“I would love to blast some pow music and just dance”: Aboriginal Students’ Experiences of Physical Activity on Campus

Leah J. Ferguson & Nadia Y. Philipenko
College of Kinesiology, University of Saskatchewan

Introduction

- Physical activity is valued in Aboriginal communities (Graham & Stamler, 2010), including leisure-time activities, sport-related activities, and traditional activities (Briner & Chad, 2013).
- However, a growing body of literature highlights the low levels of physical activity among First Nations, Inuit, and Métis peoples in Canada.
- Rates of physical inactivity and deteriorating health status among Aboriginal Canadians are greater than non-Aboriginal Canadians (Briner & Chad, 2013; Foulds et al., 2011).
- An in-depth understanding of the physical activity beliefs, behaviours, and experiences among urban Aboriginal Canadian peoples is absent from the literature (McHugh, 2011).

Purpose

The primary purpose of this study was to explore Aboriginal university students’ experiences and challenges with physical activity on campus.

A secondary purpose was to identify strategies that promote positive physical activity experiences for Aboriginal students on campus.

Method

Qualitative Strategy of Inquiry

- Narrative inquiry: participants share stories about their lives to illuminate meaning on their socially constructed experiences (Creswell, 2014; Smith & Sparkes, 2009).

Participants and Procedure

- Ongoing engagement with gatekeepers.
- Purposeful and snowball sampling (Creswell, 2014) of five First Nations students on university campuses.

Data Collection

- Three regularly active to obtain substantial health benefits (Godin, et al., 2006), resonated from the students’ stories connected into storylines (Creswell, 2014).

Data Analysis

- The sharing circle and interviews were audio-taped, transcribed verbatim, and an analytic coding process resulted in emergent themes that connected into storylines (Creswell, 2014).

Results

The themes that emerged from the participants’ narratives of physical activity experiences and challenges on campus are presented.

We are similar but unique

- Many similarities between participants’ stories and non-Aboriginal student experiences (e.g., lack of time to be active, feeling incompetent or self-conscious).
- Powerful uniqueness to their stories.

A longing for tradition

- Inherent to many shared experiences was a desire to have access to traditional cultural practices.

Extending a personal connection with physical activity

- The participants’ current stories of physical activity reflected their personal history and connection with being active.

Results Continued

Strategies and resources for moving forward

- Personal resources
  - Engage in positive and realistic self-talk, incorporate social network, integrate traditional beliefs and practices.
  - Potential relevance and usefulness of self-compassion (Neff, 2003)
  - Similarities between self-compassion and traditional teachings (e.g., imperfection, respect, responsibility, self-care).
  - Concerns with being too self-compassionate.
- Institutional strategies
  - Help remove barriers to physical activity and enhance quality of experiences.
  - Develop Aboriginal-specific programming.
  - More Aboriginal involvement (e.g., Aboriginal staff, recreational coordinators, trainers).

Interpretation and Discussion

- Common barriers to physical activity were identified (Aru et al., 2006; Hoesch et al., 2000); however, many stories and challenges with physical activity on campus were unique to the Aboriginal student experience.
- Misguided stereotypes and racist spaces (Paraschak, 2012).
- Lack of empowerment, a noted barrier to Aboriginal peoples’ physical activity (Skinner et al., 2006), resonated from the students’ stories.
- Effective personal resources to cope with barriers and challenges related to physical activity experiences are needed.

Participant-Identified Action Items

- Institutional facilitation of self-selection of activities (Foulds et al., 2011).
- Example: Powwow fitness classes.
- Childcare options on campus.

Future Research Recommendations

- Participatory action research working collaboratively with Aboriginal students on university campuses to:
  1. Integrate traditional activities and practices.
  2. Develop and implement strategies to enhance physical activity experiences.

Acknowledgements

Thank you to the participants for sharing their experiences, the Aboriginal Students’ Centre for facilitating this study, and the University of Saskatchewan for providing funding to complete this research.
The project is informed by:

- Health Canada’s Population Health Framework
- Tri-Council Policy Statement 2: Chapter 9 (Research Involving the First Nations, Inuit and Métis Peoples of Canada)
- An adaptation of the four phase approach of the First Nations Regional Longitudinal Health Survey

Community Leadership: Community members had substantial input in planning the project and in questionnaire development. Data was collected by community members trained in questionnaire administration, clinical and environmental assessments. The training and experiences of these individuals has contributed to increased skills and capacity in the communities in areas of health and housing.

An Example of Reconciliation Through Research: The First Nations Lung Health Project

**DESCRIPTION**

First Nations Lung Health Project: “Assess, Redress, Re-assess: Addressing Disparities in Respiratory Health Among First Nations People”

PIs: Drs. J. Dosman, P. Pahwa, S. Abonyi; and J. Episkopou (deceased)

Canadian Institutes of Health Research MOP 151096; 2012-2017

A collaborative effort involving:

- Two First Nations communities in Saskatchewan
- The Canadian Centre for Health & Safety in Agriculture, the Department of Community Health and Epidemiology, and the College of Nursing at the University of Saskatchewan
- Indigenous Peoples’ Health Research Centre
- First Nations University of Canada

The aim of the project is to evaluate the impact of individual and contextual factors on respiratory health, and to understand how community-chosen interventions can contribute to health.

The project is informed by:

- Health Canada’s Population Health Framework
- Tri-Council Policy Statement 2: Chapter 9 (Research Involving the First Nations, Inuit and Métis Peoples of Canada)
- An adaptation of the four phase approach of the First Nations Regional Longitudinal Health Survey

Community Leadership: Community members had substantial input in planning the project and in questionnaire development. Data was collected by community members trained in questionnaire administration, clinical and environmental assessments. The training and experiences of these individuals has contributed to increased skills and capacity in the communities in areas of health and housing.

**CONTACT**

Lynette Epp 306-966-7884 lynette.epp@usask.ca
www.firstnationslunghealth.usask.ca

**PROCESS AND OUTCOMES**

Phase 1: A two-year process of project co-creation in which the communities identified the issues of concern, and together with the University-based researchers developed the aims for the project, identified key outcomes for assessment, and established research agreements.

Phase 2: Baseline assessments were conducted in 2013 through interviewer-based questionnaires and clinical measurements (lung function and allergy testing), administered by trained community-based research assistants.

- Community A: 431 adults representing 173 households (324 completed clinical measures); 195 children (174 lung tests)
- Community B: 443 adults representing 233 households (348 completed clinical measures); 156 children (136 lung tests)

Phase 3: The communities identified key actions to “address” (community-based interventions) and “redress” (policy level) issues based on findings from Phase 2. These included:

- Environmental assessments in homes to measure air quality
- Focus groups with a mix of community members from teens to elders, to identify strategies and possible interventions to address findings.
- The GreenLight Program, which celebrates smoke-free homes and supports efforts towards culturally appropriate use of tobacco.
- The GreenTree Program to teach and empower school-aged children to learn about lung health and make positive choices towards their personal lung health.

Phase 4: (2016-17) “Re-Assess” Follow-up questionnaires and clinical measures were gathered in 2016, with follow-up child assessments and housing evaluations being conducted in 2017. Changes over the duration of the project will be examined.

**HOW IT BUILDS RECONCILIATION**

TRC Calls to Action

FNLPH Contributions to TRC Calls to Action

18. “...to acknowledge that the current state of Aboriginal health in Canada is a direct result of previous Canadian government policies, including residential schools.”


19. “...to establish measurable goals to identify and close the gaps in health outcomes between Aboriginal and non-Aboriginal communities, and to publish annual progress reports and assess long term trends. Such efforts would focus on indicators such as: chronic disease, illness and injury incidence, and the availability of appropriate health services.”


20. “...to recognize the value of Aboriginal healing practices and use them in the treatment of Aboriginal patients in collaboration with Aboriginal healers and Elders where requested by Aboriginal patients.”


The study coordinator (KM) is from the Lac La Ronge Cree Nation and provided Indigenous guidance from an academic and community perspective to researchers and students.

Clinical aspects of the study were conducted primarily by students from the communities who were undertaking nursing, education and social work training courses. They were trained in spirometry and allergy skin prick testing at the Canadian Centre for Health in Agriculture, University of Saskatchewan. Community Health Directors and Community Leaders were invited to participate in poster and oral presentations at provincial, national and international conferences.
INTRODUCTION
Beginning in 1920 all First Nations (FN) children in Canada aged 7-15 were required to attend residential schools, where the goal was to assimilate these children into the broader Canadian society. Widespread reports of physical and sexual abuse, poor health, and malnutrition have emerged from this era. Little is known about the health status of children and youth prior to residential school entry, although narratives from this time period, especially before and during the depression of the 1930s, suggest that food shortages were being experienced in some communities. Anthropometric data from FN children, taken during residential school entrance examinations, reveal new insights on their health prior to first entry to residential schools.

METHODS
Using cross sectional residential school entrance examination data collected between 1919-1953 we investigated the BMIs of 1767 Canadian Prairie FN children (Table 1). This is significant because this information reflects conditions in their home communities rather than in the schools. Examinations captured height and weight data as well as general qualitative observations on the health of the child. Following Cole et al we calculated and categorized as very underweight/underweight, normal weight, and overweight/obese by age, sex, time period and residential school site (Figure 1). Height and weight quartiles were compared with a 1953 Canadian survey and BMIs with current WHO growth charts for Canadian children.

RESULTS & DISCUSSION
- The vast majority (~80%) of FN children had normal BMIs (Figure 2), compared to 65-70% for Canadian children today, and less than 40% regionally in some FN communities.
- A general trend for diminishing levels of underweight and increasing levels of overweight/obesity over time was observed. Highest rates of underweight occurred before the depression (Figure 3a-3b).
- Those attending residential schools in the southern prairies were more likely to be underweight (Figure 3c).
- FN children tended to be slightly taller than non-FN Canadian children from the 1953 survey, but shorter than Canadian children today (Figure 4). Most weights for older FN children were within the 25th and 75th percentiles of non-FN Canadian (Figure 5).
- Age and sex specific 50th percentile BMI values were very similar to reference values for Canadian children today.

In contrast to the widespread hunger and malnutrition experienced by FN children and youth in residential schools, this data from the same era provides evidence that on first entry to these schools most children and youth had normal BMIs by current standards, and those attending residential schools in the southern prairies were more likely to be underweight (Figure 3c). Height and weight quartiles were compared with a 1953 Canadian survey and BMIs with current WHO growth charts for Canadian children.

SIGNIFICANCE
These historical findings provide insights and context to the current obesity epidemic among First Nations people, and to the ongoing and tragic legacy of the residential school era. We continue to grapple with the ethical implications of analyzing this type of historical data and welcome further dialogue.
Creating engagement, empowering communities, and sharing wisdom: Dealing with dogs in Northern Saskatchewan

Dr. Jasmine M. Dhillon and Dr. Tasha Epp
jasmine.dhillon@usask.ca
Large Animal Clinical Sciences, WCVM, University of SK, Saskatoon, Canada

Background
- Dog populations in indigenous communities are primarily unrestricted and free-roaming
- Communities use various methods to reduce aggressive encounters

Research Questions
- How do communities develop population control and bite prevention strategies?
- Are methods successful in stabilising populations and reducing bites?
- What are the differences between community methods?

Study Framework
- Multiphase, convergent mixed methods
- Community-based participatory research
- Community engaged knowledge translation

Study Sites
- 4 remote indigenous communities in northern SK
- Purposefully selected consenting, volunteering communities

Study Methods

Comparative Community Findings

Summary
- Participatory engagement methods ensures all community members have a voice in identifying issues and suitable, community-specific solutions are built and driven by interested and involved citizens
- Communities choose interventions based on perceived risks, available resources, community issues and individualised circumstances
- Although seasonality impacts aggressive human-dog encounters, communication, enforceable bylaws and comprehensive education may dramatically decrease the number of dog bites in indigenous communities
- In First Nations communities, research is only part of holistic knowledge and evidence, and is best conveyed through traditional storytelling and wisdom sharing methods – what is called Two-Eyed Seeing

Acknowledgements
- Funding provided by WCVM Companion Animal Health Fund, Northern Scientific Training Program, WCVM Interprovincial Fellowship Grant
- Thank you to participating communities, site contacts, project volunteers, advisors, committee members and aggregate agencies
This qualitative project focuses on the decision making process that Indigenous women undergo when receiving breast cancer treatment. One-on-one, open-ended interviews were completed with 12 Indigenous women from the Saskatchewan region. Two-eyed seeing was the theoretical framework that developed the data collection and analysis phases. A methodological approach of interpretative phenomenological analysis (IPA) was conducted in a thematic analysis to conclude the main findings.

OBJECTIVES
• To understand what impacts the decision making process around breast cancer treatment for Indigenous women
• To understand Indigenous women's experiences in the health care system when going through breast cancer treatment
• To understand how culture plays a role in the decision making process around breast cancer treatment
• To understand Indigenous women's approaches (Western and/or Traditional) for breast cancer treatment

RESULTS
Several of the participants have expressed concerns about four main themes which are: worldview, colonization, accessibility, and support.

Support:
• Emotional
• Physical
• Mental
• Spiritual

Worldview:
• Western
• Traditional
• Combination of the Two

Accessibility:
• Living on reserve/up North
• Self-Efficacy
• Time
• Language

Colonization:
• Indian Residential Schools (IRS)
• Intergenerational Effects of IRSs
• Institutional Racism

IN THEIR OWN WORDS

**Worldview:**
"Everybody has different beliefs in their lives. Some are different like Catholic or whatever, right? I’m Catholic. I always go to the churches, but I always go that [Traditional] way too. I don’t want to lose my culture, [or] where I come from. A lot times that helps a person out."

**Colonization:**
"I couldn’t believe having to make that decision because nowhere on the forms does it say, “I want to be seen by a woman doctor,” or something like that right? There’s nowhere to check that off. It’s an assumption made and for Aboriginal women, it’s not something we do, right? We go in a sweat lodge and cover up in a blanket, you know? We cover, cover, we’re covering ourselves constantly, so yeah that was the big one that really scared me. [It’s a challenge] and I think that it has residential school influence and unfortunately in learning the Indigenous culture, I was learning Indigenous culture effected by residential schools [and] so that was layered on top of it."

**Accessibility:**
"I had to go to the Pink Tree and they gave me the prosthesis and two bras and I went back for another one here, I think it was five years later I went back and then I went back about three years ago because you have to take yourself to Saskatoon to get the services. They don’t bring it to you. Then there’s nobody here to talk to and everybody you talk to, they just sit there and listen and walk away. It’s not effective in any way and the only way you can get a referral back to the Pink Tree is to go see the family doctor and he will refer you.

"I found that difficult. That there wasn’t much support. I mean there was a lot of - there were support groups for women - but they were all older women, and there was definitely nothing for Indigenous people there."

REFERENCES
Brooks, C. M. (2009). Aboriginal Women’s Visions of Breast Cancer Survivorship: Intersections of Race (ism) / Class / Gender and “… Diversity as We Define It” A Thesis Submitted to the College of Graduate Studies and Research in Partial Fulfills the Requirements F. University of Saskatchewan.


First Nations people in Coastal British Columbia have harvested and commodified the forest for centuries. With the arrival of European settlers and the inception of a commercial logging industry, Coast Salish men became highly respected and sought-after employees at logging camps up and down the coast. With attention to the 20th century, my research analyzes the long history of Coast Salish forestry to highlight how cutting down trees provided Coast Salish men the ability to affirm masculine identities in both the pre and post-contact periods. In the theatre of a logging camp, Coast Salish men could ascend the racial and social limitations placed on their masculinity through skill and hard work. By analyzing Coast Salish logger’s remembrances (through community-engaged ethnohistorical research) of their time in ‘the bush,’ this thesis is a study in Indigenous historical consciousness. Considering both the continuities and changes present in Coast Salish forestry and ideals on masculinity constructs an understanding of not only the colonial processes that oppressed, but also the avenues where Indigenous people carved out opportunities for themselves.

The Coast Salish are a linguistic group consisting of several mutually unintelligible languages spoken by culturally related Aboriginal nations in the southern coastal region of British Columbia. I interviewed Coast Salish men who worked as commercial loggers from two Coast Salish nations: the Stó:lō (Fraser River Valley and Canyon) and the Tla'amin (Sunshine Coast, north of the city of Powell River). My research revealed that logging was an extremely prominent occupation for the majority of the men from these communities throughout the late 19th and 20th centuries. Many of these men learned how to log by watching and helping their grandfathers, fathers, uncles, and brothers log around the reserve, and when they came of age (often 11-12 years old, but occasionally younger) they followed them into the bush. For some men, taking up logging provided an escape from the oppressive residential school system. These men learned, from very young ages, that earning a living and providing for family was essential to manhood—both Indigenous and Colonial ideology pertaining to masculinity.

Once working in logging camps, Coast Salish men found that through hard work, they could transcend the racial and social limitations placed on their identities outside of the forest. Logging camps provided a theatre for masculinity to triumph over what the logger provided a Coast Salish man with social mobility both within settler and Coast Salish society. Recognizing that Aboriginal people resist or accept change. Conversations of continuity and change, of acceptance and resistance. They allow us to delve deeper, and more meaningful conversations over how Aboriginal people resist or accept change. Examining the ways that masculinity associated with being a logger provided a Coast Salish man with social mobility both within settler and Coast Salish society pushes us away from a simplistic story of European domination and Aboriginal assimilation. Recognizing that Aboriginal people came to the table with their own ideas relating to society, class, labour, and gender creates a narrative that elevates Aboriginal people beyond mere passive pawns in an imperial and colonial project.
Introduction

Water is essential to all life. The risk to both human health and the natural environment due to contamination of water sources is a concern for Mistawasis Nêhiyawak.

As a result, Mistawasis Nêhiyawak has decided to develop a Source Water Protection Plan (SWPP) to help safeguard their drinking water sources from contamination.

The broader purpose of the plan will be to ensure that their reserve and traditional lands are sustained as healthy environments.

Objectives

This Source Water Protection Plan proposal contains five specific objectives:

✓ Create a Working Committee with invested community members
✓ Perform a Source Water Risk Assessment, and inventory potential contamination sources
✓ Create a risk ranking system and identify appropriate management actions
✓ Develop an implementation strategy
✓ Indigenize the Source Water Protection Plan uniquely for Mistawasis Nêhiyawak

Discussion

✓ Source water protection is defined as the management of watersheds used to supply water – both surface and groundwater – to people (Shrubsole, 2004).
✓ Source water protection is an endless cycle that becomes increasingly efficient and effective as the plan is continually re-evaluated and re-designed
✓ A planning guidance and template developed by Aboriginal Affairs and Northern Development Canada (2013) will be used during the planning process.

Risk Assessment

Risks to source water are identified on a scale of likelihood of occurrence and impact of occurrence. Identified risks are given a numeric value to determine their overall risk ranking score

Significance

The expectation is to incorporate text and design aspects that will help “indigenize” the final plan. This process will help to engage community members, especially local youth, to participate in this community effort to protect source water.

First Nations are well positioned to become leaders in drinking water protection planning in Canada

Projected Results

✓ A draft source water protection plan to Mistawasis Nêhiyawak outlining threats, risks, management actions and implementation to help protect drinking water quality as well as increase water awareness and improve water planning and management

Committee Members

Daniels, Harold – Land Manager, Mistawasis Nêhiyawak Council
Head, Linda – Health Representative, Mistawasis Nêhiyawak Council
Head, Russ – Public Works, Mistawasis Nêhiyawak Council
Horsefall, Michael – Public Works, Mistawasis Nêhiyawak Council
Johnston, Anthony – Special Projects Mistawasis Nêhiyawak Council
Kindrachuk, John – North Saskatchewan River Basin Council
Ledoux, Calvin – Mistawasis Nêhiyawak Community Member
Ledoux, Louis – Director of Operations, Mistawasis Nêhiyawak Council
Pechawis, Greg – Mistawasis Nêhiyawak Council
Pechawis, Leslie – Mistawasis Nêhiyawak Council
Sanderson, Derek – Mistawasis Nêhiyawak Council
Watson, Daryl – Mistawasis Nêhiyawak Chief
CONCLUSIONS

In 1975, anthropologist Niels W. Braroe published Indian and White: Self Image and Interaction in a Canadian Plains Community. This book was based on research conducted in Maple Creek, SK and focused on social relationships and ethnic interaction between members of Nekaneet First Nation (NFN) and settler community members. Braroe (1975) found that NFN members were considered by town residents to be an impoverished segment of society and were marginalized from social and economic opportunities. This current research analyzes the changes in interethnic interaction that have occurred in the area as identified by participants in the 40 years since Braroe’s publication.

In the 40 years since Braroe’s work, Aboriginal community members have sought innovative approaches to improving their social, economic and political positions in Maple Creek. Some, but not all settler community members have also supported and even participated in this endeavour, but not always representing Aboriginal peoples the way many see themselves.

Aboriginal participants identified local problems and posed solutions to their experiences in interethnic interaction. Key changes desired include: Aboriginal representation on the school board, achieving more professional opportunities in positions of higher status for Aboriginal peoples, and the creation of an Urban Reserve and/or aboriginal owned businesses in Maple Creek.

REFERENCES


ACKNOWLEDGEMENTS

Thank you to all research participants from Nekaneet First Nation and Maple Creek. Funding for this research was provided by the Department of Agriculture and Resource Economics, University of Saskatchewan.

FOR MORE INFORMATION:

Dr. David Natcher, Department of Agriculture and Resource Economics, 306-966-4045, david.natcher@usask.ca
Indian Residential Schools: Healing and the Role of Mental Health Professionals

Tracey Carra Brian Chartiera Riley Burnsb Evelyn Burnsb Joanne Yakowecb David Cochran

INTRODUCTION

- Studies of the long-term impacts on former Indian residential school (IRS) students and the subsequent effects on their families document the need for reconciliation
- The literature on healing from IRS impacts is relatively scant
- This research builds on a pilot study of former IRS student and what healing means

OBJECTIVES

- To understand what healing means to former IRS students
- To gather information on what was needed to promote healing among former IRS students
- To explore the role of mental health professionals in meeting healing needs

MATERIALS & METHODS

- In partnership with the Marguerite Riel Centre in Melfort, Saskatchewan, which houses one of Saskatchewan’s Resolution Health Support Programs (RHSP) we began our snowball sampling of Support Workers and Elders
- RHSP Support Workers and Elders provide emotional and cultural support to former IRS students and their families
- We interviewed 11 Support Workers and Elders in four sites in Saskatchewan and asked what was needed for former students to heal from IRS impacts
- We were particularly interested in their perceptions of the role of mental health professionals in the healing process

RESULTS

- Participants identified two main themes regarding what mental health professionals could do to promote healing
  a) Understand culture and personal history
  They don’t understand us. So, like if there was a therapist that came or a counsellor that came to talk to you. ‘No, I don’t want to listen to them.’ I’ve heard that! Because they don’t understand us. They won’t believe us. So how—how can the white community help us when they don’t believe what happened to us.
  b) Need for continuity and proper diagnosis
  Sometimes our people are not as fortunate and they get misdiagnosed and they get placed on medication and then they stay there for forever and a day.
  We need to have some kind of continuity in regards to the program delivery, in regards to the kind of people who are working in our communities.

CONCLUSIONS

- Our findings indicate that intercultural competency must be based on relationship building and exposure to Indigenous cultural practices
- A strong and distinct theme from our interviews was participants’ perceptions of the lack of cultural understanding among mental health professionals—a direct tie to Call to Action (#57) the need for skills based training in intercultural competency.
- This study emphasizes Call to Action (#23): the need for all levels of government to provide cultural competency training for all healthcare professionals

REFERENCES


ACKNOWLEDGEMENTS
Our research community is made up of Elders, Treatment Centres, researchers, service providers and decision makers. We are bringing together multiple worldviews in our research process, and putting into practice what the Canadian Institutes of Health Research define as two-eyed seeing, as taught by Elder Albert Marshall. Central to doing this is accounting for everyone’s voice in the space that relates, as explained by Te Pou (2008).

Nominated Principal Investigator: Colleen Anne Dell (University of Saskatchewan) Co-Principal Investigators: Carol Hopkins (National Native Addictions Partnership Foundation), Peter Menzies (Independent, formerly Centre for Addiction and Mental Health), Jennifer Robinson and former designate Jonathan Thompson (Assembly of First Nations) Co-Aplicants: Sharon Acoose (First Nations University of Canada), Peter Butt (University of Saskatchewan), Elder Jim Dumont (Nimke NupiGawagan Healing Centre), Marwa Farag (University of Saskatchewan), Joseph H. Gone (University of Michigan at Ann Arbor), Rod McCormick (Thompson Rivers University, formerly University of British Columbia), Christopher Mushquash (Lakehead University), David Mylota (University of Saskatchewan), Nancy Poole (RC Centre of Excellence for Women’s Health), Rev. Sha (University of Ottawa), Virgil Tobias (Nimke NupiGawagan Healing Centre) Knowledge Users: Mary Delaney (Independent, formerly Nimke NupiGawagan Healing Centre), Renee Linklater (Centre for Addiction and Mental Health), Mike Martin (National Native Addictions Partnership Foundation), Kasi McMicking (Health Canada), Brian Rush (Independent, formerly Centre for Addiction and Mental Health), Sarah Stevens and former designate Darry Stoneedge (Health Canada) Collaborators (Treatment Centres): Willie Alphonse (Nenpayin Wellness Centre), Ed Azure (Nelson House Medicine Lodge), Christina Brazzoni (Carrigan Sekani Family Services), Patrick Dumont (Wanaski Centre), Cindy Ginnish (Rising Sun), Yvonne Howe and former designate Hilary Harper (Ekwesket Healing Lodge), Karen Main (Leading Thunderbird Lodge), Zelda Quewancewanz (Sauteaux Healing and Wellness Centre), Yvonne Rigby-Jones (Tsun-Wun-Lum), Ernest Sauve (White Buffalo Youth Inhalant Treatment Centre), Virgil Tobias and former designate Mary Delaney (Nimke NupiGawagan Healing Centre), Norma Saulis (Wolastoqiyik Healing Lodge) Contributors (Treatment Centres): Iris Allen (Charles J. Andew Youth Treatment Centre), Rolanda Manitowabi (Ngwaagan Gaag Recovery Centre Inc.), Susan Thomas (Sagebrush Mind Pimatiziwin Family Treatment Centre), Sadie Greenway (Kackaamin Family Development Centre), Yvonne Oliver (Skiska Medicine Lodge), Delena Tikk (Three Voices of Healing Society), Jordan Head (St. Paul’s Treatment Centre), John Dixon (Dilico Adult Residential Treatment Centre) Collaborators (Leadership): Chief Austin Bear (National Native Addictions Partnership Foundation), Debella Doll (Youth Solvent Addiction Committee), Val Desjarlais and former designate Janice Nicotine (National Native Addictions Partnership Foundation), Rob Eves and former designate Rita Notarandrea (Canadian Centre on Substance Abuse), Elder Campbell Papequash (Saskatchewan Team for Research and Evaluation of Addictions Treatment and Mental Health Services) Contractors (Methodology): Elder Jim Dumont (Nimke NupiGawagan Healing Centre), Randy Duncan (University of Saskatchewan), Carina Fiedeler-Van Dijk (ePhy Consultancy), Laura Hall (University of Saskatchewan), Margo Rowan (University of Saskatchewan) Management: Barbara Fornssler and former designate Michelle Kushniruk (University of Saskatchewan)
Indigenous Success in the STEM Disciplines; Exploring Assets and Barriers to STEM Engagement for Indigenous Students

Dr. Kristina Bidwell, Associate Dean Aboriginal Affairs & Dr. Sandy Bonny, Program Developer; STEM Access Initiatives

INTRODUCTION

Indigenous students are strongly under-represented among University of Saskatchewan undergraduate STEM degree programs (4% and 3% in the Colleges of Arts & Science and Engineering, respectively, compared to 14% in social sciences, and 24% in education). The reasons for this are complex, but the outcomes are clear: fewer eligible applicants to professional colleges requiring a foundational degree (Medicine, Dentistry, WCVS); few Indigenous STEM professionals (including science teachers); a lack of role models to inspire young Indigenous STEM students; and a limit on the diversity, richness and social-relevancy of the STEM disciplines among our provincial demographic.1

Situated on Treaty 6 Territory in the Homeland of the Métis Nation, our university is called in the spirit of Truth and Reconciliation to ensure that Indigenous peoples have equitable access to educational opportunities (TRC 92.1) through changes that welcome both Indigenous peoples and their ways of knowing into our colleges. Reconciliation in STEM disciplines includes working to ameliorate a long history of systemic and institutional racism that has limited the cultural-relevancy of, and tangible access to, STEM for Indigenous learners.2,3

We engaged in a consultation process with students, academic staff, program administrators, and cultural teachers within and beyond our campus community4 to better understand the forces driving Indigenous student participation in the prairie region. Our goal is to inform the development of post-secondary programming that will provide a pipeline for Indigenous students to access diverse STEM degree programs.5 We envision diverse STEM degree paths, succeed within those programs, and embrace socially- and culturally-responsive approaches but also ensure that Indigenous students have equitable access to educational council and community and peer support for STEM engagement. Interviews with students, teaching faculty and program advisors at U of S and other institutions provided additional information and context to inform quantitative data analysis.

RESULTS

Unlike K-12 preparation in STEM subjects for students attending rural, remote, and First-Nations administered high schools, as compared to urban provincial schools, was a strong barrier to successful post-secondary STEM engagement. The availability of 20 and 30 level STEM courses in rural, remote, and FN schools is limited by a STEM-teacher deficit and by an inflexible delivery model.1 Currently, direct entry U of S students (52% > 70%) who have been unable to access pre-requisite 30 level math and science courses are directed to adult basic education and/or online course options. The challenges of enrolling in multiple institutions concurrently, as well as attention to technical collegiate programs, do not encourage transition to U of S STEM degree programs. Students who access STEM degree programs with pre-requisites earned without requisite hands-on laboratory and problem-based learning experiences may also find themselves under-trained in problem-solving and experience first year courses as discouragingly challenging. Other key barriers and assets to STEM engagement are summarized in Table 2.

Despite barriers, Indigenous students do persist in STEM disciplines and current upper year Indigenous BSc students expressed appreciation for cultural and advisory supports provided by the Trik Mount University and Aboriginal Student Centre. While some had accessed academic supports, all of these upper-year STEM students had been admitted with 30-level STEM pre-requisites, and many benefited from non-academic assets including financial advocacy, a sense of belonging to the campus community, and a sense of personal responsibility for their own success. They viewed second education as a path to valued career and life goals, and are sustained by a passion for learning:

“...to see, studying science is like… becoming a part of the future, do you know what I mean? It’s just got endless possibilities that I’m excited about and excited about learning about.”

Table 1. U of S Research Services. Bâm Certificate # 15-397

• Electronic surveys (14)
• Interviews (26)
• ASAP program evaluation (4 x 60)
• Upper year conversation cafe hosted by the TMC (20+)

U of S Indigenous Student Experience

• Interviews (26)
• Internal data analytics
• Past program and course review (MISP, ATEP, strategies within ASAP, individual instructional approaches)

Administration / Advisory / Instructional Experience

• External program visits (U Manitoba, U Winnipeg, U Lethbridge, U Calgary, Mt. Royal U, Yukon College) and interviews (15)
• Interviews with community educators, transition coordinators, advisors to educational council (17)

Community & External Program Survey

Here’s a cool idea… I heard of a program that…

CONCLUSIONS

This research identified key elements of program design and delivery that support the engagement and retention of Indigenous learners in STEM degree programs.

1. Improved access to preparatory K-12 content is needed to increase eligible Indigenous student enrollment in STEM programs.

2. On-site preparatory courses (90-120 level) would improve students’ academic experience in first year, and provide a ladder in to STEM.

3. Culturally-responsive advising helps students navigate non-academic and cultural barriers to academic engagement.

4. Instructional strategies matter and small class sizes promote instructional responsiveness.

5. There is a need to build cultural capacity within STEM disciplines… to connect and support Indigenous STEM students and to highlight to relevance of STEM degree outcomes to Indigenous learners and their communities.

We are excited to apply results of this research to the development of a visible pathways model to support student access to, and success within STEM degree programs and post-graduate opportunities.

REFERENCES


ACKNOWLEDGEMENTS

We thank the Gwenna Moss Centre for Teaching Effectiveness and Curriculum Innovation Fund for supporting this research; our colleagues in the Trish Mount University and Social Science Research Laboratory for their collaboration; and participating staff and students for sharing their perspectives and priorities for STEM engagement — Anindikokimick, misi cho, marsey, thank you!
## Context

- Sport participation fosters a range of positive physical, mental, emotional, spiritual, and social health-related advantages (Statistics Canada, 2008; Taliaferro et al., 2010)
- Indigenous women athletes, in particular, experience many challenges and they continue to struggle to increase their recognition and participation in sport (Forsyth, 2007; Hall, 2013)
- Learning from Indigenous women athletes about their meanings and experiences in sport is necessary for sport program implementation, health optimization, and sport policy development

## Purpose

The purpose of this research is to explore Indigenous women athletes’ meanings and experiences of flourishing in sport, and to identify culturally relevant strategies to support them to reach their potential and attain health outcomes in sport. This research focuses on the voices of Indigenous women athletes.

## Philosophical Worldview

- **Two-eyed seeing** (Bartlett et al., 2012)
  - Introduced to the research world by Mi’kmaw Elders Albert and Murdena Marshall
  - Rooted in the belief that there are many ways of understanding the world, some represented by various Indigenous knowledge systems and others by Western perspectives

## Research Design

- **Narrative strategy of inquiry in which participants share stories about their lives to illuminate meaning on their complex, socially constructed experiences** (Creswell, 2014; Smith & Sparkes, 2009)
  - Reflective of the nature of Indigenous knowledge, which rests on oral tradition derived from practical knowledge and storytelling (Baskin, 2005; Blodgett et al., 2011)

## Participants

- **16 competitive Indigenous women athletes**
  - Self-identification as an Indigenous woman – First Nations, Métis, or Inuit (AANDC, 2012)
  - Minimum age of 13 years
  - Minimum provincial sport experience
  - Willingness to share personal experiences representative of flourishing in sport

## Procedure

- **Prolonged engagement through two phases to facilitate depth of understanding and ongoing consultation** (Blodgett et al., 2015)

## Data Analysis and Knowledge Translation

- Combine textual and visual data to co-construct narratives with participants (Collier & Collier, 1996)
  - Highlight athletes’ unique journeys toward flourishing in sport, and identify strategies/resources to support Indigenous women athletes’ flourishing in sport
- Reach Indigenous, sport, and academic audiences (e.g., Indigenous media sources, social media, conferences)
- Provide platforms to generate attention with Indigenous women athletes (e.g., athlete interaction, product creation)

## Acknowledgements

Thank you – tiniki – to the community advisors, Ms. Wuttunee from Red Pheasant First Nation and Mr. Dunn from Athabasca Chipewyan First Nation, for their ongoing consultation, commitment, and involvement, and to the Saskatchewan Health Research Foundation (SHRF) for providing funding for this research.

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Image credit: https://www.flickr.com/photos/integrativescience/

Photo credit: SHRF

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**Indigenous Women Athletes’ Flourishing in Sport**

Leah Ferguson¹, Gillian Epp¹, Kellie Wuttunee², Matthew Dunn², Tara-Leigh McHugh³, Louise Humbert¹, & Sean Lessard³

¹College of Kinesiology, University of Saskatchewan, ²Community Sport advisor, ³University of Alberta
Influence of Discrimination, Residential Schools and Cultural Disruption on Diabetes Prevalence among First Nations Adults

Roland Dyck1, C Karunanayake1, B Janzen1, J Lawson1, D Rennie1, V Ramsden1, J Gardipy2, L McCallum3, S Abonyi1, J Dosman1, JA Episkenew4, P Pahwa1

University of Saskatchewan1; Beardy’s and Okemasis Willow Cree First Nation2, Montreal Lake Cree Nation3, University of Regina4

Background:

- Indigenous peoples in Canada are experiencing an epidemic of diabetes and its complications
- Known diabetes predictors include increasing age, female sex, obesity and exposure to diabetic pregnancies
- Social determinants of health are also important diabetes predictors but little is known about the contribution of factors related to colonization.

Aims:

- To investigate the influence of discrimination, residential school attendance and cultural disruption on diabetes prevalence among adults in two Saskatchewan First Nations communities while adjusting for known diabetes risk factors.

Methods:

- 2012-2013 cross-sectional survey conducted as part of CIHR funded First Nations Lung Health Project
- Community-Based Participatory Research approach
- Modified Krieger scale used to evaluate discrimination.
- Chi-square tests to determine univariate associations between diabetes prevalence and independent variables.
- Multilevel logistic modeling approach to adjust for covariates of interest and to examine possible interactions.

Univariate Associations between Diabetes and Individual Characteristics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Diabetes Prevalence (%)</th>
<th>Odds Ratio (95% CI)</th>
<th>Parameter</th>
<th>Diabetes Prevalence (%)</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Male 9.7, Female 15.8</td>
<td>1.73 (1.16, 2.58)</td>
<td>Marital status</td>
<td>Married 16.3, Single 8.4</td>
<td>1.00 (ref)</td>
</tr>
<tr>
<td>Age</td>
<td>30-39 years 10.9, 40-49 years 9.6</td>
<td>3.39 (1.69, 6.78)</td>
<td>Smoking status</td>
<td>Never 18.6, Current smoker 10.9</td>
<td>1.00 (ref)</td>
</tr>
<tr>
<td>Body Mass Index</td>
<td>High (8-11) 0.11 (0.02, 0.54)</td>
<td>0.007</td>
<td>Body Mass Index</td>
<td>Normal 2.1, Overweight 3.86 (1.51, 9.87)</td>
<td>0.005</td>
</tr>
<tr>
<td>Duration on Reserve</td>
<td>&lt; 12 months 1.00 (ref), All 1.69 (0.96, 2.97)</td>
<td>0.068</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary

- Higher diabetes prevalence in two Saskatchewan First Nations communities was significantly related to known diabetes risk factors including female sex, increasing age and increased measures of adiposity.
- Elevated diabetes risk among First Nations women was at least partly due to increased adiposity.
- Those living on-reserve full time experienced elevated diabetes risk.
- Using this methodology, residential school attendance was not a predictor of individual-level diabetes risk and measures of cultural continuity did not protect against diabetes occurrence.
- An unexpected finding was that those experiencing the highest levels of discrimination had the lowest prevalence of diabetes.
  - These individuals were more likely to be employed or students, married and to have higher incomes.

Discussion

- Impact of residential school attendance may be so pervasive within First Nations Communities that it is not possible to demonstrate differences in individual-level diabetes risk between those directly affected or not.
- High levels of discrimination more likely to be experienced off-reserve and our findings may relate to improved social determinants of health. However, while engagement with off-reserve society may reduce diabetes risk in some way, it appears to come at a high emotional cost.

Contact: roland.dyck@usask.ca

Conflict of Interest Disclosure: none. This poster does not contain any trade names. This poster does not cover any unapproved uses of specific drugs, other products or devices.
The present study uses cross-sectional data collected in 2012-2013 as part of the relationship between interpersonal discrimination and depression differs for women whether: 1) interpersonal discrimination is associated with depression; and 2) the To determine among rural-dwelling on-reserve First Nations people in Saskatchewan
Saskatchewan First Nations Lung Health Project (FNLHP), a community-based complete interviewer-administered questionnaires.

Variables
Depression, the dependent variable, was measured dichotomously (yes/no) by the question “Has a doctor or primary care giver ever said you have...depression”. Self-reported, health professional-diagnosed depression has shown to be a suitable proxy measure for diagnosis of depression based on clinical interview.

The primary exposure was interpersonal discrimination, measured by the 9-item measure for diagnosis of depression based on clinical interview.

Covariates included gender, age, needed housing repairs, employment, education financial strain, self-rated physical health, and diabetes.

RESULTS
Of the 1570 eligible adults (18 years of age and older) and 580 eligible households in the two First Nations communities, 874 (55.7%) individuals living in 406 (70%) households participated in the survey.

Table 1: Distribution (N, %) of study variables for total sample (n=874) and by gender (men=431, women=443)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Total Sample</th>
<th>Men</th>
<th>Women</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years), mean ± SD</td>
<td>35.22 ± 14.39</td>
<td>35.65 ± 14.42</td>
<td>34.37 ± 14.32</td>
<td>0.084</td>
</tr>
<tr>
<td>Housing in need of repairs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>345 (40.7)</td>
<td>186 (44.0)</td>
<td>159 (40.6)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>529 (59.3)</td>
<td>265 (56.0)</td>
<td>264 (59.4)</td>
<td></td>
</tr>
<tr>
<td>Yes, major repairs</td>
<td>232 (28.5)</td>
<td>119 (28.1)</td>
<td>113 (28.8)</td>
<td>0.58</td>
</tr>
<tr>
<td>No, regular maintenance</td>
<td>238 (29.2)</td>
<td>118 (27.9)</td>
<td>120 (30.6)</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed/unemployed</td>
<td>303 (35.7)</td>
<td>127 (29.6)</td>
<td>176 (41.9)</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>410 (47.2)</td>
<td>198 (45.1)</td>
<td>212 (49.5)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>156 (18.0)</td>
<td>64 (14.9)</td>
<td>92 (21.6)</td>
<td></td>
</tr>
<tr>
<td>Educational attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school or greater</td>
<td>441 (50.6)</td>
<td>248 (56.2)</td>
<td>193 (44.9)</td>
<td>0.001</td>
</tr>
<tr>
<td>Less than high school</td>
<td>430 (49.4)</td>
<td>231 (53.8)</td>
<td>199 (45.1)</td>
<td></td>
</tr>
<tr>
<td>Financial hardship</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>460 (53.0)</td>
<td>218 (49.5)</td>
<td>242 (56.5)</td>
<td>0.039</td>
</tr>
<tr>
<td>No</td>
<td>408 (47.0)</td>
<td>222 (50.5)</td>
<td>186 (43.5)</td>
<td></td>
</tr>
<tr>
<td>Self-rated physical health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excellent/very good/good</td>
<td>629 (72.1)</td>
<td>301 (67.9)</td>
<td>328 (76.3)</td>
<td></td>
</tr>
<tr>
<td>Fair/poor</td>
<td>244 (27.9)</td>
<td>142 (32.1)</td>
<td>102 (23.7)</td>
<td>0.007</td>
</tr>
<tr>
<td>Ever diagnosis of diabetes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>728 (85.7)</td>
<td>355 (83.5)</td>
<td>373 (89.9)</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>112 (13.3)</td>
<td>70 (16.5)</td>
<td>42 (10.1)</td>
<td>0.007</td>
</tr>
<tr>
<td>Discrimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No situations</td>
<td>305 (35.8)</td>
<td>159 (36.8)</td>
<td>146 (34.7)</td>
<td>0.590</td>
</tr>
<tr>
<td>1 or 2 situations</td>
<td>224 (26.2)</td>
<td>107 (24.8)</td>
<td>117 (27.8)</td>
<td></td>
</tr>
<tr>
<td>3 or more situations</td>
<td>325 (38.0)</td>
<td>166 (38.4)</td>
<td>158 (37.5)</td>
<td></td>
</tr>
<tr>
<td>Depression diagnosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>668 (80.6)</td>
<td>324 (76.2)</td>
<td>344 (81.5)</td>
<td>0.001</td>
</tr>
<tr>
<td>Yes</td>
<td>161 (19.4)</td>
<td>101 (23.8)</td>
<td>60 (18.5)</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Multivariable logistic regression of association of interpersonal discrimination with depression, adjusting for covariates*

<table>
<thead>
<tr>
<th>Gender</th>
<th>Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>1.00</td>
</tr>
<tr>
<td>Women</td>
<td>1.75 (1.17-2.61)</td>
</tr>
<tr>
<td>Interpersonal discrimination</td>
<td>1.00</td>
</tr>
<tr>
<td>1 or 2 situations</td>
<td>1.76 (1.05-2.95)</td>
</tr>
<tr>
<td>3 or more situations</td>
<td>1.97 (1.22-3.15)</td>
</tr>
</tbody>
</table>

*Adjusted for age, need of housing repairs, education, employment, financial strain, self-rated physical health, diabetes

DISCUSSION
The main finding of this study was that exposure to interpersonal racism among rural-dwelling, on-reserve First Nations women and men in Saskatchewan was associated with an increased odds of depression in a dose-response manner, after adjusting for potential confounders.

The association between interpersonal discrimination and depression was similar for women and men. Women in our study, however, were more likely than men to report a diagnosis of depression. The relationship between gender, depression and related symptomatology is likely a result of a complex interplay of factors, including gender-role related differences in help seeking behaviour and expressions of distress. Indigenous women’s social and economic disadvantage relative to indigenous men has been causally linked to the denigration of gender-egalitarian Indigenous culture following colonization.

Strengths of this study include its participatory methodology and community partnerships, a respectable response rate, statistical control of key confounders, the use of a psychometrically sound measure of interpersonal discrimination, and its gender lens. Limitations were also present. Misclassification was likely introduced by this study’s focus on perceived discrimination measuring that only discriminatory behaviors apparent to the individual and at the interpersonal level were assessed, likely resulting in an underestimation of our primary exposure. Additional limitations included our use of self-reported, health professional diagnosed depression and a Western ethnocentric conceptualization of depression. The cross-sectional design prevents us from making causal inferences.

CONCLUSION
These findings highlight the importance of interpersonal discrimination as a determinant of mental health among First Nations women and men in rural Saskatchewan. Research directed at identifying the most efficacious interventions, programs and policies to combat racism is required to advance the goal of health equity.

ACKNOWLEDGEMENTS AND CONTACTS
*Assess, Redress, Re-assess: Addressing Disparities in Respiratory Health Among First Nations People*, CHR MOP-246583-A08-CCA-11823. PIs: Drs. J. Dosman, P. Pahwa, S. Abonyi College of Medicine, University of Saskatchewan. We are grateful for the contributions of all the community members who took the time to participate and assist in the study.

For inquiries specific to this study, contact Bonnie Janzen, Dept of Community Health & Epidemiology (bonnie.janzen@usask.ca).
Introduction to CRISM

Omotolani Adekoya\textsuperscript{a}, Barbara Fornssler\textsuperscript{b}

\textsuperscript{a}University of Saskatchewan, \textsuperscript{b}Canadian Research Initiative in Substance Misuse (CRISM)

The Canadian Research Initiative in Substance Misuse (CRISM) is a five-year initiative of the Canadian Institutes of Health Research (CIHR).

- CRISM can identify and develop effective clinical & community-based treatment and prevention interventions.
- CRISM can provide evidence to enhance treatment & prevention services.
- CRISM can support efforts to improve quality of care and quality of life.

To ensure nationwide coverage and regional responsiveness, four Nodes comprise the network: BC, Prairies, Ontario, and Quebec-Atlantic.

CRISM Prairies & Reconciliation

CRISM Prairies is applying what team members learned from the Honouring Our Strengths: Indigenous Culture as Intervention in Addictions Treatment research project. We are doing this because reconciliation is not about a single research project, it is about the research processes we engage together and how we conduct ourselves everyday. Reconciliation can be seen in the partnerships we form and in the relationships we prioritize for this work together.

Reconciliation “is about establishing and maintaining a mutually respectful relationship between Aboriginal and non-Aboriginal peoples in this country. In order for that to happen, there has to be awareness of the past, acknowledgement of the harm that has been inflicted, atonement for the causes, and action to change behaviour” (TRC Commission 2015).

- CRISM Prairies leadership participated in the initiating Pipe ceremony and Sweatlodge with our guiding Elders. Engaging ceremony is part of our research process and knowledge collaboration.
- Elder JoAnn Saddleback shared her perspective and teachings with all network members at our initiating team meeting. We are listening and adapting our practices to reflect new knowledge.
- We are collaborating to share the importance of relationships through a CRISM video series that will be released in 2017.
- We are forming an Indigenous Advisory Council to further guide the work of CRISM Prairies.

...and we won’t stop there!

Introduction to CRISM

National Project

The OPTIMA Trial

Optimizing Client-Centered Care

- Prevention and treatment of opioid use disorder (OUD) in Canada has become an urgent public health priority. The available maintenance treatment of methadone and suboxone have been associated with several adherence challenges.
- The OPTIMA national trial seeks to examine the relative benefits of buprenorphine/naloxone and methadone, within a realistic model of care.

Who we are

The CRISM Prairie Node is comprised of members from the provinces of Alberta, Manitoba, and Saskatchewan interested in substance misuse. Our team is comprised by Elders, Knowledge Keepers, Researchers, Front line service providers, Clinicians, and Community groups.

Node Leadership Includes: Elders John & Jerry Saddleback & Terry Daniels. Knowledge Keeper Shane Patterson. Nominated Principal Investigators: Dr. Cam Wild (UofS) Co-Principal Investigators: Dr. Colleen Dell (UofS) & Dr. David Hodgkins (UofC) Node Manager: Dr. Denise Adams Communications Manager: Dr. Barbara Fornssler

Regional projects

Motivating client engagement in SM treatment

- Researchers and service providers recognize that drop-out is perhaps the most common outcome of specialty substance misuse (SM) treatment regardless of type of intervention offered or service context.
- To tackle this, the Node’s first demonstration project focuses on motivational client engagement and contingency management interventions in SM treatment.

Building Online capacity for community-based SM screening and brief interventions

- Only a small proportion of substance misusers are ever diagnosed. Many people exhibiting moderate-to-low problem severity prefer, and can benefit from, exposure top low-intensity and self-directed interventions.
- Additional research is needed to examine the impact of interventions that link SM screening with brief internet-based interventions.

Contact us

Website: www.crismprairies.ca
Prairie Node Office: 4 - 062 Edmonton Clinic Health Academy 11045 - 87 Avenue Edmonton Alberta, Canada T6G169
Tel: 780-492-0135
Fax: 780-492-0165
Node Manager E-mail: deniseadams@ualberta.ca

Examples of Member Projects

- Implementing harm reduction services in acute care: patient and health care provider experiences’ describes one of Canada’s first needle and syringe exchange programs for acute care inpatients in order to generate evidence to enhance this program’s delivery.
- Adding Contingency Management to On-Line Treatment as for the Treatment of Disordered Gambling

Node funding

- The CRISM Prairie Node provides support for its members to develop new projects. Ad-hoc request of members may be considered for up to $15,000 one-time funding.
- Funds are to be used to support research and/or knowledge exchange activities in the area of substance misuse interventions.
- 9 members have received funding to date.
Building Reconciliation at the U of S

Investigation of Aboriginal Student Health Concerns and Utilization of Student Health Services

Sagal Adam, Shaileia Rajagopal, Faria Khan, Madiba Tahir, Kyle Moroziuk, Maryellen Gibson, Lynn Kuffner, Graeme Joseph

INTRODUCTION

In 2011, Saskatchewan’s population of self-identified Aboriginals was 157,740 or 15.6% of the total population (1). University of Saskatchewan has one of the highest populations of Aboriginal Students in the U15 (2).

Student Health Services (SHS) is a primary health care center that offers non-urgent and urgent care, including physicians, medical specialists, psychiatrists, nurse practitioners, nurses, social workers, and dentists (3). SHS was troubled by the lack of utilization of campus health services by Aboriginal students and wanted to learn how to better support this demographic of students.

They partnered with the School of Public Health and the ASC to explore these issues at the University of Saskatchewan. This distribution was coupled with advertisements on the Aboriginal Student Centre Facebook page. The survey consisted of closed and open ended questions.

OBJECTIVES

The purpose of this project was to conduct a survey questionnaire of Aboriginal students to learn more about health beliefs, practices, socio-economic status and their utilization of health services. The project also aimed to gather insight into the gaps in services at Student Health Services and to create a more inclusive environment to address the health needs of the entire university population.

METHODS

A quantitative and qualitative data collection method was delivered via an online survey administered to Aboriginal Students on campus. Researchers met with stakeholders to consult on appropriate question formation and cultural sensitivity.

A survey was produced and distributed via email to all self-identified Aboriginal students registered at the University of Saskatchewan. This distribution was coupled with advertisements on the Aboriginal Student Centre Facebook page. The survey consisted of closed and open ended questions.

RESULTS

In total, the survey had 230 respondents of the 2200 target population. Demographic questions found higher proportion of female students taking part in the survey (79.1%) with the majority of respondents being undergraduate students (78.3%). 90% of the respondents were full time students with 40% of students working at least part time while studying.

The questions based on access and utilization found that 33% of respondents had accessed the health clinic on campus with a further population visiting physiotherapy (1.3%) and massage therapy (2.2%).

When asked to list all applicable reasons as to why they had not used on-campus services, respondents cited not knowing about the services (43%), not needing the services (37%), or accessing these services elsewhere (43%). The idea that Aboriginal students were accessing off campus at a higher rate than on-campus was reiterated in the 51st question.

The possible reasons for the lack of utilization were: most respondents noted a lack of knowledge on Student Health Services, a lack of insurance, inconvenient hours, and a lack of culturally sensitive services as the main reasons for not using on-campus services more.

CONCLUSIONS

The survey did find a higher proportion of Aboriginal students accessing Student Health Services than previously known or expected. Even though more students are accessing the services, the survey respondents gave constructive ideas on areas where Student Health Services can make their services more accessible to this group of students while taking into account the diverse health needs of the Aboriginal student population.

REFERENCES


ACKNOWLEDGEMENTS

Special thanks for the creation, implementation, and results of this project go to:

• Lynn Kuffner, former Student Health Services Manager
• Rita Hanoki, Health Education Coordinator
• Graeme Joseph, Team Leader for First Nation, Métis, and Inuit Student Services
• Dafene Speidel, Traditional Native Elder
• Eleonore Daniel-Vaughoes, Assessment Coordinator
• School of Public Health
Medicine Wheels and Celestial Circles

History, Symbolism and Teachings

Natasha King, MSEM student, School of Environment and Sustainability

Advisor: Janet McVittie Community partner: Alexandria Wilson, Aboriginal Education Research Centre, University of Saskatchewan

The Prairie Habitat Garden transitions the angular knot of campus buildings onto the sinuous banks of the South Saskatchewan River. The river, whose continued flow alongside growing grasses and under shining sun, reminds us of our obligation to share this land under the spirit an intent of Treaty 6. The College of Education at the University of Saskatchewan created the garden as a teaching tool, to preserve native prairie ecosystems and to increase awareness and understanding of Indigenous cultures. By incorporating Indigenous design features in the garden, the college has set forth to integrate, preserve, and sustain endangered, native, prairie plants and ecosystems together with endangered Indigenous cultures.

Individual and group values shape the social-cultural pillar of sustainability and determine how forces will either influence or hinder adaptive change. As the University of Saskatchewan moves along a path of decolonization and Indigenousization by incorporating land-based education, Indigenous knowledge, and Indigenous ways of knowing in many departments, they strengthen this socio-cultural pillar of sustainability for all people.

The Prairie Habitat Garden is a place of refuge, a haven for native prairie and medicinal plants, and an introduction for many to Indigenous teachings through design elements constructed by Elders and students together. One of these elements is a medicine wheel. The large circle of rocks is divided into quadrants by two lines of rocks that cross in the middle of the wheel. This symbol is used in Indigenous and non-Indigenous teachings, frequently in healthcare and school settings, across North America to explain four parts, positions, or components that are equal and complimentary of each other. A brief list of some teachings conveyed by the medicine wheel includes: the four directions, four seasons, four stages of life (child, youth, adult, elder), four elements (air, fire, water, earth), and the four parts of ourselves (body, mind, heart, spirit).

One part of the strength of these teachings is the equality placed upon the parts, demanded by the spatial configuration of the circle. A list would create a hierarchy and denote an importance of one over another thus breaking apart continuity and relationships. The medicine wheel is a powerful, easily recognisable and useful symbol. The medicine wheel in the garden has been disturbed by weeding, animals and the elements so it is no longer a complete symbol. In the discussion to rebuild it, the history of medicine wheels was questioned, as it is not a local Neyinowak Inninwak (Cree) traditional symbol.

Research Questions

- Should the Prairie Habitat Garden replace the current damaged medicine wheel with a traditional celestial circle? How will that change the teaching dynamics and what can be learned?
- The medicine wheel has been used as a powerful teaching symbol and is fully integrated into many learning systems. Will discovering a non-traditional history of this symbol affect the power of its teachings?
- Can a celestial circle serve its traditional uses in a location near a building where the sunrise on the horizon cannot be seen? Does the ability of students to learn Indigenous science, celestial rhythms, and the other traditional uses from the circle outweigh the fact it may not be fully functional for viewing all celestial alignments?
- Could this placement open up needed conversations and teachings about urbanization, light pollution, human adaptability, indigenization of colonial spaces and values?

Methodology

In order to answer these questions, I plan to conduct a literature review on the histories of medicine wheels and celestial circles, compiling how these symbols are used and what teachings are effectively learned through them. As many of the details of the origin and use of these symbols are not written down, I will also interview several sources and consult Elders to fill in the details.

The outcomes of my research will assist the current guardians of The Prairie Habitat Garden in their decision to either rebuild the existing medicine wheel or replace it with a celestial circle. We will engage a group in the building process, and I will design a teaching lesson for this aspect of The Prairie Habitat Garden, including descriptive, education signage relating to the garden’s features and, possibly, the process involved in making the decision to either rebuild or replace.

Limitations

I am a woman of settler origins and although I seek awareness of how this pervades my research standpoint I will always be influenced by racism and colonization. Labouring to decolonize myself and our institutions, and to upend racism and hetero-patriarchy will continue to be my primary purpose.

Acknowledgments and References

I acknowledge that I live and work on the traditional territories of the Neyinowak Inninwak (Cree) and Metis peoples.

Thank you to my advisors Dr. Janet McVittie and Dr. Alex Wilson, for their confidence and encouragement.
NEEDS ASSESSMENT FOR HIGHWAY 123 TO CUMBERLAND HOUSE, SK

PRESENTED BY: JOHN DESJARLAIS JR., P. E, ENG., MBA, MMP, GENI CANDIDATE
SUPERVISOR: DR. ROBERT PATRICK

HISTORY
- Historical Cumberland House
- Oldest existing settlement in Western Canada
- Established 1774
- First inland Hudson Bay trading post
- Instrumental in development of Western Canada
- Historical trade hub and route
- Largest inland Delta in North America
- Highway 123 – Only means of “All weather road access”
- 138 km total, 96 km of gravel

RESEARCH QUESTION
- Does the physical condition of northern roads have an impact on people and their communities?

RESEARCH GOALS
- Does the physical condition of Highway 123 to Cumberland House have any impact on the people and community of Cumberland House

RESULTS
- “Worst Highway in Saskatchewan” – CAA, 2013
  - Highway 123 is not an “All Weather Road”. All Weather Road defined as:
    - Road that after inclement weather, is passable after 4 hours by non four wheel vehicle
    - Unpaved road that does not create mud after rainfall
    - Passable in all seasons.

Common themes in interviews:
- Permanent = Reliable, residents want to be able to pass safely at all times of year
- Elevated safety incidents
- Increase costs – Food, via freight, damage to freight.
- Increased costs – Maintenance, i.e. personal and business
- Recruitment Issues – People do not want to work in community because of road
- Postponed important trips
- Road construction quality substandard – People report construction using dirt vs. appropriate highway substrate

RESULTS Cont’d
- Resident migration – People are leaving community because of road condition
- “Only a few brave souls” travel to Cumberland House – Road condition impacts regional tourism

RECOMMENDATIONS
- CHCN – Develop community level infrastructure plan including Highway 123 to secure funding from Federal Gov’t. First Nation Infrastructure Plan
- Leverage funding to partner with Sask. Gov’t.
- Feasibility Study comparing cost of proper road construction and maintenance vs. cost of poverty indicators, i.e. health, education, economic development.
- Gap Analysis – Sask Gov’t Quality standards vs. Highway 123 actual construction and maintenance

CONCLUSION
- This research shows a link between northern roads and impact on people and community.
- Implementing these recommendations will improve the quality of life in Cumberland House

FURTHER RESEARCH
- Impact of Highway 123 linked to:
  - Poverty indicators, i.e., Health and food security.
  - Economic development opportunities
The IYMP is a healthy living program delivered by youth to younger community peers to promote wellness. The program consists of both a mentor and youth learning component based on the Circle of Courage Framework [Figure 1]. IYMP initially began in Manitoba and is now being offered in 12 communities across Canada, with the Saskatoon program in its initial year of offering.

Youth mentors from diverse settings, backgrounds and Indigenous cultures who have participated in IYMP have identified the impact IYMP had on their lives: specifically, creating and promoting respect in their community, building a sense of belonging, and developing an understanding of the importance of wellness for obesity and type 2 diabetes prevention in children [May 27th and 28th 2015, Manitoba Indigenous youth leaders shared their mentoring experiences with IYMP to a team of scientists, community members, and elders].

Early pilot data from programs in Manitoba [2010-2012] has also shown that those youth who received the program intervention showed positive improvement in: healthy food and physical activity knowledge, waist circumference, and body mass index z-score (Eskicioglu, et al., 2014).

The voices of youth have resonated with the team and our goal is to honour and carry these voices across Canada.

Figure 1. The Circle of Courage Framework Guided by Indigenous teachings and the Indigenous Medicine Wheel approach to wholistic health. The framework is premised on fostering resilience among youth through four universal needs: Belonging, Mastery, Independence, and Generosity.
Shared Decision Making in Saskatchewan's Indigenous Community

Gary Groot, Tracey Carr, Tamara Waldron, Tania Lafontaine, Lorna Arcand, Rose Roberts, Linda McMullen, Sylvia Abonyi, Vicky Duncan, Gill Westhorp, Shelley-May Neufeld

INTRODUCTION OR ABSTRACT

In our realist synthesis (1, 2) of Shared Decision Making (SDM) literature, we identified the key mechanisms that enable patients to engage in SDM (Figure 1) to explore the specific context of the Indigenous communities of Saskatchewan.

Figure 1. Shared Decision Making Program Theory

- In interviews with 18 Indigenous people with cancer, we uncovered that two key mechanisms, trust and worldview, are important aspects of Indigenous patients' experiences with the health care system.

OBJECTIVES

- To determine what trust and worldview mean in the SK Indigenous context
- To recognize the impact those factors have on Indigenous peoples' ability to engage with health care providers
- To understand how to best support SK's Indigenous peoples in making patient-centered health decisions

METHODOLOGY

To address these objectives we will conduct sharing circle interviews with:

- Indigenous patients with cancer
- Family members
- Traditional Indigenous healers

Sample

- We will use purposive sampling to recruit participants from Saskatoon and La Ronge

Design

- Guided by the First Nation and Métis Health Services (FNMH), our team will develop the sharing circle interview guides by adapting questions from an existing measure of mistrust with health care among Native Americans (3) and sources on Indigenous worldviews (4).

Analysis

- Transcripts will be analysed using thematic analysis with a focus on themes that emerge around trust, worldview and ways to integrate traditional healing into the health care system.

TIES TO RECONCILIATION

This research relates directly to the following Calls to Action (5) of the Truth and Reconciliation Commission:

- **Call to Action #19** – the emphasis on the need to close the gaps in health outcomes between Indigenous and non-Indigenous communities
- **Call to Action #22** – the goal to understand how to best support Saskatchewan’s Indigenous peoples in making patient-centered health decisions, the knowledge translated from this research has the potential to improve how the health care system responds to Indigenous patients
- **Call to Action #23** – if health care providers have a better understanding of the underlying causal conditions of how Indigenous people make treatment decisions, a more nuanced, culturally sensitive and potentially effective approach can be taken to patient-centred care

REFERENCES

College of Arts and Science/Department of History

SHIFTING CURRENTS:
COAST SALISH WAR CANOE RACING AND COLONIAL CONTROL IN THE PACIFIC NORTHWEST

INTRODUCTION
My ongoing community engaged research explores the dramatic changes in Coast Salish war canoe racing throughout the nineteenth century. Currently, I am working on an MA thesis that argues these changes to war canoe racing were responses to the colonial presence, and that the Coast Salish were adapting to, and often subverting, their new colonial relationship by using war canoe festivals as substitutes for potlatch gatherings (when these were officially banned), and as substitutes for intercommunity conflicts and relationships, which were constrained under colonial control.

ETHNOHISTORY FIELD SCHOOL
In the spring of 2015 I was generously invited to participate in a month-long ethnohistory field school—a biannual collaboration between the Stó:lō Nation, the University of Victoria, and the University of Saskatchewan. Held in Chilliwack, British Columbia—Stó:lō territory—throughout the month of May, student researchers, at the request of the Stó:lō people, complete projects that benefit the Stó:lō community and their own scholarship.

I was given the opportunity to research the origins of Coast Salish war canoe racing, by interviewing and learning from elders who carved, and raced, and skipped their own teams, as well as multiple generations of Coast Salish pullers who have trained and raced most of their lives.

COMMUNITY ENGAGED SCHOLARSHIP
Community engaged research projects such as this field school promote mutually beneficial relationships between scholars and the sources of their scholarship: the communities they research and the histories they engage in.

The communities who employ or engage these scholars can direct their research and studies to projects that are beneficial to their people, and the scholars are able to establish lasting connections to communities they often spend years working with.

For example, my research project soon developed into my MA thesis, and with the continued interest and support of the Stó:lō community, I am working on transitioning my research into a PhD proposal.

CONTACT
Davis Rogers, MA candidate in History
(Supervisor Keith Carlson)
davis.rogers@usask.ca

BUILDING RECONCILIATION
Building reconciliation between Canada’s indigenous and settler communities is a gradual and fragile process.

Yet efforts to decolonize the history of Canada’s many Indigenous communities are strengthened with sustained and supported projects like this ethnohistory field school.

Indigenous directed, guided, and produced research and community engagement projects continue to produce some of the richest and strongest scholarship possible, all while demonstrating (and perhaps proving) what a successful relationship between indigenous communities and researches and scholars can achieve.
INTRODUCTION

The purpose of this project was to develop a needs assessment for a source water protection (SWP) plan for the tri-community area of the Town of La Ronge, The Village of Air Ronge, and the Lac La Ronge Indian Band (LLRIB).

This is an important topic of study for Northern Saskatchewan because smaller communities and First Nations are more likely to have improper access to safe drinking water.

Remediating contaminated sources is much more expensive and difficult than preventative measures.

A multi-barrier approach, with source water protection planning as its first barrier, is the best way to mitigate risks and is an economically responsible approach for communities.

Research Questions:

- What are the threats to the source water supplies in the three communities?
- What measures might the three communities take in order to ensure a safe and sustainable drinking water supply?
- Would a SWP plan be beneficial to the tri-community?

METHODS

- Literature review
- Needs assessment from the analysis of interview data to determine:
  - Greatest risks to the water source
  - Possibilities for improvement

Key Findings

- Although water processing and delivery facilities for this area are new, and adequately managed, there are a number of existing and potential threats to the drinking water source, which should be mitigated.

Interviews revealed 3 major threats from past and present, local and upstream sources:

- Sewage leakage into the lake
- High toxic spill potential (radioactive materials, fuel, or chemicals) from transport trucks at the Montreal River Bridge
- Fuel entering the water via a number of sources.

CONCLUSION

- Instituting these recommendations will help to ensure the safety of this communities drinking water supply.
- A source water protection plan is the environmentally and economically responsible choice for the tri-communities.
INTRODUCTION
Cities in Canada are situated in the traditional territories of Indigenous peoples. Existing approaches to engaging Indigenous communities in urbanism processes have not been influential in removing various forms of discrimination and marginalisation within urban areas. Indigenous communities have the capacity, knowledge, and ability to introduce new epistemologies and approaches to urban planning and design.

OBJECTIVES
• This research examines the extent to which urban planning and design respond to the needs, aspirations, and claims of urban Indigenous communities.
• It explores the opportunities that Indigeneity brings to urbanism processes which benefit not only Indigenous citizens but all citizens.
• It searches for finding the ways that facilitate Indigenous participation in the production and programming of urban space and place.

MATERIALS & METHODS
• Face-to-face open-ended interviews with 19 Indigenous citizens. Participants were asked about their urban experience, how they perceive urban space and place, how they think that their rights, needs, and aspirations are fulfilled.
• The second set of interviews with high-level Indigenous officials working at managerial positions in different Indigenous organisations on their participation in urban planning and programming in addition to the provision of civic services for Indigenous communities.
• A third set of interviews with municipal officials to elicit how they engage with the issue of reconciliation in regards of incorporating Indigeneity in their planning and programming efforts.

RESULTS
Indigenous citizens perceive the spatial structure of the city as oppressive, discriminatory, and privileging in their everyday lives. Inclusion and engagement strategies are inconsistent with rights, needs, and aspiration of Indigenous peoples. Inclusion and engagement strategies are structured within existing planning and decision-making frameworks.

Collaborative planning strategies are inspired by contemporary politics of recognition under liberal democratic reconciliation politics. For interviewees, such strategies demonstrate a de-radicalised and de-politicised form of recognising Indigenous specific urban rights in Winnipeg. For urban Indigenous communities, recognition of Indigenous original occupancy and its consequent constitutional rights underpin any effort towards reconciliation and collaboration in policy making and planning in Canadian cities.

CONCLUSIONS
Urban Indigenous communities do not only expect to receive better social services, jobs, and other essential needs in cities. As Urban Aboriginal Peoples Study (Environics, 2010) confirms, they are looking forward to playing a more significant role in shaping urban environments and influencing the social and cultural life of their cities. In other words, reclaiming urban spaces and places in settler cities is a quintessential aspect of constructive reconciliation with Indigenous communities.

REFERENCES

ACKNOWLEDGEMENTS
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Stranger in a Strange Land: George Copway’s Struggle for Equality in 19th-Century America

GEORGE COPWAY (1818-1869)

The life of Canada’s first international celebrity presents a unique opportunity to explore the trans-cultural experience of 19th-century indigenous intellectuals. Paradoxically, his adoption of Euromerican religion and culture gave him agency to pursue his own pro-indigenous ambitions. He did this by publishing books and a literary journal and by embarking on extensive lecture tours throughout the 1850s.

LITERACY

As a youth, Copway’s parents sent him to a Methodist school where he received an education in English literacy superior to that of the average Euro-Canadian.

After leaving Canada in 1846, he settled in New York City where he made friends with the American literary class including Washington Irving, Henry Longfellow, and Francis Parkman.

These new cultural tools and allies helped him to insert himself into the public discourse on indigenous rights and history, culminating in his promotion of the formation of an independent indigenous state called Kahgega that would be run by indigenous intellectuals and closed to Euromerican encroachment.

His Books:

*The Life History and Travels of Kahgegahbowh* (1847): recounts his conversion, missionary work, and early indigenous political organization in Canada.

*The Traditional History and Characteristic Sketches of the Ojibway Nation* (1850): an ethnographic work documenting the history, politics, spirituality, and traditional stories of the Great Lakes Ojibwe.

*Running Sketches of Men and Places* (1851): reflections on his travels through Europe. He openly weighs the practices and cultures of Europeans, criticizing and praising as he sees fit.

FREEMASONRY

The idealized philosophy of Freemasonry made its members more welcoming to indigenous history and culture than society outside the lodge:

“By the exercise of brotherly love, we are taught to regard the whole human species as one family... as created by one Almighty Parent, and inhabitants of the same planet.”

The Masonic lodge provided a protected and shared space where Copway could assert the importance of Ojibwe culture to a receptive audience of brothers.

The lodge also presented a discrete social system wherein Copway advance to become fraternally equal to his brothers. He could also attain the leadership position of Lodge Chaplain, holding responsibility for the spiritual welfare of his Euromerican brothers.

RECONCILIATION?

Although Copway exercised a unique level of agency, his ambitions were repeatedly frustrated by the invisible barriers of colonial Euromerican culture.

Despite the best intentions of his Euromerican allies, the inherent racism of 19th-century U.S. society crippled any dreams for real equality, and as America became tired of his books and performances he fell into obscurity.

Copway’s story reveals the complexity of religious conversion and cultural transformation wherein an indigenous individual could achieve a degree of freedom but in fashion that was ultimately both limited and unsustainable.

REFERENCES


All pictures are public domain.

CONTACT

John Bird, MA History Program
jrb102@mail.usask.ca
Sustainability and Indigenous Knowledges in Aboriginal Post-Secondary Education Places of Learning

Yvonne Vizina, PhD Candidate
School of Environment and Sustainability, University of Saskatchewan

Abstract

This research is designed to determine the status of sustainability practices and drivers in select Aboriginal post-secondary education places of learning and identify how their capacity for engagement in culturally relevant community-based conservation and environmental decision-making may be advanced through a national sustainability network. The relationship between sustainability and Indigenous knowledges comprises an important part of the research.

Research Objectives

1. Produce three publishable manuscripts based on research data and drivers in select Aboriginal post-secondary education places of learning and identify how their capacity for engagement in culturally relevant community-based conservation and environmental decision-making may be advanced through a national sustainability network. The relationship between sustainability and Indigenous knowledges comprises an important part of the research.

Methodology & Methods

This research takes a qualitative approach using socially constructed knowledge claims and advocacy-participatory knowledge claims as the methodological framework for accommodating the Indigenous ontologies, epistemologies, and axiologies (Creswell, 2003, pp. 6-8). Socially constructed knowledge claims acknowledge that individuals understand the world through subjective experiences. The resulting complexity of views, rather than narrowing of views, is desirable in making meaning by the researcher. Participant social interactions, historical and cultural norms, as well as the specific contexts in which people live and work are taken into consideration by the researcher. Advocacy-participatory knowledge claims inform the research design because the structured laws and theories of post-positivism do “not fit marginalized individuals or groups or did not adequately address issues of social justice” (Silverman, 2005, p. 9). The work of emancipatory theorists such as Habermas and Freire initiated advocacy-participatory research approaches, which integrate an action agenda for reform that considers politics and political agendas and may change the lives of participants (Silverman, 2005).

In general, theories are used to understand phenomenon and arrange concepts within a framework that can facilitate a greater understanding of the relationships among the concepts (Silverman, 2005). In this research, I am drawing on Indigenous knowledge and theory, critical theory, and emancipatory theory to assist in discussion of the research. Indigenous knowledge and theory has been studied in academic literature for several decades and is accepted as an important foundation for working with Aboriginal Peoples because it contextualizes cultural worldviews (Wilson S., 2008; Paiz, 2005; Smith, 2012; Kovach, 2009).

The results of this research will be used to construct a manuscript style dissertation.

References


Traditional belief systems are not artifacts of the past, but comprise the foundation of decision-making in everyday life, including social, economic, and environmental aspects of sustainable development.

- Yvonne Vizina

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DKG
Traditional Ecological Knowledge and Western Scientific Knowledge: Two-eyes Towards Sustainable Forest Management Practices

Ashley Shaw ● MES ● ams546@mail.usask.ca ● University of Saskatchewan
Supervisor: Dr. Toddi Steelman ● toddi.steelman@usask.ca ● University of Saskatchewan

Background
My project focuses on categorizing the Indigenous Knowledge (IK) of the Beardy’s and Okemasis First Nations (BOFN) community regarding the Nisbet Provincial Forest. We categorize this IK by using Houde’s (2007) Six Faces of TEK as a framework. By doing so, each face may then be visually represented via Geographic Information System (GIS) maps. These depictions may reduce the knowledge boundaries between IK and Western Scientific Knowledge (WSK), thus allowing GIS to act as a boundary object. In doing so, these representations may provide a nuanced perspective towards resource use within the forest and may influence management decisions.

Research Question
What are the limits and opportunities of using GIS as a boundary object to represent IK in Nisbet Forest resource planning and implementation processes?

Objectives
The purpose of this study is to identify the barriers and knowledge gaps associated with incorporating IK into forest planning and land use implementation initiatives.

1) Identify existing sources of already collected IK related to BOFN land use

2) Synthesize the collected IK related to BOFN land use to create a comprehensive visualization of the available IK

3) Identify potentially missing BOFN IK

4) Understand whether and how GIS can be used as a boundary object to advance the use of IK in the implementation process of the FMP for the Nisbet Provincial Forest

5) Develop a good practice which includes recommendations on how to represent and implement IK in FMPs that may allow for long term sustainability for the multiple stakeholders vested in forest resources

Methods

TEK Categories
- Collect currently available IK
- Evaluate IK against Houde six faces of IK
- Identify which faces are or are not represented by available IK
- This will result in gaps in knowledge which will inform interview questions
- Identify how and whether gaps can be filled using GIS platform

GIS Maps
- Create one map for each of the six faces of IK
- Use these maps to illustrate IK that is available and the IK that is not available
- Include these maps in the interview
- Process to gain information regarding the illustration of IK and the potential incorporation of these maps within the FMP

Interviews
- BOFN community members may validate the maps created and discuss missing IK and the feasibility of incorporating this missing knowledge into GIS maps
- NIT may discuss the efficacy of including GIS visualizations into the FMP and the limitations/opportunities of using GIS as a boundary object
- Information from BOFN and NIT may help us to evaluate the viability of incorporating different dimensions of IK into planning processes

Figure 1. The Six Faces of TEK (Houde 2007)

Significance of Research and Anticipated Contribution
Theoretically, I will be using Houde’s (2007) Six Faces of TEK to advance and test a new conceptual framework for understanding different types of IK. These categorizations will allow me to identify which kinds of IK are most and least prevalent at this time and identify where potential gaps may exist in the kinds of knowledge collected or in existence. Practically, I will be using this framework within the context of a case study of the BOFN community.

My project may contribute to good practices regarding the use and potential implementation of IK within forest management decisions and natural resource use.

Additionally, my project may advance current research regarding the use of GIS to visually depict IK to reduce the knowledge barriers between IK and other knowledge systems. By using GIS in this way, it may act as a boundary object between IK and WSK and the role IK within a forest management context may then be identified. By doing so, more IK may be considered for future management decisions.

Limitations
The case study proposed in my research primarily involves the IK of one Indigenous community within one geographical region. Due to this specificity, the results of my study may be limited in its generalizability.

Reliability vs. Validity
Bias as an ‘outsider’

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Figure 1. The Six Faces of TEK (Houde 2007)
The term Two-spirit is a self-descriptor increasingly used by Aboriginal gay, lesbian, bisexual and transgendered people who strive to live within a traditional Aboriginal worldview. It asserts that all aspects of identity (including sexuality, race, gender and spirituality) are interconnected and that one’s experience of sexuality is inseparable from experiences of culture, community, and the land (Wilson, 2007, iv).

How does homelessness impact two-spirit/queer Aboriginal people in urban centres in Saskatchewan?

And, How can service providers and educators improve access to homeless two-spirit/queer Aboriginal people?

The authors acknowledge and thank the partnerships with OUTSaskatoon, Prince Albert Two-spirit Society, TransSask, Two Spirit People of Manitoba, and Saskatchewan Two-spirit Society. This research was funded by a SSHRC Partnership Grant titled ‘Urban Aboriginal Knowledge Network: Research for a Better Life.’ The funding was administered by the Prairie Research Centre of the Urban Aboriginal Knowledge Network.
ABSTRACT

A pilot project was conducted with rural First Nations healthcare representatives to review the applicability of a theoretical model of Social Interaction Knowledge Translation (KT) ‘Translating Knowledge Through Relating’ (Jansen et al., 2013) to inform KT for traditional and western approaches to community health promotion and chronic care.

This model suggests that KT is facilitated by social interactions within working relationships amongst interdisciplinary service and care teams, individuals, families and communities. Five key relational themes of the model were: Living with the Problem, Developing Comfort, Nurturing Mutuality, Building Confidence, and Managing In-Home Care. These themes were interlinked with five additional KT themes which included: Building Experiential Knowledge, Easing into a Working Relationship, Facilitating Knowledge Exchange, Fine Tuning Knowledge, and Putting it all Together.

METHODS

In a casual setting, interdisciplinary participants were invited to share their perspectives on how the theoretical model of social interaction KT (Figure 1.0; 2.0) might have applicability to their work with First Nations individuals, families and communities relevant to nutritional approaches for health promotion and chronic disease management.

Three main questions were asked of the participants:
1: “Does this framework or model make sense? Is this what you have experienced?”
2: “Was anything missed?”
3: “How do you think First Nations Communities and healthcare organizations could use this model?”

RESULTS

Jansen et al. (2012) found that relational approaches and ‘working together’ promoted families’ and clients’ experience of KT. Conversely, barriers and ‘not working together’ inhibited knowledge seeking behaviors.

Jansen et al. (2012) also found that social interactions that promote KT are complex and interrelated. Understanding the dynamic and bi-directional processes of KT can support knowledge application in practice.

FINDINGS

Facilitators and barriers for the implementation of social interaction KT strategies were:
- Consistent Relationships – consistency in care providers and health care teams helps to strengthen relationships.
- Lack of consistency impedes working relationship, thus impeding KT
- Adequate Time – adequate time promotes working relationships; not enough time to develop working relationships impedes relational interactions and ultimately, KT.
- Incorporating traditional knowledge and learning approaches of individuals, families and communities promotes working relationships and mutual understanding about how to manage health promotion and chronic disease within cultural contexts.

IMPLICATIONS

Relational practice vs tasks for creating learning approaches can inform KT strategies. Application of practical ‘how to’ strategies that represent research, Aboriginal and western experiential knowledge is important to inform culturally responsive KT approaches. Theoretical models of social interaction KT and Aboriginal ways of knowing may also inform how to address barriers and facilitators of KT.

REFERENCES


CONTACT

Dr. Lynn Jansen
College of Nursing
University of Saskatchewan
Lynn.Jansen@usask.ca
306.337.3801