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## "We are the Land": Researching Environmental Repossession with Anishinaabe Elders

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A thesis submitted in partial fulfillment of the requirements for the degree in Doctor of Philosophy  
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**“WE ARE THE LAND”: RESEARCHING ENVIRONMENTAL REPOSSESSION WITH  
ANISHINAABE ELDERS**

(Thesis Format: Integrated Article)

By

JOSHUA TOBIAS

Graduate Program in Geography

A thesis submitted in partial fulfilment  
of the requirements for the degree of  
Doctor of Philosophy.

The School of Graduate and Postdoctoral Studies  
The University of Western Ontario  
London, Ontario, Canada

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## Thesis Abstract

Research shows that Indigenous connection to land carries important health benefits. Among Anishinaabe peoples, the land is the foundation for Indigenous Knowledge and central to physical, spiritual, mental and emotional health. Today, many of the most pressing health inequities experienced by Indigenous peoples are shaped by historic and on-going processes of environmental dispossession. This dissertation was framed by a community-based participatory research (CBPR) approach conducted in collaboration with two Anishinaabe communities on Lake Superior (Ontario, Canada), the greater goal being to develop strategies of environmental repossession. Developed around three manuscripts, this thesis addressed four objectives:

- 1) To examine the strengths and challenges of applying community-based participatory research within the context of Indigenous health research;
- 2) To identify the impacts of both historical and on-going experiences of environmental dispossession upon community health;
- 3) To explore Elders' approaches for resisting environmental dispossession and maintaining their connections with traditional lands;
- 4) To apply an integrated knowledge translation methodology towards developing strategies for environmental repossession.

Informed by in-depth interviews with Elders (n=46), this thesis opens with a methodological chapter that reviews how CBPR approaches applied in the context of Indigenous health research can be successful when founded upon notions of respect and reciprocity. Drawing from the Elders' narratives, the following two empirical chapters further reveal that Elders' access to their traditional lands and Indigenous Knowledge base have been negatively impacted by various processes of

environmental dispossession, including residential schools and environmental contamination. Elders' strategies for resisting these negative impacts and maintaining strong connections with their traditional lands and resources include the development of cultural camps and the planting of community gardens. In focus groups and talking circle discussions, community Elders' ideas about best strategies for practicing environmental repossession and preserving Indigenous Knowledge focused squarely on increasing opportunities for Elders and youth to connect, both in social settings and out on the land.

Overall, this dissertation demonstrates an applied process through which Indigenous communities can use research to begin to lay the groundwork for processes of environmental repossession. While CBPR approaches may not, in and of themselves, directly reduce health inequity, these approaches are well suited for mobilizing the sorts of local action that will lead to improved health.

**Keywords:** Anishinaabe, Environmental Dispossession, Environmental Repossession, Community-Based Participatory Research, Indigenous Knowledge, Lake Superior, Health Geography.

## **Dedication**

This research would not have been possible without the participation, guidance, and patience of the collaborating Elders from The Ojibways of the Pic River First Nation of The Batchewana First Nation of Ojibways. I cannot thank you enough for welcoming me into your homes and for so openly sharing your stories. Your laughter, songs, invitations to ceremony, and tasty meals have helped me realise that this is the path that I am meant to follow. This thesis is dedicated to all the Elders. I will keep your teachings with me always.

Chi-Miigwetch,  
Bamaapii

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I would also like to express my gratitude to my examination committee members: Dr. Renee Pualani Louis, Dr. Susan Hill, Dr. Jeff Hopkins, and Dr. Rick Fehr. Your time and valuable feedback are very much appreciated. I also owe a great deal of thanks to the Department of Geography staff, especially Lori Johnson and Karen VanKerkoerle. Thank you both for always having an open door and the ability to get all the answers.

To my friends at Western, I am grateful to you all. Thanks to Vincent and Emmanuel (my Ghana brothers!) for always encouraging me and for all the laughs! To the past and current members of the Indigenous Health lab (Katie, Kassandra, Cindy, Hannah, Fatih, Kyla, and Shyra) thanks for some great memories! I also would like to thank Dr. Leith Deacon, Dr. Paul Mkandawire, and Dr. Odwa Attari for providing stellar examples for me to follow.

This research would not have been possible whatsoever without the collaboration of both communities. I am indebted to Harley Syrette, Dayna Crosson, Raven Courchene, Samantha Boyer, and Shannon Courchene. You have all taught me so much over the years. I also owe a great deal of gratitude to Patricia and Jerald Desmoulin, Diane and Reg Richmond, Kim Lambert, Chief Dean Sayers, and Chief Duncan Michano. Thank you all for making me feel so welcomed in your communities. Also, I cannot express how thankful I am to Pauline Wright-Bozek for giving me a home away from home.

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## Co-Authorship Statement

This thesis is comprised of a collection of three manuscripts, all of which have been or will be submitted to peer reviewed journals for publication. The research problem, objectives, and relationships between the various manuscripts are outlined in Chapter 1.

The currently published research manuscripts are as follows:

### Chapter 4:

**Tobias, J. K.**, Richmond, C. A. M., & Luginaah, I. (2013). Community-Based Participatory Research (CBPR) with Indigenous Communities: Producing Respectful and Reciprocal Research. *Journal of Empirical Research on Human Research Ethics*, 8(2), 129-140.

### Chapter 5:

**Tobias, J. K.**, & Richmond, C. A. M. (2014). "That land means everything to us as Anishinaabe...": Environmental dispossession and resilience on the North Shore of Lake Superior. *Health & Place*, 29(0), 26-33.

These chapters have been co-authored with my thesis supervisors. As the first author I was primarily responsible for the data collection and analysis, with each chapter being co-written for publication. The bibliographies of the individual chapters are consistent with The University of Western Ontario Graduate and Postdoctoral Thesis requirements.

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# Chapter One: Introduction

## 1.1 Research Context

The ways through which Aboriginal peoples have come to know the world around them and understand how to live in health sustaining relationships with their larger physical and social environments has been characterised as Indigenous Knowledge (Battiste & Henderson, 2000; Cajete, 1999). Broadly, this refers to knowledge gained through lived experiences in connection with the land (McGregor, 2004). Community Elders have traditionally transmitted this important knowledge to younger generations (Ermine, 2005). For example, by taking their grandchildren hunting Elders share teachings that not only explain how to hunt successfully, but also describe the importance and practice of showing proper respect to the animal. This includes teachings on how to use all parts of an animal as well as the importance of taking only what is needed to ensure the sustainability of the animal population for future generations. However, the capacity to practice the sharing of this knowledge has been significantly reduced and is having devastating impacts on Aboriginal communities throughout Canada.

The health and wellbeing of Aboriginal<sup>1</sup> peoples is intrinsically connected to that of their traditional lands<sup>2</sup> (Durie, 2004; Parlee, Berkes, & Gwich'in, 2005;

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<sup>1</sup> Throughout this thesis, the term 'Aboriginal' is used in reference to the Indigenous population of Canada. The Constitution Act of Canada (1982) recognizes three Aboriginal groups: North American Indians, Inuit, at Métis. The term 'First Nation' is preferred by many identifying as North American Indian and will also be used throughout this thesis to identify this group.

Richmond, Elliott, Matthews, & Elliott, 2005; Simpson & Driben, 2000). For countless generations, Aboriginal people depended entirely on the resources of these lands for survival, including food and shelter. This resulted in a deep-seated respect for the land which was founded upon a recognition of the interconnectedness of all living things (Greenwood & de Leeuw, 2007; Maher, 1999). In the time prior to the colonization of North America by European empires, these strong ties to traditional lands allowed for the flourishing of healthy Aboriginal societies.

Strong connections with traditional lands created the foundation for Aboriginal ways of knowing, including the multiple ways that Aboriginal people understand health and illness. These approaches are best characterised as holistic, placing an emphasis on the larger social and physical environments within which an individual exists (Kingsley, Townsend, Philips, & Aldous, 2009; Simpson & Driben, 2000; Waldram, 2006). The physical element of the health of an individual cannot be viewed as existing separately from that of their mental, spiritual, and emotional elements. Being healthy requires one to strive to maintain balance amongst these elements and to do so in a way that honours and respects ones family, community, and all of creation.

By characterizing health in this way, access to traditional lands provides benefits to health that extend beyond the provision of the basic nutritional

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<sup>2</sup> Throughout this thesis, the term 'traditional lands' refers to not only the area traditionally occupied by an Indigenous population, but encompasses all features of the living environment (Berkes, 2008). This includes: lands, airs, waters, plants, animals, and minerals.

resources necessary for survival. The capacity to be out on the land is essential for maintaining balance amongst the elements that constitute a healthy person.

Traditional activities on the land, such as berry picking or hunting for example, promote social connection, contain spiritual significance, and foster cultural continuities (Gross, 2002; Kirmayer, Brass, & Tait, 2000; Parlee et al., 2005; Parlee, O'Neil, & Lutsel K'e Dene First Nation, 2007). These activities also provide opportunities for sharing moral and social values, and for practicing and learning Indigenous Knowledge. This fostering of an Indigenous Knowledge system that links people to one another and to their local ecosystem is the basis for health and wellbeing<sup>3</sup> of future generations.

Resulting from centuries of on-going colonization – including being stripped of their religion, culture, language, autonomy, and traditional lands – Aboriginal peoples currently face serious challenges to Indigenous Knowledge, including their health and wellbeing. In comparison with non-Aboriginal Canadians, Aboriginal peoples throughout Canada are faced with a significantly higher burden of morbidity (e.g. diabetes) and mortality (e.g. accidents, suicide) (Bartlett, 2003; Brown, McPherson, Peterson, Newman, & Cranmer, 2012; Gracey & King, 2009; King, Smith, & Gracey, 2009; Waldram, 2006). The forced removal from traditional lands combined with chronic underfunding of reserves has created an uneven burden of poor health outcomes amongst the Aboriginal population of Canada (Adelson, 2005;

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<sup>3</sup> There are multiple definitions of wellbeing. Throughout this thesis, wellbeing is a term that refers to the sum of various factors influencing enjoyment of life. These extend from physical health and includes psychological state, social relationships, and relationships to the environment.

Frohlich, Ross, & Richmond, 2006). These disparities and their underlying causes have drawn increasing attention both domestically and internationally. This attention includes a report published by the United Nations Special Rapporteur on the Rights of Indigenous Peoples in which he states: “the health and wellbeing of First Nations, Inuit and Métis people in Canada is a matter of significant concern (Anaya, 2014. p9)”.

Richmond and Ross (2009) put forward the notion of environmental dispossession as a framework for understanding underlying processes contributing to these health disparities. Environmental dispossession refers to the processes through which access to traditional lands is reduced or eliminated. Occurring in both direct and indirect forms, processes of environmental dispossession act to erode the health sustaining connection between Aboriginal people and their traditional lands. This includes reducing the capacity of communities to share and practice Indigenous Knowledge, which is itself a broader determinant of health within First Nation communities (Durie, 2004; Shah, 2004; Smylie, 2009). The results of dispossession have led to drastic changes in the way of life of the affected communities. In turn, these drastic changes and their impacts on Indigenous ways of life have resulted in disastrous outcomes for health. For instance, the concept of cultural continuity has been applied to partially understanding high rates of youth suicide in some Aboriginal communities (Chandler & Lalonde, 2004; Chandler, Lalonde, Sokol, & Hallet, 2003; Chandler & Lalonde, 1998). This research found an inverse relationship between youth suicide and the presence of cultural facilities, which enabled Elders and youth to interact and facilitate the transmission of

Indigenous Knowledge. Conversely, higher rates of youth suicide were found in communities where opportunities for Elders and youth to interact on the land were restricted and youth did not possess the resulting sense of identity.

Despite the opportunities for understanding the underlying causes of poor health outcomes presented by emerging frameworks such as environmental dispossession, the majority of Aboriginal health research has generally remained heavily focussed on description of poor health outcomes. Relatively little emphasis has been placed upon both understanding the root causes of health problems and conducting research that seeks to meet the health needs of the communities in question (O'Neil, Reading, & Leader, 1998; Reading & Nowgesic, 2002; Wilson & Young, 2008; Young, 2003). Furthermore, several Indigenous communities globally have seen very little benefit and have experienced serious harms resulting from the participation in health research. For example, the collection of Havasupai Tribe blood samples by researchers at Arizona State University was given consent by the community under the pretext that these samples were to be used in diabetes research. However, it was discovered much later that the samples were also used in further unrelated studies without proper consultation and approval from the community (Andrews, 2005; Mello & Wolf, 2010). Innumerable instances such as these have fostered significant mistrust towards research and researchers, as well as increased calls for decolonizing research by creating spaces for Indigenous communities to take greater ownership over research (LaDuke, 2002; O'Neil et al., 1998; Smith, 1999).



Emerging from this legacy of exploitive health research, the Canadian Institutes of Health Research released its *Guidelines for Health Research Involving Aboriginal Peoples* (CIHR, 2007). This ethical guideline seeks to redirect Aboriginal health research towards the production of research that is focussed upon benefitting communities and their unique health needs (Brant Castellano & Reading, 2010; Reading & Nowgesic, 2002). Furthermore, the guideline also stresses the importance of engaging in research partnerships as a means of both overcoming previous injustices as well as creating research capacity within Aboriginal communities.

In response, Aboriginal health research has witnessed an exciting increase in the adoption of community-based participatory research (CBPR) approaches as one way towards decolonizing research (Castleden, Mulrennan, & Godlewska, 2012). CBPR is a collaborative approach to research that begins with a research question of importance to the community and seeks to include participation of those affected by the issue being studied throughout all stages of the research process (Buchanan, Miller, & Wallerstein, 2007; Leung, Yen, & Minkler, 2004; Minkler, 2005; Minkler & Wallerstein, 2008). Furthermore, CBPR is an action-based orientation to research with the primary purpose of conducting research being to take action or affect social change. In essence, CBPR approaches to research hold the potential to move forward from the legacy of exploitive health research by moving from research 'on' Aboriginal communities towards research 'with' and 'for' them (Wilson, 2008).

Motivated by the need for decolonizing research and the importance of developing research which supports environmental reconciliation, Big-Canoe and

Richmond (2014) put forward the notion of environmental repossession. This refers to the social, cultural, and political processes by which Indigenous peoples are reclaiming their traditional lands and ways of life. Social processes include efforts at fostering strong positive social relationships within communities. This includes the important role of family and friends for establishing and maintaining healthy behaviours. Cultural processes include efforts towards the preservation and sharing of Indigenous Knowledge, including traditional languages and ceremonies. Political processes within environmental repossession are typified by assertion of sovereignty over traditional lands and action on land claims. Globally, Indigenous communities who have taken action in these areas have witnessed positive outcomes for community wellbeing. For instance, Kingsley et al. (2009) found that increased assertion of the right to be involved in the management of traditional lands – a political process of repossession – offered significant benefits to the health of three indigenous groups in Victoria Australia. These benefits included greater self-esteem, fostering positive self-identity, as well as mental relaxation resulting from time on the land.

This dissertation draws upon the theories of environmental dispossession and repossession and is framed by CBPR as a means of developing strategies for improving health within the two collaborating communities. The primary contributions of my thesis are methodological. This research provides an applied example of CBPR within Indigenous health research. In doing so, my dissertation addresses questions and critiques surrounding the challenges of conducting Indigenous health research as a non-Indigenous scholar. Furthermore, this research

illustrates how the spirit of collaboration can be maintained throughout all stages of the research process, notably during the data analysis phase, where collaboration is most difficult to sustain.

Both environmental dispossession and repossession frameworks present unique opportunities for researching Aboriginal health. Environmental dispossession, with an emphasis on processes reducing or terminating health sustaining connections with traditional lands, allows for an understanding of health beyond the description of health outcomes. Researching how processes of dispossession undermine and reduce the quality of health determinants amongst Aboriginal peoples is fundamental for creating initiatives aimed at improving the gap between the health of Aboriginal and Non-Aboriginal Canadians. Environmental repossession frames research in a way that seeks to distil health-promoting actions, particularly those aimed at supporting the health sustaining links between Aboriginal peoples and their traditional lands. In combination, these two frameworks contribute to both developing a clearer understanding of upstream processes resulting in poor health outcomes as well as building strategies for improving upon these outcomes. The inclusive and participatory nature of CBPR means that this research was designed to benefit from experiential insight into these health issues. By directly involving those closest to the problem, as well as incorporating locally appropriate theories of health and wellbeing, the research was designed to yield strategies for action that were highly relevant to each of the collaborating communities.

The research presented in this dissertation forms part of a larger research project drawing upon a community-based research approach to engage youth from Anishinaabe communities on Northern Lake Superior in ethnographic research that involves interviewing community Elders to document Indigenous Knowledge about key environmental issues. This research project emerged from the results of a one-year operating grant, which revealed considerable anxiety resulting from environmental dispossession in the shape of increased industrial development in traditional Anishinaabe territory on the North Shore. These results are presented in two Masters theses, written by Katie Big Canoe (Western University) and Michelle Saravia (Lakehead University) respectively. Specifically, communities expressed concern regarding how industrial development had affected the quality of available local resources as well as reduced community access to these resources. Since the development of the TransCanada Highway, Anishinaabe communities living along the North Shore of Lake Superior have endured increasing levels of exploitive resource development. This has included several instances of environmental contamination resulting from large-scale mining, forestry and steel development. At the same time, several communities in the region are involved in longstanding land-claim struggles with the Crown. Despite the abundance of natural resource development in this region - most of which is occurring within the traditional territories of the Anishinabe people - most First Nation communities in this region have been relatively marginalized from this development, yet they have borne a considerable environmental burden.

The project was led by Dr. Chantelle Richmond and included co-investigators from The University of Western Ontario (Dr. Isaac Luginaah, Dr. Jerry White) and Lakehead University (Dr. Robert Stewart), with funding from The Canadian Institutes for Health Research. The research directly involved a number of community collaborators in the form of local advisory committees, as well as graduate students from both Lakehead University and The University of Western Ontario. Nested within this larger project, my dissertation focused specifically on preserving Elder knowledge about environment and health issues in their area, as well as examining and implementing Elders' strategies for protecting their traditional lands and improving community health.

## **1.2 Research Objectives**

This thesis is written as a collection of three manuscripts, each building upon the previous to construct a narrative outlining the progression of this community-based environment and health research project. There are four main objectives guiding the research:

1. To examine the strengths and challenges of applying a Community-Based Research approach within the context of Indigenous health research;
2. To identify the impacts of both historical and contemporary experiences of environmental dispossession upon community health (as defined by the collaborating communities);
3. To explore Elder approaches for resisting environmental dispossession and maintaining their connections with traditional lands;

4. To explore the process of applying integrated knowledge translation in translating Elders' strategies for resisting the impacts of environmental dispossession into tangible strategies for environmental repossession.

### **1.3 Thesis Outline**

**Chapter 2** reviews the main literatures drawn upon to theoretically frame this research: community-based participatory research, Aboriginal health, health geography, and Indigenous Geography.

In **Chapter 3** an overview of the methods employed throughout this research is presented. This begins with a presentation of the methodological framework and profiles of the collaborating communities. Subsequently, the chapter reviews the stages of project development, data collection, data analysis, and dissemination that occurred throughout the research.

**Chapter 4** presents the first manuscript of this thesis. Published within the *Journal of Empirical Research on Human Research Ethics*, this chapter presents the unique community-based approach to health research conducted within this research project. The chapter is framed by a series of key questions for conducting research with Indigenous communities, put forward by The Indigenous Peoples' Specialty Group of the Association of American Geographers (IPSG-AAG, 2009). The purpose of the chapter is to demonstrate how a collaborative approach to respectful and reciprocal research can be achieved, as well as to discuss some of the challenges of conducting community-based research within an Aboriginal health project.

**Chapter 5** builds upon the methodological framework introduced in Chapter 4 to examine the perceived health impacts of environmental dispossession resulting

from 46 in-depth interviews conducted with Elders from both The Batchewana First Nation of Ojibways and the Ojibways of the Pic River First Nation. This chapter addresses the need to explore environmental dispossession from the perspective of those directly affected. The chapter engages with the concept of resilience. Previous research exploring notions of resilience have typically employed quantitative approaches to study how individuals respond to experiencing adversity (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008; Wexler, DiFluvio, & Burke, 2009). In this chapter, resilience is explored qualitatively at the community level thereby contributing to the increasing literature on Indigenous resiliency and health, which is conceptualized as collective cultural characteristics that sustain or improve health and wellbeing (Kirmayer, Dandeneau, Marshall, Phillips, & Williamson, 2011; Kirmayer, Sehdev, Whitely, Dandeneau, & Isaac, 2009).

**Chapter 6** illustrates the collaborative process used in translating the empirical findings discussed in Chapter 5 into strategies of environmental repossession. This chapter is framed around the process of integrated knowledge translation used throughout the research and culminating in a final Elders' Celebration of the research findings. Given that one of the principal goals of community-based research is a strong commitment to action resulting from the research, there is a need for researchers adopting these approaches to elaborate upon the process of translating research into action.

**Chapter 7** outlines the findings of this thesis and discusses the contributions of the research to academic knowledge on community-based research, environmental dispossession, and environmental repossession. This chapter

concludes with a discussion of the limitations of the research, and its practical implications.



## **Chapter 2: A Review of the Relevant Literature**

### **2.1 Introduction**

This chapter reviews the existing literature upon which this thesis draws in order to provide a suitable background for understanding the study and results presented in subsequent chapters. Four key areas are explored: Community-Based Participatory Research, Aboriginal Health, Health Geography, and Indigenous Geography. In this chapter, I present an overview of each of these key areas. I conclude the chapter by summarizing how each of the key areas reviewed contribute to the development and enacting of collaborative research aimed at environmental repossession on the North Shore.

### **2.2 Community-Based Participatory Research**

#### *2.2.1 Conceptualizing CBPR*

The research undertaken within this thesis was framed by a community-based participatory research (CBPR) approach. This approach to research is quickly gaining popularity within academia (Castleden, Mulrennan, et al., 2012; Seifer & Sisco, 2006; Wallerstein et al., 2008), and as a result it has been conceptualized and operationalized in several different ways. The lack of a universally accepted definition of the approach is attributable to the wide diversity in academic disciplines currently applying CBPR (Delemos, 2006). The broadest view of CBPR positions the approach as one rooted in community research interests, facilitating community participation, and centred upon affecting social change (Buchanan et al., 2007; Delemos, 2006; Minkler, 2005). In their seminal text exploring CBPR applications within health research, Israel, Schulz, Parker, and Becker (1998) offer

keen insight on how CBPR can be applied to address health inequalities. They posit that CBPR is an approach to conducting health research that is explicitly focussed upon redressing social, structural, and environmental health inequalities. As a means of guiding researchers and encouraging increased adoption of the approach, Israel et al. (1998) offer a set of nine principles that they argue capture the elements essential for impactful CBPR (Table 2.1).

<b><u>Principle</u></b>	<b><u>Summary/Implication for Health Research</u></b>
<ul style="list-style-type: none"> <li>• Community is a unit of identity</li> </ul>	<ul style="list-style-type: none"> <li>• Need to clearly establish/define community</li> </ul>
<ul style="list-style-type: none"> <li>• Builds on strengths and resources within the community</li> </ul>	<ul style="list-style-type: none"> <li>• Need to support and expand social structures and process that contribute to capacity building</li> </ul>
<ul style="list-style-type: none"> <li>• Facilitates collaborative, equitable partnership in all research phases.</li> </ul>	<ul style="list-style-type: none"> <li>• Involves an empowering and power-sharing process that attends to social inequalities</li> </ul>
<ul style="list-style-type: none"> <li>• Promotes learning and capacity building among all partners</li> </ul>	<ul style="list-style-type: none"> <li>• It is a co-learning process</li> </ul>
<ul style="list-style-type: none"> <li>• Integrates and achieves a balance between research and action</li> </ul>	<ul style="list-style-type: none"> <li>• A commitment to the translation and integration of research results</li> </ul>
<ul style="list-style-type: none"> <li>• Emphasizes problems of local relevance and perspectives that recognize multiple dimensions</li> </ul>	<ul style="list-style-type: none"> <li>• Strive to achieve broad-scale social changes aimed at eliminating health disparities</li> </ul>
<ul style="list-style-type: none"> <li>• Involves systems development</li> </ul>	<ul style="list-style-type: none"> <li>• A cyclical and iterative process to capacity building</li> </ul>
<ul style="list-style-type: none"> <li>• Equal Dissemination of knowledge</li> </ul>	<ul style="list-style-type: none"> <li>• All partners involved in dissemination process</li> </ul>
<ul style="list-style-type: none"> <li>• Requires long-term process and commitment to sustainability</li> </ul>	<ul style="list-style-type: none"> <li>• Ensuring balance requires consistent partnership</li> </ul>

**Table 2.1: Guiding Principles of CBPR (Israel et al., 1998).**

These nine principles provide researchers with a blueprint necessary for developing CBPR. Within these principles, three essential elements to all CBPR studies are clear: participation, research, and action (Minkler, 2005; Minkler & Wallerstein, 2008).

Participation, the first of these elements refers to the inclusion of individuals from an identified community. A strong emphasis on the participation of community collaborators throughout all stages of the research process is consistently described as an essential characteristic of CBPR. This includes involving community members within the conceptualization and planning of a research project through to the dissemination of research findings. Thus, while the findings resulting from CBPR research are important, equal emphasis is placed upon how communities were identified and research relationships were formed (Castleden, Mulrennan, et al., 2012; Castleden, Sloan Morgan, & Lamb, 2012a; Castleden, Sloan Morgan, & Neimanis, 2010; Flicker, Savan, Kolenda, & Mildemberger, 2008; Israel, Eng, Schulz, & Parker, 2005; Minkler & Wallerstein, 2008; Wallerstein & Duran, 2006).

Minkler (2005) identifies research as the second foundational element of CBPR. In distinguishing CBPR as a unique approach to conducting research, Wallerstein and Duran (2006) put forward the notion that CBPR is more than simply a set of research methods. They argue that it is an orientation to research with methodology emerging from the relationships between academics and community partners. Methodologies are the approach to discovery of what is believed can be known about reality, given the ontological and epistemological assumptions made about the nature of reality (Guba & Lincoln, 2004). Traditional Western approaches to health research has often value the scientific method, including controlled experiments conducted by objective experts within particular fields of research.

However, as CBPR seeks to create a space for the inclusion of multiple perspectives within the research process, assumptions of objectivity and the search for laws are typically not valued as highly. The notion of objectivity runs counter to the goal of collaboration by placing the majority of power within the hands of academic experts. Furthermore, the experiential knowledge held by community members is also discredited as a result of the desire to maintain objectivity. This reinforces passivity amongst research participants, and also acts to deter them from voicing any objections they may hold (Wallerstein and Duran, 2008).

Those following CBPR approaches recognize that knowledge is provisional and contextual. In this sense, what is or can be known about a topic may change with time and is mediated by the circumstances from which the topic is examined. Thus, effective research methodology within the context of CBPR is best selected by building upon partnerships and involving those closest to the subject of interest as intellectual collaborators within the process of knowledge production (Cashman et al., 2008; Castleden, Garvin, & Huu-ay-aht First Nation, 2008; Israel et al., 2005; Israel et al., 1998; Israel et al., 2008).

Placing an emphasis on the provisional nature of knowledge creates an ideological contrast between CBPR and the ontological and epistemological rigidity typically attributed to positivist research paradigms. By recognizing that local knowledge and experience is of equal validity and importance, CBPR draws upon critical theory, feminism, anti-colonialist and constructivist paradigms (Fletcher, 2003; Holkup, Tripp-Reimer, Salois, & Weinert, 2004; Israel et al., 1998; Leung et al., 2004; Wallerstein & Duran, 2003).

Thirdly, Minkler (2005) cites integrating action towards affecting positive changes within community as the third essential element of CBPR. Although integrating action with research is an integral part of CBPR, it has not received as much attention within academic scholarship in comparison to institutional and methodological issues within CBPR research (Israel et al., 2005; Israel et al., 2008). In a comprehensive review of published studies, Cook (2008) argues that studies reporting successfully integrating action and research typically embody three characteristics.

First, studies initiated by communities are cited as being more likely to result in action. Community-initiated studies, it is argued, are often guided by practical and actionable needs. Those initiated by a researcher are typically guided by theoretical research questions. Second, action is more likely to occur if it is supported by or occurs in conjunction with a broader social movement (Cook, 2008). Third, studies that incorporate qualitative methods were reported as having greater success integrating action within the research. Qualitative methods are beneficial to CBPR in that they are both likely to generate actionable knowledge informed by community members living under the conditions being studied as well as easily integrated into contextually relevant strategies for community-level change (Viswanathan et al., 2004). This is not to say that quantitative research methods are not suitable for action-oriented CBPR studies. However, efforts must be made to ensure that the voice of the collaborating community is present when designing survey instruments and conducting analysis (Boston et al., 1997).

### 2.2.2 *The Roots of CBPR*

Advocates of CBPR typically cite its origins as the result of efforts by Kurt Lewin and Paulo Freire, who both recognised the need for increased involvement of those directly affected in solving social problems (Castleden et al., 2008; Flicker et al., 2008; Israel et al., 2005; Leung et al., 2004; Wallerstein & Duran, 2003; Wing et al., 2008). Kurt Lewin, a social psychologist in the 1940s, developed the foundation of CBPR approaches through advocating and enacting what was initially termed action research (Lewin, 1946; Lewin, 1948). Critical of the gap between theory and practice, Lewin believed that problems could be addressed through active involvement in the research of those affected by the problem being studied. Lewin proposed that in order for research to initiate social change, it must progress through a cyclical process of fact finding, action, and reflection upon the effectiveness of the action.

Paulo Freire's contributions to contemporary CBPR approaches were rooted in his work within the emancipatory efforts of popular education. These took place with oppressed peoples across Latin America, Africa, and Asia during the 1970s (Minkler & Wallerstein, 2008). Within his seminal book *Pedagogy of the Oppressed*, Freire discussed creating knowledge and action for social change through emancipatory education. This included a shifting of the role of the learner from that of a passive recipient of knowledge to an active co-creator of knowledge. This fostered discussion of the importance of re-structuring research relationships from one in which communities were objects of research to one in which community members would become active participants in its creation (Freire, 2002). Popular

education efforts were action oriented, seeking the development of counter narratives to the dominant and colonizing nature of research to which populations in these regions had been subjected. The action-oriented and participatory nature of this movement was a result of it having emerged from the people themselves instead of traditional academic spheres. Participatory research within the popular education movement sought to break the control over knowledge production held by universities, recognizing that academic knowledge production was linked to various interests and power relations beyond the level of individual members of society.

This brief overview of CBPR origins provides insight into the current manifestation of the approach. Grounded in its emancipatory roots and iterative nature, CBPR approaches are ideally suited for studies on disparities amongst marginalised populations. For researchers concerned about social justice and a desire for positive change, CBPR approaches are suitable.

### *2.2.3 CBPR and Health*

The benefits of undertaking CBPR within the context of health studies has been recognized to the extent that the Institute of Medicine has named CBPR as one of the eight areas in which all schools of public health should be offering training (Minkler & Wallerstein, 2008). Public health research continues to build upon the notion that, beyond individual behavioural or genetic factors, health inequalities are shaped by environmental, political, social, and economic systems (Curtis, 2004; Evans & Stoddart, 1994; Hatzenbuehler, Phelan, & Link, 2013; Marmot, 2012). Initiatives developed through CBPR are often able to address the health problems

that are typically not the focus of study within biomedical research. The results of CBPR often present key health decision makers with detailed and accurate information with which to develop health initiatives highly applicable to community health issues (Fletcher, 2003; Flicker et al., 2008; Harvey, Schulz, Israel, & Sand, 2009; Israel et al., 2005). For instance, O'Brien and Whitaker (2011) discuss a CBPR study exploring cervical cancer screening amongst inner-city women. Not only did this study identify barriers to cancer screening which had not previously been discussed by existing screening efforts in this community, members of the research team and their collaborators continued working together in order to advocate for the creation of a new clinic which met the unique needs of the community.

The argument for increased adoption of CBPR within health studies is based upon two assumptions (Wallerstein & Duran, 2006). The first is that health interventions can be improved if they benefit from community insight and include local theories of both the sources of poor health outcomes as well as the reasons for changes in community health. The second assumption is that there is an added value of enhancing the health of community collaborators as they participate in CBPR studies (Buchanan et al., 2007). For example, Hayashi et al. (2012) conducted collaborative research with active drug users in Bangkok, Thailand. This produced valid research results concerning the effectiveness of a drug intervention strategy. However, the study also greatly empowered community collaborators who were able to continue applying the skills they had obtained towards continuing to educate others within their community about safe drug use methods.



Equitably involving community members in all stages of the research, including developing research questions and data collection, renders outcomes that are more accessible, understandable, and relevant than when they are not. This also allows for the emergence of new research questions reflecting health issues of real concern which may have been overlooked or unknown (Wallerstein & Duran, 2006). Pidgeon and Hardy Cox (2002) discuss how, by involving Aboriginal students throughout their study, they were able to develop research questions and instruments that reflected the cultural beliefs and practices of the students. Furthermore, they were also able to uncover barriers faced by Aboriginal students that had previously been unexplored. The results of the research were translated into the introduction of initiatives that led to measurably improved mental health.

A special issue of *The Canadian Geographer* explored how CBPR is undertaken in partnership with Indigenous peoples and communities to inform geography in Canada (Castleden, Mulrennan, et al., 2012). In this special issue, contributions emphasised the important role that CBPR approaches play in partnerships seeking to address issues of political, social and environmental justice amongst Indigenous communities in Canada. Castleden, Sloan Morgan and Lamb (2012) presented the results of a qualitative study with academic researchers conducting CBPR with Indigenous communities throughout the country. This study revealed that the experience of conducting CBPR varied greatly amongst participants. This included how studies were instigated, the degree of community participation within the study, as well as diverse perceptions concerning whether CBPR approaches were necessary. Contained within this article is the important lesson that there is no

single correct way to enact CBPR research and that researchers must be open to respecting the process of developing the proper relationships in order for research partnerships to flourish.

#### *2.2.4 Limitations of Community-Based Participatory Research*

As mentioned previously, a key principle of CBPR is that it is a long-term process requiring significant commitment on the part of all parties involved. CBPR research processes are likely slower and more drawn out than non-collaborative approaches (Menzies, 2004). This raises a number of potential barriers for those seeking to adopt a CBPR approach. To begin, the length of time required in order to successfully build relationships with communities as well as to design and conduct the research acts to limit the number of researchers able to adopt this approach. For instance, without prior project development, it would be unreasonable to assume a student enrolled in a two or four-year academic program would be capable of meeting the research requirements in sufficient time. Williams, Labonte, and O'Brien (2003) state that the development phase of their research took nearly two years, while Gibbon (2002) discusses spending ten years abroad for her research prior to completing her doctorate.

Time constraints are also an issue for relatively new faculty members, who often find themselves facing the 'publish or perish' dilemma (Wallerstein & Duran, 2006). There is also typically a financial cost associated with developing CBPR initiatives. This has the potential to difficulty for some researchers when costs are incurred before the timeline for research grants being awarded (Menzies, 2004).

At the community level, the amount of time for successful CBPR may create dissatisfaction amongst individuals who seek immediate results to the problems they face. Furthermore, research conducted with vulnerable populations faces a high potential for attrition as the demands resulting from involvement in a research project may impose or unreasonable expectations on participants in terms of the time and energy required by participation. This is especially true if there are multiple processes happening simultaneously, which can cause participation to become a burden. Within a CBPR approach to the study of diabetes among the James Bay Cree, Boston et al. (1997) cite the challenges involving the recruitment and participation of community health representatives. Although integral to the research, these individuals were often pressed for time, requiring the rescheduling of research components and extension of the project beyond the anticipated completion date.

The degree of citizen involvement in CBPR initiatives varies according to both the goals of the research and the desire for participation by the community. Although participation can be limited to development of the research design, it should also seek the inclusion of community members in data collection and analysis. This raises a second common critique to CBPR, with some questions regarding the ability of untrained people to carry out complex research analysis (Frideres, 1992). This thesis provides an answer to this critique by demonstrating how individuals with little to no research experience can be included throughout all stages of the research.

Once the research has been completed, academic researchers will undoubtedly want to publish their findings. Potential conflicts between researchers and participants can arise when research results construct a discourse with unintended consequences for the communities involved (O'Neil et al., 1998). Although it is impossible to predict all outcomes of publication, researchers must be critical in ensuring that publications resulting from collaboration maintain respect community research objectives, even if collaborators are unable or unwilling to act as co-authors on academic publications. Development of research contracts at the onset of a project has been suggested as one way of overcoming this issue, yet this raises the question of who represents the community within negotiation of these contracts.

CBPR approaches require a clear definition of community (Wallerstein & Duran, 2006). This relates to the following fundamental questions: who defines community; who constitutes community; and who speaks for community? Issues related to the conceptualization of community are further complicated when competing interests exist within the community as well as when ambiguity exists in relation to ethical concerns of community approval. CBPR researchers often include reflection surrounding who participated in developing and enacting research, as well as attempts at identifying community members who did not participate, as a means of ensuring transparency.

A further conceptual issue within CBPR approaches relates to the need for defining participation. The extent to which members of an identified community are expected to participate by the researcher may be very different than the expectation

of participants. While researchers may hold ideals of complete community participation, control over all aspects of the research is rarely completely in community hands. Furthermore, community may not always desire complete control (Cornwall & Jewkes, 1995). Researchers must work with communities at the onset of any CBPR initiative in order to clearly define the degree of participation expected of community members.

Furthermore, it is important to note the potential for marginalization still exists despite the emancipatory nature of CBPR approaches (de Leeuw, Cameron, & Greenwood, 2012; Flicker et al., 2008; Gibbon, 2002; Minkler, 2005). Conceptual issues surrounding participation include the blurring of the role played by community members once research has begun. This includes confusion on the part of community members who hold typical views of a distanced researcher and a passive research subject. Participants holding this view may be less willing to engage in a critical discussion of the research, including voicing concerns over marginalisation. In developing a clear definition of participation, as well as community, researchers and communities engaged in CBPR can limit the degree to which marginalization occurs.

## **2.3 Aboriginal Health**

### *2.3.1 The Health of Aboriginal Peoples in Canada*

The 2011 National Household Survey (NHS) reported slightly more than 1.4 million people identified as Aboriginal in 2011 (Statistics Canada, 2013). This represents 4.3% of the total Canadian population. First Nations people were the largest of the three legally identified groups, representing 60.8% of the total

Aboriginal population (851,560 individuals). The Métis population comprised 32.3% of the total Aboriginal population (451,795 people), with the Inuit comprising 4.2% (Statistics Canada, 2013). The remaining 1.9% of the Aboriginal population identified themselves as having either more than one Aboriginal identity or as having other Aboriginal identities.

Ontario is home to the largest Aboriginal population, where 21.5% of the total Aboriginal population resided in the province. Slightly less than half (49.4%) of First Nations people with Registered Indian status throughout Canada lived on a reserve. In Ontario, 37% of status First Nation lived on one of the 133 First Nation reserves, which represents the second lowest proportion of a total provincial population living on reserve amongst all the provinces. This reflects a growing trend amongst all Aboriginal populations in Canada, where over half (54%) of the population reported living in urban centres (Statistics Canada, 2008).

The Aboriginal population increased by 20.1% between 2006 and 2011, compared with an increase of 5.2% for the non-Aboriginal population (Statistics Canada, 2013). A younger population supports the significantly larger growth rate amongst the Aboriginal population. The median age of the Aboriginal population in 2011 was 28 years, which is 13 years younger than that of the non-Aboriginal population. One-quarter of the total Aboriginal population is aged 14 and under, compared with 16.5% of the non-Aboriginal population. An additional 18.2% of the total Aboriginal population was between the ages of 15 and 24. Seniors (65 years and over) made up just 5.9% of the Aboriginal population, which is less than half of the proportion of seniors in the non-Aboriginal population.

The higher growth rate and younger overall population is the result of both lower life expectancy and a higher number of births amongst Aboriginal peoples. Between 1996 and 2001, the fertility rate for Aboriginal women was 2.6 children, compared with 1.5 amongst all Canadian women (O'Donnell & Wallace, 2011). In 2011, Health Canada reported a crude birth rate of 24 births per 1,000 population for registered First Nation in Atlantic and Western Canada (Health Canada, 2011). This was more than double that of the corresponding non-Aboriginal population. A higher crude birth rate is partially due to the fact that the Aboriginal population is both younger and having children at younger ages. Census data from 2006 revealed that 8% of Aboriginal teenage girls between 15 and 19 years old were parents, compared to 1.3% amongst non-Aboriginals. For First Nation teenage girls living on reserve, this number increased to 12%.

The Aboriginal population across Canada experience a disproportionate burden of morbidity and premature mortality compared to non-Aboriginal Canadians. The majority of these disparities can be linked to socio-economic determinants of health, as well as colonialism and the subsequent inequities in access to health resources (Adelson, 2005; King et al., 2009; Richmond & Ross, 2009; Smylie, 2009; Waldram, 2006). Life expectancy amongst Aboriginal people in Canada has consistently been lower than that of non-Aboriginal Canadians. Despite recent increases, differences in life expectancy at birth between Aboriginal peoples and the general population persist (6.6 years for males, 6.5 years for females). Narrowing of the gap in life expectancy can also be attributed to relatively smaller increases in life expectancy for the general Canadian population (Health Canada,

2009). This has been projected to continue over the next decade albeit a slight improvement, with an average gap in life expectancy of 6 years for men and 5 years for women (Statistics Canada, 2010). The Inuit are predicted to have the lowest life expectancy in 2017, with a gap of 15 years for men and 10 years for women.

A significant contribution to the measured differences in life expectancy is attributable to considerably higher rates of infant mortality. Although information on Aboriginal infant mortality is limited, persistent and sizeable differences between Aboriginal and non-Aboriginal Canadians have been found to exist. Amongst registered First Nations living in both British Columbia and Manitoba, the rate of infant mortality is approximately twice that of non-First Nations with greater rates of disparities in rural and remote areas (Luo et al., 2007; Luo et al., 2004). Amongst the Inuit, the reported rate of infant mortality (18.5 per 1,000 population younger than age 1) were reported as nearly four times that of the Canadian statistic in 2003 (Wilkins et al., 2005). Elevated rates of infant mortality have been attributed to disproportionately poor levels of congenital conditions, sudden infant death syndrome and infections experienced by the Aboriginal population (Smylie, Fell, & Ohlsson, 2009).

The leading causes of mortality amongst Aboriginal communities include diseases of the circulatory, digestive, and respiratory systems (Health Canada, 2009). However, external causes of morbidity and mortality remain the primary cause of death amongst Aboriginal peoples. These include vehicle accidents, intentional self-harm, and assault. In 2000, the number of potential years of life lost amongst First Nations in Canada was nearly three times that of the national rate (FNIHB, 2005).



The rate of unintentional injuries amongst First Nations across Canada was also nearly four and a half times greater than the national rate. First Nation males suffered a greater proportion of premature mortality than females.

Rates of several infectious diseases are also significantly higher for Aboriginal peoples compared to the rest of Canada. The prevalence of tuberculosis, which has been largely eliminated amongst the general population, represents one of the most striking examples of persistent inequalities in health and healthcare between Aboriginal and non-Aboriginal Canadians. Amongst the Inuit population, the prevalence of tuberculosis has been reported as being 20 to 50 times higher than the national average (Nguyen et al., 2003). This has been linked to poverty, including lack of access to traditional environmental resources, poor living conditions, and limited ability to access nutritious foods (Kulmann & Richmond, 2011). First Nation and Inuit children are also at considerably higher risk of hospitalization or death due to respiratory illness (Banerji et al., 2009; Kovesi, Cao, Osborne, & Egeland, 2011; Kovesi et al., 2007).

Aboriginal peoples in Canada have also experienced an epidemiologic transition. This is typified by a shift in causes of morbidity and mortality away from a predominance of nutritional deficiencies and infectious diseases, towards degenerative chronic diseases (Orman, 1971). The most discussed chronic disease within Aboriginal communities is diabetes. The age-standardized rates of diabetes was 17.2% for First Nation individuals living on-reserve and 10.3% for those living off-reserve, compared to 5% amongst the non-Aboriginal population (PHAC, 2011). The prevalence of diabetes also varies significantly amongst First Nations

communities throughout Canada, and has been reported as reaching rates of up to 25% for particular on-reserve First Nation communities (Young, Reading, Elias, & O'Neil, 2000).

Emerging patterns of cancer amongst Aboriginal peoples reflect those of indigenous peoples globally. Aboriginal peoples diagnosed with cancer in Canada have higher mortality rates from than non-Aboriginal Canadians, with status First Nations having the highest mortality rates (Marrett & Chaudhry, 2003). In Ontario, incidence rates for major cancers (breast, cervical, colorectal) are increasing more rapidly and rates of survival are significantly lower amongst First Nation people compared with the provincial averages (Nishri, Sheppard, Withrow, & Marrett, 2015). Later stage at diagnosis and greater prevalence of co-morbidities were identified as the two most significant causes of survival differences (Nishri et al., 2015; Sheppard et al., 2010). Disparities in cancer risk factors, such as significantly higher rates of cigarette smoking amongst Ontario First Nations, underwrite the growing burden of cancer.

### *2.3.2 Concepts of Health Among Aboriginal Peoples*

The global diversity of Indigenous peoples and their geographies has led to several different conceptualizations of health (Richmond, 2015). There can be differences in concepts of health even within Indigenous communities themselves, with some individuals choosing to follow holistic approaches while others can elect to subscribe to biomedical understandings or a hybridization of both (Durie, 2004; Waldram, 2006; Ypinazar, Margolis, Haswell-Elkins, & Tsey, 2007).

Traditional lands often play a central role in understanding what it means to be healthy within holistic approaches. For many Indigenous peoples, being healthy is fundamentally linked to their ability to maintain strong connections to their traditional lands and the social and cultural strengths that result from this connection (Parlee et al., 2005; Richmond et al., 2005). In a basic sense, traditional lands have provided the materials essential for surviving in harsh natural environments across multiple generations. This includes the traditional food and medicines that have been harvested or hunted from the land. Time spent on the land also provides the opportunity for physical activity while the harvested materials provide economic resources through the sale of goods produced.

However, the connection between the health of Indigenous peoples and that of their traditional lands goes beyond the physical and material benefits that result from being on the land. The mechanisms through which the land sustains Indigenous peoples' health are better understood when health itself is approached from a culturally appropriate perspective. Indigenous meanings of health are as varied as Indigenous peoples themselves. However, most frameworks share a basic commonality in that health is approached holistically and characterised by recognition of the interrelationships between the individual, the natural, and the spiritual (Battiste and Henderson, 2000; Cajete, 2000; Greenwood and de Leew, 2007).

For instance, Durie (1994) discusses a Maori health model known as *Whare Tapa Wha* (four sided house), which was put forward as a culturally appropriate alternative to the Western biomedical perspective that characterized healthcare in

New Zealand. The *Whare Tapa Wha* model compared health to a house with four walls within which each wall was necessary to ensure the strength of the structure. Physical health represents one of the four sides, with the remaining components consisting of spiritual, thoughts and feelings, and family. For an individual to be considered healthy, all four elements are required to be present and undamaged. Maori Elders emphasised the crucial importance that the spiritual element (*Taha Wairua*) plays within health, believing that an individual is more prone to illness without spiritual awareness (Durie, 2004).

*Taha Wairua* requires maintaining a strong relationship with the environment as well as understanding the significance that the physical landscape plays in Maori identity and spirituality. This understanding is traditionally transmitted to younger generations through song and oral history.

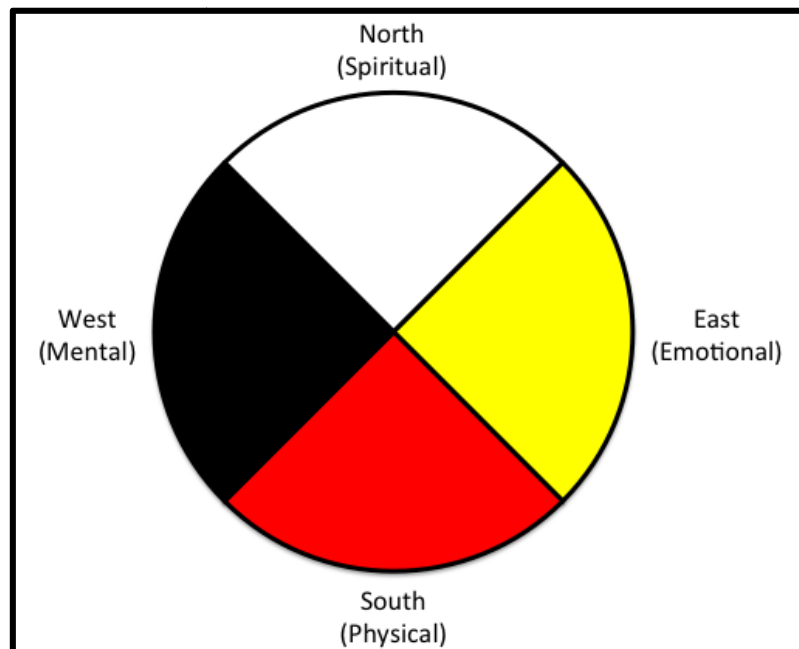
In Canada, Adelson (2000) describes the concept of *Miyupimaatisiun* (living a good life) as a Cree framework for understanding what it means to be healthy. This concept places little emphasis on preventing diseases and focuses instead on the importance of Cree cultural identity. Within this framework, being alive well means “being able to hunt successfully, pursue traditional activities, live well in the bush, eat traditional foods, keep warm, and provide for oneself and others” (Adleson, 2000. P. 97). In order to achieve this, Cree youth are taught by their Elders to show respect to the natural environment as a means of ensuring the continued presence of game animals for hunting and the preservation of the Cree way of life. *Miyupimaatisiun* also views cultural traditions and the land as containing powers that enable individuals in distress to heal.

These examples illustrate the distinct ways that two Indigenous peoples from different geographic regions conceptualize health. Common to both understandings are a belief that physical health shapes only a portion of what it means to be healthy as well as an emphasis on the integral role of connections to traditional lands for sustaining health. Knowledge about the various ways through which Indigenous peoples have come to know how to connect with their lands and live a healthy have been described as Indigenous knowledge (Battiste and Henderson, 2000; Berkes, 2008). Indigenous knowledge consists of the knowledge systems distinct to specific places, and provides teachings for how to survive and thrive as equal parts of their local ecosystems. Community Elders have customarily transmitted this knowledge orally to younger generations, through experiential teaching and learning occurring on the land (Ransom, 1992; Battiste and Henderson, 2000; Kovach, 2005).

Amongst several First Nation groups in Canada, the Medicine wheel is used to conceptualize the physical, mental, emotional and spiritual dimensions of a person (Isaak & Marchessault, 2008; Yearington, 2010) (Figure 2.1). These four elements of the self are represented within the four directions (north, south, east, west). Although interpretations differ across Aboriginal nations, a common understanding of the Medicine Wheel is that each individual has both a physical part (i.e. the body) and a spiritual part (i.e. connections with spirit world). These two parts are reconciled by the emotional and mental capacity of the individual (Dapice, 2006; Kattelmann, Conti, & Ren, 2010; Yearington, 2010). The emotional element is comprised of the psychological state of the individual (i.e. happiness, love, lonesomeness, grief) and the mental dimension reflects their intellectual capacity. If

an individual focuses too heavily on one particular aspect, the result is an imbalance. Healing within the Medicine Wheel teachings then requires the individual to rebalance themselves (Dapice, 2006).

The Medicine Wheel has been used as a teaching tool in a variety of applications within First Nation communities. Kattelmann et al. (2010) adapted the Medicine Wheel as the foundation for a nutritional education model within a randomized control trial of individuals with type 2 Diabetes Mellitus. They found significant results amongst those who had participated in the Medicine Wheel model, with measured weight loss and decreased BMI occurring within this group. Overall, this study argues for the strengths of culturally appropriate approaches to health interventions.



**Figure 2.1: The Medicine Wheel**

The importance of maintaining a balance with all of creation in order to live a good life is further emphasised within the Anishinaabe creation story. Within traditional teachings are the foundations of cultural identity as well as the tools needed help to understand the relationships and responsibilities that people have with the land (McGregor, 2009). These teachings create an Anishinaabe identity as caretakers of the land and the important lesson that human beings are just one small part of creation (Miller & Davidson-Hunt, 2013). The Anishinaabe story of how the world was created teaches that *Gitchi-Manitou* (The Creator) made all things and assigned them a purpose. Humans were created as the last and weakest amongst all things, but was given the gift of dreaming that allowed them to have vision and connect with *Gitchi-Manitou* (Benton-Banai, 1988; Peacock, 2001). Original Man was instructed by *Gitchi-Manitou* that all things had a spirit and purpose and were to be given respect. Man was told that they should always show respect to all living things, especially when taking life. This teaching included following *biindaakozh*, which involves offering of sacred tobacco both before and after a successful hunt and harvest (Benton-Banai, 1988).

Further Anishinaabe teachings emphasise the importance of maintaining a respectful and balanced relationship with creation, as well as the consequences of causing the relationship to become imbalanced. The teaching of the Great Flood tells of how after many generations of living in harmony, the Anishinaabe began to stray from the original path that the Creator had laid before them (Benton-Banai, 1988; Johnston, 1995; Peacock, 2001). Families and villages began arguing and fighting over hunting grounds, resulting in fighting and killing. As the Anishinaabe people

were no longer respecting creation, *Gitchie-Manitou* decided to purify the Earth. He did so through a great flood, drowning the Earth in a great sea and killing most living things. A few animals were able to survive and found themselves clinging to a floating log. Also clinging to this floating log was *Nanabosho* (man), a prominent figure in several Anishinaabe stories. *Nanabosho* consulted with the other animals and decided that they may be able to restore life and land by retrieving a piece of the Earth from the bottom of the great sea. However, all of the animals including *Nanabosho* failed in their attempts to retrieve a piece of earth despite having boasted about their superior abilities to do so. The last of the beings to speak up about wanting to try and make the dive was a muskrat. All the animals laughed at him, believing him to be the weakest and unable to swim. The muskrat made his attempt and only following a long time did he emerge from the depths clinging to a small piece of earth in his paw. However, the muskrat did not survive the journey. In mourning, all the animals placed the muskrat on the back of a turtle along with the piece of earth it had collected. Sadly, all the beings performed a ceremony thanking it for its sacrifice and mourning the loss of their friend. Recognizing that balance and respect had been restored amongst the beings, *Gitchi-Manitou* sent his breath as the wind into the piece of earth. The piece of earth began expanding on the back of the turtle and shaped what would become known as Turtle Island (North America). This story illustrates how the Anishinaabe identity, including their health, is tied to the land and all elements of Creation. The story teaches that to be healthy, an individual must acknowledge this by showing respect, love, and humility to the land and all living things.



A final example of how the Anishinaabe belief that living a good life is tied to maintaining strong connections with creation is illustrated by the sweat lodge ceremony. Within the lodge, individuals are able to connect with the land and creation. The structure of the lodge itself is representative of the womb of Mother Earth. In this ceremony, tying saplings together and covering them with tarps creates a dome. A fire pit in the ground is dug at the centre of the structure where the grandfathers (rocks) are placed. These grandfathers have been heated in a fire outside of the lodge for several hours before hand. Participants crawl into the lodge and form a circle around the centre pit. The grandfather rocks are welcomed into the lodge and the entrance is shut, leaving the lodge in complete darkness. Water is sprinkled onto the grandfathers, resulting in steam and heat to be emitted. While several variations exist, the ceremony consists typically of songs and prayers to the four directions with the door being opened after each round and more grandfathers welcomed into the lodge.

The sweat lodge is a purification ceremony that is used for prayer, to maintain overall health, as well as to address specific health and social concerns (Waldram, 2006). These ceremonies have also been used within a variety of contexts, such as correctional facilities, helping youth to cope with suicides, and assisting in overcoming alcoholism and other addictions (Crowley, Harre, & Tagg, 2002; Hall, 1986; Waldram, 1993, 1997). Schiff and Moore (2006) conducted a study exploring the impacts of attending sweat lodge ceremonies upon the wellbeing of 39 individuals, measuring self-assessed physical, mental, emotional, and spiritual health both before and after attending several sweat lodge ceremonies. They found

significant increases in overall wellbeing had occurred immediately after attending a ceremony, especially within spiritual and emotional dimensions.

Clearly, Aboriginal peoples throughout Canada face high rates of a wide range of biomedically defined health problems. When taken together, these indicators reflect significant challenges to the health of Aboriginal peoples. However, the severity of these inequalities in health are further compounded when health is expanded to reflect a more holistic understanding of what it means to be healthy.

## **2.4 Health Geography**

Health geography is the study of how populations, places, and spaces interact to shape health (Gatrell & Elliott, 2009). The central focus of the discipline is on the identification, classification, and reduction of risks to health resulting from environmental and social inequalities, behavioural determinants, and location specific characteristics (Luginaah, 2009).

The theoretical lineage of health geography as a discipline has been traced back to insights on the relationship between the natural environment and health put forward by Hippocrates (Barrett, 2000). In his reflections upon human health, Hippocrates argued for the importance of understanding the influence that airs, waters, and places have on human health.

Discussion of the history of health geography also point to the fabled mid-nineteenth century study of the spatial distribution of an outbreak of cholera in London by medical doctor John Snow as a key foundational moment of the discipline (Gregory, Johnston, Pratt, Watts, & Whatmore, 2009). Through his use of spatial perspective - manifested in the shape of dot mapping - to determine that the Broad

Street water pump was the source of the outbreak, Snow was able to demonstrate the effectiveness of adopting spatial approaches to the study of illness.

Snow's study is often used as an introduction to the study of the relationship between health and geography. However, epidemiologists are quick to cite Snow as the father of modern epidemiology and there is some speculation surrounding whether Snow initially used mapping to establish the pump as the source of the outbreak (Barrett, 2000; McLeod, 2000). Throughout its infancy, geographical approaches to understanding health remained tied to medical and health services research (Gregory et al., 2009). Because of these strong links to medical fields, geography was slow to develop its own identity within the study of health.

It would not be until the mid-twentieth century that geographers would begin to distance themselves from medical research fields and claim medical geography as a distinct sub-discipline with its own unique approaches to exploring disease and health (Brown, McLafferty, & Moon, 2010). At this time, Jacques May began to demonstrate his belief that the biomedical model, the dominant epistemological approach within epidemiology, was too narrow a philosophical approach to fully comprehend disease aetiology. May (1958) gathered empirical evidence regarding the emergence of several diseases in specific places, such as Vietnam, in order to understand their distribution. In his study, May demonstrated how disease distribution could be interpreted as resulting from more complex factors than human contact with a pathogen. The work of May and others in the mid 20<sup>th</sup> century effectively formalized medical geography as a sub discipline of human geography,

existing within the fringes of medical and epidemiological sciences (Brown et al., 2010; Gregory et al., 2009; Meade & Earickson, 2010).

#### *2.4.1 Approaches within Health Geography*

Currently, geographical approaches to the study of health can be categorised into three strands, which often intersect and overlap (Kearns & Moon, 2002). The first strand consists primarily of the analysis of spatial variations in human health, with a focus on distributions of morbidity and mortality (Gatrell & Elliott, 2009; Meade & Earickson, 2010). This approach is the earliest one taken by researchers exploring the relationship between health and geography and involved developing an understanding of the environmental and social causes of morbidity and mortality within a population (Gatrell & Elliott, 2009; Mayer, 2000b; Mayer & Meade, 1994). Studies within this strand of medical geography typically employ frameworks such as disease ecology and landscape epidemiology combined with quantitative methodologies to understand how human behaviours interact with environments to produce health outcomes within a specified population (Crighton, Elliott, Moineddin, Kanaroglou, & Upshur, 2007; Mayer, 2000b; Meade & Earickson, 2010).

The second strand explores the organization, distribution, accessibility, and use of health services (Andrews & Moon, 2005; Gatrell & Elliott, 2009; Kearns & Moon, 2002). Studies within this strand are exemplified by the use of mapping inequalities in access to healthcare services as a means of providing health policymakers with information regarding populations in need of services as well as potential locations for new facilities (Brown et al., 2010). For instance, Wilson and Rosenberg (2002b) conduct a comparative analysis of access to healthcare services

within the ten Canadian provinces, situating their study within the narrative of challenges presented by decreased federal funding for services and the resulting provincial restructuring of healthcare delivery.

The third strand is relatively new within the discipline, emerging as a result of ontological and methodological debates surrounding the role of place within health occurring in the 1990's (Andrews & Moon, 2005; Luginaah, 2009). This third strand currently seeks to engage with more complex conceptualizations of place, incorporating increased attention to the multiple and subjective meanings that people attribute to places and how these shape experiences and influence health (Brown et al., 2010; Gatrell & Elliott, 2009; Wilson & Rosenberg, 2002b).

The reconceptualising of the role of place in medical geography instigated debate between traditional medical geographers and those advocating a new geography of health. Advocates for a reconceptualising of space would argue that medical geography has been limited by a lack of engagement with critical theory, resulting in oversimplified views of places as simply containers for action (Dyck, 1999b; Litva & Eyles, 1995). These debates would continue throughout the pages of geographical journals, such as *Progress in Human Geography* and *Health & Place* throughout the early to mid 1990s (Kearns & Collins, 2010).

Kearns (1993) contributed to this discourse by attempting to sway the focus of medical geography towards a cultural standpoint by putting forward the notion of post-medical geographies of health. This notion argued for a reformed medical geography which should incorporate two forms of research: one continuing the longstanding medical focus on the spatial and ecological distribution of disease and

service, and another that would define and study health with a conceptual emphasis on place and an increased engagement with social theory and cultural geography (Andrews & Evans, 2008). Litva and Eyles (1995) propositioned a 'coming out' into theoretical awareness, increasing engagement in social theory as a means of enriching research.

Increased awareness of the multiple characteristics of place and how these impact the experience of health laid the foundation for growing methodological and analytical sophistication, with research increasingly accepting qualitative and mixed methods approaches (Andrews & Evans, 2008). This acted to further widen the range of topics which continue to be studied by health geographers, as well as to increase interdisciplinary work with disciplines from within both medical and social sciences (Curtis, 2004; Luginaah, 2009; Parr, 2004). It is within this strand, with its emphasis on the subjective experience of place in shaping health, that I situate my doctoral research. The holistic conceptualization of health and participatory nature of the study may not have been possible within previous incarnations of the discipline.

#### *2.4.2 Frameworks and Methods in Health Geography*

Within a broadened awareness of the need to focus upon the multiple ways that place is experienced, as well as recognition that health can hold different meanings amongst various populations, multiple humanistic and interpretive approaches that create opportunities for exploring and understanding subjective notions of health and illness have become increasingly popular within health geography. This includes a greater engagement with critical social theories as well

as increased adoption of qualitative research methods (Andrews & Moon, 2005; Kearns & Moon, 2002; Parr, 2004)

As mentioned, medical geography had typically relied upon positivist approaches to studying health from a biomedical perspective. This included the use of human-disease ecology as a theoretical approach to understanding how human behaviour interacts with the environment to produce or prevent disease within a defined population (Mayer, 2000a; Meade & Earickson, 2010). Methodologically, research of this nature included the use of mapping, with developments in Geographic Information Systems (GIS) enriching the possibilities for presenting the spatial patterns of diseases or access to healthcare in question (Gatrell & Elliott, 2009; Kistemann, Dangendorf, & Schweikart, 2002; Meade & Earickson, 2010).

Within the third strand of health geography, several key theoretical frameworks and methodological approaches have witnessed an increase in popularity. Drawing on both cultural geography and health geography, Gesler (1991) introduced the concept of therapeutic landscapes as places with lasting reputations for achieving healing. By including notions of sense of place held by individuals, Gesler was able to examine the attachments that people have with places and how these produce healing benefits. Therapeutic landscapes continue to be employed as a key framework within health geography, with researchers applying it within a wide variety of places. These include psychiatric hospitals (Wood et al., 2013), urban environments (Wendt & Gone, 2012), and traditional places such as spas (Foley, Wheeler, & Kearns, 2011).

Methodologically, the increased emphasis on the importance of developing deeper understandings of the complex ways place and health interact has necessitated greater opportunities for the use of qualitative research methods (Baxter & Eyles, 1997; Dyck, 1999a; Elliott, 1999). The argument being that, while dot maps may reveal spatial patterns of health and illness, the dots themselves represent real people whose experiences are deserving of consideration (Gatrell & Elliott, 2009; Smyth, 2008).

#### *2.4.3 Geographies of Indigenous Health*

The study of health within Indigenous populations is a relatively small yet developing area within the discipline of health geography. Changes in the approaches taken within the broader discipline of health geography, as discussed in the previous sections, is reflected in the broadening of approaches taken by geographers who have studied the relationship between health and place amongst Indigenous populations.

For instance, studies conducted by both Newbold (1998) and Thouez, Foggin, and Rannou (1990) provide examples of descriptive geographical research on Aboriginal health. Concurrent with the second strand of health geography and its focus on the spatial distribution of health services, quantitative comparative analysis using large datasets such as the Aboriginal Peoples Survey (APS) and the General Social Survey have been used to explore differences in both health status and use of medical services between Aboriginal (both on and off reserve) and non-Aboriginal populations in Canada (Newbold, 1997, 1998).



Large-scale quantitative studies have been criticized for their tendency to create a homogenized depiction of Indigenous populations (Wilson and Young, 2008). Furthermore, studies of this nature typify the view of place as a container for health, rather than seeking to examine the underlying characteristics of place that intersect to shape health. However, Newbold (1998) does provide an indication towards the future of health geography and Aboriginal health by calling for the development of a deeper understanding of pressing health challenges through community self-identification of the problems. In short, Newbold (1998) recognises the need for community-based approaches.

Both Wilson and Rosenberg (2002a) and Richmond, Ross, and Egeland (2007) draw on the APS to explore aspects of Aboriginal health. However, both studies bring unique perspectives to the analysis of APS data. For instance, Richmond et al. (2007) chose to focus on social support as it relates to thriving health. In doing so, this study presents the strengths of exploring health promoting aspects of Indigenous health as opposed to determinants of disparity. Wilson and Rosenberg (2002a) explore the relationship between traditional activities and health using the APS. The study concluded that First Nations' health is enhanced by culture. In reflecting upon unique findings presented within each study, both Wilson and Rosenberg (2002a) and Richmond et al. (2007) note the limitations of the APS and call for more nuanced (i.e. qualitative, CBPR) studies of Indigenous health and the underlying factors both negatively and positively effecting it.

In a study that is characteristic of health geography's third strand, Richmond et al. (2005) employed a political ecology of disease framework to qualitatively

understand perceptions of the link between the environment, economy and health amongst members 'Namgis First Nation. Through this approach, this research was able to explore how larger social-structures and political processes impacted health. The use of qualitative methods within this study provides insight into the multiple ways that individuals associated their health with that of their larger environments (social, political, economic).

Similarly, Wilson (2003) employed the geographic concept of therapeutic landscapes to understanding the importance of land in shaping health amongst an Anishinaabe community in northern Ontario. Through this approach, Wilson was able to deeply explore the multiple ways that land shapes all aspects of health (physical, emotional, mental, and spiritual) on a daily basis. By adopting an Anishinaabe view of health, this study demonstrated that culture is an important factor within the link between health and place. Wilson (2003) emphasized that the Anishinaabe view of health was based on the importance of maintaining a balance within all aspects of life. Furthermore, the study also adopted the view that the land represents more than just the physical environment to the Anishinaabe people, but that it is an integral element within mental and emotional wellbeing. Wilson (2003) provides evidence that Indigenous interpretations of health are gaining prominence within the health geography literature.

As the Aboriginal population in Canada becomes increasingly urbanized, health geographers are increasingly exploring the health of urban Aboriginal populations. This includes demographic characteristics of Aboriginal urban

populations, access to social services (i.e. housing, healthcare), and the determinants of urban Aboriginal health (Peters, 1992, 2006; Walker, 2008).

#### *2.4.4 Environmental Dispossession and Repossession*

As mentioned briefly in Chapter 1, the concept of environmental dispossession was introduced by Richmond and Ross (2009) as an approach to understanding processes contributing to loss of access to traditional lands and how these impact the health of First Nation communities. Within this framework, dispossession is conceptualized as occurring in two ways. Direct forms of dispossession act to physically separate people from their access to traditional lands. The mercury poisoning experienced by Grassy Narrows First Nation (*Asubpeeschoseewagon*) as a result of Dryden Chemical Company discharging effluent into the Wabigoon-English River system is a pertinent example of direct dispossession. As a result of this contamination, the community had no other option but to stop eating fish, which were the main food source in the community. The effluent was toxic and those who persisted in consuming fish suffered severe neurotoxic poisoning. This contamination also led to considerable changes in way of life, including loss of economic opportunities resulting from decreases in sport fishing tourism to the area. Indirect forms of environmental dispossession seek to erode the importance that Indigenous peoples place upon traditional territories. Assimilationist policies such as the residential schools and the 60s Scoop<sup>4</sup> are

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<sup>4</sup> The 60's Scoop began in 1960 and lasted until the mid 1980s. Throughout this period, Aboriginal children were often forcibly removed from their homes and communities, often without family consent, and placed into the foster care of non-Aboriginal families and institutions throughout

examples of indirect forms of environmental dispossession from Canada's not-so-distant history.

Environmental dispossession has been used in several ways to contextualise the poor health outcomes currently faced by Aboriginal populations throughout Canada (Czyzewski, 2011; Ford, Smit, & Wandel, 2006; Luginaah, Smith, & Lockridge, 2010; Mitchell, 2012; Smith, Luginaah, & Lockridge, 2010). Brown et al. (2012) explore the health impacts of environmental dispossession, including how dispossession creates barriers to accessing appropriate health services. The study found that dispossession of land had impacted the health of 'Namgis participants, particularly in their capacity to speak their traditional language and practice traditional healing ceremonies. This resulted in a decreased sense of self worth, as well as a reliance on non-traditional medical services. Brown et al. (2012) conclude by suggesting that nurses can begin to address health inequities by first acknowledging the connections between health, identity, land, and language.

Recently, the concept of environmental repossession has been introduced as a framework for exploring how Aboriginal peoples are reconnecting with traditional lands and the resulting benefits to health that this brings. Environmental repossession refers to the social, cultural and political processes by which Indigenous peoples and communities are reclaiming their traditional lands and ways of life (Big-Canoe & Richmond, 2014). Successful repossession requires the availability and sharing of transmission of Indigenous Knowledge. Subsequently,

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Canada. Information tying the children to their homes was seldom recorded, leaving many individuals unable to return to their families.

this also requires positive and supportive social relationships within a community, such as opportunities for sharing between Elders and youth. Finally, repossession also requires access to traditional lands.

Existing scholarship demonstrates how the health of Indigenous peoples can be protected and improved through initiatives aimed at re-establishing ties between Indigenous peoples and their traditional territories (Isaak & Marchessault, 2008; King et al., 2009; Kingsley et al., 2009). Kirmayer, Boothroyd, Tanner, Adelson, and Robinson (2000) found that spending more time on the land amongst other members of their community measurably increased mental wellbeing amongst members of the Cree of James Bay. This study suggests that land-based opportunities for healing provide an opportunity to repair the lasting intergenerational emotional and mental damage caused by residential schools.

A key feature within health geography broadly - and reflected within both the environmental dispossession and repossession frameworks - is an emphasis on concerns for fairness and justice with respect to opportunities for accessing, improving, and maintaining health (Andrews & Moon, 2005; Curtis, 2002; Luginaah, 2009). This emphasis is especially prevalent where health geographers have sought to work in collaboration with Indigenous communities. Several collaborative studies have adopted community approaches to understanding health as well as the challenges to maintaining health within the collaborating community. These have resulted in targeted initiatives applicable to addressing community health needs (Big-Canoe & Richmond, 2014; Castleden, Garvin, & Huu-ay-aht First Nation, 2008; Fletcher, 2003).

## 2.5 Indigenous Geography

### 2.5.1 Geography and Imperialism

The legacy of research within Indigenous communities is one of colonialism, exploitation, and oppression. Geography itself has a longstanding and established history of creating and contributing to the history of colonialism as well as on-going neo-colonial endeavours that have dispossessed Indigenous peoples of their lands and traditional knowledge worldwide (Bell, Butlin, & Heffernan, 1995; Godlewska, Moore, & Bednasek, 2010; Johnson, Cant, Howitt, & Peters, 2007; Powell, 2008) Geography was essential to the imperialistic expansion of European empires throughout the world (Painter & Jeffrey, 2009). Early explorers created a variety of maps that were used to support settlement of unclaimed territories. These maps were created with the goal of assisting claims of *terra nullius* (empty lands), which justified expansion of European empires throughout the world. The location and existence of Indigenous communities were omitted, dispossessing these populations from their lands (Deloria Jr., 1969; McMillan & Yellowhorn, 2004). Furthermore, the creation of these maps was often made possible as a result of participation by Indigenous peoples, who were unaware of the consequences when they acted as guides for explorers.

The early maps contributed to the dehumanizing of Indigenous populations, turning longstanding and thriving communities into features of the landscape in the eyes of colonisers. This perception of Indigenous peoples as sub-human persisted and created a rationale within which researchers were then able to justify experimenting on Indigenous populations (Bell et al., 1995). These experiments

included exhuming bodies of deceased ancestors and filling the skulls with millet seed to determine changes in cranium size, which was believed to indicate intellectual capacity (Smith, 1999). In a contemporary example, Mosby (2013) discusses how Canadian nutritionists conducted multiple studies on Aboriginal children attending residential schools. This included long-term and un-consented experimental studies that purposely deprived students of essential nutrients.

Geographers also made early contributions to the geographic conceptualization and design of the reserve system as their methods identified land that provided the spatial and political framework from which Canada could enact its plan for the assimilation of Aboriginal peoples. This process began with locating lands upon which traditionally nomadic Aboriginal peoples could be converted to agricultural societies in close contact with Christian missionaries. The process continued throughout treaty negotiations where suitable locations for reserves was determined based on the ability for continued resource extraction (de Leeuw, 2009; Harris, 2011). The introduction of the Indian Act (1876) provided the Government of Canada with a legal framework from which to regulate its assimilationist policies. This included the further assimilation of Indigenous lands throughout the country.

Specifically, the introduction and implementation of The Indian Act in 1876 was underwritten by There have been innumerable consequences for the health and wellbeing of Aboriginal people as a result of the introduction of the Indian Act and its assimilationist agenda. Kelm (1998) provides a detailed account of how the reserve system undermined Aboriginal wellbeing in British Columbia as it restricted the ability to engage in subsistence activities. This resulted in significant changes to

diet, food source and nutrition, notwithstanding the cultural and social significance underlying processes of food procurement and had the larger effect of shifting patterns of morbidity and mortality during the first half of the 20<sup>th</sup> century.

Incidents of researchers, including geographers, conducting unethical and harmful research amongst Indigenous communities are not restricted to historical accounts. In 1990, researchers at Arizona State University collected more than 200 blood samples from members of the Havasupai Indian Tribe. The community provided consent for collection of these samples with the agreement that the samples were to be collected in order to provide medical data that the community could use for its own benefit. However, it was soon discovered that the samples had been used by researchers from the university in the context of several other studies without consultation or consent from the community (Mello & Wolf, 2010). This resulted in tribal members filing a 50 million dollar lawsuit against the University (Andrews, 2005). The Human Genome Development Project (HGDP) provides another example. Researchers have taken blood samples from isolated Indigenous communities throughout the world, claiming that these were being used to provide pathology tests that would yield immediate clinical value. The samples were subsequently provided to the HGDP and analysed in DNA research without having first obtained consent (Dodson & Williamson, 1999; Mooney, 1994).

In a direct link with geography, Louis and Grossman (2009) discuss a geographic study funded by the Foreign Military Studies Office (FMSO) in the United States to document Indigenous land tenure and land reforms. With Indigenous communities asserting increasing pressure for land reform upon governments



throughout the world, intelligence agencies were found to have interpreted these as threats to national security (Louis and Grossman, 2009). Previous FMSO publications had cited decolonization movements by Indigenous peoples in places such as Mexico as a threat to the national security of the United States. Subsequently, the 2006 study framed Indigenous movements for land and self-determination as legitimate threats to democracy. It argued that geographical fieldwork stands to make a significant contribution to the War on Terror. The FMSO funded study not only failed to disclose their funding source, but they also failed to receive informed consent from the participating communities.

Broader critiques of the continued relationship between academia and Indigenous communities also discuss the uneven distribution of benefits resulting from such research (Castleden, Sloan Morgan, et al., 2012a; Castleden et al., 2010; Louis, 2007; Meadows, Lagendyk, Thurston, & Eisener, 2003; Warry, 2007). Often communities themselves see very little benefit from research, while academics publish papers and build their careers. This leaves communities wondering why they agreed to partner with researchers, as well as questioning whether future research partnerships are necessary. In far too many instances researchers have engaged in parachute research, whereby they collect data at a convenient time (typically the summer months) and exit the community never to be seen again (Brant Castellano, 2004; Menzies, 2004).

### *2.5.2 Decolonizing Geography*

In her seminal *Decolonizing Methodologies: Research and Indigenous Peoples*, Maori scholar Linda Tuhiwai Smith discusses the unequal and exploitive

relationship that exists between researchers and Indigenous communities (Smith, 1999). While the book provides significant insight into the history of the relationship between colonialism and research, it also provides a path for future researchers to follow. Smith calls for the decolonizing of research, represented by a shift from research conducted *on* and *for* Indigenous communities to research conducted *by* and *with* them. Decolonizing research is an empowering process wherein reciprocal relationships form the basis through which Indigenous communities set the research agenda geared towards positive changes in their communities (Bartlett, Iwasaki, Gottlieb, Hall, & Mannell, 2007; Jones, 2008; Smith, 1999; Zavala, 2013). Geographers encouraging engagement with Indigenous communities have also noted the necessity to decolonize research as a means of overcoming the colonial history of the discipline (Coombes, Johnson, & Howitt, 2014; Herman, 2008; Peters, 2001, 2003).

Inspired by increasing calls to decolonize research, Indigenous geography as a sub discipline of geography emerged in the 1990s (Johnson et al., 2007; Louis, 2007; Shaw, Herman, & Dobbs, 2006). While recognizing that multiple ways of knowing exist amongst Indigenous peoples globally, it was argued that the label of Indigenous geographies would serve as a form of common ground for those seeking to prioritize research projects shaped by respectful relationships with Indigenous communities and that focus on research topics of importance to communities themselves.

There has been increasing recognition of the potential role that geography can play in supporting Indigenous goals self determination (Castleden, Mulrennan,

et al., 2012; Usher, 1982; Wolfe-Keddie & Peters, 1995). In supporting the suitability of geography to conduct research of this nature, Herman (2008) states that “wisdom sits in places” (p. 73). This statement is made with reference to how traditional knowledge within Indigenous communities is tied to traditional lands (Battiste & Henderson, 2000). Geography’s emphasis on recognizing the interconnectedness between environments (place) and peoples presents a distinctive starting point for understanding the unique relationship between Indigenous peoples and their traditional lands.

The recognition of geography as a well-suited discipline for approaching research partnerships with Indigenous communities culminated in the formation of specialty groups within global geographical associations, such as the Indigenous Peoples Specialty Group of the Association of American Geographers (IPSG-AAG) in 2000 (Berry, 2008). Indigenous geography has developed into an exciting research area that includes academic geographers as well as Indigenous leaders, activists, and community members (Larsen & Johnson, 2012). Subsequently geographers globally have collaborated with Indigenous communities and organizations on multiple topics, including evidence and impacts of global climate change (Ford et al., 2006; Furgal, Martin, & Gosselin, 2002; Furgal et al., 2001; Furgal & Seguin, 2006; Hazlewood, 2012; Rundstrom, 1991; Rundstrom, 2000), resource development (Binns, Hill, & Nel, 1997; Hazlewood, 2012), urbanization (Peters, 1992, 2006; Raerino, Macmillan, & Jones, 2013; Wendt & Gone, 2012; Wilson & Cardwell, 2012) and health (Big-Canoe & Richmond, 2014; Richmond et al., 2005; Richmond & Ross, 2009; Smith et al., 2010).

Embedded across the various discussions of the nature of Indigenous geography is a unanimous recognition of an activist orientation within the research, with the larger purpose of generating research that contributes to Indigenous self-determination (Herman, 2008; IPSG-AAG, 2009; Johnson et al., 2007; Larsen & Johnson, 2012; Louis & Grossman, 2009; Louis, 2007; Shaw et al., 2006). As such, geographers have become allies in Indigenous efforts towards protecting and reclaiming their traditional lands by collaborating on research projects with results applicable to such efforts as land claims and impact benefit negotiations for resource extraction on traditional lands.

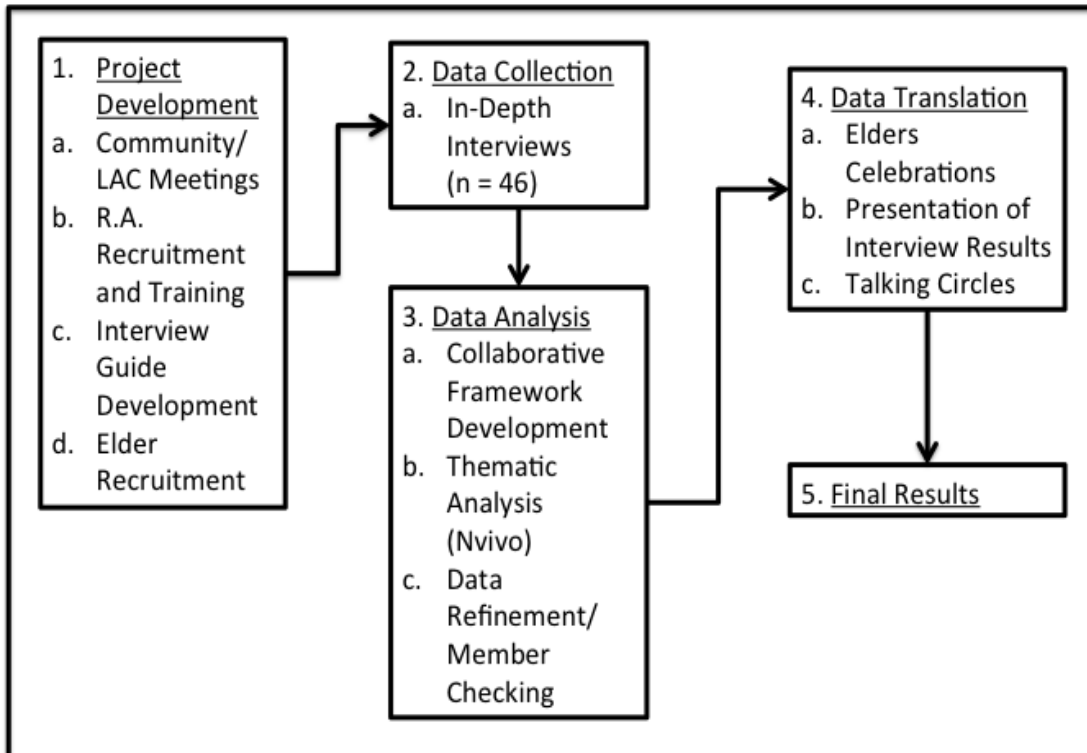
## **Chapter 3: Research Methods**

### **3.1 Introduction**

This chapter begins with a personal reflection surrounding my identity within the project. Subsequently, I present the methods employed throughout the research conducted for this thesis. As illustrated in Figure 3.1, this research progressed through four phases before obtaining the final results. Each of these phases is discussed in detail within this chapter, including a brief profile of the two collaborating communities. While these methods are woven throughout the three preceding chapters, they are described here in greater detail. As this thesis is written in an integrated article based format, descriptions of research methods within the chapters that follow are limited due to the restrictions on word length placed by journal formats. Therefore, in this chapter I discuss in detail how qualitative research was enacted within my study. I also discuss the development of the project, as well as the progression followed throughout participant recruitment, data collection, and data analysis.

I have played a role within each stage of the research. I was responsible for assisting in the hiring and training of local youth research assistants. I also resided in Pic River First Nation during data collection, where I coordinated participant recruitment and facilitated interviews in that community. While the research assistants were primarily responsible for interviewing their Elders, I was present to ensure that interviews were successful. Following the interviews, I led a workshop with both Pic River and Batchewana First Nation research teams wherein we collaboratively developed an analytical framework.

I made several trips to both Pic Rive and Batchewana throughout the subsequent data analysis. During these trips I met with advisory committee members and Elders to review emergent themes and ensure that community research objectives were being respected. I presented the results of interview analysis at the Elders Celebrations held in each community, as well as facilitated discussion of both the Elders' perceptions of the results and their strategies for moving forward. Finally, I also analysed the data that was collected during the Elders Celebrations.



**Figure 3.1: Methodological Framework**

### 3.2 Positioning Myself Within The Research

As a non-Indigenous person collaborating on a research project with two Anishinaabe communities, I have often been asked about my motives for doing this research. Indigenous and non-Indigenous persons, academics, friends, and family

have all asked a variety of questions that can be characterized under two broad headings: why do I care about Aboriginal health?; Why do I want to do this type of research?

I am originally from a small Ontario town called Russell, located roughly 30 minutes southeast of Ottawa. I grew up in this town unaware that I was living in traditional Algonquin territory or that the place where my family made their home had been the subject of an on-going land claim that began shortly after I was born. In fact, I remained unaware of this until I attended an Idle No More public teach-in held at Western University in the winter of 2013. At this teach-in one of the speakers stated that we were all treaty people. Because of this, we (Indigenous and non-Indigenous alike) all had the responsibility to ensure that the treaties were respected. This begins, the speaker argued, by both recognizing and seeking to understand the history of the places we come from. This inspired me to learn about the Algonquin land claim and I hope to someday be able to collaborate on research in my home territory.

I can also attribute a great deal of my interests in Aboriginal peoples to my parents. My mother and maternal grandmother would often speak of our family lineage and distant ties to Indigenous roots. Research undertaken by various aunts and second cousins expanding on our family history revealed our Algonquin ancestry. This sparked a curiosity in me and inspired me to learn more about this history. Throughout my doctoral research I have continued to be curious and hope to someday fully understand my heritage.

My father also inspired me to learn about Aboriginal peoples. In 1961 my grandfather moved his family from their home in Petrolia to Oshweken, a village on the Six Nations of the Grand River First Nation reserve. My grandfather took a job with Petrol Oil to maintain gas outlets throughout the community. My father grew up here, attending the local village school and playing for the lacrosse team. Growing up, both he and my grandfather would talk about living on the reserve and would take me to visit family friends. Retrospectively, I believe these visits helped me to move beyond the fear and misunderstandings that most non-Aboriginal people have regarding First Nation reserves, and instilled in me the knowledge that First Nation communities can be very open places where non-Indigenous individuals are welcomed if they show respect and humility. These individuals and experiences represent the early roots of my interest in Aboriginal peoples in Canada.

My curiosity about Indigenous peoples deepened in 2005 when I spent several months living in Australia. During this time I was privileged to travel throughout the country as well as to speak with several Indigenous peoples. While learning about their culture as well as the challenges they were facing, I drew several parallels with what I knew about Indigenous peoples in Canada. Upon returning to Canada, and registering in the geography program at The University of Ottawa, I continued to explore these similarities when the opportunity presented itself throughout my undergraduate degree. This included an introductory course in health geography.

In 2008 I moved to London and began working on a Master's degree at The University of Western Ontario. Within this research, I explored the relationship



between Hepatitis B and alcohol misuse in the Upper West Region of Ghana. I was fortunate to be able to spend several months living in the region while collecting data for the study. However, I often questioned whether my research could truly translate into improving a problem of such epidemic proportions. While I sent a copy of the thesis to local health policymakers, I couldn't help but feel that I should have done more.

During the completion of my Master's degree, Dr. Chantelle Richmond acted as a co-supervisor on the research. Meetings with Dr. Richmond would often include discussion of her research interests and eventually led to me inquiring about further research opportunities with her. Dr. Richmond accepted me as a doctoral student in 2010. At this time, I began learning about Aboriginal health, Indigenous research methodologies, and community-based research in earnest. This included my course work and comprehensive exams as well as attending Indigenous Peoples Specialty Group sessions at the Association of American Geographers annual meeting where I was fortunate to meet Indigenous and non-Indigenous scholars who work on these same important topics.

Working with an Indigenous scholar provided me with multiple advantages, both in learning about the topical issues, but also about appropriate ways of undertaking research. For instance, Dr. Richmond was able to teach me about Indigenous health and research from the perspective of a First Nations scholar. She often drew on experiences from her own community as a means of emphasising certain points. I was also able to capitalize upon longstanding relationships that Dr. Richmond had fostered with the collaborating communities. Specifically, as a

member of Pic River First Nation, Dr. Richmond and her family provided common ground. During introductions, Elders would often ask who I knew from the community. Telling them that I was Dr. Richmond's student often put them at ease. This also resulted in a few interesting stories about my supervisor!

Despite this important introduction to the theory and method of Indigenous health geographies, the reading and research I undertook as part of my course work and comprehensive exams raised larger ethical and methodological questions related to my own positionality within this research program. For instance, was I able to apply Indigenous research methodologies? I had conversations about this topic with other students and academics and quickly discovered there was no consensus on this issue. Some encouraged me to explore Indigenous methodologies further while others took the position that non-Indigenous scholars should not apply this approach to research. I decided that, while I would not claim to be directly applying Indigenous research methodologies, I would be open and respectful to these methodologies and research emerging from these approaches.

I also began to critically evaluate my identity as a non-Indigenous researcher and what impact this would have on my relationships with the collaborating communities. I feared that I would be perceived as an outsider who was interested only in gathering data and completing their research. I also feared that, as the academic researcher, my position would result in being perceived as someone who possessed more knowledge than those with whom I would be collaborating. In an exert from journal entry completed the evening prior to my first meeting with Batchewana First Nation I reflected on these concerns:

*Meeting with Batchewana advisory committee tomorrow. Feeling nervous!! I really don't want to screw this up. Still don't know how I'm going to try and avoid being thought of as some white guy here to take advantage of them and to teach them how they can be saved...have to see where this goes. (May 1, 2011)*

These initial meetings with each community advisory committee were critical in shaping how I would approach the research for the remainder of the project. Each community clearly described what they expected from the research. They recognized the skills that I possessed and articulated how these could be put to use within the project. They also provided instructions on working with Elders, advising me to always show respect and most importantly, to always listen:

*Feeling much better about doing this project today. I was told by (community advisor) to just be open and respectful. Starting to think that it's okay for me to just be curious. Do I really need to label myself as an 'academic ally' or someone who is approaching their work from a 'post-colonial perspective using two-eyed seeing methodology'. I'm curious and I want to do this (research) in a good way. That might be enough for now.*

As the project moved into data collection and my relationships deepened with the Elders, I began to feel less worried about my identity as an outsider. Although my earlier concerns remained with me throughout the research, these were no longer at the forefront of my thoughts, but were maintained as reminders – those I often returned to throughout the research. As my confidence grew regarding my identity as a non-Indigenous outsider, my concern about having this research and my role within it accepted by the Elders abated. Instead, I became increasingly aware of my responsibility to ensure that I represented this research properly, as a means of showing respect to the relationships and friendships that had resulted.

### **3.3 Knowledge Translation**

One of the primary objectives of the larger project shaping this research was to encourage as many sites of knowledge translation as possible. Within the academic literature, knowledge translation is broadly described as the process of translating knowledge gained through research into practice. While there exists some debate over how knowledge translation should be defined and implemented (Straus, Tetroe, & Graham, 2009), most studies based in Canada employ a definition put forward by the Canadian Institutes of Health Research (CIHR). The CIHR defines knowledge translation as “a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system” (CIHR, 2014). CIHR goes on to state that knowledge translation occurs within a system of complex interactions between researchers and knowledge users. There are two broad categories within which knowledge translation can be classified: end of grant knowledge translation and integrated knowledge translation.

The first, end of grant knowledge translation, entails the dissemination of knowledge gained through research once the study is complete. This often includes conference presentations and journal publications. End of grant knowledge translation can also include more tailored messages to specific audiences, such as workshops for knowledge users or policy briefs developed for administrators.

Integrated knowledge translation entails the engagement with potential knowledge users throughout the entire research process (Graham et al., 2006;

Kothari & Wathen, 2013). Studies framed by integrated knowledge translation have predominantly occurred within the medical fields, with a large amount of research taking place within nursing research (Kothari & Armstrong, 2011). In a similar spirit as CBPR, integrated knowledge translation strives to prioritize the inclusivity and equality of all parties throughout the research. This begins by creating spaces of equality between the methodological and theoretical expertise of researchers and the lived experiences of collaborators, including working towards addressing the deep-seeded power issues inherent within these relationships (Jardine & Furgal, 2010). Identified knowledge users may be included in shaping research design, data collection and analysis, as well as dissemination of the results. Importantly, integrated knowledge translation often relies upon knowledge users when developing strategies for moving the results of research into practice. A key difference between CBPR and integrated knowledge translation as they are currently practiced includes the types of collaborators. Within integrated knowledge translation, collaborators are often restricted to key decision makers including those directly involved in the development and enacting of health policy (Lencucha, Kothari, & Hamel, 2010). This differs from collaborators within CBPR studies, which emphasises collaboration at the community level.

Integrated knowledge translation has been advocated as an important methodological approach within Indigenous health research because of its ability to act as an interface between Indigenous (i.e. holistic) and Western (i.e. biomedical) knowledge systems (Estey, Kmetz, & Reading, 2008; Sherwood & Edwards, 2006; Smylie, Kaplan-Myrth, et al., 2009; Smylie et al., 2004). By advocating applicability of

the research results and the use of culturally appropriate research methods, integrated knowledge translation provides a means for Western and Indigenous ways of knowing to coexist. Furthermore, integrated knowledge translation is a transformative method that nurtures the emergence of research environments wherein all collaborators can benefit from the experience of applying research in ways which they may have had little experience.

As highlighted in the following sections, various sites of knowledge translation were integrated throughout all stages of this research. This included the sharing of knowledge amongst participating Elders, project advisors, local youth research assistants, and myself.

### **3.4 Project Development**

Project development formally began in 2008 when Dr. Chantelle Richmond held a number of community meetings with residents, officials, and Elders living in Anishinaabe communities along the North Shore of Lake Superior. This resulted in collaboration agreements and subsequent meetings with Pic River First Nation and The Batchewana First Nation of Ojibways.<sup>5</sup> The purpose of these meetings was to discuss local perceptions of key environmental and health concerns as well as to begin developing a research project that would address these concerns. Throughout these meetings, participants expressed considerable anxiety surrounding the lasting impacts of increasing industrial and natural resource development in the region.

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<sup>5</sup> Initially, a third community was interested in participating in the project. Unfortunately, a band election and re-structuring of the council resulted in this community being unable to participate at the time data collection was to begin.

This included discussion of the links between limited access to and reduced quality of local resources with decreased capacity to participate in cultural activities that sustain health such as ceremony, medicine gathering, as well as hunting, trapping, and fishing. This included a targeted discussion on the environmental contamination and subsequent dispossession caused by nearby mines, mills, and the steel industry.

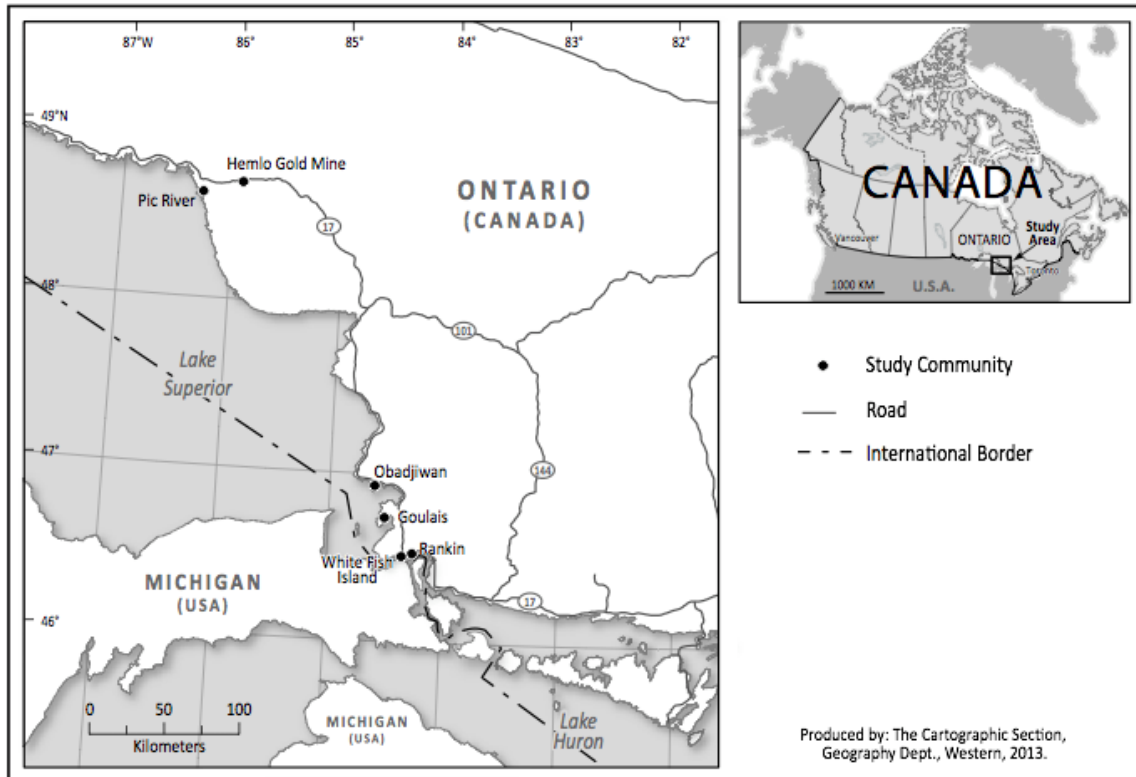
In the spring of 2010, my role in the project formally began when I travelled to both communities as a research assistant in order to meet with members of our Local Advisory Committees (LAC). These committees were comprised of Elders, youth, as well as elected and non-elected band representatives. The purpose of the LAC was to ensure that community research needs are represented throughout the course of the project. During these meetings the roles, and expectations held by both the communities and myself were discussed. This included outlining areas of concern within each community that would be addressed during in-depth interviews with the Elders. We also held meetings with community members in order to generate some interest in the project as well as in recruitment of youth as will be outlined later in this chapter. In the following section, I offer profiles of the collaborating communities, including outlining their experiences with environmental dispossession.

#### *3.4.1 Batchewana First Nation of Ojibways*

The land base of The Batchewana First Nation of Ojibways is spread across four different locations along the northern shore of Lake Superior. The majority of on-reserve band members reside in Rankin Reserve, located between Garden River

First Nation and the city of Sault Ste. Marie (Figure 3.2). The location draws its name from the Rankin Mining Company, from whom the community purchased the land in 1939 (Batchewana First Nation of Ojibways, 2014b). Goulais Mission Reserve (*Chi-wehn-kwe-Dohn*) is located roughly 50 kilometres northwest of Rankin. Batchewana (*Obadjiwan*) is located 20 kilometres northwest of Goulais Mission Reserve, roughly 85 kilometres from Sault Ste. Marie. The fourth land base, Whitefish Island (*Atikamegminsing*), is an island located on the St. Mary's river. Batchewana First Nation reclaimed the island in 1997 (Batchewana First Nation of Ojibways, 2013). It is an unoccupied historical site with a longstanding significance as a fishing area and trading post. Batchewana First Nation membership is comprised of 2,649 individuals, with the majority of those registered with the band (1,904) living off-reserve (Canada, 2013). Reserve lands total 2241 hectares, with Rankin Reserve representing the largest of the four reserve areas.





**Figure 3.2: Location of the Collaborating Communities.**

Prior to European contact, the Anishinaabe people in the area were a hunter-gatherer society spanning over a large territory stretching from Whitefish Island to the southern shore of the Pukaskwa River and over 50 kilometres inland (Batchewana First Nation of Ojibways, 2013). In the summer months, groups would come together at an area known as *Bawatung* (Gathering Place) in what are now the cities of Sault Ste. Marie Michigan and Sault Ste. Marie Ontario (Broad et al., 2006). The Batchewana people controlled much of the southbound trade from the north and west. European colonization of the area severely impacted longstanding Anishinaabe ways of life in the region. Increased settlement and subsequent logging, mining, and overuse of resources dispossessed Batchewana of their traditional

hunting and gathering economy including significantly reducing the community's capacity to undertake both subsistence and commercial fishing activities which had sustained them for centuries.

Batchewana First Nation hereditary Chief Nebenegoching signed the Robinson Huron Treaty in 1850, agreeing to share lands with the province in exchange for continued access to resources, annuity payments, and title to two reserves (Whitefish Island and Batchewana Bay Reserve). However, the survey of the Batchewana reserve was improperly undertaken and the agreed boundaries were changed by government decree and without consultation, resulting in outstanding treaty land entitlement (Batchewana First Nation, 2013). Specifically, the changing of the boundaries removed access to the waters of Batchewana Bay and Lake Superior.

Emerging from increased government pressure to acquire more lands for European settlement, The Pennefather Treaty was subsequently enacted nine years after the signing of The Robinson Huron Treaty (Batchewana First Nation of Ojibways, 2010). This resulted in further dispossession of traditional lands at the Batchewana Reserve and left the community without a land base save for the islands located in the St. Mary's river. Whitefish Island was also appropriated by the federal government without surrender or compensation in 1905 for the construction of a railroad (McNab, 1999). The railroad was never built and the island became a national heritage park. Despite being restricted from accessing the island, community members continued to assert their sovereignty over it and were regularly charged for pursuing traditional fishing practices. Eventually the band

would use their own funds to purchase lands at Goulais Bay and Rankin, as well as winning the struggle for restored rights to Whitefish Island in 1992.

The loss of traditional lands and the on-going struggle to regain them demonstrates how The Batchewana First Nation of Ojibways have been resisting environmental dispossession for centuries. The persistence of community members in resisting dispossession is strongly represented by the struggle over fishing rights. The community faced consistent reduction in commercial fishery quotas enacted by the Ministry of Natural Resources throughout the 1980s despite these rights having been guaranteed by The Robinson Huron Treaty. In 1985, one community member had their fishing equipment seized and was convicted of commercial fishing without a licence (Haliechuk, 1988; McNab, 1999; The Globe and Mail, 1989). The Ministry of Natural Resources continued their attempts to restrict Batchewana fishing rights throughout the subsequent federal proceedings spurred by both the Batchewana case as well as that of Ronald Sparrow in British Columbia. This included armed raids, seizure of equipment, and calls for boycotting fish caught by the Batchewana fishers (McNab, 1999).

Despite having experienced numerous attempts at dispossession, Batchewana First Nation continued to proactively assert sovereignty within their traditional lands. Batchewana Natural Resources recognizes the important role of the land, centring traditional values in their approach to developing natural resources (Batchewana First Nation of Ojibways, 2014a). This means that the proper use of the land defined by traditional Anishinaabe laws are respected, including those of resource sustainability and community safety. Prior to any

agreements, traditional ceremony is conducted during which Elders ask the land for permission to develop. Batchewanna insists that any prospective development partners respect these laws and traditions. These values have shaped projects within the traditional territory, including the development of The Bow Lake Wind Project, a planned 36 turbine wind farm being developed in partnership with BluEarth Renewables Inc.

#### *3.4.2 The Ojibways of the Pic River First Nation*

The Ojibways of the Pic River First Nation reserve land is located along the shoreline of Pic River, roughly 300 kilometres east of Thunder Bay and 400 kilometers northwest of Sault Ste. Marie. The reserve itself is comprised of just 316 hectares, although their traditional territory extends from Pukaskwa National Park (south) to the town of Schreiber (northwest) and inland past the Trans-Canada Highway (see Figure 3.2). The registered population totals 1,111 people, with 519 individuals living on reserve (Canada, 2013).

The traditional Anishinaabe name for the region, *Begetekong*, means ‘where the rivers meet’. The mouth of the Pic River was a longstanding trading place for Indigenous populations prior to European colonization of the region. Canoe transportation throughout the local waterways offered travel along the shores of Lake Superior, as well as to northern regions as far as James Bay (Ojibways of the Pic River First Nation, 2009). The area where the reserve is now located was used as a halfway point for European traders penetrating into the region. Trade with French explorers began in the 1770s, with a permanent trading post known as Fort Pic established by the North West Company in 1792.

Mining exploration and expansion resulted in several grievances from Indigenous people living on the north shore of lakes Superior and Huron throughout the 1840s (Long, 2010). This culminated in 1849, when a group of warriors halted operations of the Quebec Mining Company at Mica Bay. In 1850, W.B. Robinson was authorised by the Canadian government to begin negotiation with tribes in the areas surrounding lakes Superior and Huron. In September of 1850 the Robinson-Superior Treaty was signed by nine Ojibway chiefs, resulting in the surrender of territory along the northern shore of Lake Superior extending from Batchewana Bay to Pigeon River (60 kilometres south-west of Thunder Bay) and inland to the land then covered under charter to the Hudson's Bay Company (Hansen, 1985; Surtees, 1986).

Pic River was not a signatory to the 1850 Robinson-Superior Treaty. The community had been invited to sign the treaty in Sault Ste. Marie, but chief *Ahdegonse* (Little Caribou) refused to attend believing that the signing was intended as a trap. According to local historical accounts, this belief was due to *Ahdegonse* being told that a large armed military presence had recently been stationed in the area where the treaty signing was to be held. As such, no reserve land was secured by Pic River during the Robinson-Superior Treaty negotiations.

Following a period of increasing forestry and European rail encroachment, Pic Chief Antoine Morrisseau petitioned the Governor General of Canada in 1880 requesting the creation of a reserve extending along the Pic River. While The Department of Indian Affairs supported the petition, the quantity of land requested was disputed. The Pic River Indian Reserve #50 was surveyed in 1885, with 800

acres officially confirmed by The Department of Indian Affairs in 1914 (Hansen, 1985). In June of 1982 the Grand Council Chief of the Anishinaabek on behalf of seven communities, including Pic River First Nation, submitted a land claim to the Lieutenant Governor of Ontario. This claim stated that the disputed territory had never been surrendered in any treaty, including the Robinson Superior Treaty. It was argued that because of this, aboriginal title and rights to the land in question remain intact.

Both direct and indirect forms of environmental dispossession have impacted how members of Pic River First Nation can benefit from their traditional lands. A strong example of this occurred throughout the 1980s and 1990s. On several occasions cyanide was released into the Black River by one of three upstream gold mines. The Black River is a tributary of the Pic River, the main water supply of the community. One spill in particular resulted in a cyanide concentration of .008 parts per million, four times that of the drinking water guidelines set by the Ministry of the Environment (Mercury, 1990). Environmental contamination again threatened the community's health in December of 2009, when a nearby pulp and paper mill discharged 12,000 litres of mill effluent onto the traditional lands of the community (Chiefs of Ontario, 2009).

Despite having faced adversity, Pic River First Nation is a progressive and self-sufficient community. Residents have access to a number of services and programs aimed at maintaining a healthy and safe community. For instance, The Pic River First Nation Health Program focuses on holistic health and wellbeing, emphasising health prevention as well as promotion. The Biidaaban Healing Lodge

is a facility that offers Aboriginal peoples throughout the Robinson-Superior Area the opportunity to seek healing from emotional and mental abuse (Biidaaban Healing Lodge, 2014). The community is also actively engaged in consultation relating to potential resource development on their traditional territories, including future mining and energy projects.

### *3.4.3 Research Assistant Training and Recruitment*

Transmission of Indigenous Knowledge from Elders to youth was one of the objectives that shaped the larger CIHR funded project within which this dissertation is involved. As such, it was decided that local youth (ages 18-30) would be recruited as research assistants. This would act to create knowledge transfer between the youth and Elders, as the youth themselves would be conducting in-depth interviews with the Elders.

LAC members in both communities agreed that the best approach to recruiting youth as research assistants was through the community summer employment opportunities program. An employment opportunity profile was created and circulated through the summer employment section on the website of each community. I was provided with the opportunity to review each application, as well as speak with each individual applicant before final decisions were reached. Five youth were hired in total, two from Batchewana First Nation and three from Pic River First Nation.

Once hired, research assistants attended an introductory summer school held at The University of Western Ontario from July 2nd through 7th 2011. Youth and community partners, including an Elder and band representative, were flown to

London and provided with accommodation on campus. The four days included an introductory discussion of Indigenous health issues and the broader research project led by Dr. Richmond, as well as a preparatory tutorial on qualitative research methods led by myself. Following this, research assistants worked with members of the research team (K. Kulmann, Dr. R. Stewart, Dr. C. Richmond, and myself) to practice interviewing skills.

We also worked collaboratively on refining the interview guide that was going to be used throughout the summer. Initially, there was some confusion surrounding what was expected during this activity. Research assistants stated that they simply expected to be handed questions that they were going to ask the Elders. However, this changed after some discussion about the collaborative nature of this research. The research assistants were keen to introduce questions once it was understood that their perspectives were just as important to the project as our own.

Research assistants also provided their views on protocols that should be followed by the research team. They instructed us on the importance of offering tobacco to Elders prior to conducting interviews as a means of recognizing and appreciating the knowledge that they were going to share with us. Furthermore, research assistants also discussed various services and events within the community that could benefit the project. For instance, assistants from Pic River spoke about meetings of The 50+ Club in their community and how these could be used to approach potential participants.



#### *3.4.4 Participant Recruitment*

During the final stages of the summer school, research assistants and community representatives were asked to develop a list of potential participants. This required a clear understanding of who we would consider an Elder. It was agreed that an Elder was not simply an individual who had attained a certain age. Instead, it was discussed that an Elder was someone who possessed certain traditional knowledge as well as the skills to share this knowledge with others. This understanding of who constitutes an Elder is reflected in existing studies conducted in collaboration with First Nation communities across Canada (Castleden, Garvin, & Huu-ay-aht First Nation, 2009; Ermine, 2005; Parlee et al., 2007; Wilson, 2003).

Having established an agreed understanding of what constitutes an Elder, the research assistants then began to create a list of individuals they believed would be ideal participants. While mostly focussed on individuals living on-reserve, the lists also included several individuals who lived in other communities. Initially, we had planned on conducting interviews with 15 Elders from each community. As such, our list of potential participants was limited to 25 individuals per community. Creating our list of potential participants also included discussion about which research assistant would be best suited to lead each interview, as well as potential locations for interviews.

Upon completion of the summer school, research assistants returned to their home communities and spent the remaining six weeks conducting interviews with community Elders. K. Kulmann resided in Sault Ste. Marie, where she assisted with interviews conducted with Batchewana First Nation members. I lived in Marathon

where I worked with assistants from Pic River First Nation. Upon arrival, a mock interview was conducted with a member of the LAC to ensure that assistants were comfortable with the interview process. This included the LAC member introducing several scenarios that could potentially occur during an interview, such as emotional responses to a particular question.

Using the created list of potential participants, the research team (myself and the youth, with some visits also including an Elder from our LAC) visited each individual at their homes. Each visit began with an introduction of the research team members, as well as an explanation of the research project. Potential participants often had several questions about the research, including why I chose to pursue this topic. Discussion with these individuals ranged in duration from 30 minutes to two hours. Out of respect, all Elders were offered Tobacco pouches at the onset of each meeting. Once the research team had answered all the questions the Elder had, we asked if they would be willing to participate in an interview.

Having pre-existing relationships between Elders and youth, as well as taking the time to introduce the research team resulted in a high number of Elders agreeing to participate. For instance, only two individuals that were approached in Pic River stated that they would not be able to participate in an interview. Amongst these two individuals, one stated that they were leaving the area and would not be returning during the timeframe allowed for data collection. The other individual expressed that they were weary of being interviewed and had previously experienced negative outcomes from participation in a study. As such, it was their

personal policy that they would no longer take part in any research.<sup>6</sup> The larger than expected response rate in both communities led us to expand the initial number of interview participants from 30 to 46 individuals.

### **3.5 Data Collection**

#### *3.5.1 In-Depth Interviews with Anishinaabe Elders*

Standard structured interviews are traditionally characterised by a single interviewer asking questions of an interviewee (Berg, 2012; Hammersley, 2007). Traditionally, this has included the use of an established list of questions that are asked in the same order to each individual participant. While this may have been the case for our first two interviews, the style of our interviews quickly shifted to become increasingly reflexive. Research assistants quickly became both familiarized with the interview guide as well as increasingly comfortable with the process of conducting interviews. This resulted in less dependence on the interview guide and more conversational style interviews. Interviews were conducted in English, with Elders sometimes speaking in Anishinaabemowin when telling stories and teachings or offering prayers.

Overall, Elders were very keen to share with us. The importance of meeting with Elders, being flexible on interview locations, and following cultural protocols prior to requesting interviews was discussed as having increased the degree of comfort they felt with the research team. Individual interviews lasted between 45

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<sup>6</sup> Throughout the summer I became familiar with this individual. In seeing him at community events or ceremony he would often share his knowledge with me. However, I respect that he did not want to formally be included in the research. As such, any information they shared with me is not included within this dissertation. I thank them for continuing to accept me and share with me whenever possible.

minutes to three hours, often beginning with a smudge as well as a prayer or song. Interviews often included breaks, the sharing of food, and several jokes. The location of interviews varied. While the majority of interviews were conducted at the home of the participant, interviews also took place on the land. Once interview was complete and audio-recording devices had been turned off, both participants and the research team reflected upon what had been discussed. Elders were also offered an honorarium at the conclusion of their interviews, as a means of further thanking them for participating.

Prior to starting data collection, I was concerned that my identity as both someone from outside of the community as well as a non-Indigenous researcher would have a negative impact on data collection. I believed that participants would be hesitant to share certain information and that my presence may have caused participants to self-censor. Throughout my required courses and comprehensive exams, I had read a great deal of literature discussing exploitive research on Indigenous peoples conducted by non-Indigenous researchers and the resulting apprehension towards research held by several communities. Being aware of this, I was nervous that I would be perceived as yet another outsider who was only seeking personal benefit.

However, I quickly discovered that the Elders we interviewed were more than willing to share with the research team and I did not get the sense that they restricted their responses because of my presence. While Elders would sometimes apologize to me before making a statement about a negative experience with a white person, I do not believe this affected what would have been said had I not been

present. Having a supervisor from the community, including local youth as research assistants, and taking the time to meet and talk with potential participants undoubtedly contributed to the level of comfort that the Elders expressed throughout their interviews.

My position as a non-Indigenous person and an outsider may also have served to enrich some of the data collected. For example, research assistants and Elders would sometimes skip specific details when discussing specific community events that had occurred. As I was unaware of the details, I would often ask for an explanation that would sometimes lead to a deeper discussion of the event in question. Brayboy and Deyhle (2000) reflect my experience, stating that insiders may miss the opportunity to capitalize on certain unstated themes due to taken-for-granted assumptions.

## **3.6 Data Analysis**

### *3.6.1 Collaborative Analytical Framework Development*

Once data collection was completed, all members of the research team gathered at Pic River First Nation for a period of four days. The purpose of this gathering was to enable all individuals to come together to discuss our experience in collecting the data. The gathering was opened by an Elder, and included a smudge and sharing circle. Within the sharing circle, each individual expressed what they perceived to be key challenges and successes experienced throughout the data collection. All members also stated that they were very grateful to have had the opportunity to participate.

A significant portion of the remainder of the gathering was devoted to examining similarities and differences within the key themes emerging from the Elder interviews. I led the discussion, beginning with an overview of how I planned to analyze the data. This included presenting a brief overview of the NVivo software and its capabilities. Following this, I asked individuals to reflect on key ideas that they believed were strong themes within the interviews. For instance, I asked how people discussed the land and their ability to access it. Members of the research team from each community then recorded key ideas relating to the specified topic before presenting them to the larger group. A discussion of similarities and differences followed, with each idea recorded on graph paper. This intensive process occurred for three days and resulted in the development of a primary analytical framework, which I then used throughout data analysis.

Discussion of key themes concluded on the morning of the fourth day. This was followed by some closing words from one of the Elders, as well as a sharing circle in which all members of the research team reflected on their experience. That evening, a local Elder invited us to his house where several members of the research team participated in a sweat lodge ceremony alongside community members.

### *3.6.2 Computer-Assisted Qualitative Data Analysis*

In consultation with LACs in both communities, it was decided that I would conduct analysis of the data. A combination of thematic analysis followed by narrative analysis guided data analysis of the interviews conducted with community Elders with the aim of generating theory from the interview data. Thematic Analysis is a commonly used systematic method for classifying the content of text into

themes and identifying relationships between them (Fereday & Muir-Cochrane, 2006). Within this type of analysis, significant themes are revealed by their consistency across and within participants (Floersch, Longhofer, Kranke, & Townsend, 2010; Miles & Hubberman, 1994). Analytical techniques within thematic analysis seek to systematically categorise data into categories which best describe the phenomena in question. Thematic analysis distinguishes itself from similar analytical techniques, such as content analysis and grounded theory, because significance of a theme is not solely based on its frequency and the unit of analysis in coding is not specified (Bryman, Bell, & Teevan, 2012; Charmaz, 2008; Floersch et al., 2010).

Narrative analysis was conducted following the establishment of themes within the data. Narrative analysis involves the interpretation of qualitative data where particular emphasis is placed upon the embedded layers of meaning within interviews (Berg, 2012; Bryman et al., 2012). This form of analysis allows for an understanding of the contingent, the local, and the particular (Wiles, Rosenberg, & Kearns, 2005). This emphasis situates narrative analysis as a useful method of analysis for health geographers in particular, as it provides a tool for connecting intimate discussions of experiences in the daily lives of participants to broader social and spatial relations. In short, narrative analysis allows an understanding of not only what is said during an interview, but also how individuals attach meaning to these experiences.

Transcripts of interview audio recordings were conducted by an external service. Upon receipt of the files, hard copies of each interview was printed and read

in tandem with the audio recording of the specific interview to ensure transcription accuracy. As was agreed upon during meetings with each LAC, names of local places as well as those of individuals were removed. Once all transcripts had been formatted, each was assigned a code to ensure confidentiality. These codes corresponded to the community and interview participant, with the key kept separately from the transcripts. Hard copies of transcribed interviews were locked in a secured drawer that was kept in a locked office.

Once the accuracy of each transcribed interview was verified, I read the transcripts again in order to further familiarise myself with the data. This was especially important for interviews conducted with Elders from Batchewana First Nation, as I was not present throughout this part of the data collection. LAC members and research assistants from Batchewana were contacted on a number of occasions in order to provide clarity on some topics discussed by Elders. Notes were made on each transcript detailing how specific sections related to the analytical framework.

Computer-assisted qualitative data analysis (CAQDA) was then conducted using QSR NVivo 9. Critics of CAQDA often argue that one of the key dangers presented by the use of software in analysis is that it can guide researchers, encouraging reliance upon technology to find common points and patterns in data (Basit, 2003; Butler, 2001; Hesse-Biber & Leavy, 2004). This is especially facilitated in NVivo 9 and 10, where auto code features allow for entire sets of data to be coded automatically. Instead, it is argued by proponents of CAQDA that researchers should familiarize themselves fully with their data through lengthy reading and rereading



of the transcripts. This prevents contradictory or rarely referred to points from being overlooked. Other common critiques of CAQDA are that it has the potential to distance the researcher from the data, encourages quantitative analysis of qualitative data, and creates methodological dogma (Welsh, 2002). However, proponents of CAQDA cite that this approach facilitates data analysis and answers calls for increased transparency (Baxter & Eyles, 1997; Bringer, Johnston, & Brackenridge, 2004; Crowley et al., 2002). In my own experience with the CAQDA, I found that it provides a means for easily dealing with large sets of data.

In the early stages of analysis, nodes were created for each individual participant using the assigned individual classified codes. These nodes were assigned attributes, using classifications such as: gender, age range, interview type (audio, video) and community (ie. Batchewana Bay, Goulais, Rankin, Pic River). Assigning attributes to the data enabled analysis based on these characteristics. For instance, I could ask the software to show me what individuals from a specific community said about a specified topic. This also allowed for quick access to interviews used specifically in the production of the documentary film. Interviews were then loaded into NVivo, with each transcript file assigned to the corresponding node created for that specific participant.

Several memos were also linked to each interview. These memos were primarily created during data collection, as such they largely related to interviews conducted in Pic River. Memos contained my own personal reflections on the experience of conducting the interviews, including any ideas that I may have had about potential limitations and areas for future exploration. Throughout interview

coding and analysis, memos served as reminders of the particular circumstances of each interview. For instance, in one memo I have written that a particular interview participant may have given relatively short answers to our questions because they expressed that they were not feeling well at the onset of the interview. In another memo I discuss why I spoke more within a particular interview, explaining that both the participant and research assistant were very emotional and that the research assistant stated they would like me to take over temporarily.

The previously created analytical framework was then incorporated into the NVivo project. This was done by creating nodes for each of the key themes within the framework. Key themes, such as 'health' and 'land' were assigned as parent nodes with related topics created as child nodes. Further child nodes were created as they emerged throughout data. For example, the parent node 'health' contained multiple levels of child nodes (i.e. definition of health, health outcomes).

Data analysis involved open coding of each interview transcript. This was believed to be the optimal approach to coding, given that the interviews themselves were semi-structured. While the use of the auto-coding feature in NVivo would have permitted much faster coding of interview data, this was not possible because all interviews did not follow a structured interview guide. Elder responses given to questions were coded to nodes as complete sentences or paragraphs. New child nodes were also created within each of the key areas if the specific topic had not been previously coded. Data was also coded to multiple nodes if it was believed that several themes were being addressed simultaneously. The emergence of new nodes occurred primarily while coding the first ten transcripts. As such, these transcripts

were re-coded once coding for all transcripts was finished. This was done to ensure that the data contained within these first ten transcripts would be coded to the final collection of nodes. Text search queries were also conducted to ensure that specific mentions of a theme had not been missed.

Subsequently, each individual child node was examined and compared with other child nodes of the parent. Child nodes were joined if they contained significant similarities in what had been coded within them. The joining of very specific smaller child nodes often led to the creation of new larger nodes which themselves related to broader themes existing within the data. Joining child nodes was also facilitated using the modelling feature in NVivo. Models were created for each parent node, with child nodes added in order to visualize how the child node related to the parent. If it was discovered that a node related to the parent only through multiple child nodes, the specific node was joined with a larger theme.

In the final stage of data analysis I conducted a series of matrix queries. These allow for the running of multiple queries simultaneously and are useful when trying to establish differences between categories or when exploring overlaps between themes (Bazely & Jackson, 2013). The results of a matrix query are displayed as a table that links directly to the sourced data. For instance, I ran a query to explore differences in coding relating to how individuals from each reserve area discussed direct forms of environmental dispossession. The resulting table displayed location as columns with each node coded for direct forms of environmental dispossession displayed as rows. I then assigned each cell to show me the total number of coding references that were found for each intersection. This allowed me to see where

similarities and differences existed in the data and visually showed me areas of comparability between the communities that I had not previously noted.

### *3.6.3 Member Checking*

Member checking is a means of assessing the trustworthiness and credibility of data analysis and interpretation (Bartlett et al., 2007; Bradshaw, 2001; Butler, 2001). Member checking also ensures that the researcher did not potentially overlook any significant themes during analysis. Furthermore, within the context of CBPR, this process also ensures that positive relationships between collaborators are maintained as well as confirming that participants understand and accept how they are being represented within the study (Kovach, 2009; Mundel & Chapman, 2010).

The process of member checking occurred over a two-week period during the spring of 2012 when I returned to both Batchewana First Nation and Pic River First Nation with hard copies of transcribed interviews. Accompanied by several of the research assistants, Elders were visited at places and times convenient to them. For several of the Batchewana First Nation Elders, this was my first time meeting them in person. This was a particularly exciting experience, as I felt a connection to several of these individuals as a result of reading through their interview transcripts.

Each individual was provided with a printed copy of his or her interview transcript. Accompanying each transcript was a letter expressing our gratitude for their participation the previous summer as well as detailing what had been done with their transcript since their interview. The letter also provided my contact information and encouraged individuals to contact either myself or one of the

research assistants if they had any concerns after reading through their interviews. Only three individuals contacted a member of the research team to discuss what was contained in their transcript. Two of the Elders provided clarification on place names or events that had not been transcribed accurately. One individual expressed some concern over statements they had made about a community event, leading to these statements being removed from the dataset.

The results of data analysis were also discussed with Elders while returning their interview transcripts. Prior to arriving I had prepared a brief PowerPoint presentation to be shown during meetings with each community LAC. The presentations detailed key themes and providing supporting quotes for interviews conducted in each community. Several Elders expressed interest in the results and took the time to review the presentation with me. Potential new themes emerged from these discussions, resulting in further analysis of the data.

### **3.7 Elders' Celebration: Translating the Findings**

The final phase of the project consisted of a two-day Elders gathering held in each of the communities. All Elders who participated in the interviews were contacted by telephone and invited to attend. Transportation was offered to those requiring it. Invitations were also extended to research assistants, LAC members, and other community members who were interested. Local catering was also recruited to provide lunch on both days.

The purpose of the gatherings was to share the results emerging from analysis of Elder interviews, as well as those emerging from interviews with the research assistants (K. Kulmann's M.A. thesis). I created a 20-minute presentation

detailing the key themes found in the data, with various quotes selected to illustrate each theme. Individual presentations were created to reflect specific topics of importance within each community. Similarities and differences between the data from each community were also highlighted throughout the presentation. K. Kulmann also presented her results in the same fashion.

Elders provided their initial feedback and asked questions upon completion of both presentations. This was followed by a catered lunch. After lunch, all those present were placed into groups of six to eight people. Each group was provided with chart paper and nominated a recorder to represent them. Groups were asked to provide feedback about the results, including key areas of concern. Groups were also asked to reflect upon directions for community action based on the results and potential areas where future research could be conducted in the community. Participants were given as much time as they required in order to fully address each question.

The elected speaker for each group presented their results in turn on the second day of the gathering. Once each group had presented their findings, all those in attendance came together as one large group to reflect on what had been shared. This was done using a talking circle approach. Talking circles are similar to focus groups in that they offer insight into areas of convergence and debate regarding particular topic (Kovach, 2009). However, talking circles follow differ from focus groups in several key ways. Firstly, each individual speaks only in turn. Often, a feather or rock is used and only the person holding this item is permitted to speak. A second difference is that individuals will address ideas but do not directly address

anyone else in the circle. Disagreement with an idea expressed indirectly, without fingers being pointed to any single person. In doing so, talking circles typically consist of multiple rounds.

The Elders gatherings also included several traditional activities. An Elder offered a traditional opening prayer and smudge at the beginning of the gathering. Prayer was also said prior to eating, with food being offered to Elders before others. Participants were also invited to attend a sunrise ceremony on the morning of the second day.

The data produced by each group during the breakout sessions as well as topics discussed during the talking circles were transcribed and analysed using similar methods to those employed in analysis of individual interviews. This data, as reported in chapter six, represents key areas for action towards environmental repossession that can be used within each community.

**Chapter 4: Manuscript 1**

**COMMUNITY-BASED PARTICIPATORY RESEARCH (CBPR) WITH  
INDIGENOUS COMMUNITIES: PRODUCING RESPECTFUL AND RECIPROCAL  
RESEARCH**

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#### **4.1 Abstract**

The health disparities between Indigenous and non-Indigenous peoples in Canada continue to grow despite a growing body of research that attempts to address these inequalities, including increased attention from the field of health geography. Here, we draw upon a case study of our own community-based approach to health research with Anishinaabe communities in Northern Ontario as a means of advocating the growth of such participatory approaches. Using our own case as an example, we demonstrate how a collaborative approach to respectful and reciprocal research can be achieved, including some of the challenges we faced in adopting this approach.

## 4.2 Introduction

There are significant health disparities between the Indigenous and non-Indigenous populations in Canada (Adelson, 2005; Waldram, 2006).<sup>7</sup> Inquiry into the nature of this health gap has resulted in a varied body of research spanning several academic disciplines. Within the social and health sciences, the study of Indigenous peoples' health and wellbeing has presented academics with significant opportunities to engage in a variety of topics using established and specialised approaches to research. In our own discipline of health geography, the role of place – and the physical environment in particular - remains the central focus of the field. Connection to land, including how it shapes the wellbeing of Indigenous populations, remains a central focus of our efforts (Luginaah, 2009; Richmond & Ross, 2009).

Despite the growing attention Indigenous health receives from academia, health disparities persist, and in some cases, they are increasing. Rates of cancer, which have typically been lower among Indigenous populations, have recently been shown to be converging with those found in the general population (Marrett & Chaudhry, 2003). In 2004, the rate of tuberculosis (TB) in the First Nation populations was 5.5 times higher than that of the non-Indigenous population in Canada (Health Canada, 2009), and the higher prevalence of diabetes among First Nation peoples (3.6 and 5.3 times higher for men and women respectively) has been

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<sup>7</sup> We use the term “Indigenous” in reference to the original inhabitants of Canada and other colonized places. In Canada this term includes the three Aboriginal groups recognized in the Constitution Act of Canada (1982): First Nations, Inuit and Métis. First Nation is a term introduced in 1980 to replace ‘Indian Band’. Both terms, First Nation and Aboriginal, are limiting in that they are imposed terms which fail to distinguish between the large cultural diversity of the peoples that the term encompasses (Ashcroft, Griffiths, & Tiffin, 2007).

argued as resulting from reduced access to traditional foods and lands (Balko et al., 2011; Young, Reading, Elias, & O'Neil, 2000). This persistence in health inequality suggests the need for Aboriginal health research to move beyond statistical profiling of poor health and toward methodological approaches that enable communities to co-create research that responds to their own concerns and ambitions (Canadian Institutes of Health Research, 2007). Of course, such a redirecting of the framing of Indigenous health issues requires researchers to acknowledge the multiplicity of factors determining Aboriginal health (King, Smith, & Gracey, 2009). This approach necessitates community partnership throughout project planning, implementation, data collection, analysis, and dissemination (Stephens, Porter, Nettleton, & Willis, 2006). As a means of guiding Indigenous health researchers through the inherent challenges and limitations of a community-based approach, and to delimit unethical research practices, a number of ethical guidelines have been created (see Castleden et al., 2012). It is in this spirit that the Indigenous Peoples' Specialty Group of the Association of American Geographers (IPSG-AAG) has produced a document putting forward a number of key questions meant to assist both researchers and communities throughout the research process (IPSG-AAG, 2010).

This paper is a response to calls for researchers to embrace the true spirit of Community-Based Participatory Research (CBPR) frameworks in their research with Indigenous communities (Coombes, 2012). We provide an example of, and reflection on, our experience of conducting CBPR with two First Nation communities in northern Ontario, Canada. The IPSG-AAG posits that building and working within ethical research partnerships with Indigenous nations presents an opportunity for

geographers to move beyond past injustices (Louis & Grossman, 2009). In answering the call for building ethical research partnerships with Indigenous communities (Ball & Janyst, 2008), two concepts have been defined as imperative: relational accountability and mindful reciprocity. Relational accountability acknowledges the importance of relationships, as they exist through all aspects of the research, requiring that special attention be paid to these relationships throughout the entire process (Kovach, 2009; Wilson, 2008). Mindful reciprocity challenges researchers to participate in thoughtful and compassionate relationships with community collaborators (Pearson & Paige, 2012). Calls for attention to these two concepts are meant to leverage power imbalances that may exist during and beyond the data collection stages of the research, and emphasising the importance of building and maintaining relationships.

The purpose of this paper is to provide an example that other researchers, including health geographers, can use in their community-based health research. We begin with a brief description of our on-going research. We then progress to describe some examples of health research gone wrong, meaning studies that have exploited Indigenous communities. We will then provide a brief overview of CBPR and its relevance to Indigenous research, including an introduction of the IPSTG-AAG position on best practices for geographic research with Indigenous communities. Drawing on our example of the geographies of Indigenous health, we will reflect on the IPSTG-AAG (2010) document, including discussion on how our research was influenced by each of these suggestions.

#### 4.2.1 Collaborative Health Research with Anishinaabe Communities on the North Shore

There is growing concern surrounding increasing environmental dispossession and its impacts on the health of Anishinaabe communities on the North Shore of Lake Superior (Davidson-Hunt, 2003). Our continuing research explores perceptions of the health effects of environmental dispossession held by two Anishinaabe communities: Batchewana First Nation of Ojibways and The Ojibways of the Pic River First Nation. Environmental Dispossession on the North Shore includes increased mining, forestry, hydro-electrical development, as well as the legacy of the residential schools. As a result, the communities have expressed several concerns about the impacts of dispossession. Of key importance is a drastic decrease in the ability for intergenerational exchange of Indigenous knowledge.<sup>8</sup>

Currently, both Federal and Provincial Governments are supporting increased mining exploration in the area while local land claims continue to remain unsettled and highly disputed. Given the strong links between the health of Indigenous communities and the land, future resource development can be viewed as threatening community health. However, very little research explores the cultural dimensions linking health and the environment within the First Nation context (Richmond and Ross, 2008; Davidson-Hunt, 2003). Therefore, there is a need for deeper understanding of the cultural, political, economic and social dimensions of the links between the physical environment and health. Our research takes direction

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<sup>8</sup> By Indigenous knowledge, we are refereeing to the knowledge of local Indigenous people concerning the everyday realities of living in a nourishing relationship with their traditional lands and ecosystems (Ermine et al., 2005; Cajete, 2000). This includes cultural traditions, values, and belief systems that have both sustained and allowed Indigenous peoples to flourish in some of Canada's harshest environments over many generations. Transmission of such knowledge typically occurs *on the land* between community Elders and youth.

from the collaborating communities in attempting to address this gap in knowledge. Overall, we are seeking to document how the preservation of Indigenous knowledge can be used to protect traditional environments and improve community health.

In addressing concerns over decreased transfer of Indigenous knowledge, our project also includes community youth from within the participating community. A total of five youth (20-25yrs) from both communities were hired to assist in conducting interviews with local Elders. Assistants were recruited through each community's summer employment opportunities, with members of the Local Advisory Committee (LAC) in each community contributing to the selection process. Our research assistants were brought to The University of Western Ontario (London, Ontario) for an intense five-day training period, during which time in-depth interviewing techniques were both discussed and practiced in detail. They were also trained in qualitative methods. Youth expressed keen interest in the project, asking a number of questions and providing a great deal of insight about their own perceptions of the health and environment struggles in their communities.

Our research team is composed of collaborators, youth and Elders from both communities and scholars and trainees from two Ontario universities. Our research team has several years experience working with First Nation communities, and is led by an Anishinaabe academic who is a member of one of the research communities.

#### *4.2.2 The Legacy of Health Research: Without Respect or Benefit*

In her seminal book on Indigenous research, Linda Tuhiwai Smith (1999) begins by stating that research itself is often perceived as a dirty word within many

Indigenous communities. She expands upon this claim by explaining how scholars have too often treated Indigenous peoples as natural objects of research. This dehumanizing of Indigenous populations has not only erased the need for accountability and reciprocity, but has had several other repercussions, including *parachute research* (Menzies, 2004).

There are numerous examples of such research. In 1990, researchers at Arizona State University collected more than 200 blood samples from members of the Havasupai Indian Tribe under the presumption that the samples were to be used within the context of diabetes research. However, researchers were subsequently found to have used the samples in several other studies without consultation (Mello & Wolf, 2010). This resulted in tribal members filing a 50 million dollar lawsuit against the University (Andrews, 2005). The Human Genome Development Project (HGDP) provides another example. Researchers have taken blood samples from isolated Indigenous communities throughout the world, claiming that these were being used to provide pathology tests that would yield immediate clinical value. The samples were subsequently provided to the HGDP and analysed in DNA research without having first obtained consent (Dodson, 1999; Mooney, 1994). A recent study by Delistraty, Verst, and Rochette (2010) has also been criticised for its failure to obtain full community consent (Makhijani, Alvarez, & Callahan, 2010). In a response published in *Environmental Research*, Harris and Jim (2010) discuss their concern over the violation of research ethics, publication, discrimination, the imposition of judgments, and the lack of collaboration and consultation.

The largely biomedical studies that typify Indigenous health research may often provide critical baseline data, they often do little to improve the health and social realities of participating Indigenous population. The epidemiological narrative, largely void of Indigenous voice, paints a picture of Indigenous communities as sick and unable to self-govern. This perpetuates a perception of the need for continuous care (O'Neil et al., 1998; Meadows, 2003). Simultaneously, such research draws attention away from the fundamental and contextually specific causes of these health issues.

Our own discipline of geography has a longstanding relationship with Indigenous peoples. We openly recognize that much of the discipline's early history is rooted in a legacy of injustice, including exploitation of Indigenous people's lands and knowledge (Smith, 2009). Geographers' early engagement with Indigenous peoples in Canada was founded within the context of the imperialist objective of settlement. In early research, Indigenous inhabitants were portrayed as nothing more than features of the untamed landscape; such dehumanization was supported by the doctrines of discovery and *terra nullius* (Shaw, 2006; de Leeuw, 2012). And while the contemporary field of Geography is being enlightened to now recognize the errors of past research, there is evidence the legacy persists today. For example, Louis and Grossman (2009) recently criticized a study funded by the Foreign Military Studies Office (FMSO) in the United States to document Indigenous land tenure and land reforms. Previous FMSO publications had cited decolonization movements by Indigenous peoples in places such as Mexico as a threat to the national security of the United States. The FMSO funded study not only failed to



disclose their funding source, but they also failed to receive informed consent from the participating communities.

#### 4.2.3 *Community-Based Participatory Research: A Philosophical Stance*

Despite a wide diversity in application, CBPR initiatives with Indigenous communities should ideally pursue a set of common objectives: to equalize power differences within the research process; to build trust between the researchers and the community; and to foster a sense of ownership tied to generating momentum towards social change (Castleden, Garvin, & Huu-ay-aht First Nation, 2008). These objectives are based on the principles that true partnership entails co-learning and that findings should benefit all partners (Israel, Eng, Schulz, & Parker, 2005). Accurately engaging these principles requires the inclusion of - and engaged participation by - community members throughout the research process (Fisher & Ball, 2003).

There are several challenges researchers must account for when engaging in CBPR. Of key concern is the need to define both *who constitutes community* and *what is meant by participation* (Minkler, 2005; Wallerstein & Duran, 2003; Wallerstein & Duran, 2006). Within the context of Indigenous health research, the collaborating community is often defined at the level of the participating First Nation band(s).<sup>9</sup> However, it is important to recognize that conceptualizing community in this way

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<sup>9</sup> In Canada, a Band refers to the collective of recognized members of a First Nation who have had lands set apart for their use by the Crown or are declared to be a band within the Indian Act. Individual bands have their own governing councils, typically consisting of a chief and councillors (Indian and Northern Affairs Canada, 2002).

can be problematic. No community is homogenous and community leaders may not represent the range of interests of a whole community (Wallerstein & Duran, 2006).

Defining the degree to which collaborators will participate in the research represents another significant challenge. Defining participation at the onset of a research initiative is a means of avoiding potential difficulties, because the extent to which members of an identified community are expected to participate by the researcher may be very different than the expectation of participants. While researchers may hold ideals of complete community participation, control over all aspects of the research is rarely completely in community hands. Furthermore, community may not always desire complete control.

Defining these concepts take time. CBPR research processes are typically slower and more drawn out than non-collaborative approaches (Menziez, 2004). The length of time required to develop trusting relationships with communities, as well as to design and conduct the research, often limits the number of researchers able to adopt this approach. Williams, Labonte, and O'Brien (2003) state that the development phase of their research took nearly two years, while Gibbon (2002) explained how she spent ten years to complete the research phase of her doctorate.

At the community level, the amount of time necessary for the development of successful CBPR may create frustration among individuals who seek immediate solutions to their problems. Furthermore, research with vulnerable populations face a high potential for attrition, as the demands of daily life may outweigh desire to participate. In their study of diabetes among the James Bay Cree, Boston et al. (1997) discuss the challenge of recruitment and participation to their research by

Community Health Representatives, whose occupational demands requiring the rescheduling of research components and extension of the research project.

In its application to the body of research on Indigenous health, the goal of CBPR is to combine knowledge and action for social change and improved realities (Wallerstein & Duran, 2003). By creating a space within which Indigenous methodologies and ways of knowing can be practiced, the dominance of the epidemiological narrative is challenged (Smith, 1999). For instance, Parlee, Berkes, & Gwich'in (2005) demonstrate the positive health impact of berry harvesting to Gwich'in women. The strength of the study lies in its use of narrative to emphasize positive health behaviours, and its incorporation of Gwich'in knowledge about intrinsic links between land and community health.

#### *4.2.4 A Way Forward for the Geographies of Indigenous Health*

Indigenous research is inherently geographical. Indigenous peoples have customarily defined themselves through longstanding connections to the places and land in which they live (Battiste & Henderson, 2000), including concepts of health and healing (Ermine, 2005; Parlee et al., 2005). For instance, in some First Nation communities in Canada the teachings of the Medicine Wheel are used to illustrate the interconnectedness of the individual to their broader social and physical environments (Isaak & Marchessault, 2008). In the context of the Haudenosaunee, the Thanksgiving Address defines their worldview, teaching how humans are interconnected with the rest of creation (Haudenosaunee Environmental Task Force, 1992). One of the messages within the Thanksgiving Address is that when the land is sick, the people become sick. Sickness in the environment must be addressed

before sickness in the community can be healed. A growing body of geographic literature examines the relationship between the environment and the health of Indigenous peoples. Wilson (2003) demonstrates how culture links health and land (as more than just a physical space) within the First Nation context, arguing that the land impacts health on a daily basis and not just within the context of isolated events. Smith, Luginaah, and Lockridge (2010) build on Wilson's (2003) work to examine how the everyday connections to the land act to foster community cohesion in the face of processes of environmental dispossession. Richmond and Ross (2009) discuss the determinants of First Nation and Inuit health in Canada, concluding with a challenge for Indigenous health researchers to produce progressively engaged and place-specific studies with a deeper understanding of ways that unique historical and contemporary processes (i.e. environmental dispossession) interact to shape health in local places.

Hackett (2004, 2005) developed a historical timeline of Indigenous health, examining the impact of smallpox (Hackett, 2004) and tuberculosis (Daschuk & Hackett, 2006). These studies advocate that the inclusion of Indigenous peoples in the creation of narratives around health and health disparities will yield increased understanding of historical health status, comprehension of current health concerns, and insight into the nature of the diseases in question. Peters' (2001) research similarly presents an overview of the characteristics of Canada's urban Indigenous population. She argues that health researchers must do more than provide descriptions of characteristics and population distribution in their research.

Canadian geographers engaging in CBPR with Indigenous communities have sought to both produce rigorous research while simultaneously focussing upon community goals. In collaboration with Arctic communities, Furgal and Seguin's (2006) work documents how observed environmental changes are impacting community health, notably food security and nutrition. This research enabled potential pathways through which communities could begin to proactively adapt to the health issues associated with climate change (Furgal, Martin, & Gosselin, 2002). Pearce et al. (2009) similarly advocate for the active involvement of community members and stakeholders in the study of climate change research in the Arctic, and a series of related studies have examined the geographies of sea ice freeze and thaw in Nunavut (Laidler, Dialla, & Joamie, 2008; Laidler & Elee, 2008). These studies present detailed community understandings of the changing patterns of sea ice conditions, the goal being to preserve local knowledge and increasing hunter safety. Castleden, Garvin, and Huu-ay-aht First Nation (2009) explores a community worldview applied to forestry management within the context of on-going treaty negotiations. The CBPR approach taken within these studies is argued to have fostered an increased sense of community ownership of the research, resulting in continued community engagement with the research.

Collectively, these studies engaged communities in research using a variety of methods. Despite the adopted research method(s), the essential message is that the benefits of CBPR approaches extend well beyond its ability to enrich data collection and analysis. In a discipline where the role of place in shaping health remains the key focus, CBPR approaches provide pathways for health geographers to engage

with deeper understandings of this relationship. This specifically includes the very different meanings that land (place) holds amongst various communities. Even more importantly, through their ability to enable increased community empowerment and trust, these approaches are a means towards the progression of the discipline away from its colonial heritage.

### **4.3 Internalising Ethical Collaboration: The IPSG-AAG Key Questions**

The Indigenous Peoples Specialty Group of the Association of American Geographers (IPSG-AAG) is a community of geographers engaging in research and education with Indigenous peoples of the world. As a specialty group of the AAG – whose annual meetings draw thousands of geographers from across the planet – the IPSG is central to the progression of Indigenous geography. In doing so, the IPSG strives to encourage the empowerment of Indigenous peoples through research, including the building of relationships based upon mutual trust between Indigenous peoples and academics.

In 2010, the co-chairs of the IPSG-AAG put forward a series of key questions meant to assist geographers in developing CBPR collaborations with Indigenous communities. These questions are categorised into six key areas (Table 4.1). In the next section of this paper, we apply this document to our current research, reflecting upon the challenges and opportunities it presents.

Research Area	IPSG Suggestions
Project Formulation	<ul style="list-style-type: none"> <li>• <i>How much time has been invested in building relationships?</i></li> <li>• <i>What role does the community have in shaping the research framework?</i></li> </ul>
Identities of Researchers	<ul style="list-style-type: none"> <li>• <i>How are power differences within the research being addressed?</i></li> <li>• <i>Have the researchers been provided with training and guidance in working with Indigenous communities?</i></li> </ul>
Partnerships	<ul style="list-style-type: none"> <li>• <i>Has the project set up a research advisory group?</i></li> <li>• <i>How will skills/knowledge be transferred to the community that will enable future community-control of research projects?</i></li> </ul>
Benefits	<ul style="list-style-type: none"> <li>• <i>How is traditional knowledge included in the project/shared with the public?</i></li> <li>• <i>How will community partners be acknowledged for their contributions?</i></li> <li>• <i>How and where will the research be published? What plan for reviewing publications will be put in place?</i></li> </ul>
Findings	<ul style="list-style-type: none"> <li>• <i>Will Indigenous partners have the opportunity to review findings?</i></li> <li>• <i>How are the voices of Indigenous peoples represented?</i></li> </ul>
Deepening Relationships	<ul style="list-style-type: none"> <li>• <i>Are researchers prepared to discuss deeper personal motivations for the research?</i></li> <li>• <i>What long-term relationship is being built with the community?</i></li> </ul>

**Table 4.1: Key Questions About Research With Indigenous Communities**

#### 4.3.1 Project Formulation

Typically, researchers have arrived in a community and proceeded to present an established research agenda complete with a list of what is required from the community. Although this may include some form of community participation, this is not in the spirit of CBPR. Instead, this approach tends to regress towards the parachute style of research so widely criticised (Menzies, 2004). In developing true CBPR initiatives, researchers can begin by presenting their skills and interests to a potential collaborating community. In this way, communities can contribute equally to shaping both the purpose of the research and the methods that will be used. Formulating the project is a negotiation built on trust, honesty, humility, and mutual reciprocity (IPSG-AAG, 2010). Developing a collaborative project emphasises building research relationships through continuous communication and adaptability (Bartlett, Iwasaki, Gottlieb, Hall, & Mannell, 2007).

As noted above, the leader of our academic team is an Anishinaabe scholar who holds membership in one of the communities. She has strong social and family ties to the North Shore as this is where she lived until she left the North for post-secondary studies. The development of this research project therefore built upon a very strong base of relationships with community members – those founded in a shared relational history – which has been essential to all stages of our project, most particularly in its early development.

Our research project formally began in July 2008 with a number of community meetings engaging local residents, band employees, elected officials, and Elders seeking to elicit local perceptions on key environmental and health issues among Anishinaabe communities on the North Shore of Lake Superior. This resulted in various subsequent discussions with youth and Elders through meetings and focus group sessions that enabled a better understanding of local health and environmental concerns. Participants discussed concern surrounding the links between increasing rates of social and chronic health problems and decreased access/control over their local environments. For example, individuals from Pic River described how a burst tailings line at an upstream mine resulted in the contamination of their groundwater supply. Among participants from Batchewana, concern was raised about the steel industry, and the introduction of wind energy to the area. Concern was also expressed surrounding increasing community problems in relation to diabetes, mental health, loss of spirituality and culture, as well as a number of social issues including addiction.



### *4.3.2 Identities of the Researchers*

The IPSTG-AAG (2009) asks researchers to think critically about their position in relation to the collaborating communities. Significant power differences can exist between researchers and community members, and researchers must address them for collaboration to occur. The position of power Western knowledge has been given has allowed researchers to exploit Indigenous ways of knowing. Viewing themselves as superior, Western scientists seldom felt the need to rationalise their work to the Indigenous community.

In the case of our study, we worked to balance power differences in a few different ways. First of all, two researchers lived in close proximity to both study communities during the primary data collection phase. Doing so introduced flexibility into the research process, as we were better able to accommodate when, where and for how long interviews would occur, time being an extremely important consideration when working with Elders. Living in proximity to the collaborating communities also facilitated relational accountability and mutual reciprocity, as it meant that we had on-going interaction with research participants and collaborators outside of the formal research. Most importantly, however, was that our research took an approach that was laden with cultural humility, meaning that we were very conscious of our own positions of power and made deliberate attempts to equalize power with our research participants and collaborators by making it known to all involved - including participants, collaborators and research assistants - that we each had our own roles to play in this project, and that the strength and success of the final outcome would be a result of this combined

knowledge. In order to maintain respectful and dynamic partnerships with all involved in the research, we were committed to a process of self-evaluation and self-critique (Minkler, 2005; Wallerstein & Duran, 2003).

Another means through which we engaged in mutual reciprocity and attempted to balance power relations was through the hiring and training of local research assistants. This presented a familiar face to potential participants during the recruitment phase, which occurred up to one week prior to the start of our data collection, and which involved visits with the potential interviewee. During these visits, the potential interviewee was introduced to the researchers, the project was thoroughly explained and any questions the Elder had were answered. These visits lasted up to 45 minutes, and formal interview date and time was scheduled once the Elder was completely at ease with the research. In order to do things in the appropriate way, we also offered tobacco ties to participants, which showing the proper respect for the knowledge that they were going to share with us. The actual interviews happened anywhere between one and eight weeks after the initial visit. Interviews lasted between 45 minutes and two hours. Prior to formally beginning the interview, Elders were introduced to the remaining members of the research team and presented with tobacco ties. The purpose of the project was also reiterated and the rights of the participant were explained to them with audio or video recording of the interviews beginning once consent was given verbally.

#### *4.3.3 Partnerships*

Researchers need to build relationships with communities at the outset of any project. Successful partnerships are key to the development of research that

will be mutually beneficial. Realistically, it is impossible for every individual in a community to become research partners. As such, CBPR often includes the formulation of Local Advisory Committees (LACs) who represent the community's greater research interests and needs. LAC's are represent their community's strategic involvement in research through provision of guidance to researchers, suggestion of recruitment strategies, and in provision of insight about the appropriateness of research methods. LACs promote rigour in the research process (Castleden et al., 2008, 2009), as they work to ensure that research is relevant, applicable, and transferable, for example by informing researchers about times when it would not be appropriate to do research (e.g. when there has been a death in the community). Not only does this local insight add to the rigour of the research process, it also increases the efficiency of time and resource use.

One of the first items for discussion in our study was the establishment of LAC in both Pic River and Batchewana. Our two LACs are composed of various community members, including Band Officials, local youth, community health workers, and at least one Elder. These individuals contributed their knowledge and local expertise in a number of ways, as alluded to above. A mock interview was also conducted with an LAC member. This provided an alternative view of both the interview questions as well as to allowed the research assistants to gain further interviewing experience prior to commencing participant recruitment. Subsequently, the research assistants were asked to identify which Elders in their community they believed should be approached for interviews.

#### *4.3.4 Benefits*

The research partners should also share benefits incurred as a result of the research. This is meant to include acknowledgement of the contributions made to the research, as well as a fair return on royalties obtained from patents or publication. Researchers should avoid creating the perception that the knowledge is their sole possession. They should also strive to not parade the knowledge that has been shared with them. Clear conversations about how traditional knowledge is to be used must occur during the formulation of the project. Communities should have a voice when it comes to the publication of research derived from the project.

As academics we face the need to publish our research findings in order to advance within our own careers. This presents a unique set of both practical and ethical challenges/opportunities to those of us engaged in CBPR with Indigenous communities. Castleden, Sloan-Morgan, and Neimanis (2010) found a lack of consensus around collaborative publication among researchers engaged in CBPR. Including communities or community representatives as collaborators in publication is often advocated. Doing so has numerous advantages. These include ensuring the findings are coherent with the community research needs, as well as increasing community research capacity. Collaborative publication also acts to increase the validity of Indigenous knowledge within academia. However, collaborative publication raises questions surrounding who is recognised and how. Can one representative be said to speak for the entire community? Conversely, can we ensure that the whole community is in agreement if the community itself is cited as an author? This process also slows down the speed at which academics can

publish their findings, especially in instances where communities have limited time/capacity to review potential publications. Finally, in some cases collaborative publication may result in community members being unwilling to agree on a specific publication. In this instance, the answer to the ethical question of whether to continue publishing without consent is no.

#### *4.3.5 Findings*

The IPSG-AAG advocates framing research findings as an on-going process. In doing so, the findings are viewed as a means to achieving a goal rather than simply as an end goal themselves. It is also important to ensure that data be represented in a means that is accessible to the collaborating community and that sources, sacred places, and knowledge are protected. Key questions in this area challenges researchers to reflect upon how the viewpoints of Indigenous participants are represented and legitimized. Researchers are also challenged to think about how individual confidentiality is respected as well as how the project will protect research materials and findings. Finally, this section also asks researchers to ensure that communities have been able to review research findings in an appropriate form and to consent to their use.

Our on-going research currently seeks to address the key issues raised in this section by adopting an iterative approach to data analysis as well as by creating transferable research findings. In this sense, our data collection did not end when we finished interviewing community Elders. Nor are we solely responsible for data analysis. At the end of the initial data collection phase, both academic researchers and youth research assistants worked together in developing a theoretical

framework within which the data was to be analysed. This presented a challenge to the research, as youth had limited experience with conducting qualitative data analysis. This challenge was successfully overcome throughout a two-day workshop on analytical framework development. With all members of the research team contributing to the process, we were able to develop an analytical framework that we believed maintained the centrality of community research needs while also meeting academic requirements.

Our research also maintained engagement with the participating communities through informal discussion with Elders during data analysis, as well as two Elders gatherings. These gatherings took place once initial thematic analysis had been completed. Key themes emerging from the data were discussed during a brief presentation, with individual quotes used to demonstrate the theme. Subsequently, a series of focus group sessions were held with the participants. These focus groups were held to both discuss the appropriateness of the findings as well as to achieve consensus upon areas of immediate future action. Areas of disagreement were discussed in detail, with efforts made to ensure that all individual opinions were being heard and respected. In reviewing the findings this way, our data has been developed into tangible strategies for improving community health by those who both participated in the research as well as who stand to be most affected by the identified challenges. However, a key challenge we faced in this stage of the research is that not all individuals may agree on a specific action area. For instance, natural resource development is simultaneously viewed as both a

threat to community health as well as an opportunity to improve health through the opportunities it presents.

#### *4.3.6 Deepening Relationships*

The final series of questions posed by the IPSTG-AAG charge researchers to reflect upon their on-going relationships with Indigenous peoples. Researchers should seek to form lasting bonds with communities, instead of viewing partnerships as existing only within the context of a research project. Furthermore, the IPSTG-AAG advocates following traditional protocols, such as gifting. Questions in this section ask researchers to be able to openly discuss their personal motivations for engaging with the community. They challenge researchers to make themselves available to the community after the research project is finished, encouraging future advocacy. They encourage researchers to assist in developing community research protocols where none may exist.

#### **4.4 Conclusion: Building Respectful and Reciprocal Indigenous Health Research.**

Indigenous health research has too often failed to meet the needs of the communities contributing to the production of knowledge. As such, research can be said to have made very little contribution to reducing the health gap between Indigenous and non-Indigenous people in Canada. If we are to address this issue, we must increase our efforts to move beyond producing research *on* Indigenous communities and towards conducting collaborative research *with* and *for* them (Koster, Baccar, & Lemelin, 2012). Decreasing the persistent health disparities between Indigenous and non-Indigenous populations in Canada can only be

achieved with the voices of communities whose lives are affected. These communities must become equal partners in understanding and developing action on the health and social problems with which they are the experts. Doing so requires academics to engage with the available ethical research guidelines, embracing the notions of mutual reciprocity and relational accountability. While there is an increasing emergence of ethical research guidelines produced by both national agencies and also by Indigenous research communities, there remain limited applications of such guidelines.

Our case-study demonstrates the effectiveness of critical engagement with one of these guidelines produced by the Indigenous Peoples Specialty Group of the Association of American Geographers. In engaging with several of the key questions posed by the group, we were able to make attempts at meeting community needs throughout all stages of the research process (relational accountability). In the future, a follow-up study exploring the perceptions of community collaborators participating in this study would provide unique insight into areas where we were successful as well as those where we could strive for improvement.

In this paper, we demonstrate the importance of using CBPR approaches in conducting research with Indigenous communities. The findings show how this methodology can be used towards the pressing need to both preserve and transfer Indigenous knowledge to new generations. Preserving and protecting this knowledge is integral to guiding the development of strategies towards improving and maintaining community health and wellbeing.



Our work seeks to make contributions to the development of practical strategies that each of the participating communities can apply towards mitigating their health and environmental concerns. In documenting the knowledge of local Elders, we are preserving critical knowledge linking Anishinaabe people and their lands. With increasing rates of both environmental dispossession and the passing of Elders, preserving traditional knowledge about the land and its significance is critically important. Documenting this knowledge also serves as a form of political support for both communities as they continue in their efforts towards self-determination and land claims processes.

Perhaps the strongest rationale for applying CBPR is the capacity of the approach to engage communities in the research questions that matter to them. In doing so, CBPR approaches enable communities to address their pressing health concerns as well as to take an active role in shaping the solutions they want to see.

This methodological chapter presents the CBPR approach taken within the research conducted for this dissertation. This chapter has highlighted the need for CBPR within the context of Indigenous health research, as well as described how CBPR was applied as the basis of this dissertation. In doing so, this chapter has paved the direction for the remaining two empirical chapters of this dissertation, which address the impacts of environmental dispossession and strategies for repossession discussed within each community. The next empirical chapter draws from the results of in-depth interviews to explore the impacts of environmental dispossession as well as highlighting how these impacts have been resisted.

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## **Chapter 5: Manuscript 2**

**“THAT LAND MEANS EVERYTHING TO US AS ANISHINAABE...”:  
ENVIRONMENTAL DISPOESSESSION AND RESILIENCE ON THE NORTH SHORE  
OF LAKE SUPERIOR**

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## **5.1 Abstract**

This article shares results of a community-based participatory research (CBPR) study that qualitatively examined the perceived health impacts of environmental dispossession among Elders in two Anishinaabe communities in Ontario, Canada, including the ways they have maintained their ways of life in spite of these processes. Through in-depth interviews, Elders (n=46) recounted changes in health and well-being, specifically that related to reduced access to traditional foods and decreased capacity to participate in, and share knowledge of, land-based practices. Elders discussed the ways in which they have remained resilient to these changes in their ways of living. With a greater purpose of proposing solutions that will improve contemporary patterns of Indigenous health, this research underscores the importance of engaging theoretically in concepts of environmental dispossession and resilience.

## 5.2 Introduction

Indigenous communities, on a global scale, live within a legacy of environmental dispossession that has profoundly uprooted a land-based way of life and the social, spiritual and cultural well-being that has nurtured and maintained good health for centuries. Environmental dispossession refers to “the processes through which Aboriginal people’s access to the resources of their traditional environments is reduced” (Richmond & Ross, 2009 p 403). These processes are characterised by widespread displacement, environmental contamination, forced assimilation, unprecedented resource extraction, and land rights disputes. The traditional lands and territories of Indigenous peoples have historically provided the daily nourishment, sustenance and medicines necessary for Indigenous peoples, and they have also been places where local culture, knowledge, norms, and values are shared and practiced. Maintenance of strong connections to traditional lands has been shown to result in increased self-esteem, cultural pride and overall improved physical health (Berry, 2008; Burgess, Johnston, Bowman, & Whitehead, 2005; Kingsley et al., 2009; Parlee et al., 2005). Indigenous views of health are approached holistically to include equal importance placed on the physical, social, cultural, environmental, emotional, and spiritual components of one’s well-being (Isaak & Marchessault, 2008). As a result of this multidimensional nature of Indigenous health, processes of dispossession have increased Indigenous vulnerability to negative health outcomes, and reduced individual and community capacity to cope with emergent threats to health (Brown et al., 2012; Kelm, 1998; Sherwood, 2013).



Drawing on the perspectives of Anishinaabe Elders living in two communities along Canada's North Shore of Lake Superior (The Batchewana First Nation of Ojibways, and The Ojibways of the Pic River First Nation), the purpose of this paper is to explore historical and contemporary experiences of environmental dispossession, with emphasis placed on identifying and articulating the ways Anishinaabe Elders have practiced resiliency through their ties to land.

### **5.3 Environmental Dispossession And Indigenous Peoples**

Processes of environmental dispossession occur through direct and indirect forms. Direct processes of dispossession lead to a physical separation from the land. For example, chemical dumping near the Mohawk community of Akwesasne has led to contamination of the St. Lawrence River, leaving residents unable to participate in the subsistence fishery (LaDuke, 1999). In this community, a 200 percent greater concentration of PCBs was found in the breastmilk of women who continued consuming fish from the river. Here, contamination not only restricted the ability to fish, but also severed a link between mother and child by reducing her capacity to breastfeed safely. Internationally, the cumulative effects of climate change represent an example of direct dispossession. Warming in the circumpolar regions has eroded access to traditional food sources, and has created hazardous conditions through changes in sea ice levels (Ford, 2012; Ford, Berrang-Ford, King, & Furgal, 2010).

Indirect forms of environmental dispossession destabilise the relationship that Aboriginal peoples have with the land through processes of acculturation and assimilation (Bartlett, 2003). Federal policies such as residential schools and the 'pass system', which required individuals to gain permission from their local Indian

agent prior to leaving their reserves, represent two prolific examples from Canada's colonial past (Barron, 1988; Elias et al., 2012; Fiske, 2008). A contemporary case is elucidated in the on-going comprehensive land claim involving the Algonquin of Pikwakanagan and a federally unrecognized Algonquin population, who have been excluded from participation (Lawrence, 2012). Within the international context, research has examined the impacts of belonging to the "Stolen Generation"; these are the survivors of Australia's Indigenous children who were forcibly removed from their communities and relocated to the homes of non-Indigenous families. The health outcomes of this experience included increased vulnerability to substance abuse, depression, and suicide (Hunter, 2002; Vicary & Westerman, 2004). Both direct and indirect forms of dispossession represent attacks on the health and cultural identities of Indigenous people (Alfred, 2008; Battiste & Henderson, 2000; King et al., 2009), as they commonly result in decreased capacity to access land, inability to practice culture, earlier mortality, and higher rates of morbidity (Gracey & King, 2009). The outcomes of dispossession increase the vulnerability of Indigenous peoples to myriad health issues, for example through changing environmental conditions and enhanced vulnerability in Arctic communities (Furgal et al., 2002; Furgal & Seguin, 2006), psychological stress from industrial development (Luginaah et al., 2010; Smith et al., 2010), barriers to traditional foods (Mundel & Chapman, 2010), social and cultural impacts of industrialization (Kryzanowski & McIntyre, 2011), and loss of language (Brown et al., 2012), among countless others.

The cumulative results of the above studies point to an important finding: processes of environmental dispossession are not confined to the historical narrative of Indigenous people's health; but rather, they continue to shape health in the modern context. As such, there is a pressing need for a more in-depth exploration of the ways environmental dispossession fundamentally undermines health outcomes in the contemporary Indigenous context, and with greater attention paid to the direct and indirect mechanisms by which these processes operate. Before moving into discussion of our methods and results, we provide a cultural context for understanding the moral value of the land from a traditional Anishinaabe perspective. The objective here is to provide a platform from which to understand the depth, intimacy and cultural relevance of the Anishinaabe land-health relationship.

### *5.3.1 Anishinaabe Connections to the Land*

Relationships with land have been health sustaining for Aboriginal peoples (Isaak & Marchessault, 2008; Mundel & Chapman, 2010; Richmond et al., 2005). Living in a health sustaining relationship with the land is about more than harvesting resources for survival, it is about a fundamental respect of the connectedness between all living and non-living things and appreciation for the essential balance of all creation (Berkes, 2008). This important knowledge is embedded within traditional Anishinaabe stories, which are both the foundation of cultural identity and conceptual frameworks that help to understand the relationship and responsibilities of people to the land (McGregor, 2009). Cultural teachings shape the Anishinaabe identity as caretakers of the land and emphasize

that humans are only one small part of all creation (Miller & Davidson-Hunt, 2013). The Anishinaabe creation story teaches that *Gitchi-Manitou* (The Creator) made all things and assigned them a purpose, with man created as the last and weakest (Benton-Banai, 1988; Peacock, 2001). Original Man was taught by *Gitchi-Manitou* that all things had a spirit and purpose and were to be given respect. Further Anishinaabe teachings emphasise the moral importance of maintaining a respectful relationship with creation. The teaching of the Great Flood, for example, tells of how the Anishinaabe began to stray from the original path that the Creator had set out for them (Benton-Banai, 1988; Johnson, 1982; Peacock, 2001). Since the Anishinaabe people were no longer respecting creation, *Gitchie-Manitou* decided to purify the Earth. He did so through a great flood, killing most living things. The few animals that were able to survive found themselves clinging to log alongside *Nanabosho*. It was decided that, if a piece of the Earth could be retrieved from the bottom of the great sea, life might be able to continue. All of the beings, including *Nanabosho*, failed in their attempts to retrieve earth from the depths. The last of those to make an attempt was the muskrat, perceived to be the weakest of all those present. After a long time the muskrat emerged from the depths holding a small piece of earth. However, the muskrat did not survive and was placed on the back of a turtle with the piece of earth it had collected. All mourned the muskrat and performed a ceremony thanking it for its sacrifice during which the piece of earth began expanding on the back of the turtle and shaped what would become Turtle Island. This simple teaching illustrates the vitally intimate social and spiritual relationship between the Anishinaabe people, the land, and all other beings – and it

sets a cultural basis for appreciating the deep cultural conceptualization of Anishinaabe health.

### *5.3.2 Land-Based Resiliency*

The teachings above illustrate a deep-seated attachment to land that is foundational to the belief system present within many Anishinaabe communities today. They demonstrate how traditional lands occupy more than just a physical space; they are the central feature upon which Indigenous people globally have developed strong cultural identities, transferred knowledge between generations, and fostered opportunities for health (McGregor, 2004; Wilson, 2003). Embedded deeply within this belief system is the understanding that human beings are but *one part* of nature and are neither separate nor superior to any other beings but live within a reciprocal relationship with the rest of creation (Cajete, 1999). As such, maintaining a strong connection with traditional lands and resources provides Indigenous communities with the social, cultural, and spiritual resources required to contest the threats presented by dispossession (Walters, Beltran, Huh, & Evans-Campbell, 2011). In this sense, traditional lands are part and parcel to the practice of Indigenous resiliency.

Within the public health literature, resiliency has customarily been conceptualised as the ability of individuals to respond positively to stress and adversity (Adger, 2000; Fergus & Zimmerman, 2005; Liebenberg & Ungar, 2009; Rutter, 1987). This body of research has been characterized almost exclusively by large quantitative studies examining factors that contribute to the ability of an individual to succeed in the face of adversity such as: socioeconomically

disadvantaged youth (Betancourt & Khan, 2008; Borowsky, Ireland, & Resnick, 2001; D'Abreu, Mullis, & Cook, 1999; Dass-Brailsford, 2005; Douglass, 1996; Garmezy, 1993; Panter-Brick, 2002); the gender effect on resilience (Christiansen & Evans, 2005; Hartman, Turner, Daigle, Exum, & Cullen, 2009), sexuality (Eisenberg & Resnick, 2006), and ethnicity (O'Donnell, O'Donnell, Wardlaw, & Stueve, 2004). The majority of these studies view resilience as a static and measureable outcome, and are often focussed on the individual (Wexler et al., 2009). In an alternative approach, Norris et al. (2008) conceptualize resilience at the community level. Herein they frame resilience as a process wherein a set of adaptive capacities are linked to a positive trajectory of functioning and adaption amongst a population after a disturbance. Within this understanding, adaptive capacities refer the sum of available resources and their attributes, which communities can draw upon in order to both recover from and continue functioning after experiencing a disturbance. The findings presented in our study, as presented below, draw from a similar community approach wherein we present environmental dispossession as a disturbance to the positive functioning of Indigenous communities.

#### **5.4 Methods and Analysis**

The results presented in this paper are derived from a larger CBR project involving 46 Elders from both Batchewana First Nation and Pic River First Nation. CBR has been advocated as a collaborative approach to conducting research that enables relationships built upon mutual respect and benefit (Castleden, Sloan Morgan, et al., 2012a). Tobias, Richmond, and Luginaah (2013) present a detailed discussion of the CBR methodology taken within this study.

Data collection involved the recruitment and training of local research assistants (Fisher & Ball, 2003; Miles & Hubberman, 1994). While there is no common definition of who constitutes an “Elder”, for example that they are of a certain age, individual Elders were selected as participants based on the important roles they each occupied within their communities. This includes their accumulated life knowledge, their responsibility to provide counsel, inspiration and healing (Holmes, Stewart, Garrow, Anderson, & Thorpe, 2002; King et al., 2009; Simpson & Driben, 2000). In-depth interviews lasted between one and three hours and were audio-recorded, with some interviews also being video recorded for use in a documentary film ([www.giftsfromtheelders.ca](http://www.giftsfromtheelders.ca)). Upon completion of the interviews, an analytical framework was developed collaboratively with local research assistants. Initial results were subsequently presented and discussed with several participating Elders and community members. The feedback provided during these forums led to further refinement of the results, which are presented in the following section.

## **5.5 Results**

### *5.5.1 Direct forms of dispossession*

Elders spoke about the introduction of railroads and highways as a time when processes of dispossession began to affect their lives in earnest. One Elder in Pic River discussed how the forestry boom directly reduced access to areas along the Pic River:

*In 1946 I saw this river full of wood. Back then the people used the river for transportation and they couldn't use it because it was full of goddamned wood. They had canoes. So already*

*industry had started to impact what we could do on the land because we couldn't use that river. (Pic River Elder, Male)*

Subsequent forms of direct dispossession included increased mining, hydro-electrical development, as well as the introduction of pulp, paper, and steel mills. Elders in Pic River recounted how spills from a nearby mine resulted in contamination of their water:

*When they built the tailings ponds we were very worried about the leakage. They say that (...) it's never supposed to leak. You know since those mines been in place there's been two scares with tailings coming right into our water system. (Pic River Elder, Male)*

Amongst the Elders of Batchewana First Nation, discussion surrounding industrial development focussed upon increasing pollution:

*I see them pulling all that slag and everything out from the steel plant. All the years they've been dumping that slag and that old molten garbage from the steel plant. They took up that whole area. (Batchewana Elder, Male)*

Elders from both communities often recognized the opportunity for economic growth presented by development. However, many individuals were critical of the paradox presented by the need for economic prosperity and the desire to treat the land with respect:

*If it wasn't for Mother Earth (...) we wouldn't be able to survive. But this is where we really have to take a good look at her and try to listen to her. And to pay respect to her (and) like not to abuse her (...) especially right now today with all the big industries just violating her and raping her, using her for money*



*and power and glory. We just rip right through her and blow her up just to get that precious gold out of there. And then what do we do in return? There's nothing that we do in return.*

***(Pic River Elder, Male)***

Concern arose about how increased limitations on access to the land would reduce its importance for future generations. One Elder spoke about how increasing resource extraction had acted to not only significantly restrict access to a highly important area which had been used for ceremonies over several generations, but had also resulted in this area being vandalized:

*There are some places that we can't go. With the gates. Our forefathers never had gates. There is a place that's so important for our people. Our people used to go there and do ceremony. And now, any of you ever been there? Spray painted all inside.*

***(Pic River Elder, Male)***

Another theme that emerged on numerous occasions was concern over alternative energy sources, such as the development of wind farms on traditional lands. This was a contentious issue for several Elders, who viewed development of this nature as a cleaner alternative. A Batchewana First Nation Elder spoke about how the introduction of wind farms had visible consequences on how they used the land:

*We used to fish on that shoreline now we don't fish over there because there are no fish in there. There's a big windmill and the vibration from that windmill is driving the fish away. They want to put more windmills up – what are they doing to our land, our water, our fishing? This is where we live.*

***(Batchewana Elder, Male)***

### 5.5.2 Indirect forms of dispossession

The most common form of indirect dispossession discussed in both communities was the legacy of residential schools. The majority of participating Elders had either attended residential schools themselves, or were children whose parents had attended. One of the greatest impacts of this system was the near extinction of the Ojibway language:

*Residential school killed it [the language]. It was drilled them that they cannot speak (Ojibway), that the language was not to be taught to the kids no more. But we were allowed to learn Latin to serve mass! (Pic River Elder, Male)*

Elders discussed the ability to speak the language as vital to living with the land. It was described as an important aspect of Anishinaabe identity as well as key to maintaining a connection with creation:

*It's our connection with the land. Gtichi Manito (Great Spirit) understands you better in your own language. I was told by an old Elder that you're going learn your language faster if you live on the land with an Elder for about a month. (Batchewana Elder, Female)*

Beyond residential schools, expressions of colonialism acted to usurp the relationship between Anishinaabe people and the land:

*We talk about these sacred places (...) and how those places were so beautiful and what they called them and then it was Christianized and made to be an evil place, a bad place and the devil something or the devil this or the devil that. But when you look behind that curtain that the crown placed, you see the beauty of our culture and the spirituality and the ceremony that*

*is in those places. (Batchewana Elder, Male)*

### 5.5.3 The Impacts of Dispossession

Dispossession was shown to have several outcomes in both communities, leading to decreased wellbeing. In discussing the effects of changes in the land, Elders viewed the wellbeing of both community and land as symbiotic:

*The respect that we need to show the land and its relatedness to us. We are the land. If the land is sick then it ain't going to be very long before we're going to get sick. (Batchewana Elder, Male)*

Discussion surrounding impacts of dispossession included several outcomes, such as visible decreases in the physical health of individuals within each community. Increasing rates of obesity and diabetes were linked to decreasing capacity to access traditional foods:

*With all the pollution that's going on now (...) I recognize the difference between a moose about 25 years ago. Like nowadays it tastes different; it doesn't taste like moose meat anymore because you're eating pollution. (Batchewana Elder, Male)*

A Batchewana Elder discussed how increased alcoholism in their community was the result of encroachment by settlers wanting to capitalize upon the availability of natural resources. Providing alcohol was discussed as a means through which settlers were able to undermine claims to the land:

*The Indians have been close to the land for centuries and centuries. When the white people first came here, the Indian had the land, and the white man had the whiskey. Now it's the opposite. The Indians got the whiskey. White man got the land.*

*(Batchewana Elder, Female)*

Dispossession was also discussed as having impacted mental and emotional wellbeing. One Pic River Elder discussed the personal impact of the experience of being prevented from trapping:

*My trap line runs right the through middle of this park here. They come and clear cut, cut it right down. They even took my traps out of there. Oh, I felt bad, man, the way they ripped that land. It was unbelievable. It hurts. (Pic River Elder, Male)*

#### *5.5.4 Resilience in the Face of Environmental Dispossession*

Despite the damaging experiences of environmental dispossession, Elders were keen to discuss strategies for successfully maintaining a connection to the land. Individuals spoke of how the land continues to play a key role in their lives, with numerous Elders stating: “the land is everything”. A Batchewana Elder emphasised the critical meaning that the land continues to occupy within the identity of the Anishinaabe people:

*Anishinaabe covers a lot when you think of that word...we are always from the land. ‘I am from this land’ that’s what Anishinaabe means, that what we call ourselves. We’re not from anyplace else. (Batchewana Elder, Female)*

Elders spoke fondly of how previous generations had lived in balance with the land. Discussions surrounding living in this reciprocal relationship included emphasis upon how learning and teaching happened on the land. The importance of maintaining a balanced relationship with the land was emphasised as continuing to

be vital for the entire community, and one for which the Elders felt directly responsible in ensuring continuity.

*The land means everything. We need to take care of it, each and every one of us whether we own it or not, we need to take care of it. That land means everything to us as Anishinaabe. If we didn't have land, where would we be today? (Batchewana Elder, Male)*

In discussion about the importance of the land to the health of the community, Elders would often talk about solutions to problems presented by dispossession, stressing the importance of getting back to the land as a community. When discussing this, an Elder in Pic River was quick to note that this did not mean a total dependence upon the land for sustenance. Instead, they insisted that connecting with the land was about learning one's culture and achieving a sense of identity:

*Healing is in those bundles and in those pipes, in our teachings and our ceremonies. Not walking around with beads and buckskin, but actually capturing the essence of what's that is about. About kindness, about honesty, about humility, all of those gifts. We need to embrace those things and give life to it so that we have something to leave for the future. We're really resilient as a people and in order to improve our resilience I think we really need to focus on those things coming back to life. (Pic River Elder, Female)*

Elders commented on how their collective experience of dispossession was used as a means of spearheading action for improving community life:

*There's been some benefits from it but it's been very, very costly to us. For example, the leakage of the tailings ponds – we really*

*had to fight politically to get that changed. That's been a benefit but it's been a big cost to us too and we really never got what we should have got out of it. (Pic River Elder, Male)*

Elders discussed individual and collective agency and activism as a vital source of fostering a respectful relationship with the land. One Elder in Batchewana recalled the struggle that an individual community member faced when they were arrested for commercial fishing despite the fact that these rights guaranteed and protected by treaty:

*They came out with some permit system and then that permit system starved our people and we just said that's enough, we're going back out there. One of our people fought them in the court system and we won our right to preserve our fishing commercially. It's one of our largest employers now. (Batchewana Elder, Male)*

The majority of Elders also stressed the importance of involving youth in traditional cultural activities. A Pic River Elder acknowledged that the opportunity to do so had not been lost:

*But the land is still here and we should teach our children and our grandchildren to use it (...) To grow your own stuff, pick your own medicine. Use your tobacco. All your sacred stuff is here. It's the only way to get this back. (Pic River Elder, Female)*

Recently, both communities have made efforts to involve youth in cultural activities on the land. Elders were adamant that these activities were crucial for the future of community health:

*I liked when I saw it this year was when they made that camp*

*for the youth. That was the greatest thing because they're showing them ways to treat our land and these kids, they're learning lots. (Pic River Elder, Female)*

Elders in Batchewana also expressed their joy at seeing these events, particularly for the youth:

*And look at the youth camp that they have (...). That's something that wasn't done before so I'm hoping that would help the young people, especially the young people between 13 and 19, those ones that we need to – we need to try to role model. (Batchewana Elder, Female)*

The idea of eating more traditional foods was discussed as a means of connecting with the land. A Batchewana Elder discussed how individual and community gardens were no longer prominent:

*I wish that they would pay more attention to the land. Make use of the land in a good way. Plant gardens. Learn how. We need to know how to use the land. We need to do something else besides the building. A different way of using the land would be planting our foods. (Batchewana Elder, Female)*

Elders in Pic River, who saw gardening as providing a further opportunity for the community to come together, echoed the desire for an increased number of community gardens and consumption of traditional food:

*Let's start eating that good source of food. I noticed this year that there's quite a few vegetable gardens that are coming up. I haven't put one up yet but next summer I plan to do it. (Pic River Elder, Female)*

Ceremony was also discussed as a means of maintaining a healthy identity. While not all Elders considered themselves to be traditional people, those who were often spoke of how ceremony provided a strong source of healing. An Elder in Pic River discussed their first experience with the Sweat Lodge, recalling how it helped them to personally feel an increased connection to creation and spiritual balance:

*I started going to sweat lodges and it started doing something good for me. I remember going to that sweat lodge for the first time. I was afraid, reluctant to go in there. But I remember when I was in there doing my prayer it was like it was like me myself with the Creator talking. (Pic River Elder, Female)*

Elders also recounted how ceremony was not always openly practiced in their communities. Individuals spoke about how, historically, several ceremonies were made illegal and individuals could be persecuted for practicing them. Inspiration for practicing ceremony was drawn from how previous generations strove to maintain these customs despite the threat of persecution:

*They'd all take their bundles; their sacred items and they'd go up the river. Way up the river in the secret that's where they'd do their ceremonies. They would never, ever do it in the community because it was against the law. You went to jail if you were caught doing those things. (Pic River Elder, Female)*

Elders in both communities were also very proud when discussing how ceremony was now becoming an increasingly prevalent practice. An Elder in Pic River discussed the challenges they faced when attempting to re-introduce the Pow Wow into the community. However, they also discussed with great pride the current importance of the Pow Wow:



*It was difficult when 28 years ago we decided to start the Pow Wow. Contrary to the priest in the community (saying) be careful, be careful. It's unreal how this spot was blessed a couple of days ago for our 28th or 29th annual Pow Wow. A lot of good things have happened here. (Pic River Elder, Male)*

Interviews with Elders in both communities often concluded with a discussion about Elders' vision for the future of their community. The majority of Elders echoed previous statements about how important it was for them to see the community return to the land:

*I really believe that the land is we gotta get back to as First Nation people, as Anishinaabe people... It's what we need to do. To find our peace with the land and learn how to live with the land. (Pic River Elder, Male)*

Taken together these results illustrate that both direct and indirect forms of environmental dispossession have had strong and lasting impacts on Anishinaabe communities along Lake Superior, the most notable relating to reduced consumption of traditional foods and severely limited opportunities for the intergenerational sharing of Indigenous knowledge. Despite the historic and ongoing dispossession endured in these two communities however, Elders declared that they maintain strong connections to the land, and they are hopeful that the knowledge they have retained can be used in ways that will also enable future generations of Anishinaabe to continue being resilient.

## **5.6 Discussion: “This is where we come from. This is who we are.”**

This paper provides qualitative evidence of the impacts of historic and on-going processes of environmental dispossession on the lives of Anishinaabe Elders from two First Nation communities along Lake Superior, Canada. With explicit focus on the meaning of land for health – as articulated by the Elders themselves - this paper sought to demonstrate how processes of environmental dispossession have led to emotional and spiritual harm, including compromised ability to transfer Indigenous knowledge to younger generations, and eroded cultural pride. A constant – and hopeful - finding in this data analysis relates to the multiple ways in which Elders discussed their continued activity on the land, including their resilience to these on-going processes of dispossession. In subsequent meetings, where we discussed the preliminary findings of the interviews, individuals stressed the importance of their ongoing resilience to government and industry efforts to dispossess them of their lands. A key, resounding message was that contemporary Anishinaabe health is rooted strongly within a cultural identity that is tied to the ability to practice a respectful relationship with the land (Gross, 2002; Simpson & Driben, 2000). Many of the Elders were enthusiastic and proud of the ways their communities have practiced their land-based cultural identity and continued to protect their community’s health through activities including community activism, ceremony, traditional food collection, language revitalization, and through connecting community youth with their lands and traditional teachings. In effect, what the Elders described was their community resilience to processes of environmental dispossession.

The existing base of literature conceptualizes community resilience as the ability of a community to draw upon a number of resources in order to recover and continue functioning positively despite experiencing a disturbance (Cutter, Burton, & Emrich, 2010; Hawkins & Maurer, 2010; Norris et al., 2008; Sherrieb, Norris, & Galea, 2010; Wyche et al., 2011). The ability of Indigenous communities to respond positively is based upon their ability to access resources enabling them to undertake processes of adaptation, for example through maintaining strong ties to traditional lands. Elders discussed various ways in which they draw upon their land-based cultural resources as a means of adapting to the negative consequences of dispossession, including efforts to revitalize their traditional language, cultural practices, and traditional resource management. These practices, all rooted fundamentally in the land, provide compelling evidence of their on-going resiliency.

Critiques of resiliency theory point to the tendency for studies to remain focussed at the individual-level, to oversimplify the concept of resilience, or to employ frameworks devoid of theoretical foundation (Holton, Brass, & Kirmayer, 2009; Howard, Dryden, & Johnson, 1999; Payne, 2011). Building from the community level conceptual works such as that put forward by Norris et al (2007), it's only recently that studies have begun to apply and measure the concept of resilience with Indigenous communities. These include a conceptualization of resilience at the community level, with focus placed on understanding the processes of resilience rather than measuring outcomes. For instance, Kirmayer et al. (2011); Kirmayer et al. (2009) conceptualize the underlying collective and cultural dimensions that may lead to sustaining or improvement of Aboriginal people's

health. They argue that the promise and power of Aboriginal resilience lies within a community conceptualization that incorporates collective history, as well as the strengths underlying retention of Aboriginal languages, tradition and connection to land, as well as activism. The significance of understanding resilience from this way was echoed throughout our research findings, specifically as Elders articulated the important links between Anishinaabe language, identity, customs and the land. Interviewees were keen to discuss their continued attachment to land-based practices, even to the extent that doing so sometimes meant they were breaking the law, for example, during the middle part of the twentieth century when many ceremonial activities were made illegal, several community members continued to practice them.

Throughout the course of this research, the uneven political relationship between the Canadian government and Aboriginal peoples has received significant attention, as demonstrated by the Idle No More Movement (Cooper, 2012; Kinew, 2012; McNutt, 2013). Idle No More is a movement focussed centrally on the protection of lands and waters across Canada, the main argument being that Canada is obliged to honour the treaties rights of First Nation peoples in economic and industrial development on Aboriginal lands (Idle No More, 2013). The Idle No More movement has attracted significant international attention, with support from Indigenous and allied populations worldwide who recognize that processes of environmental dispossession are not only historical, but rather that they continue to affect the lives of Indigenous peoples, not only in Canada, but around the world. For example, upon completion of a nine-day visit to Canada in October 2013, James

Anaya, United Nations Special Rapporteur on the Rights of Indigenous Peoples, claimed “Canada faces a crisis when it comes to the situation of Indigenous peoples of the country” (Anaya, 2014). He cited the growing gap in health between Aboriginal people and the general Canadian population, and unresolved land claims as two of the most pressing issues deserving of resolve. Undoubtedly, access to and protection of land lay at the core of these issues. Anishinaabe resilience to environmental dispossession, as articulated in this study, is part of a much larger national and international movement and frustration related to precipitous, on-going industrial development in the traditional territories of Indigenous peoples, and with unprecedented government support.

Clearly, the theoretical and methodological foundations of resiliency research, particularly the inclusion of Indigenous communities themselves in the research, bears considerable importance for the subsequent findings. Inclusion facilitates perception in context and the development of a common understanding (Veland, Howitt, Dominey-Howes, Thomalla, & Houston, 2013). Nowhere is this more important for Indigenous peoples than at the policy level. Herein, it is critical that researchers highlight that the act of being resilient must be understood within its relative context. That is, many Indigenous communities and other socioeconomically marginalized communities continue to live in chronically inequitable conditions. That even under these circumstances some communities are able to practice resilience should not be interpreted as an excuse for inaction by their nation states. To be clear, the ability of individuals or communities to succeed in the face of widespread adversity, as demonstrated within this paper, does not suffice as

evidence that policy and action on these struggles for Indigenous land rights and health are not urgently needed. In the Canadian example, for instance, the federal government has a fiduciary responsibility for the First Nations of Canada; adherent to this legal relationship, includes an obligation to honour, uphold and respect the treaties it has made with First Nations communities (RCAP, 1995; Warry, 2007).

Our work is situated within an emerging body of research exploring and defining the ways Indigenous peoples have practiced resilience in historic and modern times. We believe that efforts to embrace community-based approaches, those that empower community voice within research design and implementation is vitally important for identifying, enriching the ways in which health and Indigenous resilience are understood. We are hopeful for the continuing emergence of studies of Indigenous health that embrace this approach.

Lastly, while we acknowledge the important utility of Norris et al.'s (2007) framing of resilience – and their definition of adaptive capacity following disturbance - our results indicate that Anishinaabe Elder resilience is not practiced in such a linear fashion (e.g. following a disturbance). Despite recent academic scholarship on the concept of Indigenous resilience, our results build on an important message: Indigenous resilience itself is not a new or emerging concept. Rather, resilience to dispossession has been on-going since first contact between Indigenous peoples and colonizing nations (Simpson, 2011). We may be labelling the desire to maintain respectful relationships with the land, which has been central to Anishinaabe identity since creation, as resilience. In this sense, the act of being Anishinaabe is itself an act of resilience. As a means of building upon these results,

the following chapter draws upon the collaborative nature of this research to further explore Elders' strategies for environmental repossession.

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## **Chapter 6: Manuscript 3**

### **TALKING IN CIRCLE: ANISHINAABE ELDERS' STRATEGIES FOR ENVIRONMENTAL REPOSSESSION ON THE NORTH SHORE OF LAKE SUPERIOR**

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## 6.1 Abstract

Environmental repossession refers to the social, cultural, and political processes through which Indigenous peoples and communities are reclaiming their traditional lands and ways of life (Big-Canoe & Richmond, 2014). These processes are important because the health, ways of living, and knowledge systems of Indigenous peoples are all dependent on access to traditional lands. This paper presents the results of a community-based participatory research study that used talking circles as a methodology to explore Anishinaabe Elders' ideas about potential strategies for environmental repossession in their communities. Participants identified four main strategies: 1) re-establishing the relationship between Elders and youth; 2) increasing time spent on traditional lands; 3) improving physical health; and, 4) fostering community pride. This research emphasizes the strengths of adopting culturally appropriate approaches, such as talking circles, to identify community-led strategies for improving health and reconnecting with land in the Indigenous context.

## 6.2 Introduction

For Aboriginal peoples in Canada, the ability to access the resources of their traditional lands has been vital in sustaining community health. At a rudimentary level, being on the land has provided opportunities to gather materials that can be beneficial for both sustenance and economic gain (King et al., 2009; Parlee et al., 2005; Parlee et al., 2007). However, the importance of traditional lands for the health of Aboriginal peoples extends well beyond its material benefits, to include a deep spiritual relatedness with the land based upon the recognition of the interconnectedness between all living things (Richmond, 2015). Recognition of the importance of, and equality between, all things on these lands shapes the basis of the Indigenous Knowledge system. This refers broadly to the ways that Indigenous communities have come to know how to live as part of their local ecosystems (Battiste & Henderson, 2000; Berkes, 2008; Cajete, 1999; Ermine, 2005; Greenwood & de Leeuw, 2007). Indigenous Knowledge systems also shape how communities come to understand their culture, values, beliefs, identities and social relationships (Parlee et al., 2005).

In Indigenous communities around the world, Elders play a critical role within the Indigenous Knowledge system (Holmes et al., 2002; Parlee et al., 2007; Simpson, DaSilva, Riffell, & Sellers, 2009). Elders are individuals who are recognised as keepers of Indigenous Knowledge and have demonstrated wisdom and leadership in their ability to practice and share this knowledge. Being recognized as an Elder carries many responsibilities, including the provision of advice and inspiration to others in the community. Elders are also seen as mentors providing



pathways for healing to others in the community (Kirmayer, Brass, et al., 2000; Simpson & Driben, 2000), the roots of which lay in the ability to practice Indigenous Knowledge on the land.

In recent times, however, the role of Elders in Indigenous communities has been diminished (King et al., 2009). Traumatic experiences such as The Residential School system and The 60's Scoop have negatively impacted the current generation of Elders, by disallowing that important connection to the land through which Indigenous Knowledge is fostered, practiced and shared with the next generation. Furthermore, increasing patterns of urbanization have also contributed to a disconnect from Elders and a diminished view of the important contributions they can offer their communities. In spite of these challenges, Aboriginal Elders remain pivotally important to the preservation and transmission of Indigenous Knowledge.

This paper is the result of a collaborative study conducted with two First Nation communities on the North Shore of Lake Superior: The Ojibways of the Pic River First Nation and the Batchewana First Nation of Ojibways (Figure 3.2). This research is embedded within a larger study which aimed to preserve Elder knowledge about health and the environment as well as to provide knowledge multiple sites of knowledge exchange between Elders, youth, investigators, and graduate students. The objective of this paper was to work collaboratively with Elders to develop strategies for environmental repossession.

### **6.3 Improving Indigenous health through Environmental Repossession.**

Significant disparities exist between health of Aboriginal peoples and that of the general Canadian population (Frohlich et al., 2006; Gracey & King, 2009;

Waldram, 2006; Wilson & Rosenberg, 2002a). These disparities are rooted within social, economic, cultural and political discrimination, including forced displacement and reduced access to traditional lands (Adelson, 2005; Bartlett, 2003; Chandler & Lalonde, 1998; Kingsley et al., 2009). In its final report The Royal Commission on Aboriginal Peoples (RCAP) emphasised the links between health and land when they stated that:

“current levels of poverty and underdevelopment are directly linked to the ***dispossession of Indigenous Peoples from their lands*** and the delegitimization of their institutions of society and governance” (RCAP, 1995).

The term environmental dispossession refers to the processes through which Aboriginal peoples' access to the resources of their traditional environments is reduced (Richmond & Ross, 2009). These processes are conceptualized as occurring in two ways. Direct forms of environmental dispossession act to physically remove the access of Indigenous peoples to their traditional lands. These include environmental contamination as well as the appropriation of traditional territory without consent. For instance, the appropriation of Ayers Rock (Uluru) in Central Australia, which removed Indigenous rights of access to important social and spiritual grounds in order to increase revenue generated from tourism, represents a strong example of direct environmental dispossession. Indirect forms of dispossession seek to sever the cultural ties between Indigenous peoples and their traditional territories. For instance, the Residential School system was intended to erode the importance that Indigenous peoples place on their traditional territories

and have had lasting impacts on the health of Aboriginal peoples (Elias et al., 2012; Mosby, 2013).

Recently, Big-Canoe and Richmond (2014) introduced “environmental repossession” as a new concept for conceptualizing the ways by which Indigenous people may begin to re-establish their relationship to their traditional lands for the protection of Indigenous peoples’ health, culture, and ways of life. Environmental repossession refers to the social, cultural and political processes by which Indigenous peoples and communities are reclaiming their traditional lands and ways of life (Big-Canoe & Richmond, 2014). The underlying assumption of this concept is that the uptake and practice of these processes may yield improvements in the health and wellbeing of Indigenous communities, as they foster improved social relationships and practice of Indigenous Knowledge. In fact, there is evidence from the international literature of the health benefits associated with improved capacity to engage with traditional knowledge and lands (King et al., 2009; Kingsley et al., 2009; Richmond et al., 2005). Processes that allow the relationship between communities and their traditional lands to be strengthened, such as the inclusion of traditional activities on the land, have been shown to promote the adoption of healthy lifestyles (Isaak & Marchessault, 2008). For instance, Kirmayer, Brass, et al. (2000) found that spending more time on the land in the company of other members of the community was associated with less psychological distress amongst The Cree of James Bay. In another study, Kingsley et al. (2009) found that more time on the land resulted in several health benefits including building self-esteem,

promoting a deeper sense of self-identity and value, enabling relaxation, and promoting cultural awareness.

#### **6.4 A culturally tailored method to practice Integrated Knowledge Translation**

This paper is part of a larger community-based study that drew from in-depth interviews to document Anishinaabe Elder's (n=46) experiences of, and resilience to, environmental dispossession, and further to explore Elders' ideas for enacting processes of environmental repossession in their communities (Tobias & Richmond, 2014; Tobias et al., 2013). In the larger project, one of the primary goals was to encourage as many sites of knowledge translation as possible, thereby recognizing that the study participants, partners, collaborators and academic team members all had different forms of knowledge to contribute and learn from.

The Canadian Institutes of Health Research defines knowledge translation as "a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system" (CIHR, 2014). CIHR goes on to state that knowledge translation occurs within a system of complex interactions between researchers and knowledge users that link academic health science research and improved health outcomes and programming. Knowledge translation is often categorised in two different ways: end of grant knowledge translation and integrated knowledge translation. Integrated knowledge translation entails the engagement with potential knowledge users throughout the entire research process (Graham et al., 2006). In a similar spirit as

CBPR, integrated knowledge translation strives to prioritize the inclusivity and equality of all parties throughout the research.

Integrated knowledge translation has been advocated as an important methodological approach within Indigenous health research because of its ability to act as an interface between two distinct ways of knowing that often seem in opposition (Estey et al., 2008; Sherwood & Edwards, 2006; Smylie, Kaplan-Myrth, et al., 2009; Smylie et al., 2004). Within Western knowledge systems, individual data is organized into abstract theory and requires a specialist (i.e. advanced degree) to be fully understood (Brant Castellano, 2004; Little Bear, 2000). The emphasis here is on proving and disproving theory in attempts to enrich and advance the current knowledge on a particular topic. Indigenous knowledge systems are typically described as holistic and non-linear. Knowledge is acquired through experience, is transmitted orally, and is seldom sought without an applied purpose (Battiste & Henderson, 2000; Kovach, 2009; Wilson, 2008). By emphasising the use of culturally appropriate research methods, integrated knowledge translation provides the opportunity for Western and Indigenous ways of knowing to come together in order to create new knowledge satisfies both approaches. Furthermore, integrated knowledge translation is a transformative method that nurtures the emergence of research environments wherein all collaborators can benefit from the experience of applying research in ways which they may have had little experience.

In the application of our Integrated KT methodology, we utilized focus groups and sharing circles with community Elders to explore their strategies for environmental repossession. Framed within the context of “Elders’ Celebrations,”

we held two-day events in both communities, the goal being to relay the results of the Elders' interviews and to provide space for them to comment on the results, and brainstorm strategies of environmental repossession for their communities. These celebrations were held approximately one year after initial in-depth interviews were conducted with Elders. All Elders who participated in the initial in-depth interviews were asked to attend the Elders' Celebrations. Invitations were also extended to other Elders who had not participated in the initial interviews and spouses of those who were interviewed. Formal invitations were delivered to the Elders, along with the transcripts of their initial interviews. Following this, members of the research team telephoned each individual to personally invite them to the event.

The first day of the Elders Celebrations included an opening ceremony and introductions. This began with an opening prayer said by one of the Elders and was followed by a smudging ceremony.<sup>10</sup> Upon completion of the smudging ceremony, a talking circle was conducted in order to introduce each of the individuals in attendance. Within the introductions, members of the research team discussed their roles within the project as well as their incentive for conducting the research. Several Elders took the opportunity to do their introduction in both English, as well as in a customary Anishinaabemowin method.

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<sup>10</sup> A Smudging ceremony is typically conducted at the beginning of gatherings in order to purify those in attendance. This typically involves the burning of sage with the smoke fanned over individuals by an Elder or someone assisting them.

Although Indigenous communities have used them for many generations, it is only recently that talking circles have been increasingly incorporated within collaborative research (Hartmann, Wendt, Saftner, Marcus, & Momper, 2014). The talking circle has traditionally been used to solve problems or discuss important issues within communities (Wilbur, Wilbur, Garrett, & Yuhas, 2001; Wilson, 2008). Generally these involve those in attendance sitting in a circle and a token (i.e. feather, stone, talking stick) is passed clockwise around the circle. This token signifies who is able to speak, with others required to respectfully listen until they possess the token. Individuals begin by introducing themselves and are encouraged to speak to the circle, avoiding focussing on any particular individual and confrontational dialogue. In similar fashion to focus groups, talking circles are a culturally appropriate means of determining where consensus and convergence surrounding a particular topic exists within a group. Momper, Delva, and Reed (2011) discuss how talking circles are an appropriate method within the context of collaborative research with Indigenous communities as they act to remove the researcher from their traditional position of power and instead refers to them as equal contributors within the process.

Within talking circles, each individual has the opportunity to discuss what he or she may feel about a certain topic without interruption. This method includes a significant degree of openness and respect being shown to each of the individual opinions presented thereby encouraging reflection and discussion (Kovach, 2009). Once every person has taken the time they need to express their individual opinion, at least one more round is conducted. On subsequent rounds, individuals can further

express what they may have missed on the first round or can choose to react to what others have said. However, it is important to note that protocol exists when reacting to statements made by another person. For instance, it is rare another individual would single someone out or have an opinion they expressed directly disputed by another participant. Instead, what often occurs is that individuals will express counter opinions without directly addressing the person with whom they disagree. Talking circles fit well within our application of the integrated knowledge translation method as it encouraged various types of knowledge to be shared, discussed and recognized.

After the introductory talking circle, members of the research team led presentations detailing the overall findings of the in-depth interviews. While the themes presented were derived from data collected in both communities, each presentation was tailored to the respective community. This included an overview of expressed health and environmental concerns in each community, as well as a summary of the stated visions for the future of their community that each Elder was asked to provide at the end of their interviews. This was followed by a screening of the film “Gifts from the Elders” which was based on the knowledge collected in the Elder’s interviews. Once these presentations were completed, a catered lunch was served and the first day of the Elders’ Celebration was concluded.

While the goals of the first day of the Elders Celebrations was to share knowledge and discuss the importance of the findings, the key objective of the second day was to draw from focus groups and talking circles to build on the findings shared in Day 1 to develop action strategies. Focus groups consisted of four



to six individuals with a member of the research team acting to transcribe for each of the groups using chart paper (See Figure 6.1). Discussion was guided broadly by two questions. Participants were asked to provide feedback on the presentations and film screening, including any areas they would like explored further. Subsequently, they were also asked to discuss strategies for implementing environmental repossession based upon the results that had been presented. Each group was given the time that they required to address the specific objective. Focus groups concluded only when all groups believed that they had fully addressed the objective in question. Subsequently, an individual from each of the groups was selected to present their findings to all those gathered before re-grouping in order to address the second objective. Once all groups had finished their discussion of the second objective, individual group members once again presented their findings.

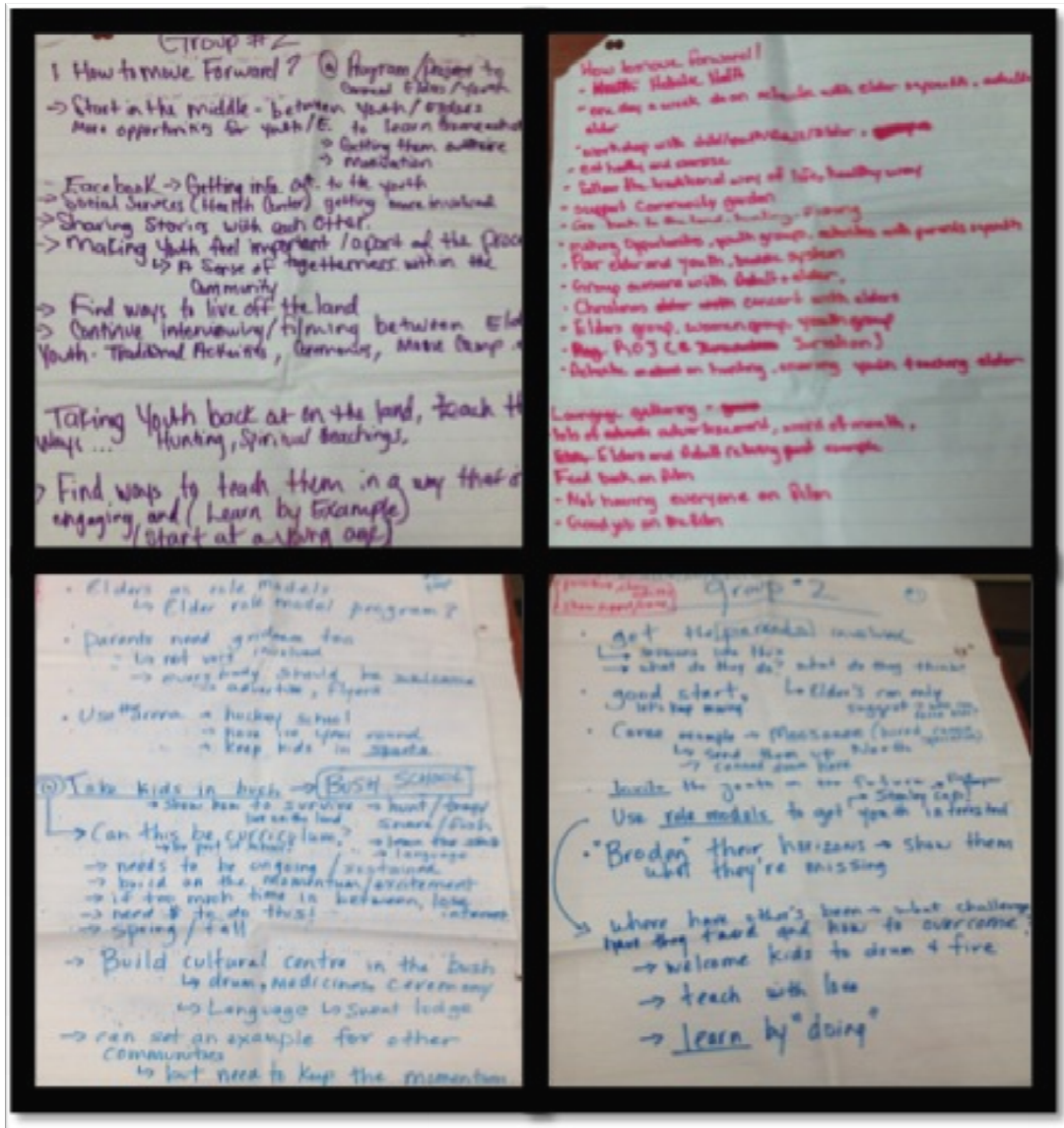


Figure 6.1: Elders' Celebrations Focus Group Results.

Once talking circles and focus groups were completed on the second day, all those in attendance were invited to feast the conclusion of the celebration. Local caterers prepared the food for the feast and an Elder was asked to perform a prayer prior to beginning the meal. The feast was successful in bringing closure to the celebrations with several laughs being shared amongst all in attendance. In Batchewana, the closing feast also included musical performances by Elders.

The notes collected within each focus group form the data presented in the following section. Notes were transcribed and analysed using QSR International NVivo 9 qualitative data analysis software. Data was analysed thematically by creating nodes and sub-nodes for each suggested repossession strategy and then adding all data from across each focus group to the particular node. Coding queries were then conducted and explored to provide evidence for the importance of each node. This resulted in the identification of the key theme discussed in further detail within the following section..

### 6.5 Strategies for Repossession

The two-day Elders’ Celebrations resulted in the emergence of four themes that Elders in both communities described as key in their goals of environmental repossession: 1) strengthening relationships between youth and Elders; 2) increasing time spent out on the land; 3) promoting physical health; and, 4) fostering community pride (See Table 6.1.). The following sections elaborate upon each of these four themes.

<b>Theme</b>	<b>Challenge</b>	<b>Strategy</b>	<b>Outcome</b>
<b>1. Youth-Elder relationship</b>	Youth spending less time learning from Elders	Elder-youth mentorship program, Christmas concert, use of social media	Re-establishing the role of Elders
<b>2. Increasing time spent on the land</b>	Need to strengthen relationship with traditional lands	Youth camps, ceremonies on the land, blueberry picking, seasonal workshops	Increasing opportunities for land-based youth-elder social relationships
<b>3. Improving physical health</b>	Burden of diabetes and obesity acting as a barrier to wellbeing	Healthy eating workshops, community exercise programs, community gardens, Medicine Wheel workshops	Develop culturally appropriate and community-driven strategies to improve health and healing
<b>4. Fostering community pride</b>	Loss of Anishinaabe identity	Recognizing community role models, increased opportunities to practice Ojibway language	Reinforce positive identity as Anishinaabe people

**Table 6.1: Key Strategies for Repossession**

### *6.5.1 Strengthening social relationships between Youth and Elders*

A key theme within the initial in-depth interviews was that the relationship between youth and Elders in both communities was at risk. Elders indicated worry that youth are spending significantly less time learning from their Elders because of external demands placed upon them, such as the need to find employment and education outside of the community, as well as the large influence of technology (i.e. television, Internet, social media) in their everyday lives. During the Elders Celebrations, participants were keen to suggest strategies that they believed would strengthen their ability to connect with youth in their community.

Firstly, there was an overall consensus regarding the need to reinforce the traditional role of an Elder. To do so, the Elders stated that it was necessary to begin by creating the physical, social and cultural spaces for these youth-Elder connections to occur. Elders described several locations that could be used by Elders and youth as including: their homes, in the community centres, and out on the land. Having Elders take youth out on the land at various times throughout the year would include different Elders providing activity-based learning to groups of youth, such as sharing traditional teachings around harvesting food and medicines.

Secondly, Elders were emphatic that the fostering of these social connections should be developed around the idea that both youth and Elders have important information to share with one another. For example, Elders acknowledged that there was a great deal of knowledge that they could learn from the youth, such as using computers and social media. Elders also stressed the importance of using an

intergenerational approach to this learning, for example by including parents in developing and implementing Elder and youth activities.

Elders in both communities recognized the important potential of social media for being inclusive in their efforts. They discussed using Facebook as a means of spreading the word about activities. The fact that most individuals in both communities, Elders and youth alike, had access to this social network was seen as an opportunity for creating awareness of upcoming activities and sharing potential ideas for future plans. However, Elders cautioned against using social media to share knowledge. They strongly believed that being out on the land would always be the best place to share traditional knowledge with youth.

Finally, developing an Elder and youth buddy system was believed to be a positive way forward for increasing the role of Elders as youth mentors. This would involve pairing each participating youth with an Elder. Youth would visit their Elder once a week where they would share stories and do cultural activities together, such as beading. Elders suggested this would be the best opportunity for them to learn from youth, including having youth show them how to use computers and other technology. In exchange, Elders could teach youth about traditional activities such as making moccasins and snowshoes. It was also believed that pairing Elders and youth could lead to an increase in participation from across the community. This included a monthly Elder and youth social where attendees could practice drumming and singing, as well as sharing skills such as medicine making. The production of an Elder and youth Christmas concert was especially well received. Elders wanted this to occur with a mix of songs and sketches in both English and

Ojibway. An Elder and youth bake sale was another activity that was suggested, with proceeds from the bake sale going towards funding community projects such as the community garden. Perhaps most importantly, Elders again stressed the importance of using a cooperative approach to creating these spaces; they suggested that the type of activity used to reinforce social relationships mattered less than the ways youth were empowered making the youth feel important by including them in the decision making process.

### *6.5.2 Increasing Time Spent on the Land*

The importance of 'getting back to the land' was discussed at length in the Elders' interviews. In discussing their visions for the future of their respective communities, Elders from both Pic River and Batchewana expressed a strong desire to continue to nurture connection to their traditional territories, the main goal being to foster the practice, uptake and preservation of their traditional Anishinaabe teachings and knowledge.

Elders identified time spent on the land as critically important for the preservation of Indigenous Knowledge at the community level. Bridging with the previous theme, Elders agreed that many of the land-based initiatives could and should be aimed at increasing the connection between Elders and youth. Youth-camps were identified as an excellent opportunity for youth to gain an appreciation for the cultural ties with their traditional territories. During the time when the initial in-depth interviews were being conducted, a 10-day youth camp was being led involving high-school students from Pic River. Time at the camp consisted of traditional teachings, bush skills, and team building exercises. Youth slept at Dead

Horse camp and did not have access to electronic devices. Elders were adamant that these youth camps should continue and that they would like to be more involved in the future. Elders were keen to connect further with youth at the camps. It was proposed that workshops could draw upon the Indigenous Knowledge and skill possessed by the Elders such as: trapping, hunting, medicine use, safety in the bush, and cleaning meat.

Conducting traditional ceremonies on the land also emerged as an important strategy for environmental repossession. While many of the Elders stated that they often conducted ceremony at their own homes, they identified the importance of doing ceremony openly out on the land. The importance of this was emphasised by several Elders, who reflected on how previous generations had often been forced to keep ceremony hidden. Two particular ceremonies were mentioned as being especially important in connecting with the land: the full moon ceremony and the sweat lodge.<sup>11</sup>

In discussing the importance of spending more time on the land, annual blueberry picking was put forward by Elders in Pic River as an activity that could be participated in by everyone. This activity, although still practiced by several members of the community, was seen as having changed significantly over time. Elders stated that they would like to see blueberry picking practiced as more of a

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<sup>11</sup> The full moon ceremony is an occasion for women of the community to gather together on the land and share in a healing process. Sweat lodges are used for cleansing wherein heated stones from a sacred fire are placed inside the lodge and prayers are offered to each of the four directions.

collaborative community event as opposed to an individual or small family event. This included distributing blueberries amongst families that were not able to collect, as well as sharing foods produced with the blueberries that were picked.

Bushwalks were discussed as an opportunity to both spend time on the land as well as to teach about the various ways that the Anishinaabe people are connected to it. Elders believed they would be able to share knowledge about local plants and animals. This included teaching the Ojibway names for of each of the local species, as well as teachings about how each could be used in medicines or for survival. It was also put forward that offering Tobacco before a bushwalk, as well as before any other activities, was an important custom to follow as a way of showing respect to the land. Tobacco is one of the four sacred plants of the Anishinaabe people and is traditionally used to show respect and give thanks for the blessing bestowed by the Creator (Benton-Banai, 1988).

All of the above initiatives stress the important role that the land plays among First Nation communities. Increasing a sense of respect and responsibility for the land amongst residents, and especially upcoming and future generations, was argued as being crucial for each community in their challenges of maintaining jurisdiction over their territories. Natural resource extraction along the North Shore of Lake Superior is increasing at unprecedented levels. This is often occurring without proper consultation and resulting in environmental contamination. Elders in both Pic River and Batchewana had previously encountered struggles to protect their natural resources and hoped that these would not recur in the future. Consequently, spending more time on the land would increase community



knowledge of its jurisdiction and allow for prioritising of full community participation in future resource development planning.

### *6.5.3 Promoting Physical Health*

The third theme that Elders stressed was the promotion of physical health in their communities. During the initial interviews, Elders expressed great worry about the increase in health problems in their communities, including addiction, cancer, obesity and diabetes. There were concerns that these issues would continue to affect future generations. The need for increased promotion of healthy eating habits and exercise was recognized as one key strategy for improving physical health. Several Elders concluded that they would have to become examples of these behaviours themselves. However, they also indicated that for such behavioural change to unfold, the creation of programming and activities was necessary. For example, ongoing initiatives such as group fitness and yoga were spoken of in high regard, and participants argued that these should occur with even greater frequency. Other suggested ideas for health promotion included group cooking and nutrition classes as well as an online forum for sharing healthy recipes.

Building upon existing community garden projects was also discussed as a way of improving physical health. While gardens existed in each of the communities, Elders were eager to see these projects expanded upon, and resources put in place to ensure their continuation year to year. Gardens were described as an essential opportunity for sharing Indigenous Knowledge. One focus group suggested that youth tending to the garden should be encouraged to fill a basket of produce and

deliver it to the homes of Elders. They believed that this would instil in the youth a greater sense of ownership and pride over the garden project.

Related to nutrition and healthy eating, Elders also saw an opportunity for improving physical health by increasing interest in hunting, fishing, and trapping. They believed that all community members should be concerned with monitoring the quality of game and fish. Fond memories were shared of a time when the entire community participated in moose hunting, with meat being distributed community wide. There was a strong desire to see this practice re-introduced into the communities.

The need for a holistic approach to improving physical health in the communities was also discussed. The importance of Western medicine was recognized, as well as the need for regular visits with medical practitioners. The Elders attending the celebration believed that further integration of modern and traditional approaches would yield greater improvements in health. Suggestions made included hikes that incorporated traditional teachings and the development of a Medicine Wheel workshop. The teachings of the Medicine Wheel include a cultural framework for balancing physical, emotional, spiritual, and mental health (Isaak & Marchessault, 2008). Elders wanted their Medicine Wheel workshop to be guided by an Ojibway Elder from outside their communities and wanted the workshop to be open to all ages.

#### *6.5.4 Fostering Community Pride*

The final theme that was discussed at the Elders Celebrations was the importance of fostering community pride. Elders were proud of their communities

as well as their Anishinaabe culture. They stressed that it was important for all members of the community to have an increased sense of pride in who they are collectively as Anishinaabe people. They believed that a being proud to be Anishinaabe was a means of preserving culture and traditional ways, including the protection of traditional territories. Several ideas were shared relating to ways that community pride could be nurtured.

Increasing the use of the Ojibway language was the most heavily discussed topic within this theme. Elders emphasized the importance of teaching the language to the youth at a very young age. However, they also stated that it was important for parents to be involved in the process and recognized that it would be difficult for older individuals to begin learning the language. As such, many Elders put forward ideas geared towards active learning as a means of increasing the use of the language amongst all community members.

Elders believed that active learning of the language should include opportunities for talking to the youth in the language, such as during visits with grandchildren or designated times at the local day-care. Holding community language nights was also suggested. This would involve speaking the language at events such as bingo or community meetings. Another suggestion was introducing a number of labels around the community and at camps on the land. Labelling buildings and trees as well as placing posters illustrating body parts or actions around the community was also suggested as a good way to start. Teaching through stories, dancing, and song was another means of communicating in the language that Elders believed would be successful. Several Elders also expressed an interest

in developing ways to integrate youth participation at community language events or in the youth and Elder pairing initiative within elementary and high school curriculum.

A powerful theme discussed in both communities was the need to recognize and promote role models. This was discussed as being especially important as a means of getting youth interested in culture and being on the land. However, Elders discussed the need to identify these individuals, as many could only name a handful that they believed would be suitable. It was decided that these individuals should demonstrate a positive and clean lifestyle as well as maintaining a strong Anishinaabe identity. Elders were not opposed to including people from outside of their communities, but were especially keen on identifying those from within their own communities. Elders also discussed the importance of recognizing the Elders themselves as potential examples. Many were eager to put forward their stories of overcoming difficulties such as substance abuse in order to provide positive examples to future generations. The Elders suggested that an Elder recognition program was also very important. Several individuals in the community, many of whom were perceived by younger generations as Elders, did not see themselves as having yet attained this status.

## **6.6 Keeping the Momentum**

Overall, Elders believed that the initiatives discussed throughout the two days were a good start to generating action around the previously collected interview data. They expressed confidence in their ability to take the first steps towards enacting these initiatives and were eager to do so. However, Elders also

recognized that it would be crucial for the momentum generated throughout the celebrations to be maintained. Elders did not want to force their will on the communities. Instead, they believed it was important to frame their initiatives as suggestions. They believed that individuals, especially youth, would be more inclined to participate if they could create attractive and exciting programs. Furthermore, they argued that sustaining these programs over time was important in order to gain increased participation.

Finally, at the conclusion of the celebrations Elders expressed hope that the work they had done, and were going to do, would inspire their communities at large. They were also hopeful that this research and its outcomes would inspire other communities to design and enact strategies of environmental repossession.

### **6.7 Knowledge translation towards Environmental Repossession**

Drawing from focus groups and sharing circles, this paper shares the results of a two-day Elders' Celebration wherein the identification of strategies for environmental repossession was the main objective. Despite grave challenges for the maintenance of their Indigenous Knowledge as a result of a long legacy of colonization and various processes of environmental dispossession, the results of this paper illustrate how Elders in both communities maintain a clear vision for upholding strong connections with their traditional lands and they identify several strategies for realising this vision.

Within the two-day Elders' Celebrations, participants were eager to share what they believed were best strategies for practicing environmental repossession, including reconnecting Elders and youth, fostering community pride, improving

physical health, and spending increased time on the land. While the desire to spend increased time on the land may initially seem like the most direct strategy put forward by the Elders, all areas that were suggested contribute to processes of reclaiming traditional lands and ways of life. The ability to reclaim traditional lands and ways of life are dependent upon a young generation who are aware and excited about doing so. Furthermore, this requires individuals to be balanced within all aspects of the Medicine Wheel, including physical health. This also requires a deep sense of community pride.

The most discussed of these four themes in both communities was the need to strengthen the relationship between Elders and youth. The increasing rates of individualism and the movement towards urbanisation have been cited as contributors to the weakening role of Elders in Indigenous communities (King et al., 2009), rates of which are predicted to rise in the future. The eagerness with which Elders discussed their desire to improve their relationships with youth demonstrates that the Elders in this study still cherished this traditional role. Similarly, Big-Canoe and Richmond (2014) revealed that youth from Pic River also recognized the importance of their Elders and expressed concern surrounding the loss of knowledge associated with their passing. This points to the need for initiatives aimed at preserving and protecting the vital knowledge held by Elders.

However, Elder voices are seldom heard within typical health research. As demonstrated by the results of this study, Elders hold important visions for the futures of their communities including clear strategies for improving health. This points to the need for a greater Elder voice within Aboriginal health research. Yet,

doing so necessitates researchers being respectful of the unique ways of knowing and sharing knowledge held by these individuals. The successful inclusion of Elders in this study was the result of the CBPR approach taken within the research (Tobias et al., 2013), which facilitated the adoption of culturally appropriate research methods.

This study also contributes to an evolving discussion about knowledge translation with Indigenous communities. The findings of this study highlight the importance of seeking to understand and include local processes of knowledge creation, dissemination, and utilization as a prerequisite to designing and implementing knowledge translation (Smylie, Kaplan-Myrth, et al., 2009). Regrettably, a legacy of exploitive research and the overshadowing of Indigenous worldviews by Western research paradigms have resulted in a longstanding exclusion of Aboriginal peoples from research that could contribute to improving their health status (Menzies, 2004; Smith, 1999). Integrated knowledge translation represents a promising pathway bridging this divide, including the production of research aimed at taking action on issues of importance to collaborating communities. However, to be successful within the context of Indigenous communities, the customary practice of integrated knowledge translation must draw upon the key principles of CBPR (Lencucha et al., 2010). This includes increasing the priority of building partnerships with communities based upon respect and reciprocity at the onset of project development. Once these foundations have been created, effective and locally relevant strategies for implementing knowledge translation can be developed.

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## **Chapter 7: Thesis Summary and Conclusions**

### **7.1 Introduction**

This thesis was designed within a community-based participatory research approach conducted in collaboration with two Anishinaabe communities on the North Shore of Lake Superior (The Ojibways of the Pic River First Nation and The Batchewana First Nation of Ojibways). The primary results of this thesis discussed the process of conducting respectful and reciprocal CBPR, and drew upon 46 in-depth interviews conducted with local Elders in order to both examine the impacts of historical and on-going processes of environmental dispossession and to explore strategies for environmental repossession.

This final chapter provides a summary of the key findings of this thesis, as they relate to each of the primary objectives of the research:

1. To examine the strengths and challenges of applying a Community-Based Participatory Research approach within the context of Indigenous health research;
2. To identify the impacts of both historical and contemporary experiences of environmental dispossession upon community health (as defined by the collaborating communities);
3. To explore Elder approaches for resisting environmental dispossession and maintaining their connections with traditional lands;

4. To explore the process of applying integrated knowledge translation in translating Elders' strategies for resisting the impacts of environmental dispossession into tangible strategies for environmental repossession.

The balance of this chapter is written in two sections. The first section presents the key findings of the research as they relate to each of the primary objectives. The second section discusses the theoretical and methodological contributions of the thesis. Within this discussion, the findings of this thesis are drawn upon to suggest a theoretical framework for developing research aimed at environmental repossession. The chapter then proceeds to an overview of the limitations of the research, before concluding with suggestions for future research.

## **7.2 Key Findings**

### *7.2.1 Applying Community-Based Research*

The first objective of the thesis was addressed in Chapter 4, which explored the process of developing and enacting respectful and reciprocal community-based research in the context of geographies of Aboriginal health research. Discussion was framed by a list of questions within six key themes (project formulation, identities of the researchers, partnership, benefits, findings, deepening relationships). These questions were put forward by The Indigenous Peoples' Specialty Group of the Association of American Geographers (IPSG-AAG, 2010). Despite the strength of the ideas put forward by the IPSG-AAG, very few geographers have yet applied or discussed their merits within the context of their own empirical research.

This chapter was built around the previously stated observation that inequalities in health between Indigenous and non-Indigenous peoples remain and continue to grow despite increasing research efforts towards examining these problems (Adelson, 2005; Waldram, 2006; Warry, 2007). This raises the need for a readdressing of the ways in which Indigenous health research is framed, including the necessity to adopt approaches that recognize the multiple factors that intersect to influence Indigenous health (CIHR, 2007; CIHR, NSERC, & SSHRC, 2010; King et al., 2009). By providing insight into how partnerships between researchers and communities are developed, Chapter 4 provided further evidence that CBPR approaches are a viable research alternative to be used in creating the space and opportunity for communities to address their unique health concerns.

In adopting the IPST-AAG document as a framework, this chapter also sought to encourage the use of CBPR amongst geographers. Geography is a discipline rooted in imperialism (Bell et al., 1995) and has directly contributed to dispossession of Indigenous traditional territories by colonizing powers (Louis & Grossman, 2009; Louis, 2007; McMillan & Yellowhorn, 2004). Recognizing the histories of colonialism inherent to the discipline - as well as the pressing need to address this on-going legacy - geographers have begun to answer calls for decolonizing research (Ball & Janyst, 2008; Smith, 1999). CBPR has been identified as an approach to doing so (Castleden et al., 2008; Castleden, Mulrennan, et al., 2012; Castleden, Sloan Morgan, & Lamb, 2012b), creating the need for the emergence of a detailed dialogue centred upon the strengths and challenges of applying this approach.

### *7.2.2 Environmental Dispossession and Health*

The impacts that experiences of environmental dispossession have had on health in both communities were explored in Chapter 5. Recalling that environmental dispossession is a term used to represent both direct and indirect processes through which Aboriginal people's access to the resources of their traditional environments is reduced (Richmond & Ross, 2009), the links between dispossession and health outcomes in both communities were discussed.

Environmental dispossession was discussed as occurring in several ways. Historically, this included the introduction of railroads and highways within traditional territories as a means of facilitating increased natural resource extraction. For instance, logging reduced access to forested areas as well as restricted upon the ability to travel via canoe due to the use of the river for transporting timber. The abundance of natural resources in the region promoted the locating of industry, which further reduced access to land as a result of increased pollution. Examples of this include the cyanide spill discussed by Pic River First Nation residents as well as experiences of contamination resulting from the steel industry in proximity to Batchewana First Nation. Consistent with other studies, the impact of Residential Schools emerged as a major form of indirect environmental dispossession. For instance, the links between residential schools and loss of the Anishinaabe language discussed by the collaborating Elders echoes findings put forward in research conducted by Brown et al. (2012). Elders acknowledged how these experiences served to erode traditional Anishinaabe values and language across multiple generations.

Emerging from these findings processes of environmental dispossession led to the increasing rates of obesity as a result of decreased ability to harvest and consume traditional foods. Furthermore, the Elders worried about the erosion of the Anishinaabe identity in their communities resulting from lack of access to land. The resulting impacts are serious problems of mental and emotional health. These impacts included a perceived increase in rates of depression and alcoholism. Furthermore, Elders expressed that dispossession has reduced opportunities to conduct and participate in traditional forms of healing on the land. Dispossession has also impacted the spiritual component of health. Specifically, the lack of respect shown by youth for sacred sites was put in the context of environmental dispossession and the resulting reduction of the importance placed upon the land.

Chapter 5 contributes to advancing the literature on environmental dispossession in three ways. Firstly, the CBPR approach framing this research is unique to the environmental dispossession literature. Few studies have explored environmental dispossession within a CBPR approach. Our study sought a unique perspective on dispossession by seeking both: to privilege community perspectives on health and the causes of poor health; and by employing an approach that would encourage action as one of its outcomes. Similar to existing research employing environmental dispossession to frame Indigenous health outcomes, this research was able to examine the processes and impacts of dispossession. However, the community-based approach provided the opportunity to explore several processes unique to each community which existing literature does not fully address. For example, there was tension surrounding the need to engage in natural resource



development while simultaneously preserving traditional lands. This was a strong theme discussed in both communities resulting from the impact that wind farms were having on fishing in Batchewana Bay as well as negotiations surrounding the location of a new mine in Pic River. The community-based approach taken within this study pushed the research to move beyond mere description of the impacts of dispossession and into action

Secondly, the results of this study were derived from in-depth interviews with community Elders. Existing research has explored the health impacts of environmental dispossession from various perspectives, such as youth (Big-Canoe & Richmond, 2014) and community health workers (Richmond & Ross, 2009). However, there are no existing studies that directly explore the multiple ways dispossession impacts health from the respected position of community Elders. In several Indigenous communities throughout the world, Elders are respected as keepers of local Indigenous Knowledge. These individuals are recognized as Elders not because they have attained a specific age, but because their communities see them as both possessing specific knowledge as well as being able to share this knowledge appropriately. Elders were able to discuss how dispossession has manifested over time as well as offer significant insight into the non-physical health outcomes of dispossession. Specifically, this included detailed discussion about how indirect forms of dispossession incurred by residential schools had impacted their capacity to connect with traditional lands. This included several discussions by Elders who expressed concern about their capacity to undertake the traditional responsibilities associated with being an Elder. Finally, as discussed in the next

section, this research contributes to the existing literature on environmental dispossession sites and acts of resistance at the community level.

### *7.2.3 Resisting Environmental Dispossession*

The findings revealed a number of ways that Elders practice resilience to processes of environmental dispossession (see Chapter 5). Despite the historical and current experiences of dispossession, as well as the subsequent health outcomes, the maintenance of strong relationships with the land emerged during most interviews. Importantly, Elders revealed how traditional lands continued to play a central role within their identity as Anishinaabe peoples. Given the important role that the land continues to play within each community, being out on the land was viewed as being crucial to both healing and maintaining health. The land was discussed as being the location where Indigenous Knowledge was acquired, shared, and practiced. Furthermore, it was also discussed as the location where traditional spiritual ceremonies should be held. These ceremonies focus on healing an individual by revealing pathways to restoring balance in their lives. As such, continued efforts at preserving traditional territories were viewed with great urgency. Elders discussed taking personal risks when attempting to protect the relationship between the land and the people; this included participating in actions that would lead to arrests such as practicing a legally banned ceremony and exercising contested fishing rights. The need for continued support of initiatives that emphasised the importance of traditional territories to community youth was an especially prevalent theme. Such initiatives were believed to be a means through which the land would continue to maintain a central role within Anishinaabe

identity. For example, youth at the Dead Horse camp in Pic River territory were taught by Elders how to trap and clean game. This included teachings about how game was used for survival. Elders showed the youth how all parts of animal were traditionally used not only for consumption, but for creating tools and clothing as well. In using all parts of the animal and leaving minimal waste, Anishinaabe youth were taught to show respect to the creature that had given its life.

This study revealed the resiliency within the communities in terms of their commitment to fostering relationships with the land in order to protect health. This view of resiliency was developed from a conceptualization of community resilience as a process linking networks of adaptive capacities to adaptation after experiencing a disturbance or adversity (Norris et al., 2008). However, it must be noted that community resilience is more than just an outcome resulting from adversity. Instead, resilience to environmental dispossession is understood as an on-going process that draws strength from local Indigenous Knowledge. This view is similar to existing research exploring resilience within Indigenous contexts, wherein resiliency is described as being rooted in strong connections with community, culture, and traditional lands (Kirmayer et al., 2011). As noted by Simpson (2011), resilience is not a new or emerging phenomenon amongst Indigenous communities. More accurately, what the academic literature may label as 'resistance' is in reality the continued practice of First Nation culture, and the expression of identity on lands and territories that were never given up.

#### *7.2.4 Implementing Environmental Repossession*

Based on analysis of the interview data, a series of talking circles and breakout sessions were undertaken to explore strategies for implementing environmental repossession in each of the communities. These occurred over a two-day Elders Celebrations held in each of the collaborating communities. Celebrations included participation in traditional ceremony, such as smudges, song and prayer, as well as a sunrise ceremony. This ensured that the celebrations respected community protocols for sharing knowledge, as well as reinforced the reciprocal nature of the research. After I shared a short presentation of the results of interview analysis, Elders participated in break-out groups wherein they were asked to discuss strategies for environmental repossession. Each group included a member of the research team who was tasked with recording the views of the Elders.

Analysis of these breakout groups resulted in four key areas central to environmental repossession within each community, presented in Chapter 6. The most commonly discussed strategy focussed on strengthening the relationship between youth and Elders. This included recognition of the important role of Elders as teachers, as well as further recognition that youth could also teach Elders. Secondly, increasing time spent on the land for all community members was discussed as vital to environmental repossession. This was discussed within the context of increasing the recognition of the important role the land plays within Anishinaabe identity, and was strategized as being developed through community initiatives such as youth camps.

Subsequently, Elders recognized the need for improving upon physical health in the community. This included increasing awareness of and access to traditional foods as a culturally appropriate alternative to dependence upon low cost but high fat diets. Furthermore, increasing community availability of traditional foods was also believed to carry social benefits, as members would be encouraged to share the fruits of their gardens or hunts. Finally, there was discussion about the need for fostering community pride. Increasing community pride - through initiatives such as recognition of local role models - would help sustain long-term political repossession initiatives including on-going comprehensive land claims and continued assertions of resource sovereignty.

This chapter contributes methodologically to a growing body of literature exploring the application of Indigenous knowledge translation. Methodologically, it provides an example of applying culturally appropriate integrated knowledge translation, a type of knowledge translation research that encourages researchers to engage with potential knowledge users fully throughout the research process as opposed to merely at the end of the research (CIHR, 2014). In our project, we adhered to the integrated knowledge translation approach in several ways, but most specifically as we hired and trained local youth to be research assistants in the project, and therein involved them in the development of the analytical framework that would be used to analyse the Elder's interview data. Results from Kulmann (2012) indicate that the approach led to a deeper understanding by the youth of the issues facing their community, as well as the strengthening of relationships between these youth and their Elders. Kulmann's (2012) research also points to the

fact that youth were able to discuss the importance of their traditional lands in greater detail following their summer jobs and were able to use this knowledge in the identification of actionable strategies for improving health and protecting their traditional lands.

The integrated knowledge translation approach culminated in the Elders Celebrations, which were a culturally important means of engaging with community collaborators in knowledge creation, synthesis, and dissemination. Specifically, it was during these celebrations where I witnessed the data collected during our research being transformed into action. As discussed in Section 3.2, this was something that I had strongly desired to witness at the onset of my involvement in the project. Overall, the experience of conducting integrated knowledge translation research with Anishinaabe Elders has deeply affected how I see my future as an academic. I hope to continue working closely with communities, collaborating in developing research that matters to them.

### **7.3 Research Contributions**

#### *7.3.1 Contributions to Theory*

This study drew largely from the concepts of environmental dispossession and repossession to understand the ways traditional lands shape health as well as how communities fight to maintain access to these places as a means of protecting and restoring health. The concept of environmental repossession was offered as a means of exploring the methods through which Indigenous peoples and communities are reclaiming their traditional lands and maintaining their culture (Big-Canoe & Richmond, 2014). As such, environmental repossession research

contributes to the growing scholarship concerned with the protection of Indigenous Knowledge and ways life.

The findings in this study demonstrate how health within the two collaborating communities, including their ability to heal, is rooted in access to their traditional lands. As illustrated within Chapters 5 and 6, Elders strategies for improving health within their communities centre upon access to traditional lands and subsequent fostering of relationships and transmission of Indigenous knowledge with younger generations occurring on the land. These findings support literature advocating for increased understanding of the ways that Indigenous health can be promoted through land-based activities (Burgess et al., 2005; Kingsley et al., 2009). This research has shown that striving for environmental repossession, including taking part in activities on the land and facilitating cultural camps, is health promoting. The multiple benefits that the Elders associated with these activities provide evidence of the positive impacts on health.

This study provides an example for future research to consider when applying the theoretical concept of environmental repossession. Environmental repossession research is centred upon the collaborating community. Consistent with CBPR, this entails beginning with a clear understanding of what constitutes the community as well as identifying community research needs (Israel et al., 2008). Identifying characteristics of the collaborating community (i.e. history, demographics, and research needs) allows the research to identify and build upon prevailing strengths and resources within the community in order to support existing structures and facilitate capacity building. Furthermore, by adopting

culturally appropriate methods (i.e. the talking circles) not only empowered interviewees to discuss local importance of the research findings, and the ways they could shape future environment and health policy/ programs, but these methods also facilitated a source of mediation in the case of differing opinions about community needs and priorities.

Theoretically, environmental dispossession research requires an understanding of three key areas: sources and outcomes of dispossession, the links between health and traditional lands, and opportunities for resilience. This necessitates insight into how each area has been uniquely experienced by the community, beginning with environmental dispossession. It is important to understand both the specific processes and subsequent outcomes of environmental dispossession within the collaborating community. This research found that processes of environmental dispossession have had several distinctive and lasting impacts upon health in each community. This is consistent with the literature exploring the impacts of dispossession on health this area (Adelson, 2005; Big-Canoe & Richmond, 2014; Brown et al., 2012; Kirmayer, Boothroyd, et al., 2000; LaDuke, 1999; Luginaah et al., 2010; Richmond & Ross, 2009; Stephens, Porter, Nettleton, & Willis, 2006). As shown in Chapter 5, the multiple ways that dispossession has impacted health go beyond the physical outcomes. For instance, being dispossessed of specific places was discussed as having impacted emotional health as well as limiting the ability of participants to practice traditional healing methods. These findings are consistent with one of central tenets of health



geography, that places and the meanings associated with them play important roles within health (Gatrell & Elliott, 2009; Kearns & Moon, 2002; Litva & Eyles, 1995).

Secondly, it is important to recognize and work from the way that health is conceptualized amongst the collaborating community. Doing so enables recognition of the multiple ways that dispossession has impacted health as well as allows for meaningful and applicable repossession strategies. In this research, this has entailed a holistic understanding of health. This understanding emerged from initial community meetings, where the importance of using The Medicine Wheel as a locally appropriate framework for understanding what health means was identified. Within this cultural framework, being healthy is understood as maintaining a balance amongst the physical, mental, emotional, and spiritual components of the self (Dapice, 2006; Yearington, 2010). There are an increasing number of studies that have integrated local communities and draw upon their concepts of health to enrich the understanding of the multiple ways that health is experienced (Isaak & Marchessault, 2008). This study provides further support for doing so and demonstrates how the cultural dimensions linking health and environment can be better understood by including the local ways that health is conceptualized.

Thirdly, it is important to develop an understanding of how the community has been resilient in the face of environmental dispossession. Growing scholarship emerging from the field of Indigenous geography calls upon geographers to produce research that supports and strengthens Indigenous communities (Castleden, Mulrennan, et al., 2012; IPSG-AAG, 2009; Louis & Grossman, 2009; Louis, 2007).

Exploring resilience in Indigenous communities answers this call. Existing literature

on resilience has typically focussed upon individual and their ability to achieve a measure of success after experiencing adversity (Betancourt & Khan, 2008; Dass-Brailsford, 2005; Fergus & Zimmerman, 2005; Howard et al., 1999).

There is also a growing body of literature exploring resilience amongst Indigenous peoples (Holton et al., 2009; Kirmayer et al., 2011; Kirmayer et al., 2009; Miller & Davidson-Hunt, 2013). This literature has conceptualized Indigenous resilience at the scale of the community and also demonstrates the important role of culture. The findings in this thesis contribute to the notion that resilience to dispossession occurs within communities. This thesis also puts forward an example of how Indigenous resilience is an on-going process that is often anchored on the important need to maintain strong ties to traditional lands.

### *7.3.2 Contributions to Research Method*

To begin, this study provides support for future collaborative research approaches with Indigenous communities, including CBPR and Integrated Knowledge Translation (Tobias et al., 2013). Recalling that increasing the research and program development capacity is both one of the key goals of community-based research and a central goal of the larger study (Israel, 1998; Wallerstein and Duran, 2006), this thesis provides an example of mechanisms through which this goal can be achieved. Specifically, the integrated knowledge translation methodology adopted within this research facilitated multiple sites of exchange between all parties involved. For instance, inclusion of local youth as research assistants has had a demonstrated increase in both their research skills as well as fostering their eagerness to conduct further research (Kulmann, 2012). The Elders, who shared

their knowledge concerning environmental dispossession and repossession, also acquired knowledge and skills from the research team. Specifically, several Elders have discussed how participation in this project has developed an enthusiasm for continued use of film and a means of further documenting and sharing their stories. I also personally acquired knowledge and skills throughout this research. Elders and youth were eager to share community research protocols, such as the meaning and importance of offering tobacco.

A second methodological contribution relates to the nature of data analysis conducted within this research. Although CBPR research seeks to include community voice throughout the research, collaboration typically occurs less frequently within data analysis and interpretation (Cashman et al., 2008; Israel et al., 2008). This study sought to increase community collaboration in data analysis in three ways. As discussed in Chapter 3, data analysis began with the creation of an analytical framework developed by all members of the research team. This framework was directly imported into NVivo and used throughout data coding. Developing the framework for data analysis collaboratively ensured that community voice was included within this stage of the research.

Secondly, although it was agreed that I would be responsible for the task of coding and analysis, steps were taken to ensure that community input occurred. Analysis was presented during meetings with members of the LACs. This included discussion about expansion of the analytical framework based upon emerging themes within the data. Meetings also involved presentation of key quotes that were believed to best represent each of the themes. Discussing data and results

throughout analysis represents a pathway through which collaborative analysis can be maintained.

Member checking also contributed to analytical collaboration. This method is advocated as a means of ensuring credibility of qualitative research findings (Baxter & Eyles, 1997). In this research, contact with interview participants occurred frequently. The majority of interview transcripts were returned in person, including time for discussion regarding individual transcripts. Participants also discussed interviews with the research team via Facebook and over the telephone. Finally, the Elders Celebrations also provided further opportunities for analytical refinement to occur by creating an open space for discussion of the findings.

A further methodological contribution of this thesis is the use of talking circles as a method for data collection. Existing literature advocates for the use of talking circles as a culturally appropriate alternative to focus groups for collecting qualitative group data (Wilbur et al., 2001; Wolf & Rickard, 2003). The findings of this thesis suggest that, when conducted within a CBPR approach, talking circles also allow for group reflection on the results of research. Furthermore, talking circles represent an excellent method for discussing potential methods of developing strategies for community action based on these results.

This thesis also answers calls for non-Indigenous researchers to embrace Indigenous approaches to research and knowledge within their own work, especially within the field of geography (Louis, 2007). Given that Indigenous paradigms and methodologies are based on lived experiences (Wilson, 2008; Kovach, 2009; Absolon, 2011) the ability of non-Indigenous researchers to fully

adopt Indigenous methodologies is limited. By working closely with community collaborators throughout all stages of the research, this project demonstrates how non-Indigenous researchers can include locally relevant approaches to research within their work. For instance, following established protocols such as offering tobacco prior to conducting interviews as well as using talking circles in place of focus groups.

#### **7.4 Limitations of the Study**

There are a few limitations to the research presented within this thesis. This research was undertaken as a case study of two Anishinaabe communities on the North Shore of Lake Superior. Inherent to this type of research design, the specific findings of this study are limited in their ability to be generalized. However, experiences of environmental dispossession and challenges of repossession are currently being faced by Indigenous communities globally. As such, similar research approaches may be used within Indigenous communities seeking to develop strategies for environmental repossession.

Related to the notion of generalizability, it is important to note that this research was conducted with two on-reserve and relatively rural populations. However, the proportion of Aboriginal peoples living in urban centres across Canada continues to increase (Canada, 2013; Guimond, Kerr, & Beaujot, 2004; Ning & Wilson, 2012). Yet, the majority of Aboriginal health research conducted in Canada does not include individuals living in urban settings despite this statistic (Young, 2003). Thus, there exists a pressing need for future research to examine the experience of environmental dispossession within urban Indigenous populations.

## 7.5 Directions for Future Research

There are several key directions for future research suggested by this thesis. Firstly, future research should pursue the exploration of both resilience and environmental repossession as theoretical frameworks for understanding Indigenous health. Pursuing the underlying strengths based approach within these two frameworks will contribute to further shifting the nature of Indigenous health research away from focussing on problems and towards the increased exploration of thriving health within the Aboriginal context. This will ultimately contribute to increased acceptance of academic research within Indigenous communities. Ideally this will effectively act to shift research further away from the legacy of colonialism that many disciplines, including geography, are founded upon.

Secondly, there are opportunities to move community-based Indigenous health research beyond the scale of spatially defined communities. Given the recent increases in awareness of Indigenous environment and health concerns through social activism such as the Idle No More movement, opportunities exist to develop participatory research projects inclusive of diverse populations. An interesting and under-explored area for future research of this nature may entail the inclusion of both Indigenous and non-Indigenous populations in the exploration of environment and health issues.

Finally, there is a need for research that explores Indigenous community perspectives on the strengths and challenges of conducting CBPR. As the number of publications identifying the use of community-based approaches continues to increase, so too does the amount of research advocating these approaches. However,

this body of research remains centred upon the experiences of academic researchers, and mostly among non-Indigenous scholars. The uptake of a community-based participatory research approach alone is not sufficient for decreasing health inequities between Indigenous and non-Indigenous peoples. As this thesis demonstrates however, CBPR approaches powerfully facilitate the development and implementation of research projects that have the potential to yield the sorts of data that can support local health initiatives, while at the same time empowering research skill and development in participating communities. Over time, we can be hopeful that the practice of these approaches will lead to the development of community research capacity, as well as the development of policies and programs that may improve local health status. Future research should strive to strengthen the case for increasing adoption of community-based approaches by exploring the merits and challenges of these approaches from the perspective of community collaborators and participants. This also includes being open to facilitating instances where the academic researcher can become the researched. For instance, scholars should be open to encouraging and participating in community-led research within which their own motivations for conducting research are explored.

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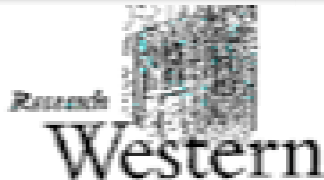
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## **Appendix A: Research Ethics Approval**



Use of Human Participants - Ethics Approval Notice

Principal Investigator: Chastelle Richmond
Review Number: 162119
Review Level: Delegated
Approved Local Adult Participants: 56
Approved Local Minor Participants: 0
Protocol Title: Anishinabe narratives about health and environment: A participatory approach to knowledge and promoting positive experiences for youth
Department & Institution: Geography, University of Western Ontario
Sponsor: Canadian Institutes of Health Research

Ethics Approval Date: June 08, 2011 Expiry Date: August 31, 2012

Documents Reviewed & Approved & Documents Received for Information:

Table with 2 columns: Document Name, Comments. Row 1: Addition of Co-Investigator, Revised study team, Jordana Tobias, Karonda Kullanan and Amanda Lino to added to the study team.

This is to notify you that The University of Western Ontario Research Ethics Board for Non-Medical Research Subjects (NMREB) which is organized and operates according to the Tri-Council Policy Statement: Ethical Conduct of Research Involving Humans and the applicable laws and regulations of Ontario has granted approval to the above amendment(s) as the approval date noted above.

This approval shall remain valid until the expiry date noted above assuming timely and acceptable response to requests for surveillance and monitoring information. If you require an updated approval notice must request it using the UWO Updated Approval Request Form.

Members of the NMREB who are named as investigators in research studies, or decline to participate in discussions related to, nor vote on, such studies when they are presented to the Board.

The Chair of the NMREB is Dr. Riley Hinson. The UWO NMREB is registered with the U.S. Dept. of Human Services under the IRB registration number IRB 00000941.

## **Appendix B: Curriculum Vitae**

**Joshua K. Tobias, PhD Candidate**  
Department of Geography  
Western University

**Education**

- 2010-Present**      **The University of Western Ontario**, London, Ontario  
*PhD Candidate, Department of Geography*  
Topic: CBPR with Anishinabe Communities on the North Shore  
*Supervisors: Dr. Chantelle Richmond, Dr. Isaac Luginaah*
- 2008-2010**        **The University of Western Ontario**, London, Ontario  
*M.A., Geography*  
Thesis Topic: Alcohol and Infectious Disease in Ghana's Upper West Region.  
*Supervisors: Dr. Isaac Luginaah, Dr. Chantelle Richmond*
- 2005-2008**        **The University of Ottawa**, Ottawa, Ontario  
*B.A., Arts (Honours with Specialisation in Geography, Minor in History)*

**Publications (Peer Reviewed)**

- Tobias, J. K.**, & Richmond, C. A. M. (2014). "That land means everything to us as Anishinaabe...": Environmental dispossession and resilience on the North Shore of Lake Superior. *Health & Place*, 29(0), 26-33.
- Mkandawire, P., Richmond, C., Dixon, J., Luginaah, I., **Tobias, J.** (2013). Hepatitis B in Ghana's Upper West Region: A Hidden Disease In Need of National Policy Attention. *Health & Place*, 23(September, 2013) 89-96.
- Tobias, J.**, Richmond, C., Luginaah, I. (2013). Community-Based Participatory Research (CBPR) with Indigenous Communities: Producing Respectful and Reciprocal Research. *Journal of Empirical Research on Human Research Ethics*, 8(2) 129-140.
- Mkandawire, P., Luginaah, I., **Tobias, J.** (2011). Landscapes of Economic Deprivation and Locally Distilled Liquor (Kachasu): An Emerging Milieu of HIV/AIDS Risk in Urban Northern Malawi. *Environment and Planning A*, 43(10) 2384-2398.

**Publications (In Preparation)**

- Richmond, C., **Tobias, J.**, Stewart, R., Fortier, J., The Batchewana First Nation of Ojibways, and The Ojibways of the Pic River First Nation (in Preparation). *Documenting Indigenous Knowledge to Protect Health: A Community-Based Film Project.*



**Tobias, J.**, Richmond C (in Preparation). Talking in Circle: Anishinaabe Elders' Strategies for Environmental Repossession on the North Shore of Lake Superior. Preparing for Submission: *Social Science & Medicine*.

### **Conference Presentations**

- 2014** **Tobias, J.**, Richmond, C. "Talking In Circles: Knowledge Translation with Anishinaabe Elders on the North Shore of Lake Superior". Poster Presentation. Indigenous Health and Wellbeing Initiative Summer School.
- 2014** **Tobias, J.**, Richmond, C. "From Research to Action: CBPR on the North Shore of Lake Superior". Annual Meeting of the Association of American Geographers, Tampa Bay.
- 2013** **Tobias, J.**, Richmond, C. "*That Land Means Everything to us as Anishinabe...*": *Elder Voices on Resistance, Recovery, and Environmental Dispossession*". Annual Meeting of the Association of American Geographers, Los Angeles.
- 2012** **Tobias, J.**, Richmond, C. "*It's About Balance: Collaborative Research with Anishinabe Communities*". Annual Meeting of the Association of American Geographers, New York.
- 2010** **Tobias, J.**, Richmond, C., Luginaah, I. "*Embodied Political Ecologies of Health: A Case Study in Ghana*". Annual Meeting of the Association of American Geographers, Washington.
- 2009** **Tobias, J.**, Mkandawire, P., Luginaah, I. "*Incivility or Masculinity: Illicit Alcohol Consumption and the Vulnerability of Youths to HIV Infection in Northern Malawi*". Annual Meeting of the Association of American Geographers, Las Vegas.
- 2009** **Tobias, J.**, Mkandawire, P., Luginaah, I. "*Dialogue of the Deaf: HIV/AIDS Policy Debate in the Malawi National Assembly*". Annual Meeting of the Association of American Geographers, Las Vegas.

### **Invited Lectures**

- 2013** **Tobias, J.** "Community-Based Participatory Research on the North Shore: Can We Produce Research that Meets Community Needs". Invited Lecture (Geography 9104) Western University
- 2013/14** **Tobias, J.** "*Protecting Indigenous Knowledge: Community Self Determination Through Research*". Invited Lecture (Geography/First Nations Studies 2411) Western University.
- 2013** **Tobias, J.** "*Community-Based Research: The way forward for Indigenous Health*". Invited Lecture (Health Sciences 1002B) Western University.
- 2012** **Tobias, J.** "*The Challenges of Conducting Community-Based Participatory Health Research with Indigenous Communities as a Graduate Student*". Invited Lecture (The Indigenous Health and Well-Being Initiative) Western University.

- 2011** **Tobias, J.** “*Globalization and Health: Understanding Impacts and Future Scenarios*”. Invited Lecture (Geography 3431B, 2151A) Western University.
- 2011** **Tobias, J.**, “*Qualitative Research Methods and Approaches in Geography*”. Invited Lecture. (Geography 3250A) Western University.
- 2009** **Tobias, J.** “Alcohol and Infectious Disease in Ghana’s Upper West Region”. Invited Lecture (Geography 2030A) Western University.

### **Scholarships and Awards**

- 2012** The E.G. Pleva Prize for Excellence as a Graduate T.A.  
\$450
- 2011-2012** Ontario Graduate Scholarship  
\$15,000
- 2010** Ontario Trust for Student Support  
\$1,000
- 2010-2014** Western Graduate Research Scholarship, Western University  
\$28,000
- 2010** Graduate Thesis Research Award, Western University.  
\$750
- 2009** IDI Initiative in Population and Life-Course Studies  
\$500
- 2009-2010** Graduate Travel Award, Western University  
\$300
- 2009** Graduate Student Research Award, Western University  
\$750
- 2008-2010** Western Graduate Research Scholarship  
\$12,000
- 2006** U. Ottawa Department Of Geography 50<sup>th</sup> Anniv. Scholarship  
\$1,000

### **Teaching and Research Experience**

- Sep 2008 – 2014** **Teaching Assistant**  
Geography of Tourism; Hazards and Human Health; Peoples, Places and Landscapes; Global Change; Geographic Research Methods; Health and Healthcare; Fundamentals of Geography; Geographies of Development
- May 2011 – Aug 2013** **Gifts from the Elders**  
Duties included conducting filmed interviews, scouting shoot locations, coordinating shoots, collecting supplementary footage, researching and collecting historical photographs and newspaper articles, coding footage, communicating with director.
- November 2012/13/14** **Arthur Labatt Family School of Nursing**  
Developed and lead two full day workshops on computer-assisted qualitative data analysis with NVivo provided to faculty and graduate students.

**Jan – Apr 2011                      Research Assistant**

Duties included developing a literature review on selected topics, creating maps using GIS, assisting in developing summer school for Aboriginal community members.

**Knowledge Translation Activities**

- 2013**            Western News: interviewed to discuss community engagement with research
- 2013-2014** Panellist at Gifts from the Elders film screenings (Los Angeles, Thunder Bay, Marathon, Sault Ste. Marie, London, Halifax).
- 2013**            Western Revealed, Rogers Television: interviewed to discuss doctoral research
- 2011**            UWO Summer School on Qualitative Research: led two-day workshop on developing qualitative research skills for First Nations youth.

**Volunteer and Service**

- 2011-2014** Diversity Ambassador – Indigenous Peoples Specialty Group of the Association of American Geographers.
- 2011-2013** Student Representative – Western University Department of Geography Graduate Affairs Committee.
- 2011**            UWO/Standing Stone School Reading Buddies, Student Volunteer.