results of a narrative analysis of the interview data revealed that access to social support is determined by a number of features associated with the post-colonial context of current-day Aboriginal communities, including parenting skills, socioeconomic dependence, trust, group belonging and the nature of help. The findings of Chapter 6 are illustrated as a framework (**Figure 6.1**), which conceptualizes how features of the broader societal context of post-colonial communities can manifest in the local social conditions of places, thereby shaping access to social support (e.g., poverty causes a shift in the *meaning* of help, as less community members are willing to help 'for free').

Access to social support is also affected as institutional and intimate supports tend to overlap in First Nation and Inuit communities, in these mainly small locations. Results of this chapter indicate that socially integrated places are not necessarily functionally supportive, health promoting places. While the existence of these overlapping social ties may lead to increased social integration within the community, such social integration does not necessarily translate into functionally supportive environments. An important distinction emerges – *structurally* supportive environments are distinct from *functionally* supportive ones (House et al., 1988; Thoits, 1982). In these small, rural communities, wherein most people are connected in some way or another, there may be a tendency make the erroneous assumption that being social integrated necessarily forges functionally supportive relationships. It is important to consider the strength – and functionality – of these ties. In understanding the factors that determine access to social supports, we must look beyond measures of structural support to consider the mechanisms that influence what it is we actually 'get out' of being socially integrated. Health and social policy options must make efforts to recognize the post-colonial influences that affect Aboriginal peoples (Frohlich et al., 2006; Waldram et al., 2006; Adelson, 2005; Browne and Smye, 2004), and study the connections between these influences and how health determinants, like social support, play out in local places as a result of this legacy.

Chapter 7 builds on the previous chapters to explore the health-enhancing and health damaging effects of social support. Little critical analysis has been made of the potential negative consequences of social support on health, such as those related to social and family obligations. The analysis of chapter 7 draws from narrative analysis and cultural and epidemiological frameworks (Svenson and Lafontaine, 1999; Gottlieb, 1984) to examine the health effect of social support, in particular to investigate the mechanisms through which varying social structures (i.e., individual-family-community or micro-mezzo-macro) can influence health.

Results of chapter 7 suggest that there are health-enhancing and health-damaging properties of social support, and that the negative properties of support can significantly outweigh the positive ones. Social support operates at varying structural levels, beginning with the individual and extending outward to family and community. The supportive behaviours associated with these varying levels of social structure are important as they embed an individual within a social context, thereby reinforcing sense of identity (e.g., sister, friend, and employee) and sense of belonging. Such forms of belonging are not uniformly health-enhancing at the individual level, however. The social norms and health behaviours to which one subscribes in the identity-building process can sometimes harm health, for example in the case of intimate partner violence or alcoholism. Conformity pressure and loyalties associated with these ties can make it impossible to disobey the social rules associated with these relationships however, thereby 'trapping' individuals within a normalized cycle of damaging health behaviours. Lifestyle changes may then require the individual to consciously remove himself/herself from the social context wherein such behaviours were enabled. Such changes may have negative consequences as well however, as they can lead to loneliness and isolation, as many CHR's reported often occurs when youth leave their communities for the first time (e.g., for post-secondary education). Key findings of chapter 7 therefore emphasize that the supportive ties of one's social network (at various scales) affect Aboriginal health via damaging health behaviours. Such behaviours (e.g., smoking, excessive alcohol consumption, poor dietary practices) are invariably reflective of the social norms, values and expectations held at the family and community levels.

Chapter 8, the final empirical chapter of this thesis, draws from a critical population health approach (Labonte et al., 2005) to conceptualize the *processes* through which changed relationships with the physical environment have manifested as health determinants among Aboriginal Canadians. Much of the population health research into Aboriginal health has drawn from quantitative methods that seek to describe patterns of health inequality, rather than looking more critically into the political, social and economic processes that create and sustain these inequalities over time (Waldram et al., 2006; Richmond et al., 2005). This chapter therefore takes the population health literature on Aboriginal health and mortality into more critical direction as it draws from CHR's stories to conceptualize the pathways through which environmental dispossession has affected social resources and other determinants of health.

CHR's identified six determinants of health: balance, life control, education, material resources, social resources, and environmental/cultural connections. It is within the sixth determinant, that of the environmental/cultural connections, wherein CHR's descriptions of Aboriginal health determinants show divergence from those of Canadians in general. CHR's pointed unanimously to changed access to environmental resources and shifting cultures as a source of decline across the five other determinants described above (i.e., balance, life control, education, economic resources and social resources). Environmental dispossession is a process that affects health in both *real* and *symbolic* ways (e.g., as communities are literally cut off from their environmental resources, such as in the case of contamination), or in the example that individuals and communities lose the knowledge associated with environmental resources, for instance as a result of the assimilative effects of residential schools. CHR's interviews pointed to loss of control over environmental resources leading to life imbalance, loss of life control, changing forms of education, material disadvantage and social dysfunction.

The impact of environmental dispossession has been felt within the social environment – by limiting people's capacities to help one another and provide the sorts of supportive behaviours that promote health. The results of this final empirical chapter point to the importance and necessity of drawing from more critical, qualitative approaches to understanding how the determinants of Aboriginal health are structured in local communities, the interplay between social and physical environmental resources for Aboriginal health, and of the ways in which social and material processes can extend poor health over time (e.g., many years following a contamination event).

9.3 Limitations of the thesis

There are limitations to the work presented in this thesis. The first limitation relates to the use of the 2001 APS. Though the survey was pre-tested, the fact remains that many questions were drawn from pre-existing surveys and may not have been validated for use in some Aboriginal populations. Other potential limitations to drawing from the APS relates to the fact that it is a post-censal survey, meaning that APS respondents were identified based on their responses to the Canadian Census. As was raised in Chapter 2, this is problematic as some segments of the Aboriginal population do not respond to the Census and can therefore not be considered within the APS sample. The methods through which the APS is conducted (i.e., telephone survey) may also affect patterns of response as it involves potentially admitting vulnerability to a government official. Despite these limitations, we must recognize the strength and sheer magnitude of the APS for creating national level statistics about a population for which such information did not exist prior to 1991, and indeed the report of the Royal Commission on Aboriginal Peoples (1996) gave tremendous support for the continuation of this survey.

The second limitation of this thesis relates to the fact that Indigenous frameworks of health are available largely *within* Aboriginal traditions, cultures and languages – many of which have not yet been explored by academics and/or published widely in the academic literatures on Indigenous health. As such, the existing Aboriginal health frameworks tend to be more generalized frameworks which may not correspond in meaningful ways when applied to more localized contexts. However, these are not insurmountable challenges and as Indigenous health scholars continue to gain momentum (and resources) in future years and decades, we can be optimistic that there will be many positive consequences for improved understandings of local knowledge and its application to health. In the mean time, it is important that researchers do the best they can with the available knowledge and tools at their dispersal. For instance, Chapter 7 of the thesis has made a critical effort to reconcile a First Nation's framework of health (i.e., the Medicine wheel) within the context of the epidemiological literature to describe the varying social structural levels within which the health of an individual is affected (i.e., the micro/mezzo/macro (Gottlieb 1984) levels versus the individual/family/community (Svenson and Lafontaine, 1999). Chapter 8 draws from a non-Indigenous health framework (i.e., the population health framework) in the consideration of the determinants of First Nation and Inuit health. The key findings of both chapters allude to the result that, in fact, Indigenous and non-Indigenous frameworks of health are not as disparate as may have been assumed. As we strive to learn about and document the more ecologically-specific frameworks of Indigenous health and healing, the findings of this thesis therefore posit that drawing from the existing epidemiological frameworks of health and social support may serve as useful starting points.

As a means of reconciling the above limitations, this thesis had the distinct advantage of drawing from a mixed-methods approach. As has been described elsewhere in this thesis (e.g., Chapters 2 and 5), the use of mixed methods within a single project can significantly enhance the rigour of the findings. That is, while quantitative research may be strong on reliability, it is often low on validity (Scarcapi, 1993; Kirk and Miller, 1986). At the same time, qualitative research has high validity but low reliability (i.e., contextual studies are variable) (Babbie, 1989). The incorporation of the 2001 APS analyses followed by interviews with Inuit and First Nations CHR's has resulted in a more rigorous and thorough study on the social support and health relationship. While the APS analyses are very capable of producing large scale population estimates for the association between health and social support for the Aboriginal population, the follow-up interviews with the CHR's were significant for providing more contextually informed interpretations of these relationships as they were understood by the CHR's interviewed in this study.

9.4 Directions for Policy

Environmental dispossession and material deprivation characterize patterns of morbidity and mortality among Aboriginal Canadians. Poverty cascades from the community level and down to that of the individual, wherein psychological responses to inequality with the greater Canadian population manifest, mainly through health behaviours, as widespread social dysfunction. These behaviours result as powerful responses to stress, anxiety and coping with the circumstances of *living in* poverty and coping with changed relationships with the physical environment. Four directions for policy fall out of the findings of this thesis.

First and foremost, changes in the health and wellness of Aboriginal peoples must be rooted in policy attempts that focus on the social and material environments of Aboriginal communities. Health education is indeed important for improving health behaviours at the individual and family levels, but interventions to initiate healthy behaviours cannot succeed without coinciding investments in material environments. Interventions that focus on issues related to poverty, social exclusion, poor housing and poor health systems are fundamental for improving the quality of Aboriginal social environments, and for providing brighter futures among Aboriginal youth. Along these same lines, policy attempts to improve health and health behaviours must take into consideration the cultural value associated with connection to the physical environment. Policy attempts must strive to emphasize the links between the physical, material and social environments as important for health.

Second, policy interventions must be targeted not only at individuals, but on families and communities. Findings of this thesis indicate that social support is a concrete health dimension, and is associated with thriving health. Improving quality of life among Canada's Indigenous population therefore requires health policy and programs that are inclusive and community-based. Such holistic models are important for unifying communities and building on the innate resources of the greater Aboriginal community – its people.

Third, there must be continued support for the APS, the only major federally funded survey that documents the living conditions of Aboriginal communities. The APS originated from the realization that little is known about the conditions of Aboriginal Canadians. It is very difficult to create evidenced-based policy when little good evidence exists. Researchers must continue to draw from the APS in the contribution of knowledge around Aboriginal people's health and social conditions, and at the same time, Statistics Canada must be vigilant in its efforts to ensure that researchers can have fair and timely access to data of the APS.

Finally, it is vital that the Institute of Aboriginal Peoples' Health (IAPH, of the Canadian Institutes of Health Research) receive continued support through the political will of the federal government. As outlined early in this thesis, the Canadian Aboriginal health literature has grown by leaps and bounds over the past decade, and much of this growth has occurred as a direct result of the creation of the IAPH in 2000, and the Aboriginal Capacity and Development Research Environments (ACADRE's) in 2001. The ACADRE program was initiated to develop a network of supportive research environments across Canada that will develop researchers in Aboriginal health in ways that respect the pursuit of scientific excellence as well as the need for community relevance in research. Since 2001, nearly 40% of the ACADRE funding has gone directly into funding graduate students and their research. Though much of this research is still in progress, the ACADRE program demonstrates considerable promise for improving the health and social wellbeing of Aboriginal peoples through its dedication to developing capacity among those who pursue this area of research.

9.5 Directions for Research

This dissertation provides evidence that the supportive behaviours of one's social ties provide an important link between the material environment and Aboriginal health. Early chapters tell us that social support is an important concept of Aboriginal health, and we also know that those with high levels of social support report higher levels of health. At the population level however, Aboriginal people's health and social conditions lag egregiously behind that of non-Aboriginal Canadians, and rates of mortality and morbidity point to distinctly social causes. The results of this thesis provide some insight to these patterns. The respondents interviewed for this thesis were able to articulate the role of the post-colonial context of Aboriginal communities in many current day social problems, including parenting skills, socioeconomic dependence, trust, group belonging, and the changing nature of help. Increased access to social support will not necessarily translate into improved health however. The respondent's discussed how the supportive behaviours of one's social ties can operate in both negative and positive ways. Embeddedness within family and community provides sense of identity and sense of belonging, which is important for health, but the health behaviours shared within these social contexts can also harm health, for instance when these behaviours operate in response to material deprivation and other forms of social disadvantage.

This research points to key areas wherein more research is necessary. First, there is a need for continued research into the conceptual understanding of social support among the Aboriginal population. The concepts of social support used in this thesis are based on those measured in the Aboriginal Peoples Survey (and derived from the Canadian Community Health Survey): positive social interaction, emotional support, tangible support, and affection & intimacy. While these concepts of social support were found to be valid constructs among First Nations and Métis, results of chapter 4 suggest that among Inuit, the measure of tangible support may be more accurately capturing concepts related to geographic isolation and access to health care, rather than social support. In the measurement of social support, we must be cautious that our measures take into consideration the vast geographic and cultural variation that exists among *and* within the Aboriginal populations of Canada.

There is also need for continued research into the life conditions and demographics of the Métis population of Canada. In the past ten years, we have witnessed a major surge of growth in the Canadian Métis population. The roots of this surge in population growth are not well understood, but the fact remains that with each Census, increased numbers of Canadians are reporting Métis status. Compared with First Nations and Inuit, we know relatively little about the health and social status of Métis. There is a need to document conditions of daily life among Métis, and ensure that the health and social needs and concerns of *all* Aboriginal populations are being addressed in an equitable way.

Continued research into the health effects of social support among the Aboriginal population is also important, for instance by examining the health effect of varying sources of social support comprising one's social context. Such work may be especially relevant among Aboriginal women. Potential research questions relate to role-relation of the tie (i.e., mother, sister, cousin, teacher), the social support received from the social tie (i.e., listens to problems, exercise partner, etc), and the effect of that social tie on one's health (i.e., positive, negative, or both). As a longitudinal study, such research could provide valuable insight into the various roles and contexts through which one's social ties can influence health over time. Examination of the relationship between these individual-level responses and the wider socio-economic and geographic characteristics of the population-level (e.g., community, region) would enable a broader material context through which to understand the results.

There is also a need for more research into understanding how the social and material environments interact to shape health outcomes among Aboriginal

Canadians. The research presented here begins to point to overlapping relationships between the meaning and functionality of social support and the prevailing conditions of the material and physical environments. More research attention should focus on identifying the pathways through which social support, poverty and the physical environment interact to influence health, for instance through a large-scale study that compares the links between supportive behaviours and health among Aboriginal communities with varying economic status and varying physical environmental resources. Such a study could provide evidence to clarify the pathways through which material conditions fundamentally underpin patterns of health in Aboriginal communities; such research would be valuable for providing more tangible solutions through which to understand and improve patterns of Aboriginal health.

Another direction for research is through change in *approach* to understanding Aboriginal health (i.e., from a problem-centred focus to a resource-centred focus). Though we cannot expect to see rapid changes in the social and economic conditions of Aboriginal communities, as researchers, we *can* take control over the ways we approach health research with Aboriginal peoples, for instance by making a conscious effort to outline the successes we have witnessed in Aboriginal health over the years. There is much to be said about community resilience and the role of human agency in initiating social movements that mobilize Aboriginal communities from suffering to equality and health. For example, the Nuu-chah-nulth and Cowichan peoples of British Columbia report that assuming jurisdiction over the medical services of their communities has served a decolonizing agenda, defined as increasing community self esteem, enhancing skills, and allowing for revitalization of Aboriginal healing (Read, 1995; Modeste et al., 1995). The challenge of course, remains making such successes a possibility for the Aboriginal population, as a whole. In investigating these success stories, the social mechanisms and resources through which success was made possible in these cases should be highlighted. In a research area that has historically centred on disparity, inequity and difference with non-Aboriginal populations, an approach focused on success will provide a refreshing and hopeful direction for Canadian Aboriginal health researchers.

Finally, given that Indigenous populations – from around the globe – display markers of health whose roots are fundamentally tied to their post-colonial contexts, and markers of social and economic disadvantage, it makes little sense that other Aboriginal health researchers are not drawing from holistic frameworks (Kenny, 2004), wherein the ties between individuals and their social and physical environments are conceptualized as critical health determinants. Based on these frameworks, a more critical examination into the social patterning of Indigenous communities is urgently needed to help us in better understanding, and improving upon, current patterns of health.

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APPENDICES

Appendix A:

Social Support Measures from the 2001 Aboriginal Peoples Survey (Core survey)

People sometimes look to others for companionship, assistance, guidance or other types of support. Could you tell me how often each of the following kinds of support is available to you when you need it:

	All of the time	Most of the time	Some of the time	Almost None of the time	Refused
Positive Social Interaction					
How often do you have someone to have a good time with?	3	2	1	0	.
How often do you have someone to do something enjoyable with?	3	2	1	0	.
How often do you have someone to get together with for relaxation?	3	2	1	0	.
Emotional Support					
How often do you have someone to confide in or talk about yourself or your problems?	3	2	1	0	.
How often do you have someone you can count on when you need advice?	3	2	1	0	.
How often do you have someone you can count on to listen to you when you need to talk?	3	2	1	0	.
Tangible Support					
How often do you have someone to take you to the doctor if you need it?	3	2	1	0	.
Affection & Intimacy					
How often do you have someone who shows you love and affection?	3	2	1	0	.

Appendix B:
Social Support Index

Types of Social Support	Possible score	Social Support Index	
		Low	High
Tangible Support (e37doct) This type of support refers to the amount of tangible social support that is available to the respondent, and is based on a single item that questions the respondent as to whether or not they had someone to take them to the doctor should they need it.	/3	0-1	2-3
Affection & Intimacy (e37love) This type of support refers to the amount of affection the respondent receives and is based on a single item that questioned the respondent whether they had someone to show them love and/or affection and intimacy.	/3	0-1	2-3
Positive social interaction (e37gtime, e37enjoy, e37togth) This type of support determines how much the respondent is involved in positive social interactions and is based on three items that questions the respondent about whether he/she has someone to have a good time with, get together with for relaxation, or to do something enjoyable with.	/9	0-3	4-9
Emotional and/or informational Support (E37lstn, e37count, e37confd) This type of support refers to the amount of emotional or informational support the respondent receives. It questions the respondent about he/she has someone to listen to and advise them in a crisis, give them information and confide in and talk to, or understand their problems.	/9	0-3	4-9

Appendix C

Checklist of Topics for Qualitative Interviewing

Study objectives

1. To explore CHR's perceptions of health in their respective communities, including change over time;
2. To explore perceptions of the sources of social support among a national sample of Indian and Inuit community health representatives (CHRs)
3. To examine how access to social support is shaped at the community level
4. To investigate CHR's perceptions of the ways in which social support can impact health in positive and negative ways.

Topics

First establish general SES information – age, family, length in community, for how long a CHR, what led them to become a CHR (e.g., the practical steps that led to this position, & also about values, beliefs, attitudes towards health and to community and to support), what (perceived and actual) roles the CHR's fill (especially in social support) and how they relate to social support…

Health

- What does good health mean to you? Poor health?
- Would you say that people in your community are healthy? Why, why not?
- Is the health of people in this community better today that it used to be in the past? Why do you think that is?
- Can you think of someone in your community that has good health?
- What is it that makes that person healthier than others?

Social Support

- Social support is generally defined as having someone you can count on in times of need – for instance if you need a hug, if you want to talk, if you need advice, or if you need someone to baby-sit your children – who do you count on in times like this? Family/ cousins/ employer/ friends/ church/ etc?
- Do people in your community have someone to rely on when they need support?
- Do you think people in this community have good social support? Why/ why not?
- Are there people in this community who do not have such support? (Young, Elderly, certain professions?) Why is that?

Types & sources of social support

- Would you say that this community helps one another? Do people like to help one another? For instance, cutting wood, helping elderly get groceries, give a ride to the city?
- Would you say families are affectionate with one another in your community? Moms & children? Husbands and wives? Why do you think that is?
- What sorts of things do people in your community do to socialize & have a good time?
- Who might community members seek advice from if they needed it? i.e., with finances, family, education, job, etc.
- What do you think the main social problems facing your community are?
- In your experience as a CHR, how does social support impact upon community health?

Health and Social support

- Do you think that having good social support might make someone a healthier person? Why?
- Think of someone in your community with good social support. Would you consider that person to be of good health? Why/ Why not? Are there other things that make that person's health good as well?
- How does the health of your community compare to that of other communities (North versus south, isolated, urban, resource-poor versus resource rich, etc.)
- Are the differences related to the 'place' of the communities, or would you say is it the people within the communities?

WAIVER

INCLUSION OF UNPUBLISHED MATERIAL IN DISSERTATION

I acknowledge that unpublished material to which I was a co-author “**The Determinants of Aboriginal Health in Canada: A Critical Population Health Approach,**” will be included in Chantelle Anne Marie Richmond’s thesis “Social Support, Material Circumstance and Health: Understanding the links in Canada’s Aboriginal Population,” submitted June 2007 to McGill University in partial fulfillment of the requirements of the degree of Doctor of Philosophy.

Sincerely,

Dr. Nancy Ross
Associate Professor, Department of Geography
Associate, Department of Epidemiology and Biostatistics
McGill University
805 Sherbrooke St. West
Montreal, QC
H3A 2K6
Voice: (514) 398-4307
Fax: (514) 398-7437

October 1, 2007

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Maya Ribault, Editorial Assistant
American Journal of Public Health
American Public Health Association
800 I Street, NW
Washington, DC 20001-3710
Tel. 202/777-2465
Fax 202/777-2531
maya.ribault@apha.org