CONCEPTUALIZATION OF COMMUNITY WELLNESS IN THREE FIRST NATIONS COMMUNITIES

by

Brittany May McBeath

A thesis submitted to the School of Kinesiology and Health Studies
In conformity with the requirements for
the degree of Master of Science

Queen’s University
Kingston, Ontario, Canada
(May, 2020)

Copyright © Brittany McBeath, 2020
Abstract

Introduction: It is well known, and well documented that Indigenous conceptualizations of wellness differ from Western conceptualizations. Using Western parameters and formulations to appraise Indigenous health and wellness is highly problematic. Purpose: To address the need for Indigenous community-led conceptualizations of wellness in order to inform the creation of more culturally relevant and applicable indicators of Indigenous community wellness. Methods: Conceptualizations of wellness were explored in three First Nations communities participating in the Kahnawà:ke Schools Diabetes Prevention Project (KSDPP) Community Mobilization Training (CMT). Kane & Trochim’s (2007) Concept Mapping for Planning and Evaluation was used to systematically collect and analyze data in partnership with each Indigenous community. The research consisted of three phases including Wellness Indicator Talking Circles, online unstructured sorting and rating, and concept map interpretation sessions. Data Analysis: Using Concept Systems® Global Max™ software, three data analysis steps were conducted to create the concept maps including a similarity matrix, multidimensional scaling, and hierarchical cluster analysis. All interpretations of these outputs were completed using a participatory approach. Results: The themes of balance and wholism, intergenerational relationships, the importance of Indigenous language and culture, connectedness, food systems and the environment were prominent in all three communities. However, each community’s concept map was distinct, highlighting that the meaning of wellness within each community was directly related to their local history, context, ideals, and resources. Discussion: Given the diversity of perspectives, histories, cultures, contexts, values, and experiences across Indigenous nations, establishing generalizable Indigenous community wellness indicators is unrealistic. Conceptualizing Indigenous community wellness is a process that should be locally determined to foster ownership and sovereignty over strategic planning and evaluation efforts related to the promotion of wellness within a community.
Statement of Collaboration

This thesis is the work of Brittany McBeath under the supervision of Dr. Lucie Lévesque. This project is ancillary to the Canadian Institutes of Health Research (CIHR) funded projects titled Mobilizing Indigenous Knowledge for Community-Driven Wellness (#IAW-151691) and Community Mobilization Training for Diabetes Prevention: Implementation and scale-up of a best practice training model for diverse Indigenous communities (CIHR PI3-151327) of which Dr. Lucie Lévesque is the Nominated Principal Investigator.

The idea to explore conceptualizations of Indigenous Wellness was a collaborative effort between all members of the Kahnawà:ke Schools Diabetes Prevention Project (KSDPP) Research Team, led by Dr. Lucie Lévesque (Professor, Queen’s University), Dr. Treena Delormier (Associate Professor, McGill University), and Dr. Alex M. McComber (Adjunct Professor, Queen’s University). The collection of qualitative data through Wellness Indicator Talking Circles was coordinated by Dr. Lucie Lévesque, Dr. Treena Delormier, Dr. Alex M. McComber, Donna Ivimey (Research Coordinator for Dr. Lévesque), and Community Research Assistants (Tanager Abigosis, Pam Smith and Denise Leafe). The collection of qualitative data through Wellness Indicator Talking Circles was facilitated by Brittany McBeath, Andrea Ianni (MSc, Queen’s University) and Olivia Franks (MSc Student, Queen’s University). Data collection and analysis of concept maps using Concept Systems® Global Max™ software was performed by Brittany McBeath, and the interpretation of results was done by participants of the KSDPP Community Mobilization Training (CMT).

Brittany McBeath performed the writing for these thesis chapters, extensively reviewed, revised and approved by the KSDPP Research Team, and KSDPP Community Advisory Board. Each community involved in the project is in the process of providing revisions and approval of this document. Dr. Lucie Lévesque revised this thesis extensively.
Acknowledgements

In line with the Ohén:ton Kariwatékhwén, I will start by giving my greetings and thanks to onkwe’shón:’a. First and foremost, I would like to acknowledge my supervisor, Dr. Lucie Lévesque. Thank you for convincing me that pursuing a research-based Master’s degree would align with my aspirations to simply ‘work with people’. Thank you for introducing me to your network of community partnerships, research partnerships and colleagues. All of the opportunities you offered to me over the past two years have enriched my development both personally and academically. Graduate studies under your supervision brought me coast-to-coast and even to the other side of the world. Thank you for providing a space for me to learn and grow at my own pace. You have been encouraging from the very beginning and I am grateful for your unwavering support, and guidance throughout this process. I look forward to all that is to come over the next few years.

Along with Lucie, I would like to acknowledge her Research Coordinator, Donna Ivimey. Thank you for being the backbone of the entire operation. Thank you for all of your help navigating the administrative side of conducting research. And thank you for always making a point to advocate for and acknowledge the work of graduate students. Your office is one of my go-to stops when I am on campus and I always appreciate our conversations.

I would like to acknowledge the School of Kinesiology and Health Studies for all of the resources and learning experiences they have provided. I am most grateful for the Teaching Assistantship opportunities that are available to graduate students in our department. Our department is made up of a very diverse range of expertise and interests. Being able to study within an environment made up of such diverse perspectives has allowed me to become more knowledgeable, open-minded and versatile. I am also grateful that the department and the School of Graduate Studies has been so accommodating as I completed this degree. Thank you for
supporting me throughout my first, and second, time limit extension required to complete this project.

I would like to acknowledge the Kahnawâ:ke Schools Diabetes Prevention Project (KSDPP) for welcoming me as a graduate student trainee. I feel very fortunate to have been able to learn from such an accomplished community organization that is leading the way in the field of Indigenous Health Promotion. I would like to give a special shout-out to Dr. Alex M. McComber, Dr. Treena Delormier, Amelia McGregor, Dr. Morgan Phillips, Judi Jacobs, Kaia’tanó:ron Mayo and all of the Community Advisory Board members. I offer my deepest thanks to each of you for supporting me in my studies in various ways whether it be by providing letters of recommendation for scholarship applications, taking the time to review my thesis and countless abstracts, or spending time visiting during kitchen table conversations. I am grateful for the opportunity to grow as a student within a research context that is grounded in Rotinonhsyón:ni principles. I look forward to continuing as a graduate student trainee working with KSDPP.

I would like to acknowledge each of the community partners that took part in the KSDPP Community Mobilization Training. Spending time getting to know each of the community members that participated in the training was my favourite part of this project. It is with great thanks that I acknowledge each of the community members that generously shared their knowledge throughout their participation in this project. Your perspectives are so valuable, and I have done my best to do them justice. Thank you for allowing me the privilege to be the author of this story.

I would like to acknowledge my fellow ‘lab’ mates. I am so thankful for the supportive dynamic that we have created. To Colin, thank you for also playing an integral role in my journey to grad school. It was no coincidence that you showed up at Four Directions as a representative from the School of Kinesiology and Health Studies in place of a representative from the Rehabilitation department to speak to me about opportunities for graduate students almost five years ago. I don’t think you realize how much you have taught me over the past few years. You
have a way of turning side conversations into stimulating discussions that have shifted my entire worldview. Thank you for your mentorship and for always setting a great example.

To Anoushka, we also crossed paths almost five years ago at Four Directions back when you were doing a project with the Aboriginal Youth Leadership Program. You have been a key part of what has led me here today as well. Thank you for your gentle soul and great advice. You have a way of seeing the bigger picture and I always look forward to catching up with you.

To Sarah D., thank you for always seeing the best in me when I could not see it in myself. Thank you for involving me in your Play-Streets Project in partnership with Kingston Gets Active. Thank you for lending me books from your satellite library collection, and for our often-therapeutic check-ins. Your positivity and passion for your work is contagious to those who are in your presence.

To Ashley, although you are a long-distance lab mate, I always appreciate your willingness to lend a helping-hand. You are a natural teacher and have been someone I can count on for honest advice. Thank you for always offering me a ride to Kingston when you were staying in Belleville, even though I never took you up on the offer. You care dearly about those around you and I admire you for your strength and perseverance through everything life throws your way.

To Danielle, you were the first friend I met on orientation day! Thank you for always sharing your energetic spirit, zest for life, and delicious Antiguan hot sauce. Thank you for checking in on me and always providing words of encouragement. I am so glad that we have stayed in touch, and always look forward to visiting with you. I can’t wait to Zumba with you in Antigua one day!

To Andrea, my fellow Onkwehon:we, I wouldn’t have been able to get through stats without you! Thank you for your contributions to this project, and for filling out the fidelity checklists when I couldn’t. Thank you for your sense of humor and light-heartedness. I truly miss your story telling.
To Zahraa, you are one of the most down-to-Earth people I know. Thank you for always telling me “It’s gonna be okay”, when I am literally dying in Lucie’s fitness class. You often inspire me to get outside and get active by sharing your love for running, so I thank you for reminding me to maintain a balance in my life. I look forward to spending the next few years studying with you.

To Olivia, I am grateful that we have been able to navigate the complexities of identity politics and Indigenous research together. Thank you for always being willing to talk and even cry things out with me. You have a way of making those around you feel safe and understood without judgement. Thank you for being the best travel buddy. Our adventure to New Zealand for the International Indigenous Mentorship Workshop will be a trip I cherish for the rest of my life. You are one of the strongest Onkwehón:we women I know and I feel very fortunate to be part of this chapter of your own journey of self-discovery. I can’t wait to see where your studies take you. You were made for excellence, and you belong here.

To Julia, you were a student in my first KNPE365 seminar group before we became lab mates, so I will begin by thanking you for always participating enthusiastically. I’m sure you now realize how great it feels when your class is actually engaged in what you are teaching them. I truly admire your commitment to learning Spanish in order to complete your project, as I know how much time and effort goes into learning another language. Your hard work doesn’t go unnoticed. Thank you for being willing to pretend that it was your birthday, even when it wasn’t (ECSEPS, 2019). You are always a joy to be around and you are going big places!

To Sarah P., thank you for teaching me the tricks of Zotero! It sure came in handy while writing this thesis. You are a truly exceptional undergraduate student, and I know that you will flourish in whichever career you choose. You still have not confirmed nor denied nominating me for the Excellence in Teaching Assistance Award, but I will extend my sincere thanks to you anyways, just in case. It was a pleasure being able to assist in teaching a student of your merit.
I would like to acknowledge both Four Directions Indigenous Student Centre and the Office of Indigenous Initiatives for striving to provide a safe, supportive and culturally rich environment for Indigenous students to thrive in. Some of the supports that have been crucial to my development both academically and personally include: the annual Indigenous Knowledge Symposium, the Indigenous Research Collaborations Workshop, the annual SAGE Writing Retreat, the Shatiwennakarâ:tats – Mohawk Language and Culture Certificate program, the Cultural Safety Training group and the various workshops, and guest lecturers. I would like to give a special nya:wen’kó:wa to Janice Hill, Vanessa McCourt and Laura Maracle who have been by my side from the very beginning, which is almost seven years ago now. And, to Ashley Maracle, thank you for introducing me to Dr. Lévesque back in my second year of undergrad. Each of you has been integral to my academic success and personal growth. I am writing this thesis today because you helped show me who I am.

I would like to acknowledge my family and all of the ancestors that have come before me. I have the joy of being here today because of your love and your sacrifice. A special thank you to my Mom and Dad for always supporting and encouraging me to be whoever and whatever I want to be. Thank you for being there to guide me through moments of weakness, and to lift me up during moments of triumph. I feel very fortunate to have parents that would do anything for their children. To my little sister Jo-Bess, my fellow Queen’s alumni, thank you for being the first person I want to celebrate good news with. Thank you for being someone I can always lean on. Thank you for letting me eat your snacks and use your bed to nap on. There is a quote by Louise Gluck that says, “Of two sisters, one is always the watcher, one the dancer.”. You are definitely the dancing sister. Thank you for providing me with the privilege to be the proudest watching sister, as you grow up dancing to the song that is your life. To my Grandma Bonnie, thank you for always calling to check in on me. Thank you for being someone that was truly interested in my work and for helping me to better understand who I am through your extensive research on our family’s genealogy. To my Grandpa Tóta, thank you for being the one to begin the pursuit of
reclaiming Onkwehonwe’néha for our family and for being my inspiration to focus my work on type 2 diabetes prevention. To my Grandma and Grandpa McBeath, thank you for always being supportive of my work over the years. I miss you dearly, Grandpa! And finally, to my partner Travin, thank you for loving and supporting me throughout my studies. Thank you for never making me feel guilty about the time I spent away from home to complete this project, and for taking care of our dog Kaia while I was gone. Thank you for being my breath of fresh air from academia, and also the procrastination police. Thank you to your parents for opening their home for me to live while I completed my Master’s degree so we could save for a home of our own. I am fortunate to be doing life together with you.

And finally, I would like to acknowledge the land, and all of creation. Thank you to the earth, the waters, the fish, the roots, the small grasses, the medicine plants, the fruits, the foods that sustain us, the four-legged animals, the insects, the birds, the trees, the Four winds, the thunders, the stars, the sun, the moon, and Shonkwaya’tíson. Thank you for providing the people with all that we need to live. This project would not be possible without the work that each of you do.
Funding Acknowledgement

I would like to acknowledge all of the agencies that supported me financially throughout my graduate studies. Nya:wen’kó:wa to the Indigenous Mentorship Network Program of Ontario for providing me with a Graduate Student Scholarship during the second year of my Master’s degree.

Nya:wen’kó:wa to the Canadian Institutes of Health Research (CHIR), Institute for Indigenous Peoples’ Health (IIPH) for awarding me a Frederick Banting and Charles Best Canada Graduate Scholarship – Doctoral Award as I both finished my Master’s thesis and began my Doctoral studies at Queen’s University. Nyá:wen’kowa for also granting me various ICS Travel Awards to attend conferences, gatherings and workshops that have thoroughly enriched my development as a scholar-in-training.

Nya:wen’kó:wa to the Mohawks of the Bay of Quinte for providing band funding to support me as I pursued this graduate degree.

Nya:wen’kó:wa to the CIHR IIPH for providing funding for the Community Mobilization for Healthy Lifestyles & Diabetes Prevention Training Workshop through two grants including the:

1) CIHR Pathways to Health Equity for Aboriginal People, Implementation Research Team Grants Component 2 Grant 2016: “Community Mobilization Training for Diabetes Prevention: Implementation and Scale-up of a Best Practice Training Model for Diverse Indigenous Communities”

2) CIHR Catalyst Grant 2017: Indigenous Approaches to Wellness Research “Mobilizing Indigenous Knowledge for Community-Driven Wellness”

Nya:wen’kó:wa to the R. Howard Webster Foundation for providing a grant that made the delivery of KSDPP CMT workshops possible.
Table of Contents

Abstract .................................................................................................................................................... ii
Statement of Collaboration ...................................................................................................................... iii
Acknowledgments ...................................................................................................................................... iv
Funding Acknowledgment ..................................................................................................................... x
Table of Contents .................................................................................................................................... xi
List of Figures ........................................................................................................................................... xiv
List of Tables ............................................................................................................................................ xvi
List of Abbreviations ........................................................................................................................... xvii
Translation of Words and Phrases Used in Indigenous Languages .................................................... xviii
Chapter 1 Introduction ........................................................................................................................... 1
  1.1 Personal Introduction ...................................................................................................................... 1
  1.2 General Introduction ..................................................................................................................... 5
  1.3 Purpose and Research Question .................................................................................................... 6
  1.4 Anticipated Implications ............................................................................................................... 6
  1.5 Thesis Organization ...................................................................................................................... 7
Chapter 2 Literature Review ................................................................................................................... 8
  2.1 Colonial Context of Turtle Island ................................................................................................. 8
  2.2 Indigenous Health Inequities and the Issue with Comparison .................................................... 11
  2.3 Differentiating Western and Indigenous Conceptualizations of Wellness ............................... 14
    2.3.1 Western Conceptualizations of Health and the Movement toward
          Wellbeing ..................................................................................................................................... 14
    2.3.2 Indigenous Conceptualizations of Health, Wellness and Wellbeing ............................. 16
  2.4 The Issue with Measurements of Indigenous Wellness .............................................................. 18
  2.5 The Future of Measuring Indigenous Community Wellness ..................................................... 20
  2.6 Summary and Rationale for the Current Research ...................................................................... 22
Chapter 3 Methodology .......................................................................................................................... 24
  3.1 Research Approach: Community-Based Participatory Research .............................................. 24
  3.2 Research Setting .......................................................................................................................... 25
    3.2.1 The Kahnawà:ke Schools Diabetes Prevention Project ..................................................... 25
    3.2.2 KSDPP Community Mobilization Training (CMT) .......................................................... 27
  3.3 Community Profiles and CMT Involvement ................................................................................... 29
    3.3.1 Tyendinaga Mohawk Territory – Kenhté:ke ....................................................................... 29
5.2.2 Intergenerational Relationships.......................................................................... 76
5.2.3 The Importance of Indigenous Language and Culture................................. 76
5.2.4 Connectedness and Interconnectedness ......................................................... 77
5.2.5 Food and Environmental Systems................................................................. 78
5.3 Community Perceptions of Priority and Possibility ....................................... 79
5.4 Strengths ............................................................................................................. 80
5.5 Limitations ......................................................................................................... 81
5.6 Contributions to Indigenous Health Research ................................................ 82
  5.6.1 Changing the Measurement of Indigenous Wellness........................................ 84
5.7 Future Directions ............................................................................................... 86
5.8 Conclusion .......................................................................................................... 87
Appendix A Thesis Change Statement ................................................................... 106
Appendix B KSDPP Review and Approval Process for Ethically Responsible Research
  Certificate of Approval .......................................................................................... 107
Appendix C Research Ethics Board Approvals....................................................... 108
Appendix D Letter of Information and Consent Form............................................. 114
Appendix E Talking Circle Guide............................................................................. 120
Appendix F Tyendinaga Final Statement List ......................................................... 124
Appendix G Black River First Nation Final Statement List .................................... 128
Appendix H Brokenhead Ojibway Nation Final Statement List............................ 131
Appendix I Online Sorting Activity Instructions Email ......................................... 135
Appendix J Sorting and Rating Activity Instructions .............................................. 136
Appendix K Interpretation Session Protocol............................................................ 138
Appendix L Tyendinaga Bivariate Value Plot Figures ............................................ 141
Appendix M Black River First Nation Bivariate Value Plot Figures ....................... 148
Appendix N Brokenhead Ojibway Nation Bivariate Value Plot Figures.................. 154
Appendix O Turtle Shell Concept Maps by Shemia Nelson.................................... 161
List of Figures

Figure 1. Geographic map locating community partners. ................................................................. 29
Figure 2. Point map (Tyendinaga) .................................................................................................. 55
Figure 3. 7-Cluster solution point-cluster map (Tyendinaga) ........................................................... 56
Figure 4. Final 8-cluster solution (Tyendinaga) ............................................................................... 57
Figure 5. Pattern matching graph (Tyendinaga) ............................................................................. 59
Figure 6. Point map (Black River First Nation) .............................................................................. 61
Figure 7. 6-Cluster solution point-cluster map (Black River First Nation) ..................................... 62
Figure 8. Final 6-cluster solution (Black River First Nation) ........................................................... 63
Figure 9. Pattern matching graph (Black River First Nation) ........................................................... 64
Figure 10. Point map (Brokenhead Ojibway Nation) ...................................................................... 66
Figure 11. 7-Cluster solution point-cluster map (Brokenhead Ojibway Nation) ............................. 67
Figure 12. Final 7-cluster solution (Brokenhead Ojibway Nation) ................................................... 68
Figure 13. Pattern matching graph (Brokenhead Ojibway Nation) ................................................... 69
Figure 14. All three community concept maps .............................................................................. 75
Figure 15. 7th Generation Thinking Bivariate Value Plot ............................................................... 141
Figure 16. Nutrition & Food Security Bivariate Value Plot .............................................................. 142
Figure 17. Community Environment Bivariate Value Plot ............................................................. 143
Figure 18. Personal Wellness & Balance Bivariate Value Plot ....................................................... 144
Figure 19. Community Connection Bivariate Value Plot ............................................................... 145
Figure 20. Interconnectedness Bivariate Value Plot ...................................................................... 146
Figure 21. Leadership & Infrastructure Bivariate Value Plot ......................................................... 147
Figure 22. Family Connections - Shawéjigewiin Bivariate Value Plot ......................................... 148
Figure 23. Education Systems Promoting Black River’s Way of Life Bivariate Value Plot ........ 149
Figure 24. Resource Collaboration, Development & Ownership Bivariate Value Plot .............. 150
Figure 25. Miino Pimatisiwin (Good Life) Bivariate Value Plot .................................................... 151
Figure 26. Food Security Bivariate Value Plot ............................................................................... 152
Figure 27. Healthy, Wholistic Self-Care Choices Bivariate Value Plot ........................................ 153
Figure 28. Family Wholistic Healing Bivariate Value Plot ............................................................. 154
Figure 29. Reclaiming and Repurposing our Self-Identity as Indigenous People Bivariate Value Plot ................................................................. 155
Figure 30. Life Skills & Education Bivariate Value Plot .................................................................. 156
Figure 31. Health, Healing & Knowing our Ancestral Ways Bivariate Value Plot ....................... 157
Figure 32. Providing & Sharing Information to Create Social Change Bivariate Value Plot ..... 158
Figure 33. Creating a Safe, Addiction-Free Community Through Connection Bivariate Value Plot ................................................................. 159
Figure 34. Balancing Wholistic Lifestyle Bivariate Value Plot ................................................................. 160
Figure 35. Turtle shell concept map (Tyendinaga)............................................................................... 161
Figure 36. Turtle shell concept map (Black River First Nation)........................................................... 162
Figure 37. Turtle shell concept map (Brokenhead Ojibway Nation)...................................................... 163
List of Tables

Table 1. Statements organized by go-zone (Tyendinaga) .......................................................... 60
Table 2. Statements organized by go-zone (Black River First Nation) ................................. 65
Table 3. Statements organized by go-zone (Brokenhead Ojibway Nation) ......................... 70
List of Abbreviations

BON – Brokenhead Ojibway Nation
CAB – Community Advisory Board
CBPR – Community-Based Participatory Research
CIHR – Canadian Institutes of Health Research
CMT – Community Mobilization Training
CRA – Community Research Assistant(s)
FNIGC – First Nations Information Governance Centre
FNRHS – First Nations Regional Health Survey
IUHPE – International Union for Health Promotion and Education
ICS – Institute Community Support
IIPH – Institute of Indigenous Peoples’ Health
KSDPP – Kahnawà:ke Schools Diabetes Prevention Project
NHRDP – National Health Research and Development Program
OCAP® - Ownership, Control, Access and Possession
OUAC – Ontario Universities’ Application Centre
PTH – Provincial Trunk Highway
REB – Research Ethics Board
SAGE – Supporting Aboriginal Graduate Enhancement
SERDC – Southeast Regional Development Council Corporation
TCPS2 – Tri-Council Policy Statement 2
### Translation of Words and Phrases Used in Indigenous Languages

**Anishinaabe**

<table>
<thead>
<tr>
<th>Anishinaabe</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baaskaandibewiziibiing</td>
<td>Broken head</td>
</tr>
<tr>
<td>Gi-zaagi’în</td>
<td>I love you</td>
</tr>
<tr>
<td>Makadewaagamijiwanong</td>
<td>Black river</td>
</tr>
<tr>
<td>Miino Piimatisiwin</td>
<td>Good life</td>
</tr>
<tr>
<td>Onaubinisay</td>
<td>Walks above ground</td>
</tr>
<tr>
<td>Shawéjigewiin</td>
<td>Loving kinship relations</td>
</tr>
<tr>
<td>Zaagi'idiwin</td>
<td>Love – as in one of the Grandfather Teachings</td>
</tr>
</tbody>
</table>

**Kanyen’ké:ha**

<table>
<thead>
<tr>
<th>Kanyen’ké:ha</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akwé:kon teyotirihwayenawákon</td>
<td>Everything is connected</td>
</tr>
<tr>
<td>Kahnawà:ke</td>
<td>By the rapids</td>
</tr>
<tr>
<td>Kahnawa’kehró:non</td>
<td>Person/people from Kahnawà:ke</td>
</tr>
<tr>
<td>Kanehsatà:ke</td>
<td>At the foot of a silky ribbon of sand</td>
</tr>
<tr>
<td>Kanehsata’kehró:non</td>
<td>Person/people from Kanehsatà:ke</td>
</tr>
<tr>
<td>Ka'nikonhri:yo</td>
<td>A good mind</td>
</tr>
<tr>
<td>Kanyen’ké:ha/Kanien’ké:ha</td>
<td>Mohawk</td>
</tr>
<tr>
<td>Kanyen’kehá:ka/Kanienkehá:ka</td>
<td>Mohawk person/people</td>
</tr>
<tr>
<td>KasehsténsheRa</td>
<td>Power/Strength</td>
</tr>
<tr>
<td>Kayanerenkó:wa</td>
<td>The great peace</td>
</tr>
<tr>
<td>Kenhté:ke</td>
<td>On the field/meadow</td>
</tr>
<tr>
<td>Konnoronkwátsera</td>
<td>Love</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Nya:wen’kó:wa</td>
<td>Great thanks</td>
</tr>
<tr>
<td>Ohén:ton Kariwatékhwén</td>
<td>The words that come before all else</td>
</tr>
<tr>
<td>Onkwawén:na</td>
<td>Our language/our words</td>
</tr>
<tr>
<td>Onkwehón:we</td>
<td>Original person/people</td>
</tr>
<tr>
<td>Onkwehonwe’néha</td>
<td>Our original ways of being (i.e. Kanien’ké:ha language and culture)</td>
</tr>
<tr>
<td>Onkwe’shón:’a</td>
<td>All of the people</td>
</tr>
<tr>
<td>Rotinonhsyón:ni</td>
<td>They have built the house (a.k.a. Haudenosaunee/Iroquois)</td>
</tr>
<tr>
<td>Shatiwennakará:tats</td>
<td>They raise the words again</td>
</tr>
<tr>
<td>Shonkwaya’tíson</td>
<td>The Creator</td>
</tr>
<tr>
<td>Skén:nen</td>
<td>Peace/Calmness</td>
</tr>
<tr>
<td>Tá:non</td>
<td>And</td>
</tr>
<tr>
<td>Tekanawí:ta</td>
<td>Two river currents flowing together; Peacemaker’s name</td>
</tr>
<tr>
<td>Tewataté:ken</td>
<td>We are all connected</td>
</tr>
<tr>
<td>Tóta</td>
<td>Endearing term for a grandparent</td>
</tr>
<tr>
<td>Tyendinaga’hró:non</td>
<td>Person/people from Tyendinaga</td>
</tr>
</tbody>
</table>
Chapter 1

Introduction

1.1 Personal Introduction

My name is Brittany McBeath. I want to tell you a bit about who I am. I am of mixed ancestry. I have pale-skin, blonde hair and blue eyes because I am of Scottish and English descent from my patrilineal side and partial English descent from my matrilineal side as well. I am Kanyen’ké:ha:ka and I sit with the Wolf clan as passed down from my mother. My ancestral roots connect me to Tyendinaga Mohawk Territory; however, I grew up outside of the community. I was born in Toronto, Ontario and spent my childhood living on Mississauga territory now known as the Greater Toronto Area, specifically Scarborough and later Bowmanville. I am 24 years old and am in my 7th year of studies at Queen’s University as I also completed my undergraduate degree here, majoring in psychology and minoring in sociology. I am also studying Kanyen’ké:ha...
onkwawén:na and I really enjoy it. Being able to learn Onkwehonwe’nêha is healing. All of the work I do is for the next generations, and I am dedicated to my work.

I will begin this thesis document by positioning myself. My intention in doing this is to shed light on how certain aspects of myself have affected this project and the way it is presented. The perspective I present within my writing is a result of a long journey of self-discovery, a great deal of learning, and even more unlearning. In order to help guide you through my journey of self-discovery, I will start from the beginning of my academic socialization.

I completed primary and secondary schooling within the public-school system. This settler colonial system was very influential in molding my young mind. Due to my white-passing appearance and the deep-rooted loss of cultural knowledge and identity passed down through the generations of my matrilineal side, I grew up completely assimilated into Eurocentric ideals. Through secondary school, I was always working toward pursuing post-secondary studies at the University level and this was something that was always encouraged by my parents and teachers. My online OUAC application was the first time I was ever asked to self-identify as someone with Indigenous ancestry. At that time, I did not hold shame about my identity as someone with Indigenous ancestry, however I did not understand why it mattered more than other aspects of my ancestry, or why it was relevant to the application. What I did not yet know was how much checking that black box would change the course of my life moving forward.

Checking that box connected me to Indigenous student support centers at various universities. Being considered within a subgroup of Indigenous student applicants, outside of the mainstream for the first time, brought feelings of shame and guilt. I was receiving so much extra support compared to others, and yet I did not feel deserving, or different from other students in any way. I didn’t feel like an Indigenous student. As a result, I declined many of the supports offered. I had no cultural identity, I had no idea what it meant to be Indigenous; to be Rotinonhsyón:ni; to be Kanyen’kéha:ka. How could I take advantage of such supports with no
cultural identity to back my status as an Indigenous student? How could I even show up at the Indigenous student center claiming to be an Indigenous student with blonde hair and blue eyes?

During my first year at Queen’s University, I decided that the only way I could enter that space was if I was going to give back in some way, I needed something to offer. So, it was a volunteer opportunity with the Aboriginal Youth Leadership Program at Four Directions Indigenous Student Center that gave me a reason to enter that space comfortably. As I began to better understand Canada’s colonial history, I also began to situate myself within it. Questions of the authenticity of my Indigeneity are still the source of my perpetual identity crisis. However, I now understand that this binary of belonging causing me to feel like I am ‘not Indigenous enough’, is a colonial construct. I also came to understand the privilege I possess as a white-passing person. Since I do not visibly present as an Indigenous person, I acknowledge that throughout my life I have not been subject to the same oppression and marginalization other Indigenous people experience due to racism. As a result, I am cognizant of the way that I conduct myself and the amount of space that I take up because of this privilege.

I am constantly seeking knowledge and understanding of my own cultural identity as a Kanyen’kéha:ka woman, while unlearning the colonial ways I find myself assimilated to. This is my form of resistance. While completing my Master’s degree, I was also completing the Shatiwennakarátats Mohawk Language and Culture certificate program offered by Tsi Tyónnheht Onkwawén:na in partnership with Queen’s University. As a result of my engagement in language learning, I have been able to reflect on Indigenous conceptualizations of wellness in relation to Indigenous language. Language learning has made me realize how much our worldview is impacted by the language we use. Language learning throughout these formative academic years has been an integral part of my growth. Throughout my career it is my intention to explore more deeply the intersection between Indigenous language learning, Indigenous language revitalization and health promotion within Indigenous communities.
The current project builds on a larger project carried out in partnership with the Kahnawà:ke Schools Diabetes Prevention Project (KSDPP) Community Mobilization Training (CMT) for type 2 diabetes prevention. My involvement with this project began in June 2016, almost four years ago, as a volunteer research assistant. I began by attending research team meetings and building relationships with the community members involved in the KSDPP, and the CMT at annual gatherings in Kahnawà:ke. Throughout, my involvement I contributed supplementary documents and graphics that were included in Dr. Lucie Lévesque’s CIHR Pathways II grant.

My time as a volunteer research assistant preceded what would later turn into a Special Directed Project (PSYC570) with Dr. Lévesque in the 4th year of my undergraduate degree. The project I undertook involved the development of a self-administered evaluation of community readiness for participation in the CMT for diabetes prevention. This measure helped our regional partner organizations strategically identify the most equipped communities to participate in the CMT. My continued involvement in the larger project, this time as a master’s student, has allowed me more time to build relationships on various occasions with the community stakeholders who are organizing and participating in the CMT. I have connected with our community partners during events in the host communities including Sadie’s Walk, bootcamp workouts, the annual project gathering held in Kahnawà:ke, during many kitchen table conversations, meetings via telephone and video calling, and at the CIHR Pathways National Gathering 2018 in Whitehorse, Yukon Territory. Through this relationship building process I have been privileged to be able to get to know all of the people involved in this project and have allowed them to get to know me as well.

Just because I identify as an Indigenous person, does not mean that I have a free pass into doing research with Indigenous communities. I believe regardless of who you are, building relationships, fostering trust, and sharing your intentions is a prerequisite to completing research with Indigenous communities. Whenever I enter a community, I am mindful of who I am, I am mindful of what I look like, and I am mindful of my position as both an insider and outsider at
the same time. The work that I have done throughout my journey of self-discovery leading up to this moment has allowed me to complete this research through a frame of mind that aligns with Onkwehonwe’néha. The work that I have done leading up to this moment has also informed my reasons for pursuing this work, and my intentions for the future. That being said, I am still learning, and will continue the process of learning throughout my entire life. As I continue to grow both personally and academically, so too will my positionality and perspective.

1.2 General Introduction

Indigenous health is consistently framed through a deficits-based lens. According to Western measures, Indigenous populations underperform significantly in comparison to non-Indigenous populations on Western indicators of health (Government of Canada, 2018). However, it is well known and well documented that Western conceptualizations and operationalizations of health that align with a biomedical model conflict with Indigenous conceptualizations that consider the whole community and surrounding environment (Smylie & Anderson, 2006; Taylor, 2008). It has been documented that what is commonly referred to as health within Western science, is better understood philosophically as wellness within Indigenous science (First Nations Information Governance Centre, 2018). Wellness from an Indigenous perspective is multidimensional and socioecological (Kirmayer et al., 2011; Richmond et al., 2007). The concept of wellness is deeply connected to maintaining a balance between the many dimensions of the self in reciprocal relation to each socioecological level of the human experience (Elder Jim Dumont, 2014).

It is clear that there are vast differences in the views and priorities of Indigenous peoples and government reporting frameworks that include conceptualizations of wellness. Yet, there has been a lack of effort to develop culturally relevant methodologies that capture the indicators of wellness as defined by Indigenous peoples (Anderson et al., 2006). This failing is reflective of the power imbalance between Indigenous peoples and colonial nation-states; assimilative research
priorities and practices are greatly to blame for the paucity of data on Indigenous conceptualizations of wellness.

Western-based systems of population health data collection, management, analysis and use that reinforce social exclusion, marginalization and oppression of Indigenous populations must end (Smylie et al., 2012). Transforming these systems is crucial because the data they generate inform policy making, planning and implementation of health care services and health promotion programming within Indigenous communities (Anderson et al., 2006; Smylie et al., 2006, 2012). The conceptualization of Indigenous community wellness is an essential first step to developing effective means to foster environments that better support living well.

1.3 Purpose and Research Question

The purpose of this research is to address the need to identify Indigenous community-led conceptualizations of wellness in order to inform the creation of more culturally relevant and applicable indicators of Indigenous community wellness. My research seeks to answer the question, *how is community wellness conceptualized by three unique First Nations communities?*

1.4 Anticipated Implications

Findings from this research will contribute to existing knowledge about Indigenous conceptualizations of community wellness. The Kahnawà:ke Schools Diabetes Prevention Project Community Mobilization Training participants are uniquely positioned to benefit from this research. Communities participating in this study will be able to utilize their community-specific conceptualization of community wellness to guide the development of indicators that can be used to gauge the impact and future success of their community mobilization efforts for type 2 diabetes prevention.
1.5 Thesis Organization

This thesis conforms to the regulations outlined in the Queen’s University School of Graduate Studies and Research General Forms of Theses document. The first chapter briefly introduces the reader to this thesis by examining contemporary conceptualizations of Indigenous health and outlining the rationale for exploring Indigenous conceptualizations of community wellness. The second chapter reviews literature on the colonial context of Turtle Island as it relates to Indigenous health, current conceptualizations of health and wellness, and the limitations of existing health data systems. The third chapter of this thesis outlines the participatory approach and methods used to explore Indigenous conceptualizations of community wellness in three First Nations communities. The fourth chapter presents the research findings, and the fifth chapter comprises a general discussion and conclusion with the appendices following in the last section.
Chapter 2

Literature Review

“Wellness from an Indigenous perspective is a whole and healthy person expressed through a sense of balance of spirit, emotion, mind and body. Central to wellness is belief in one’s connection to language, land, beings of creation, and ancestry, supported by a caring family environment. The spirit causes us to live, gives us vitality, mobility, purpose and the desire to achieve the highest quality of living in the world. Spiritual wellbeing is the quality of being alive in a qualitative way. Spirit is central to the primary vision of life and worldview and thereby facilitates hope. Within an Indigenous worldview, being rooted in family, community and within creation as extended family is the foundation of belonging and relationships. At this heart level of one’s being, emotional and relational wellbeing is nurtured by one’s belonging within interdependent relationships with others and living in relation to creation, including beings in creation. The mind operates in both a rational and intuitive capacity. Mental wellbeing is the conscious and intelligent drive to know and activate one’s being and becoming. Having a reason for being gives meaning to life. The body is the most outer part of our being and is comprised of the most immediate behavioural aspects of our being. Physical wellbeing is that way of behaving and doing that actualizes the intention and desire of the spirit in the world. This and the knowledge that the spirit has something to do in the world generates a sense of purpose, conscious of being part of something that is much greater than they are as an individual.”

The Definition of Wellness© by Elder Onaubinisay Jim Dumont, an Ojibway-Anishinaabe of the Marten Clan, from Shawanaga First Nation. (2014).

2.1 Colonial Context of Turtle Island

Colonization, oppression, and its resulting intergenerational trauma are the root causes of persistent health disparities and inequities between Indigenous peoples and non-Indigenous people (de Leeuw et al., 2015). The accumulated damage from past colonization and contemporary processes of ongoing colonization have a direct effect on Indigenous peoples’ health (Bourassa et al., 2004). Considering that settler-colonial power continues to dominate the geographic lands upon which we are situated, it is critical to understand how colonization wields its influence on the lives and health of contemporary Indigenous peoples.
The colonization of Turtle Island began with land dispossession and related discriminatory legislation. This included the 1493 Doctrine of Discovery, which justified colonial nations’ right to claim *terra nullius*, a Latin phrase meaning empty land, as discovered by explorers (Pope Alexander VI, 1493). In 1763, the Royal Proclamation instituted constitutional law stipulating that treaties, a system of property ownership imposed by the colonial capitalist system, would be the only legal way that Indigenous peoples could release control of their lands (George, 1763). The notion that land was something to be bought, sold, owned, and exploited for profit was a foreign concept to Indigenous peoples who view the land as kin. These justifications for land dispossession are early examples of how the very existence of Indigenous peoples, their belonging on, and use of Turtle Island have been denied for the benefit of the colonizer.

As Turtle Island became usurped and empirically known as Canada, Indigenous peoples became barriers to settling the land. The settlers’ saw Indigenous people not as a group of human beings, but as a problem to be solved for their own benefit. One part of the solution involved the creation of the British North American Act of 1867 through which the federal government took authority over First Nations and the land reserved for First Nations (The British North America Act, 1867). Another part of the solution involved the introduction of the Indian Act (*Indian Act*, 1985). Although this legislation was passed by the Canadian government in 1876, it has been amended many times and still controls many aspects of daily life for Indigenous peoples today (Truth and Reconciliation Commission of Canada, 2015b). This Act aims to erode and destroy the cultural, social, economic, and political distinctiveness of Indigenous peoples in favour of their assimilation into Eurocentric Canadian lifestyles and values.

Targeting the malleable minds of the children and youth, Church-run mission schools were established as early as the year 1620 (Miller, 1996). The oldest mission school, which later became a Residential School, is the Mohawk Institute in Brantford, Ontario. It opened its doors to boarders in 1831 (*The Mohawk Institute—Brantford, ON*, n.d.). Published documents supporting the operation of these schools included the Bagot Commission Report (1842-1844) and Egerton
Ryerson’s Report on a System of Public Elementary Instruction for Upper Canada in 1847 (Bagot, 1845; Ryerson, 1847). These reports recommended the separation of Indigenous children from their families and communities as the best way to assimilate them into Eurocentric, Canadian culture and that the Mohawk Institute should be considered a model of best practice (Bagot, 1845; Norman, 2017; Ryerson, 1847).

In 1879, Nicholas Flood Davin investigated the American Industrial schools for Indigenous children and made recommendations for similar schools in Canada in his report titled Report on Industrial Schools for Indians and Half-Breeds. This report famously emphasizes the effectiveness of these schools in “killing the Indian within the child” (Davin, 1879). Based on these recommendations, in 1883, Sir John A. Macdonald authorized the creation of the residential school system funded and co-operated by the Government of Canada and the Roman Catholic, Anglican, Methodist, Presbyterian and United churches (Truth and Reconciliation Commission of Canada, 2015b). Following this authorization and amendment to the Indian Act, the number of residential schools rapidly increased.

In 1920, the Indian Act was amended under the advice of Deputy Superintendent General of Indian Affairs, Duncan Campbell Scott, making enrolment and attendance of either an Indian Residential School or Day School mandatory for all Indigenous children (Indian Act, 1985; Lougheed, 1920). Through these Residential Schools, and Indian Day Schools, Indigenous children were stripped of their cultures and languages for generations. Many forms of violence were normalized in Residential Schools and over 6000 children died while being there (Truth and Reconciliation Commission of Canada, 2015b). The last Residential School to close its doors in 1996 was The Gordon Residential School in Punichy, Saskatchewan (Miller, 1996). For survivors, abusive and violent behaviours, often combined with substance abuse, are legacies of their time at these schools (Truth and Reconciliation Commission of Canada, 2015b). Many survivors came to accept violence as a norm due to their personal trauma and have passed this down to new generations.
Although many residential schools closed their doors in the first half of the twentieth century, the resulting family dysfunction was used by the Canadian government to justify another wave of assimilation through interference known as the ‘Sixties Scoop’. The Sixties Scoop era began in 1951, after amendments to the Indian Act gave provinces jurisdiction over child welfare on reserves (Indian Act, 1985; MacKay, 1952). As a result, over 16,000 Indigenous children were put in foster care and sold by state authorities, most being adopted into non-Indigenous homes or institutions across Canada and the United States. Today, the practice of removing children from their homes still persists as Indigenous children are still highly overrepresented within the Child Welfare System (Truth and Reconciliation Commission of Canada, 2015b).

Deep unequal power relations that began with colonialism continue today in many ways. The current reliance on Western medical, educational, justice, and governance systems are evidence of the legacy of colonization and the destruction of Indigenous knowledge and practices (Truth and Reconciliation Commission of Canada, 2015b). It is not a coincidence that lifestyle diseases and related disorders have increased as Indigenous peoples have moved from traditional, to transitional, and modern lifestyles (Gracey & King, 2009). The displacement of traditional lifestyles in favour of a modern lifestyle through both colonial forces and technological advancement are important to consider when seeking to address the problem of ill health among Indigenous peoples. Although each Indigenous community has experienced colonialist and assimilative policy implementation by the Canadian government in a unique way, the legacy of damage to all aspects of Indigenous communities’ way of living and being is common across all communities. This legacy frames the context of ill health among Indigenous peoples, today.

2.2 Indigenous Health Inequities and the Issue with Comparison

Ill health at the individual level through chronic disease is one way in which the effects of colonization have manifested within Indigenous populations (Greenwood et al., 2015). To demonstrate the severity of health inequities that exist between Indigenous and non-Indigenous
peoples, health conditions among Indigenous populations are often described in comparison to those of the non-Indigenous population. For example, it is well documented that Indigenous peoples across Turtle Island are disproportionately affected by type 2 diabetes and its related complications (Yu & Zinman, 2007). According to the Centre for Chronic Disease Prevention and Control, in Canada, age-standardized prevalence of diabetes is 17.2% among First Nations people living on-reserve, 10.3% among First Nations people living off-reserve, and 7.3% among Métis people, compared to the rate of 5.0% within the general population and Inuit peoples (Chronic Disease Surveillance and Monitoring Division & Centre for Chronic Disease Prevention and Control, 2011).

The comparison of type 2 diabetes rates between Indigenous and non-Indigenous people highlights a deficit that is concerning – however, such comparisons are misleading in the absence of context because Indigenous and non-Indigenous populations cannot be compared as equals. Current social structures and the land base have been carefully set up to disadvantage Indigenous peoples. The very different past and current experiences of Indigenous and non-Indigenous peoples must be considered when interpreting these varying rates. Health inequities are directly linked to the effects of colonization including cultural suppression, family and community dislocation, chronic unemployment, poverty, lower educational attainment, and unhealthy environments (Greenwood et al., 2015).

Labeling Indigenous peoples through these comparisons can lead to a self-fulfilling prophecy in which our own people believe it is not a matter of if they will develop type 2 diabetes (for example) in their lifetime, but rather, when they will develop type 2 diabetes. Ill health has become a given; a part of our identity due to continuous comparisons, and deficits-based research. These representations further marginalize Indigenous peoples as less-than non-Indigenous peoples, imposing a notion that ill-health is the fault of Indigenous peoples ourselves (Geddes, 2015), and that we need to change, or rather, assimilate in order to meet the health standards of the rest of the population. These comparisons have been successful in drawing attention to the
large gap; however, they have not been successful in providing information to enable social solutions to existing health disparities.

Another problem arising from the comparison of disease rates between Indigenous and non-Indigenous people is the assumption that health is conceptualized in the same way by everyone. Some scholars have argued that comparing disease rates like those cited above is irrelevant because Indigenous and non-Indigenous concepts of health are shaped by distinctly different worldviews, cultures and experiences (Richmond et al., 2007). The implications of this viewpoint highlight how problematic current representations of Indigenous health can be.

Current representations of Indigenous health reflect the power imbalance between Indigenous peoples and the colonial nation-states that set the parameters for the conceptualization and operationalization of health. As a result, the views and priorities of Indigenous peoples are unrepresented within government reporting frameworks of Indigenous health. There has also been a lack of effort toward developing culturally appropriate methodologies to capture the indicators of wellness as defined by Indigenous peoples (Anderson et al., 2006). Thus, to close the gap in health outcomes between Indigenous and non-Indigenous peoples, we must start by considering how Indigenous peoples conceptualize health instead of defining it on their behalf. Starting with an Indigenous-led conceptualization of health ensures that any efforts to improve Indigenous health will address determinants specific to Indigenous peoples. Achieving health equity between Indigenous and non-Indigenous peoples cannot be done without going beyond the conventional determinants of health and including those associated with Indigenous cultures, histories, colonization, and the current social, economic, political and geographic contexts (King et al., 2009).
2.3 Differentiating Western and Indigenous Conceptualizations of Wellness

2.3.1 Western Conceptualizations of Health and the Movement toward Wellbeing

The word health comes from the Old English word hǣlth of Germanic origin, meaning wholeness (“Health,” 2020). The Oxford Dictionary defines health as, “The state of being free from illness or injury.” (“Health,” 2020). This definition is rooted in a biomedical model of health that focuses on the absence of disease and implies an inherently ableist and ageist conceptualization. The definition of health has continued to evolve ever since the World Health Organization overcame this negative definition in 1948. They defined health as the positive state of, “complete physical, mental and social well-being and not merely the absence of disease or infirmity.” (WHO, 1948). It was considered progressive at the time of its formulation in 1948. However, despite 70 years of criticism for its unattainability, it has never been revised (Huber et al., 2011).

Changing patterns of disease have had an important impact on the movement toward a more wholistic conceptualization of wellness in Western science. Prior to the 20th century, acute illnesses such as infectious disease were of greatest concern (Omran, 1971). From the mid-20th century to the present (up until the recent COVID-19 pandemic), chronic illnesses such as cardiovascular disease, cancer, and type 2 diabetes have been of greatest concern. From this evolution in primary health concerns grew the fields of public health and health promotion. The field of health promotion specifically, has produced various documents that have shaped Western conceptualizations of health.

In 1974, Minister Marc Lalonde brought forward a document titled *A New Perspective on the Health of Canadians*, more commonly known as the *Lalonde Report* (Lalonde, 1981). This report challenged dominant views of health and suggested that making change in our individual lifestyle, the physical environment and social systems would result in better health outcomes than simply improving the health care system. Central to this report is the framework for health titled
the Health Field Concept (Lalonde, 1981). The four cornerstones of this concept are elements of human biology, environment, lifestyle and health care organization. This report has been heavily critiqued for the underlying blame this perspective assigns to the individual for poor health (Hancock, 1986). These criticisms allowed for further reflection on this perspective and led to the development of a clearer vision of what fosters health, and also what influences it.

In 1986, the Canadian Minister of National Health and Welfare released a document titled *Achieving Health for All: A Framework for Health Promotion*, more commonly known as the *Epp Report* (Health and Welfare Canada, 1986). This report further embraced the ideas of the Lalonde Report, emphasizing the need to view health in non-medical terms. Health is described in this report as, “a basic and dynamic force in our daily lives, influenced by our circumstances, our beliefs, our culture and our social, economic and physical environments” (Health and Welfare Canada, 1986). Another seminal document that readjusted again how health was defined and promoted, also released in 1986, was the Ottawa Charter for Health Promotion (WHO, 1986). The Ottawa Charter states:

“To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.” (WHO, 1986).

The Ottawa Charter has since been critiqued, drawing attention to both the dominant presence of privileged voices, and exclusion of specifically Indigenous voices, thus reflecting society’s order of inequality in its creation (McPhail-Bell et al., 2013). Although this document also reflects Western worldviews, it provides evidence of the shift from biomedical models of health to a more wholistic understanding of health. The Ottawa Charter of Health was the first
document to suggest going beyond healthy lifestyles to wellbeing. It introduced the importance of considering more than just physical aspects, but also mental, spiritual, emotional, environmental and social factors, to the context of mainstream health care (Donatelle et al., 1999). This multidimensional conceptualization of health was new to Western science, but not to Indigenous societies (Elliot & Foster, 1995).

Most recently, in April 2019, a statement representing the collective voice of the social movement members, researchers, practitioners and policy makers that participated in the 23rd IUHPE World Conference on Health Promotion in Rotorua, Aotearoa was produced. This statement is titled “WAIORA: Promoting Planetary Health and Sustainable Development for All” (Rotorua Statement, 2019). Waiora is a Māori concept expressing the interconnectedness of the health of all people and the natural environment. Conference participants put forth global calls to action including: 1) Ensure health equity throughout the life course, within and among countries, and within and across generations, 2) Make all urban and other habitats inclusive, safe, resilient, sustainable and conducive to health and wellbeing for people and the planet 3) Design and implement effective and fair climate change adaptation strategies, and 4) Build collaborative, effective, accountable and inclusive governance systems and processes at all levels to promote participation, peace, justice, respect of human rights and intergenerational health equity. Overall, the Waiora statement serves to highlight the imperative to work with Indigenous peoples to draw on Indigenous knowledge, and to share knowledge reciprocally for the wellbeing of the planet and all of humanity alike.

### 2.3.2 Indigenous Conceptualizations of Health, Wellness and Wellbeing

The terms health, wellbeing and wellness are not clearly defined and are often used interchangeably within an Indigenous context. This could be indicative of the limitations that a universal definition could place on a fluid and subjective concept such as wellness. My own analysis of these terms leads me to believe that ideas about Indigenous conceptualizations of
health, wellbeing and wellness are all quite similar in that they all represent a wholistic concept of being in the world that relies on the interconnectedness and balance of multiple dimensions.

Conceptualizations of each term centre around the collective, not just the individual (McCubbin et al., 2013). When conceptualizing wellness in this way, the individual is not necessarily at the centre; instead, the centre is everywhere, meaning that individual indicators cannot be *the* central aspect of our understanding of wellness. Instead, indicators involving other socioecological levels including the natural environment and social systems are just as central to understanding wellness as conceptualized by Indigenous peoples.

Indigenous languages are unlike English and other European languages in that they are verb-based rather than noun-based. While the English language classifies the word wellness as a noun, when it is described in an Indigenous language, it takes the form of a verb. For many generations, Indigenous people have described their world using verb-based languages that have been highly influential in the development of Indigenous worldviews (Hart, 2010). When wellness is classified as a verb, it is understood as an action, state or occurrence as opposed to a word used to identify a class of people, places or things. Thus, an Indigenous perspective would suggest that wellness is a process rather than a product.

The Definition of Wellness© by Elder Onaubinisay Jim Dumont presented at the beginning of this chapter, does a good job of describing the many mediating factors that interact to define the experience of wellness as represented in the literature (Elder Jim Dumont, 2014; Graham & Leeseberg Stamler, 2010; Kirmayer et al., 2009; Quinless, 2015; Richmond et al., 2007). This definition suggests that Indigenous peoples conceptualize wellness as a multidimensional and socioecological phenomenon (Elder Jim Dumont, 2014). Indigenous perspectives on wellness reveal that much of what promotes wellness originates outside of the individual and the key to wellness is balance and harmony among all elements including personal and collective aspects of life. Existing in ecological balance with the surrounding environment is imperative to community wellness (Kirmayer et al., 2011; Richmond et al., 2007).
Throughout the thesis, I will be using the word wellness to capture the wholistic concept of Indigenous health. Given the focus on the collective in this research, the term community wellness will be favoured.

2.4 The Issue with Measurements of Indigenous Wellness

It is clear that Indigenous conceptualizations of community wellness are vastly different from Western conceptualizations of health and even wellbeing. How wellness is conceptualized will influence its operationalization and thus, the creation of outcome indicators. The use of dominant Western conceptualizations of health limits the representativeness of Indigenous wellness. Past literature demonstrates that current measures of Indigenous wellness are inadequate and further oppressive as they, 1) only capture Indigenous communities through a deficits-based lens influenced by a Western biomedical model of health and government surveillance priorities, 2) are used to compare conditions of Indigenous communities to those of non-Indigenous communities, and 3) do not account for local priorities or culturally relevant indicators of wellness within Indigenous communities.

Health assessment data are drawn from five principal sources including census, vital registration, health surveys, health services utilization data and surveillance systems (Smylie & Anderson, 2006). Monitoring health and wellness status for the purpose of identifying and solving community health problems is an essential service of the field of Public Health and Health Promotion. However, data from current sources that provide limited representativeness of Indigenous peoples’ wellness are limited in their ability to effectively inform subsequent health policy, programs and services.

The population of First Nations peoples living on-reserve and in Northern communities has been excluded from national health surveys (Anderson et al., 2006; First Nations Information Governance Centre, 2018). This has resulted in large gaps of information about many key socio-economic indicators to improve the lives of First Nations people (Anderson et al., 2006).
National-level data on Indigenous wellness are inadequate for the planning and delivery of public health services (Smylie & Anderson, 2006). Furthermore, community-level Indigenous health measurement systems are often non-existent or inadequate, which is indicative of a deficiency in the supportiveness of local service development in Indigenous communities as well (Anderson et al., 2006). Therefore, there is a need for representative, culturally and geographically relevant community-level data to inform the creation of more effective and supportive health and social service provisions within Indigenous communities.

The failure to include local priorities or culturally relevant indicators of wellness in the measurement of Indigenous wellness means that the current portrayal of Indigenous health is incomplete. In order to obtain a more wholistic, representative picture of Indigenous health and wellness, researchers must change what we measure to incorporate other data sources that add more context, and local relevance (Anderson et al., 2006; Smylie et al., 2012; Taylor, 2008).

In addition to measurements of Indigenous health, there are two main methods of measuring Indigenous community wellness in Canada. The first measure is the Registered Indian Human Development Index, and the second is the Aboriginal Community Well-being Index (Cooke & Beavon, 2013; O’Sullivan & Senécal, 2014). Both indexes have been critiqued for their Western conceptualization of wellbeing, which is concerned with assessing primarily individual-level indicators (Quinless, 2015). They fail to take into consideration social and cultural values, and exclude other indicators such as mental, emotional and spiritual health, nutrition, addictions, family structure, and language.

One recent improvement in this area is the First Nations Regional Health Survey (FNRHS), which was established in 1997. The FNRHS is a national health survey created, conducted and carried out by First Nations people, for First Nations people (First Nations Information Governance Centre, 2018). This survey was implemented to address First Nations and Inuit health and well-being while acknowledging the need for First Nations and Inuit to control their own health information. The FNRHS is implemented explicitly in alignment with
OCAP© Principles, under complete control of each First Nation community. So far, it is the only First Nations health survey of its kind. Although this survey is a step in the right direction, in moving toward self-determination and self-governance of Indigenous health information, there is a need for additional Indigenous-informed wellness measures, indicators and frameworks.

2.5 The Future of Measuring Indigenous Community Wellness

Smylie et al. (2012) have explored the ways in which current Indigenous health data systems can become tools for community empowerment. The authors provide suggestions for using data to actively contribute to social, economic and political processes in a way that can reduce health inequities. This re-envisioning involves the creation of data systems that are directly connected to Indigenous communities, separate from colonial structures, in replacement of the systems implemented by colonial nation states on their behalf. It also involves a complete shift from the current reliance on individual level data to the ongoing development of community level understandings of the social change needed to reduce health inequity.

The authors outline four strategies for change that are intended to facilitate the transformation of current health and social data systems into tools for community empowerment. Strategy one is adopting a community-centric approach (Smylie et al., 2012). This strategy involves the community being at the center of the data system. This means that the community must be the one to initiate data processes and be actively engaged in the formative stages of data systems work. Central to this strategy is earning trust and respect from the community by building strong collaborative community partnerships. It is also essential that the researcher let go of control over the data to ensure communities have complete stewardship over their own information. Building community-level data systems will contribute to producing higher quality, more relevant data that works to reduce rather than perpetuate the exclusion, oppression and marginalization of Indigenous peoples.
Strategy two is changing what we measure (Smylie et al., 2012). Since it is clear that the processes driving social exclusion and health inequities occur primarily at the collective level, the focus of future measurement must be reflective of collective community level processes. Changing what we measure means strategically focusing on the social systems that maintain health inequities rather than the individual level determinants of health. This strategy involves including the assessment of social, economic and policy level processes that will provide the basis of strong arguments for change. Therefore, central to this strategy is the involvement and engagement of Indigenous community members, leadership, policy makers and organizational representatives. Concept mapping is one research tool that has been useful to support communities in the process of conceptualizing health and determining their related priorities for the development of measurement tools (Burke et al., 2005; Cargo et al., 2019; Firestone et al., 2014).

Strategy three is creating cross-community, cross-sector partnerships and alliances (Smylie et al., 2012). This strategy addresses the current division of health disparities and inequities according to certain categorizations. This division serves to resist change by disguising each disparity and inequity as a separate unrelated problem, when really, they are all just different manifestations of the same systemic problems. We can break out of the silos that seek to divide and conquer any movement toward change and optimize political leverage by forming partnerships.

Strategy four is working toward the integration of data systems with social, economic and political levers for change (Smylie et al., 2012). This strategy involves the integration of all health system performance measures to be governed and operated by Indigenous communities. Within these integrated data systems, it will be important to monitor the impacts of policy, programming and services on the distribution of social resources as it links to reducing health inequities. Although there are no examples of an integrated data system yet, this type of work is beginning to take place (Welch et al., 2010).
It is evident that going through the process of creating a community-led conceptualization of wellness is beneficial in itself as it represents a first step in fostering self-determination of health data systems within a community (Kobeissi et al., 2011; Pivik & Goelman, 2011). The creation of cross-community and cross-sector partnerships paired with a movement toward an integration of data systems may present a more community-centric research space to allow movement away from the recreation of grassroots measurement tools (Mackenbach, 2003; Smylie et al., 2012).

2.6 Summary and Rationale for the Current Research

In summary, it is essential that the evident health disparities and inequities experienced by Indigenous peoples in comparison to non-Indigenous peoples always be considered within the current colonial context of Turtle Island. The dangers of comparing Indigenous health data with non-Indigenous health data are that such comparisons mask the colonial context by assuming these populations can be compared as equals. These comparisons also assume that Indigenous peoples conceptualize and operationalize wellness in the ways prescribed by Western ideals. The conceptualization of Indigenous wellness should account for the relationality and interaction that take place between the multiple dimensions and socioecological levels of the human experience to mediate the experience of wellness (Elder Jim Dumont, 2014; Kirmayer et al., 2011; Richmond et al., 2007). For Indigenous peoples, wellness is a verb, not a noun.

It is clear that Indigenous conceptualizations of community wellness are vastly different from Western conceptualizations of health and even wellbeing (Graham & Leeseberg Stamler, 2010), yet Western measures are still being used as primary sources of information about Indigenous health (Anderson et al., 2006). The use of these measures will lead to further exclusion, oppression and marginalization of Indigenous peoples (Anderson et al., 2006; Smylie & Anderson, 2006). Although there has recently been Indigenous-led work to address this issue, the need for further exploration persists.
Based on recommendations within the literature, it is clear that adopting a community-centric approach and changing what we measure are the first steps to transforming data systems into tools for community empowerment (Smylie et al., 2012). Therefore, going through the process of developing a community-led conceptualization of wellness is beneficial in itself as a first step in fostering self-determination of health data systems within a community. The current research responds to calls within the field of Indigenous health to address the need for Indigenous community-led conceptualizations of wellness that can inform the creation of more relevant and applicable measures of Indigenous community wellness. Accordingly, my research seeks to answer the question, *How is community wellness conceptualized by three unique First Nations communities?*

Findings from this research will contribute to existing knowledge about Indigenous conceptualizations of community wellness and provide locally relevant and useable information. Findings will be used to guide the creation of a measure to assess the impact of community mobilization efforts for type 2 diabetes prevention.
Chapter 3

Methodology

3.1 Research Approach: Community-Based Participatory Research

Community-based participatory research (CBPR) is a methodological approach in which researchers and community members work together as active participants throughout the research process (Israel et al., 2005). Evidence shows that research becomes more meaningful with Indigenous community engagement and local knowledge integration in the research process (Potvin et al., 2003).

CBPR has been used to investigate a variety of topics within the health field and is an increasingly popular approach to working with Indigenous populations (Israel et al., 2008; Petrucka et al., 2012; Tobias et al., 2013). A participatory research approach designed to provide communities the opportunity to be equal partners in the decision-making processes related to the research design and methods is typically very welcomed by community and often preferred over researcher-driven research (Petrucka et al., 2012). The valuing of local knowledge and protocols throughout the entirety of the research partnership aligns with current ethical standards for conducting research with Indigenous communities (Brant Castellano, 2004).

Within the context of Indigenous health research, the Tri-Council Policy Statement stipulates that community engagement and the nature of that engagement should be agreed upon by the researcher and community members prior to commencement of a project (Government of Canada, 2019). As one of its central tenants, CBPR promotes equitable partnerships that move away from the traditional researcher-subject relationship dynamic (Israel et al., 2005) and instead, promotes relationship building with community partners to ensure that the research will be mutually-beneficial, relevant to local customs and codes of ethics, and has the potential to create a long-lasting partnership (Petrucka et al., 2012).
3.2 Research Setting

3.2.1 The Kahnawà:ke Schools Diabetes Prevention Project

The Kahnawà:ke Schools Diabetes Prevention Project (KSDPP) is an exemplar of one of the longest standing CBPR partnerships existing on Turtle Island. My primary community research partner is the community of Kahnawà:ke (meaning ‘by the rapids’), home of the KSDPP. Kahnawà:ke is a community of Kanien’kehá:ka, located along the south shore of the St. Lawrence River, approximately 15 kilometers from the city of Montreal in Québec (Kahnawà:ke, n.d.). In 2016, there were 10,946 registered band members, with 7,987 Kahnawa’kehró:non living on-reserve (Indigenous and Northern Affairs Canada, 2018).

Kahnawà:ke was established by the French Crown in 1680 through the Seigneurie du Sault-Saint-Louis (G. Alfred, 1995), which granted a 16,316 hectare territory to the Jesuits to “protect and nurture” the Kanyen’kehá:ka who converted to Catholicism and had moved from the homelands in the Mohawk River Valley (G. Alfred, 1995). The Jesuits permitted French and other European colonists to settle on the territory intended for the Kanyen’kehá:ka, ultimately depleting their land-base. When the British assumed control of New France after the Seven Years’ War in 1762, control of the reserve lands was given to the Kanyen’kehá:ka under the supervision of the Indian Affairs Department. Within the reserve system, Kahnawà:ke is Reserve No. 14 and currently covers a land-base of 4,825 hectares (Indigenous and Northern Affairs Canada, 2018). The Kahnawa’kehró:non and Kanehsata’kehró:non also share the lands of Doncaster Reserve No. 17, located 16 km northeast of Sainte-Agathe-des-Monts, for hunting and fishing (Indigenous and Northern Affairs Canada, 2018). The community is currently governed by an elected Chief and Council made up of 12 people.

The KSDPP was established in 1994 in response to chart reviews conducted at Kateri Memorial Hospital Centre by two family physicians practicing in the community, which revealed high rates of type 2 diabetes, high prevalence of obesity, and related complications (Macaulay et
al., 1988; Montour & Macaulay, 1985). After returning the results to the community, community Elders insisted that efforts to address the incidence of type 2 diabetes be focused on the youth, with the health of seven generations\(^1\) into the future at the forefront (Macaulay et al., 1997).

From its very beginning, KSDPP was designed as a community-academic partnership based upon Rotinonhsyón:ni values and principles to ensure that intervention and research benefited the community (Cargo et al., 2007; Cargo et al., 2011, 2003; Potvin et al., 2003). Within KSDPP, the community is represented through a Community Advisory Board (CAB) comprised of community members who collectively represent multiple sectors from across Kahnawà:ke. The coalition includes representation from Education, Health & Social Services, Recreation, Political, Social, Economic, Spiritual, and Cultural and Environmental sectors. The community is also represented by researchers and staff from the community that are part of the Research Team (Potvin et al., 2003). Researchers from Université de Montréal, McGill University and Queen’s University are also part of the KSDPP community-academic research partnership. The creation of this partnership was facilitated and strengthened by the co-creation of a governance document in 1997 – the KSDPP Code of Research Ethics (Macaulay et al., 1998).

The purpose of the Code of Research Ethics is to identify the roles and responsibilities of both the researchers and community members and to provide guidelines for all aspects of the partnership (Potvin et al., 2003). The Code of Research Ethics sets out two major policy statements, 1) that the Kanien’kéha:ka of Kahnawà:ke are sovereign to make decisions about research in Kahnawà:ke, and 2) that research should benefit and contribute to community empowerment (Macaulay et al., 1998). This agreement has served as a reference point for the KSDPP ever since\(^2\).

---

\(^1\) The Seven(th) Generation Principle from The Great Law of Iroquois Confederacy is based on the philosophy that decisions we make today impact seven generations into the future.

\(^2\) In 2007, a third policy recognizing academic researchers’ obligations to contribute to knowledge creation in their discipline was added to the KSDPP Code of Research Ethics (Kahnawake Schools Diabetes Prevention Project, 2007).
KSDPP has evolved since its conception in 1994 and has grown through five phases of funding, research and intervention activities. The project began as a 3-year demonstration project funded by the National Health Research and Development Program (NHRDP, 1994-1997). This first phase focused on the implementation and research of type 2 diabetes prevention intervention activities within schools and the community at large (Macaulay et al., 1997). With the evident success of the interventions and the need to continue this good work, organizations from within the community, private foundations, and the federal government funded phases 2 and 3 of KSDPP, which focused on the implementation and evaluation of intervention activities within the community (Macaulay et al., 2003). In 2001, the KSDPP received funding from the Canadian Institutes for Health Research (CIHR) Community Alliance for Health Research and Interdisciplinary Health Research Team grant programs to support phase 4 and the creation of the Kahnawake-based Centre for Research and Training in Diabetes Prevention (Potvin et al., 2003). By now, KSDPP had proven a model of best practice for diabetes prevention (Public Health Agency of Canada, 2016) and other Indigenous communities were interested in learning from KSDPP’s experiences. In 2001, the KSDPP Community Mobilization Training (CMT) model was developed as a way to share KSDPP’s approach to diabetes prevention with other First Nations, Metis, and Inuit (FNMI) communities across Turtle Island.

3.2.2 KSDPP Community Mobilization Training (CMT)

In 2017, the KSDPP team received funding from CIHR’s Pathways 2 initiative (CIHR PI3-151327) to study the implementation of the CMT across six communities (two each from Manitoba, Ontario and Québec) and to better understand how wellness is conceptualized by Indigenous communities (#IAW-151691). Intervention funding was provided by the R. Howard Webster Foundation.

The CMT for diabetes prevention aims to engage stakeholders from Indigenous communities across Turtle Island. The CMT offers to teach local stakeholders how to develop
and implement a diabetes prevention strategy in their own communities. The training takes the form of a 5-day workshop that teaches trainees how to develop a mobilization plan for diabetes prevention based on the KSDPP intervention model, with a lot of room for customization according to local context and community resources. During the training, the facilitator guides a diverse group of community members through various strategic planning activities including discussing and reaching a consensus about core values, creating a collective vision and mission statement, assessing internal strengths and weaknesses, as well as external opportunities and threats, and activity planning and evaluation preparation (KSDPP Center for Research & Training in Diabetes Prevention, 2019). Each planning activity is meant to inform the creation of a community coalition that will be working to collectively promote healthy lifestyles. Following the training, the community coalition is expected to continue to meet regularly to implement, coordinate and/or oversee the activities they planned during the training.

In the first year or two of the CMT, trainees from communities outside of Kahnawà:ke would travel to Kahnawà:ke for training and return home to share the knowledge they had gained. Unpublished evidence from over 100 trainees representing a diversity of communities from across the country suggests that this remote delivery approach led to some challenges for trainees. Despite being supported by their community to attend the training, trainees returning to their community were often left unsupported by co-workers or supervisors who hadn’t taken the training and/or were assigned to duties unrelated to diabetes prevention. In response, a new approach to training delivery was adopted resulting in the CMT Facilitator delivering the training on location in the interested communities. This delivery model allows many more stakeholders, including local leadership, to receive the training that ultimately allows for a stronger community collective to be formed to carry out local mobilization efforts. Currently, there are six Indigenous communities actively involved in the CMT process. My project involves three of these communities.
3.3 Community Profiles and CMT Involvement

3.3.1 Tyendinaga Mohawk Territory – Kenhté:ke

One of the communities involved in the CMT is Tyendinaga Mohawk Territory, or Kenhté:ke (meaning ‘on the field/meadow’). In recompense for the loss of homelands in the Mohawk River Valley, and in recognition for their faithful military alliance with the British Crown, the Kanyen’kehá:ka were allowed to select any of the unsettled lands in Upper Canada (History | Mohawks of the Bay of Quinte, n.d.). After travelling by canoe from Lachine, Québec, the ancestors of the Kenhté:ke’hro:non arrived on the shores of the Bay of Quinte on May 22, 1784. This is celebrated annually within the community at the Mohawk landing commemoration. Kenhté:ke is the birthplace of Tekanawí:ta, the Peacemaker, who brought together the original Five Nations Iroquois Confederacy under constitution of The Great Law of peace in the 12th Century, also known as the Kayanerenkó:wa. Today, Kenhté:ke is considered a rural community (Indigenous and Northern Affairs Canada, 2018). However, since the community is situated between the cities of Belleville and Napanee, urban access is only a 20-minute drive away.
Consisting of more than 9,000 members, with over 2,000 living on the territory, the Mohawks of the Bay of Quinte are considered the third largest First Nations community in Ontario (Tyendinaga Mohawk Territory, n.d.). There are no longer any living first language speakers of Kanyen’ké:ha onkwawén:na in Tyendinaga, however there is a growing community of second language speakers and learners³. According to the 2016 Census Aboriginal Community Portrait, 240 community members have knowledge of Kanyen’ké:ha onkwawén:na (Government of Canada, 2020c).

Currently, the community is governed by the elected Chief and Council using the Indian Act election system (Indigenous and Northern Affairs Canada, 2018). There is also a longhouse where members of the community participate in traditional ceremonies, social events and governance practices. Within the community, there are many educational institutions including First Nations Technical Institute for post-secondary studies, an aviation school, an alternative secondary school, a Kanyen’ké:ha onkwawén:na immersion school, an elementary school, and many daycare centers for early childhood education. There is a police station, which is a branch of the Ontario Provincial Police governed by the community’s elected Chief and Council. There is a community wellbeing centre, a community centre, a fitness centre, a library, and many churches of various denominations. Within the growing private sector, there are gas stations, shops offering handcrafted art and art supplies, a few restaurants, and many smoke shops selling both tobacco and cannabis products.

Tyendinaga is home to events such as the annual Mohawk Agricultural Fair and a community pow wow. The Tyendinaga Mohawk Council describes the community as follows:

“Tyendinaga, as part of the Mohawk Nation, is a healthy, sustainable Kanyen’kehá:ka community, built on and united by our language, culture, traditions, knowledge,

³ First language speakers refer to people who have been speaking Kanyen’ké:ha onkwawén:na as their first language since they were children. Second language speakers refer to people who have become fluent in Kanyen’ké:ha onkwawén:na as a second language. Second language learners are those who are just starting to learn the language.
and history. We exercise our rights and responsibilities for the protection of and respect for our people, our land, our resources, and the environment.” (Mohawks of the Bay of Quinte, n.d.).

Tyendinaga’s partnership with KSDPP dates back to 1994 when they accepted to be a comparison community for the KSDPP during the NHRDP funding period (Paradis et al., 2005). The children from the elementary school in Tyendinaga participated in the same assessments as did those in Kahnawà:ke from 1994-1996. Shortly thereafter, Tyendinaga ceased being the comparison community and became an intervention site, but diabetes prevention activities tapered off and a community-wide initiative was not sustained. In 2002, two community members received the CMT in Kahnawà:ke. As a result, some diabetes prevention initiatives were revived and implemented in Tyendinaga, continuing to this day (e.g., Sadie’s walk), but the need for a community endorsed plan for mobilization around diabetes prevention is still present. Thus, in 2019, Tyendinaga participated in the new model of the CMT, which was delivered in Tyendinaga during two different sessions in January 31st- February 1st, 2019 and April 15th-18th, 2019.

3.3.2 Southeast Resource Development Council Corporation (SERDC)

Two communities located in Manitoba - Black River First Nation and Brokenhead Ojibway Nation - were invited to participate in the CMT based on the recommendation of a KSDPP contact at the Southeast Resource Development Council Corporation (SERDC). The SERDC, which represents the formal unification of eight member First Nations in the southeastern portion of Manitoba, was incorporated and recognized in 1978. It is governed by the Chiefs of its member communities who represent approximately 12,000 individual members. SERDC seeks to facilitate the development of local control and responsibility for programs and services including all health related services, band financial management, capital, technical services, housing advisory, maintenance, social services advisory, economic development, community planning and student services (SERDC - About Us, n.d.).
Black River First Nation. Black River First Nation, or Makadewaaagamijiwanong in the Ojibwe language, is located on the eastern shores of Lake Winnipeg, along the O’Hanley and Black Rivers. The community is 138km Northeast of the city of Winnipeg and 36km north of the nearest town Powerview/Pinefalls (Home | Black River First Nation, n.d.). Within the reserve system, Black River First Nation is Reserve No. 9, Band No. 260. Black River First Nation is also part of Treaty 5 territory, a Treaty first established in September 1875 between the Crown and the peoples around Lake Winnipeg and the District of Keewatin (Tough, 1996). The land base of Black River First Nation’s reserve is 809.3 hectares (Black River - SERDC, n.d.). Black River First Nation is considered a rural community, accessible by an all-weather road via the PTH #304 and a municipal road.

Black River First Nation is made up of 1,407 registered band members. Of the 982 community members who live on-reserve, there are 135 people with knowledge of the Ojibway language according to the 2016 Census Aboriginal Community Portrait (Government of Canada, 2020a). Currently, the community is governed by the Chief and three portfolio Councillors who are elected to a four-year term using the First Nations Elections Act election system (Indigenous and Northern Affairs Canada, 2018).

Within the community there is a school that offers education from nursery to Grade 9, a Headstart program, an alternative education program, a health centre, a general store, a grader operations company, a Truss Plant, and a water treatment plant (Black River - SERDC, n.d.). Activities such as trapping, agricultural development, wild rice harvesting, hunting and commercial fishing make up a majority of the economic base within the community. Black River First Nation received the CMT in a series of three sessions held January 14th-16th, 2019, February 11th-13th, 2019 and May 24th, 2019.

Brokenhead Ojibway Nation. Brokenhead Ojibway Nation (BON), or Baaskaandibewiziibiing in the Ojibwe language, is an Anishinaabe (Saulteau/Ojibwa) First Nation located along the southern shores of Lake Winnipeg including part of the Netley Creek
Marsh area, 82km north of the city of Winnipeg. The Brokenhead River runs through the centre of the community. Within the reservation system, BON is Reserve No. 4 and Band No. 261 (Brokenhead - SERDC, n.d.). BON is part of Treaty 1 territory, which was the first Treaty to be negotiated and set a precedent for settlers securing title over additional lands through the subsequent numbered treaties (Treaties 1 and 2 | The Canadian Encyclopedia, n.d.). Treaty 1 was signed August 3rd, 1871 at Fort Garry after eight days of tense negotiations between Commissioner Simpson and Lieutenant-Governor Archibald (representing the Crown) and over 1,000 Indigenous attendees including men, women and children. The land base allocated following the ratification of Treaty 1 was based on the formula for white settlers’ homestead provisions outlined in the Dominion Lands Act, which allotted approximately 65 hectares of land per family of five. Today, the land base of BON’s reserve is 5412.8 Hectares (Brokenhead - SERDC, n.d.). BON is considered a rural community located along an all-weather road PTH #59.

There is a total of 2,072 registered band members. Of the 800 community members living on reserve, there are 45 people with knowledge of the Ojibway language according to the 2016 Census Aboriginal Community Portrait (Government of Canada, 2020b). The community is governed by an elected Chief and Council using the Indian Act election system (Indigenous and Northern Affairs Canada, 2018).

Within the community, services and businesses include a school offering education from nursery to Grade 9, a daycare, a recreation centre, an entertainment centre, a health centre, a training and employment centre, a shop offering handcrafted art, an Elders’ Lodge, a water treatment plant, the historic village, a bison ranch, a gas station and convenience store, and a casino-hotel (Brokenhead - SERDC, n.d.). The BON community describes itself as “a proud and thriving First Nation … focused on providing education and opportunities that can help assure a positive tomorrow for our youth, our families and our Elders.” (Brokenhead Ojibway Nation |, n.d.). BON received the CMT in a series of three sessions held April 3rd- 5th, 2019, May 27th- 29th, 2019 and July 15th- 16th, 2019.
3.4 Relationship Building with Tyendinaga, Black River, and Brokenhead

Establishing a participatory research relationship between community and outside researchers begins with conversations with local governance authorities, Indigenous advisory committees and local community ethics review boards (where relevant). Beginning in this way ensures the creation of research projects that specifically prioritize Indigenous community interests, needs and local knowledge, and optimize community resources. The principal investigators of the CMT research project developed relationships within each CMT community by drawing on mutual connections and long-standing professional relationships. I was able to develop personal relationships with community members and research participants through multiple in-person visits to each community.

The project team is committed to conducting research in a good way. To do this, the four R’s -- Respect, Relevance, Reciprocity, and Responsibility -- principles that are key to understanding how to improve Indigenous student learning within post-secondary institutions (Kirkness & Barnhardt, 1991) and a fifth R, Reflexivity, identified by Kovach, (2009) – have been invoked. For instance, this project has been conducted in a way that is respectful of local knowledge and protocols, is relevant to Indigenous perspectives and experiences, creates an opportunity for reciprocity in relationships and in knowledge sharing, acknowledges the responsibility that comes with knowledge-sharing in one’s own life and through participation in the research, and is reflexive -- valuing the changes within the researcher and community as a result of the co-constructed relationship and knowledge translation. These considerations provide a principled framework from which additional ethical considerations were drawn throughout the duration of this project, which is still ongoing.

3.5 Ethical Standards for Research with Indigenous Peoples

Our research adheres to the strict ethical standards set out in Chapter 9 of the Tri-Council Policy Statement (TCPS2) regarding research with Indigenous peoples (Government of Canada,
This is achieved in part by following the principles of ownership, control, access and possession (First Nations Information Governance Centre, 2014; Schnarch, 2004). The principles of OCAP®, first coined by the First Nations Regional Longitudinal Health Survey Working Committee, and now a registered trademark of the First Nations Information Governance Centre, highlight the researchers’ obligation to ensure that all information and knowledge shared by Indigenous peoples remains the property of Indigenous peoples; OCAP ensures that decisions about shared information and knowledge are determined by Indigenous peoples (Kovach, 2009). These principles were developed in direct response to the malpractices of researchers working within Indigenous communities both past and present (Schnarch, 2004).

The OCAP® principles are consistent with the KSDPP Code of Research Ethics, which guided the development of a CMT Code of Research Conduct that was developed at the start of the project by the Project Advisory Circle, which is made of regional Indigenous organization representatives, community members from the participating communities, and academic researchers. As per the CMT Code of Research Conduct, the roles and responsibilities of both the researchers and the participating communities were discussed, agreed upon, and documented through signed agreements with each of the participating communities during the conceptualization phase of the project. In Manitoba, the Assembly of Manitoba Chiefs was consulted and was satisfied by the above procedures, recognizing each community’s autonomy to sign a research agreement with the CMT research team.

As part of the research agreement, a community research assistant (CRA) was identified by each community to work with the CMT team to organize the training sessions (e.g., oversee logistics, recruit potential CMT trainees, identify a local Elder) and to assist with research activities. The CRA was paid with CIHR research funds.
3.5.1 Approval from the KSDPP Community Advisory Board and Other Local Stakeholders

While the membership of the CMT Project Advisory Circle was still being established, the long-running KSDPP Community Advisory Board (CAB) took on the responsibility to review my project proposal; CAB made suggestions and I reworked my proposal in collaboration with two CAB members. Prior to submission to the Queen’s and McGill University’s General Research Ethics Boards, the research activities I proposed were formally approved by the KSDPP CAB at a monthly meeting on December 18th, 2018 (see Appendix B). Since this project primarily involves communities and participants receiving the CMT, it was also presented to the appropriate decision makers within each community involved. My project was formally supported by the Chief and Council of Tyendinaga, Black River First Nation, and Brokenhead Ojibway Nation as part of the larger CMT and research project.

3.5.2 Universities’ Research Ethics Boards

This research has also met ethical criteria stipulated by Queen’s and McGill Universities’ Research Ethics’ Boards. As an ancillary project to the larger CMT research project, the ethics’ application for this project was submitted and approved as an amendment to the larger ethics’ submission for the CMT projects (REB File No. 6021180 & 6021182) for which my supervisor, Dr. Lucie Lévesque, is the nominated principal applicant. Specifically, the amendment pertained to the methods and procedures related to concept mapping (Kane & Trochim, 2007); it was subsequently approved on January 4th, 2019 (Appendix C for all REB Approvals).

3.6 Research Design

3.6.1 Participants

The participating communities of Tyendinaga Mohawk Territory (Ontario), Black River First Nation (Manitoba) and Brokenhead Ojibway Nation (Manitoba) were invited to be part of the project because they were identified by contacts in Tyendinaga, and by SERDC in Manitoba
as having a high level of readiness for community mobilization to prevent type 2 diabetes and promote wellness and confirmed an interest in participating in the CMT research component. The participants of this research were local community members who attended the CMT within their respective community. CMT participants were employees of organizations/institutions that have a mandate consistent with community mobilization activities for type 2 diabetes prevention and community wellness promotion more generally (e.g., health centre staff, recreation staff, school teachers, etc.). A local Elder also participated in each CMT.

**Participant Demographics.** In Tyendinaga, of the participants (n=16) that attended the CMT, all except one person identified as Kanyen’kéha:ka. Fourteen participants identified as women, with only two participants identifying as men. Participant ages ranged from 23 – 67 years. The participants represented various sectors within the community including Fitness & Recreation, Community Health & Wellbeing, Social Services, Education, Band Council, Catering, and the Traditional Longhouse. Interested community members at large also participated.

In Black River First Nation, of the participants (n=10) that attended the CMT, all identified as members of Black River First Nation or Mi’kmaw from Qalipu First Nation. Nine participants identified as women, and one participant identified as a man. Participant ages ranged from 22 – 62 years. The participants represented various sectors within the community including Community Health & Wellbeing, Social Services, Education, Band Council and Lands Management.

In Brokenhead Ojibway Nation, of the participants (n=14) that attended the CMT, all except two persons identified as Indigenous; Indigenous participants were Métis, Anishinaabe, Ojibway, or non-status First Nation. Eleven participants identified as women, and three as men. Participant ages ranged from 27 – 69 years. The participants represented various sectors within the community including Fitness & Recreation, Community Health & Wellbeing, Social Services,
Education, Band Council, Spiritual Advisors, Police, Leadership, Transportation, and Administration. Interested community members at large also participated.

3.6.2 Methods

Talking Circles. Phase I of III in this research (Brainstorming phase described below) involved Wellness Indicator Talking Circles in each community. Trainees were encouraged to think about how they conceptualize community wellness; this information would be used to guide the subsequent type 2 diabetes prevention and community wellness promotion strategic planning process within the CMT. Talking circles were designed to capture each community’s ideas about what community wellness means to them. Talking circles are a qualitative methodology that are grounded in the Indigenous tradition of being in circle to share stories (Lavallée, 2009). Similar to focus groups, talking circles typically include people who have had a common experience, with one moderator who guides the discussion (Ritchie et al., 2014). When in circle, the participants are all connected and there are no power differentials between the moderator and the participant. Physically, everyone is sitting on the same level, and everyone has a chance to have their voice heard without being interrupted.

CMT trainees from each of the three communities were invited to participate in a Wellness Indicator Talking Circle to explore the ways in which they understand community wellness. The purpose of this research component was explained to the group. They were reminded that their participation in the talking circle was voluntary and that the talking circle would be recorded. Participants who did not wish to be recorded were still invited to sit in the circle and refrain from participating, though the option to leave the room was given as well. It was explained that if participants did agree to participate, they could refuse to answer questions or leave the circle at any time. It was also explained that since individuals were not being identified, it would not be possible to remove the information shared after participating. All participants received $10 as a
small token of appreciation from the research team regardless of their level of participation in the research\(^4\) (see Appendix D for the LOI/Consent Form).

Before beginning the talking circle, the participants had a chance to raise any questions or concerns to the facilitator. To ensure each person had an equal chance to share, the talking circle was guided by an animate object such as a talking stick or stone. Local protocol of the territory dictated the direction of the talking circle which was counterclockwise in Rotinonhsyón:ni communities and clockwise in Anishinaabe communities. In each talking circle there was an Elder or Knowledge Keeper to assist in this process and to provide support for participants. Within the talking circle three main topics were put out for comments and stories. It was also stressed that it was okay to veer into other interesting and relevant topics within the circle. The three main topics introduced for discussion included the meaning of wellness in the context of the individual and the community, its interrelatedness, and the evaluation of these aspects of wellness (See Appendix E for the Talking Circle Guide). Once completed, the talking circle audio recordings were transcribed verbatim.

In Tyednaga, two Wellness Indicator Talking Circles took place at the end of the first day of CMT Part I on January 30\(^{th}\), 2019. All CMT activities and research were completed at the Mohawk Community Centre in Tyednaga Mohawk Territory. Thirteen of the 16 CMT trainees participated in the talking circles (TC1 n=7; TC2 n=6). All thirteen of the CMT trainees present when the talking circles were conducted, consented to participate. The duration was 44 minutes for talking circle #1 and 38 minutes for talking circle #2.

In Black River First Nation, one Wellness Indicator Talking Circle took place at the end of the first day of CMT Part I on January 14\(^{th}\), 2019. This activity was completed at the Papertown Inn in Powerview-Pine Falls Manitoba. All seven of the CMT trainees present when the talking

\(^4\) With the exception of community members at large, all CMT trainees received their regular salary from their employer while they attended the CMT. The Elder received a daily honorarium of $250 paid with CIHR funds. One community did not allow their employees to receive the $10 gift from the research team.
circles were conducted, consented to participate in the talking circle. The duration of the talking circle was 1 hour and 17 minutes.

In Brokenhead Ojibway Nation, one Wellness Indicator Talking Circle took place on the first day of CMT Part I on April 3rd, 2019. All CMT activities and research were completed at the Community Centre in Brokenhead Ojibway Nation. All nine of the CMT trainees present when the talking circles were conducted, consented to participate. The duration of the talking circle was 1 hour and 6 minutes.

3.6.3 Participatory Data Analysis

**Rotinonhsyón:ni Culture and Values.** In keeping with a participatory approach, I was mindful to stay grounded within Rotinonhsyón:ni culture and value systems during the data analysis phase, as KSDPP has always done their work in this way. A participatory approach to analysis reflects the traditional governance system of the Rotinonhsyón:ni which values the contributions of all members.

Within the Rotinonhsyón:ni longhouse, governance systems are built around the clan system (Porter, 2008). A longhouse typically includes members from about 20 families from the same clan. Within the clan system (a system based on matrilineal descent among the Rotinonhsyón:ni), clan mothers are chosen by the rest of the clan family to hold that role and to carry out its associated responsibilities. The clan system is non-hierarchical. Each clan can include several clan mothers, chiefs and sub-chiefs, but there is no designated leader. The Rotinonhsyón:ni longhouse governance system is consensus-based. When decisions need to be made, clan women will call family members together to discuss business in order for all of the other members to contribute their voices as well. Since each person has a voice at the clan level, they have a voice at the community level through their clan. The governance system of the Rotinonhsyón:ni peoples has often been cited as “the true democracy”, and is often credited as the first constitution of a democratic confederation (Grindle, 2003; Olson, n.d.; Porter, 2008).
Grounding the data analysis within traditional Rotinonhsyón:ni governance ideology ensured an inclusive space where all participant voices could be appreciated.

**Concept Mapping.** Concept mapping is a generic term describing any process for representing ideas in the form of pictures or maps (Kane & Trochim, 2007). It is a participatory method that can inform health promotion program planning and evaluation. The concept mapping method outlined by Kane & Trochim (2007) is considered an integrated analytical approach because it uses a software to analyse the data through its qualitative and quantitative components. A strength of this method is its ability to bring together diverse groups of stakeholders to help them rapidly form a common conceptual framework that can be used for further planning and evaluation activities. The cost to purchase a license to access to the software can be quite prohibitive and some training is recommended to use the software to its fullest extent.

Previous literature has indicated that concept mapping is a very relevant and successful method when used in the context of research involving Indigenous communities (Cargo et al., 2019; Dawson et al., 2013; Firestone et al., 2014). In a study completed by Cargo et al. (2019), concept mapping was used to engage evaluation stakeholders in a ground-up process to identify strategies to strengthen culturally safe evaluation practice in health promotion and health services within Indigenous communities. As a result of the concept mapping method, the main strength described in this research was the comprehensive process of evaluation stakeholder engagement across two countries over an extended period of time (Cargo et al., 2019).

Another recent study completed by Dawson et al. (2013) used concept mapping to identify and prioritize culturally relevant strategies to promote smoking cessation in Aboriginal Health Workers in Australia. Driving the design of this research was the importance of smoking cessation programs for Aboriginal Health Workers being designed by Aboriginal Health Workers and other Aboriginal stakeholders. Concept mapping was chosen because it is a method that allows for the participation of a large number of stakeholders in program design. This research used an Indigenous cultural form of conversation called ‘yarning’ in the brainstorming phase.
this way, the concept mapping method allowed for a certain degree of culturally relevant adaptation throughout the process (Dawson et al., 2013).

Within the Canadian context, Firestone et al. (2014) use the method of concept mapping within three Urban Aboriginal populations because it supports local knowledge and establishes a conceptual foundation for data measurement and systems to be grounded upon. It also builds upon mapping traditions of Indigenous land-use, upholds collective values and opinions, and requires strong community participation. This research focused on conceptualizations of health priorities in each of the three Indigenous communities. Resulting maps following the concept mapping process were locally grounded and reflective of the diverse sociocultural, geographic and political contexts of each community. This method was shown to align well with an Indigenous worldview and has been effective in accurately representing Indigenous communities (Firestone et al., 2014).

There are six steps involved in the process of concept mapping (Trochim, 1989). The first step is Preparation, which includes participant selection and developing the focus for conceptualization. The second step is the Generation of statements through brainstorming. The third step is the Structuring of statements. The fourth step is the Representation of Statements as a concept map through multidimensional scaling and cluster analysis. The fifth step is the Interpretation of maps. And, the sixth step is the Utilization of maps. Though this project undertook all six steps of concept mapping outlined by Trochim (1989), I have organized the project activities into three main phases of data collection including, I) Brainstorming, II) Unstructured Sorting and Rating of Statements, and III) Concept Map Interpretation (Kane & Trochim, 2007).

Kane and Trochim stipulate that a valid and reliable sample size for the concept mapping phases are as follows, brainstorming: 20-30 participants; sorting: 10-15 participants; and rating: 7-78 participants (Kane & Trochim, 2007). As per the method outlined by Kane & Trochim, it is not mandatory that the same group of participants are engaged in each of the concept mapping
activities. Within this research, the participant samples varied across Phases I, II and III. When the concept mapping was planned, the anticipated CMT participation was estimated to be 25 trainees in each community.

3.6.4 Phase I: Brainstorming through Talking Circles

Brainstorming involves the generation of ideas that describe the conceptual domain of interest. As per the protocol outlined by Kane & Trochim (2007), it can be facilitated as a group process in the manner of a focus group, or involve people submitting individual inputs using the online software. For the purposes of this project, the brainstorming phase was completed during the talking circles. To prepare the resulting data for the subsequent concept mapping process, statements were first pulled using exact verbatim phrases from the transcriptions. They were then worded in a way that would be a direct response to the prompt: “Wellness can be demonstrated in our community by…”. For example, a verbatim phrase such as “I really engage in my traditional cultural practices during ceremony and that’s where I keep healthy and that’s what I do on a daily basis”, would be converted to a statement such as “Engaging in traditional cultural practices during ceremony to keep healthy on a daily basis.” Data preparation was done in a way that used as much of the language from the original statement as possible.

These statements were compiled into a list and were then cleaned using a process referred to as idea synthesis (Kane & Trochim, 2007). The four main purposes of idea synthesis are to obtain a list of unique ideas with only one idea represented in each statement, to ensure that each statement is relevant to the focus of the project, to reduce the statements to a manageable number for the stakeholders to sort and rate, and to edit statements for clarity and comprehension across the entire stakeholder group (Kane & Trochim, 2007). The process of idea synthesis does not prioritize or remove specific ideas. The prioritization of information emerges during the subsequent rating phase of the research. Idea synthesis was completed in this project by removing
repetitive statements to reduce the list from over 200 statements to a more manageable list of 70-100 unique statements per talking circle.

The brainstorming session in Tyendinaga yielded 142 statements in talking circle #1, and 111 statements in talking circle #2. Following the idea synthesis process to eliminate redundancy, the final statement list included 89 unique statements across the two circles. The brainstorming session in Black River First Nation yielded a total of 220 statements. Following the idea synthesis process, the final statement list included 75 unique statements. The brainstorming session in Brokenhead Ojibway Nation yielded a total of 143 statements. Following the idea synthesis process, the final statement list included 75 unique statements. The final lists were then uploaded onto the Concept Systems® Global Max™ software for participatory analysis through the sorting and rating activity (See Appendices F-H for Final Statement Lists).

3.6.5 Phase II: Unstructured Sorting and Rating

The sorting phase involves participants sorting the statements into groupings of similar meaning. The sorting task helps identify participants’ views of the interrelationships of ideas (Kane & Trochim, 2007). The rating phase involves participants assigning a rating to each statement on the basis of the specified rating focus prompt. The unstructured sorting and rating sessions were conducted using Concept Systems® Global Max™ software. The original intention was to have each community complete the sorting and rating task online in-between CMT sessions to make the most of the time spent in community. However, I provided the option to conduct the unstructured sorting and rating activity in person as well, in case it was preferred by community members. Two of the three communities opted to complete this phase of data collection in person.

In order to access the list of statements generated from the Wellness Indicator Talking Circles, participants were sent an email that contained a link to the sorting and rating site via internet, their username and password (see Appendix I for Instructions Email). Statements were
sequenced in a random order by the software program and could be accessed by logging-in to the project site. During data sorting, participants first read through the instructions (see Appendix J for Sorting Activity Instructions), and then through the statement list, and organized each statement into groups based on the similarity in meaning or theme they thought it belonged to. Once finished the sorting task, the software directed participants to the final task of rating, during which participants were instructed to go through the list assigning values from 1 to 4 to each statement. Participants completed this task twice; once to prioritize each statement and a second time to rate the importance of each statement. First, participants answered the question “Should this be prioritized in our community?”, using the Likert scale values of 1 = not a priority, 2 = somewhat a priority, 3 = a priority, or 4 = a top priority. They then went through the statement list a second time, answering the question “Is this possible for our community?”, using the Likert scale values of 1 = not possible, 2 = somewhat possible, 3 = possible, or 4 = very possible or already happening (see Appendix J for Rating Activity Instructions).

For the communities that completed this activity in-person, individual statement sorting cards were generated by the Concept Systems® Global Max™ software. They were then printed, cut, and kept together like a deck of cards using a paper clip. I posted the key instructions on a piece of chart paper and then explained the activity orally to participants. Each participant received their own deck of sorting cards, read through each statement card and organized each card into piles by hand based on the similarity in meaning or theme. Once finished, piles were labelled, fastened together using paper clips, and placed into a large envelope identified by individual participant codes. Once the sorting task was completed, each participant received two full statement lists and were instructed to circle either 1, 2, 3, or 4 beside each statement based on their response to the two rating questions described above.

For Tyendinaga, the sorting and rating activities took place online between CMT Part I and II during the dates of April 1st – 12th, 2019. A total of 15 participants completed the activity. Three participants partially completed the activity and five invited participants did not complete
the activity. Partially completed participant data were not included in further analyses. Out of those 15 participants, 11 had participated in the talking circle and 4 were new participants.

In Black River First Nation, the sorting and rating activity took place in person at the CMT Part II on February 11th, 2019. Seven participants completed the activities. One participant partially completed the rating activity; these data were not included in further analyses. Of the seven participants, three had participated in the talking circle and four were new participants.

In Brokenhead Ojibway Nation the sorting and rating activity took place in person at the CMT Part II on May 27th, 2019. Twelve participants completed the activities. All participants fully completed each activity and were included within further analyses. Of the 12 participants, seven had participated in the talking circle and five were new participants. All sorting and rating data were collected and manually entered into the Concept Systems® Global Max™ software for further analysis.

3.6.6 Analysis of Concept Mapping Outputs

Determining the Concept Maps. In concept mapping, several different maps are generated depicting the relationship between the statements and concept domains according to the way in which each participant sorted and rated their list of statements. The process to reaching the final concept map begins with the point map. The Concept Systems® Global Max™ software uses nonmetric multidimensional scaling and cluster analysis to create point and cluster maps reflecting the overall group’s sorted and rated values (Kane & Trochim, 2007). To develop the concept maps, three data analysis steps were conducted. First, each participant’s sorting data were used to create a similarity matrix that contained information on the number of participants who sorted each pair of item statements together. The second step involved multidimensional scaling, which is used to position each statement on a point map. The third step involved hierarchical cluster analysis, which converts the point map into a cluster map by grouping similar items into non-overlapping clusters. Concept mapping is unique compared to other traditions of
multidimensional scaling (e.g. factor analysis) in that it is more interested in the map for its relationality – its ability to portray the relationships among the statements in terms of distance or proximity as opposed to an interpretation of its dimensions. The resulting maps depict the individual statements in two-dimensional space whereby more similar statements are located near each other, forming grouped clusters that partition the x and y axes on the map (Kane & Trochim, 2007).

For this research, following the first two steps of analysis, a ledger of how clusters were reduced from a 16- to a 5-cluster solution was constructed. In the Concept Systems® Global Max™ software I was able to start at a 20-cluster solution, however, to be more efficient I chose to start at 16- as the thematic meaning of clusters did not take shape until I reached at most a 10-cluster solution. The ledger included the average bridging values, which are a calculation of the distance between statements. Clusters with low bridging values are more cohesive and conceptually distinctive. In order to determine the final cluster solution, each solution was reviewed at each of the stepwise merging of clusters from 16-clusters until the smallest thematically meaningful cluster solution was reached. The degree of thematic meaning was chosen by me based on my consideration of bridging values and an examination of the content of statements within each cluster solution. The optimal cluster solution occurred when any further merging of clusters would yield more than one unique conceptual domain per cluster (Kane & Trochim, 2007). A stress value for the cluster map is automatically calculated by the software. The stress value reflects the ‘goodness of fit’ of the map to the original similarity matrix, with a lower stress value indicating that the participants sorted their statements in a similar manner (Kane & Trochim, 2007). Acceptable stress values fall between .21 and .37 (Kane & Trochim, 2007).

**Pattern Matching Ratings.** Next, pattern matching analysis was completed to compare the average cluster ratings for the variables priority and possibility. Average cluster ratings were generated by the Concept Systems® Global Max™ software once all participant rating data was
input into the program. Pearson correlation coefficients between cluster matches were also calculated to suggest the degree of participant agreement on which clusters are a priority and a possibility. Pattern matching can be used to assess consensus between participants, consistency or change in a measure over time, and the degree to which outcomes match expectations in an evaluation (Kane & Trochim, 2007). In this research it was used to assess consensus and to reflect on the degree to which outcomes matched participant expectations.

**Bivariate Value Plots of Ratings.** Bivariate value plots, or Go-Zone displays, are much like pattern matching graphs as they compare ratings. However, pattern matching is used for cluster-level analysis and Go-Zones are used to provide greater within-cluster details for statement-level analysis (Kane & Trochim, 2007). Go-Zones are divided into quadrants according to the mean rating values of each variable. In this research, bivariate value plots were calculated to compare the average ratings of each individual statement for the two variables of priority and possibility. From these plots it is possible to discern exactly which statements are of high priority and are most possible (Green Zone), of low priority but highly possible (Orange Zone), of high priority but low possibility (Yellow Zone), and of low priority and low possibility (Grey Zone). This information is key to furthering each community’s strategic planning, and later evaluation efforts.

### 3.6.7 Phase III: Concept Map Interpretation Sessions

The interpretation session is the first time that participants were able to view the results of the concept mapping analysis and relate them back to their community. It was a chance for participants to reflect on the results, and to discuss actionable ideas within the resulting clusters (Kane & Trochim, 2007). Key goals of the interpretation sessions included ensuring that participants had an understanding of the concept mapping results in order to begin conversations about their utility. All interpretation sessions were completed in person, in a group setting within each participating community (see Appendix K for Session Protocol).
The interpretation session began with the point map, the point-cluster map, and the final cluster map being projected onto a screen for all participants to view. This was done with the aim of achieving consensus about the final themes in a way that was most representative of the community. The statements contained in each cluster were then closely examined and discussed. Participants were able to challenge the cluster maps and change them as they saw fit. Final cluster maps and labels were determined in this way. The pattern matching graphs and bivariate value plots were also projected onto a screen for participants to view. Participants were able to discuss their reactions to the rating results and potentially actionable items. Originally, I had planned to record and transcribe these sessions, but upon noticing the adverse effects that the audio recorder had on participation levels during regular group discussion, I decided not to use it for these sessions, and instead took detailed notes to further analyze discussion points arising. Promptly following the interpretation session, I compiled each community’s findings and returned them in the form of a written report.

On April 17th, 2019, I shared the 7-cluster solution with participants in Tyendinaga at the CMT Part II. During the interpretation session there were 15 participants present. Out of those 15 participants, 10 had participated in the talking circle and sorting and rating tasks, one had participated in just the talking circle, two participated in just the sorting and rating tasks, and two were new participants. Upon examination of the statements within each cluster, it was determined that some statements needed to be moved as they were perceived to fit better in other clusters or should constitute its own cluster. Using the concept mapping software, I was able to move statements from one cluster to another as requested by the participants. However, the scope of the software does not allow for the creation of custom clusters. Therefore, I was not able to create a new cluster within the software for some statements. Instead, I added a new cluster manually after exporting the map to Microsoft PowerPoint. As a result, the additional cluster was not able to be isolated from their original clusters within the pattern matching graphs and bivariate value plots. Following these changes, the calculated stress value representing the ‘goodness of fit’ of the map
was re-examined. Making these changes was inconsistent with the protocol recommended by Kane & Trochim (2007), however since they were recommended by the community during the interpretation session, they were deemed essential as the purpose of the concept map is to best represent the community regardless of the statistically generated version of the concept map.

Next, the participants examined the clusters during the interpretation session and collectively derived a theme that would best represent the content of the statements in each cluster. The concept mapping software generated a pattern matching graph based on participant statement ratings of possibility and priority (see Chapter 4, Figure 4). Participants then examined the themes through the pattern matching graph in order to determine which areas of community wellness are most important to the group and are considered most possible to address within the context of community mobilization for type 2 diabetes prevention and wellness promotion. Finally, participants examined the rating data at the statement-level within each cluster through the bivariate value plots (see Chapter 4, Table 1 and Appendix L, Figures 13-19 for bivariate plots and statements) to gauge how the rated importance compared to the rated possibility of each individual statement within each cluster.

In Black River, the interpretation session took place at a follow-up meeting in the community. On May 24th, 2019, the 6-cluster solution was shared with participants at the CMT Reporting-Back Meeting. During the interpretation session there were six participants present. Of those six participants, one had participated in both the talking circle and sorting and rating tasks, two had participated in just the sorting and rating tasks, and three were new participants. Upon examination of the statements within each cluster, there were no recommendations to move statements into different clusters. The participants collaboratively named the theme represented by each cluster following a collective examination of the content of the statements in each cluster. Next, participants examined the themes through the pattern matching graph based on participant statement ratings of possibility and priority (see Chapter 4, Figure 8). This visual representation of the average ratings of statements organized by cluster (i.e., themes) helped the community
determine which areas of community wellness are most important to the group and which are considered most possible to address within the context of community mobilization. Finally, participants examined the rating data at the statement level through the bivariate value plots organized by cluster (see Chapter 4, Table 2 and Appendix M, Figures 20-25 for bivariate value plots and statements) to gauge how the rated importance compared to the rated possibility of each individual statement within each cluster.

On July 16th, 2019, the 7-cluster solution was shared with participants in Brokenhead Ojibway Nation at the CMT Reporting-Back Meeting. During the interpretation session there were six participants present. Out of those six participants, four had participated in both the talking circle and sorting and rating tasks, one had participated in only the sorting and rating tasks, and one was new to the research. Upon examination of the statements within each cluster, there were no recommendations to move statements into different clusters. The participants collaboratively developed thematic titles for each of the clusters following a collective examination of the content of the statements in each cluster. Next, participants examined the clustered rating data through the pattern matching graph (See Chapter 4, Figure 12). This visual representation of the average ratings of statements organized by cluster helped the community determine which areas of community wellness are most important to the group and considered most possible to address within the context of moving forward with their community mobilization. Finally, participants examined the rating data at the statement level through the bivariate value plots organized by cluster (See Chapter 4, Table 3 and Appendix N, Figures 26-32 for bivariate plots and statements) to gauge how the rated importance compared to the rated possibility of each individual statement within each cluster.

Following the interpretation sessions, an artistic representation of each community’s concept map was created by Shemia Nelson, an Anishinaabe youth artist (See Appendix O for Turtle Shell Concept Maps). The turtle shell was chosen to depict the concept maps because the turtle shell is symbolic in many ways. It is symbolic of our Creation story and geographic
location here on Turtle Island. This was done to show the versatility of the concept map and our ability to turn it into something with a deeper interpretive meaning. The turtle shell concept maps became the title page of each community’s concept mapping report and can be used further by the community as a meaningful piece of art to revisit and reflect upon.

### 3.7 Limitations and Strengths of Concept Mapping

One limitation of using concept mapping as the chosen method for participatory analysis is the software’s restricted ability to customize the concept map. Having to create custom clusters for the community outside of the capability of the software indicates that perhaps the software’s rigidity to maintain statistical rigour does not always reflect the best representation of the community. Another limitation of concept mapping is the labour-intensive process of sorting and rating. Within phase II unstructured sorting and rating, participants combed through their community’s final statement list at least three times in order to complete the activities. Some participants described the process as tedious and others enjoyed it, describing it as relaxing. This part of the concept mapping process is very systematic and sterile, lacking elements of artistic creativity and interaction amongst the group.

In the future, although I would consider choosing a more artistic and interactive method of participatory analysis, Kane & Trochim’s (2007) concept mapping for planning and evaluation using the Concept Systems® Global Max™ software was ideal within the context of the CMT for two reasons. First, since the CMT brings together a diverse group of participants within a community, there are often varying levels of power held by each participant. In efforts to remove the effect of power dynamics within the group and consistent with Rotinonhsyón:ni culture, the concept mapping software ensures that each participant’s voice is considered individually, and equally in the calculations used to create the final concept map.

Second, since the CMT was taking place within six communities across three provinces, the online capabilities of the concept mapping software were ideal to mitigate time and travel
constraints posed by distance. Although only one community utilized the online capabilities, this highlights the versatility of this method and its ability to be adapted in many ways to meet the needs of the community using it. Ultimately, this method was agreed upon because it ensured that findings from the analysis of the Wellness Indicator Talking Circle data could be used by each community to guide the development of their strategic community mobilization plan for type 2 diabetes prevention and wellness promotion.

3.8 Qualitative Rigour

In order to assert the design of this research as rigorous, I have constructed an argument for the appropriateness of the process and the trustworthiness of the outcomes. The work of Frauenberger et al. (2015) proposed a method for analysing research rigour by analyzing the concept of coherence in the context of the participatory research design. This can be operationalized as part of reflective practice. Coherence is analysed by considering the harmony of the different features of the participatory research design. Participatory research design must be based on an epistemology that accommodates the values that drive the effort, involve the stakeholders in ways that reflect these foundations and accordingly define and deliver meaningful outcomes (Frauenberger et al., 2015).

Using the concept of coherence to guide my reflection, the current research asserts qualitative rigour within the context of research involving Indigenous communities, first by being grounded in Rotinonhsyón:ni culture and values. By using concept mapping as the method for participatory analysis, I ensured the voice of each Indigenous community was central in the conceptualization and analysis of wellness and that all participant voices were included equally. This method for understanding complex conceptualizations of community wellness using data from multiple community perspectives ensured accurate representation of the Indigenous community voice within my research. Further, concept mapping as an integrated mixed-method approach for planning and evaluation research has been tested and proven to generate valid and
reliable results (Rosas & Kane, 2012) and has been successfully implemented in Indigenous communities (Margaret Cargo et al., 2019; Dawson et al., 2013; Firestone et al., 2014). The systematic approach provided by concept mapping enabled the identification and analysis of patterns that may have been overlooked or obscured by researcher-bias in any other methods of analysis (Rosas & Kane, 2012). And finally, meaningful outcomes were co-defined and delivered with a priority for community benefit.

Consistent with a community-based participatory research approach, which stipulates that research must be of use to participants, the use of concept mapping allows us to satisfy and expand on the main research question in the current research. The Wellness Indicator Talking Circles and unstructured sorting activity satisfy the main research question of this study. Further participatory analysis of this information through the rating activity was included to ensure community benefit. It is of interest to communities to collectively define and analyse priorities for wellness, and the extent to which each of their priorities are perceived as possible to address. This understanding contributes to CMT related strategic planning efforts and will later inform measures to evaluate the impact of intervention activities implemented thorough the community mobilization process.
Chapter 4

Results

This chapter will outline the findings from this research. Each community’s concept mapping experience will be presented separately.

4.1 Tyendinaga Mohawk Territory

4.1.1 The Concept Map

The point map illustrates the arrangement of the 89 participant-generated statements, organized according to their conceptual similarity using multidimensional scaling (see Figure 2). Each number on the point map and the point-cluster map represents one of the generated statements. The distance between each statement on the (x,y) plane illustrates the degree of conceptual similarity between the statements; points close together on the map were sorted together more often by participants. The position of clusters on the (x,y) plane is not meaningful;

Figure 2. Point map (Tyendinaga)
the concept map as a collective, may be rotated and moved along the (x,y) plane. The size of clusters, however, indicates the degree of similarity across statements within the cluster (i.e., small tightly packed clusters indicate that statements were sorted together very often and have distinct conceptual congruence compared to larger, more dispersed, and/or overlapping clusters). Organized by hierarchical cluster analysis, the point-cluster map (see Figure 3) depicting the two-dimensional organization of sorted themes was created using data from the 15 participants. Upon my examination of Tyendinaga’s point-cluster map I noted that the content of the clusters was organized in the most conceptually distinct way at a 7-cluster solution and had the lowest average bridging values of .61, .42, .31, .25, .18, .21 and .12 per cluster. The calculated stress value representing the ‘goodness of fit’ of the 7-cluster solution was 0.31, which is an acceptable value as it falls between .21 and .37 (Kane & Trochim, 2007). I found the 7-Cluster Solution to be the most relevant and meaningful distribution of statements based on my analysis of the bridging values and content of clusters.

![Figure 3. 7-Cluster solution point-cluster map (Tyendinaga)](image-url)
The following themes emerged from the participant interpretation session: 7th Generation Thinking, Nutrition & Food Security, Community Environment, Personal Wellness & Balance, Community Connection, Interconnectedness, Leadership & Infrastructure, and Caring for our Elders. Creating the Caring for our Elders theme was requested and agreed upon by participants during the interpretation session as they felt it was an especially important aspect of their community conceptualization of wellness. Since this theme was manually created outside of the software, it was not possible to separate the statements included within the Caring for our Elders cluster from their original placement within the point-cluster map in subsequent analyses. The final 8-cluster solution concept map depicted in Figure 4 also includes the re-arrangement of certain statements as requested during the interpretation session. These changes did not affect the integrity of the concept map as the stress value representing ‘goodness of fit ‘remained unchanged at .31. These changes could be made within the capabilities of the software and have been included in the subsequent analyses including pattern matching and bivariate value plots.

*Figure 4. Final 8-cluster solution (Tyendinaga)*
4.1.2 Pattern Matching

The pattern matching graph illustrated in Figure 5 depicts aggregate ratings data for the 7 clusters. The relationship between perceived priority (left) and possibility (right) of each ranked cluster is depicted with a line that connects the two constructs. Horizontal lines suggest relative concordance while discordant rankings are evident by the oblique lines suggesting that overall, perceived possibility is lower than perceived priority in each cluster. Maximum and minimum values of ranked clusters according to possibility ratings reveal that the cluster with highest perceived possibility is Nutrition & Food Security ($\bar{x}=3.21$) and the cluster with the lowest perceived possibility is Leadership & Infrastructure ($\bar{x}=2.74$).
Maximum and minimum values of ranked clusters according to priority ratings reveal that the cluster with highest perceived priority is 7th Generation Thinking ($\bar{x} = 3.46$) and the cluster with the lowest perceived priority is Interconnectedness ($\bar{x} = 3.13$). Priority rankings all fell within a very narrow range. The maximum and minimum values of the possibility construct also reveal that overall, participants perceived the possibility of each cluster as falling between somewhat possible and possible on the 4-point Likert scale. Conversely, participants situated all seven themes between a priority and a top priority on the 4-point Likert scale. The Pearson correlation coefficient between mean possibility and priority ratings overall was $r = .51$, suggesting that there was a positive mid-range correlation between what is a priority and what is possible.
4.1.3 Bivariate Value Plots

The perceived possibility and priority ratings from the 15 participants were used to generate a bivariate value plot, also referred to as a ‘Go-Zone’. Findings from the bivariate value plots depict how the perceived possibility compares to the perceived priority of the individual statement within each cluster. Each statement is represented as a numbered point on the plot graph. Each point is placed on the plot graph according to its mean perceived possibility rating (y-axis) and mean priority rating (x-axis). For ease of reading the bivariate value plots, one has been created for each cluster (see Appendix L for Bivariate Value Plots). From these plots it is possible to discern exactly which statements were deemed of high priority and considered to be most possible (Green Zone), of high priority, but low possibility (Yellow Zone), of low priority, but highly possible (Orange Zone), and of low priority and low possibility (Grey Zone), within each cluster. Table 1 depicts the numbered statements from each cluster according to which ‘Go-Zone’ they appear in. Statements appearing within the Green Zone would indicate ideal targets for intervention program planning and evaluation.

<table>
<thead>
<tr>
<th>Table 1. Statements organized by go-zone (Tyendinaga)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cluster Titles</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>7th Generation Thinking</td>
</tr>
<tr>
<td>Nutrition &amp; Food Security</td>
</tr>
<tr>
<td>Community Environment</td>
</tr>
<tr>
<td>Personal Wellness &amp; Balance</td>
</tr>
<tr>
<td>Community Connection</td>
</tr>
<tr>
<td>Interconnectedness</td>
</tr>
<tr>
<td>Leadership &amp; Infrastructure</td>
</tr>
</tbody>
</table>

Note: See Appendix F for numbered final statement list.
4.2 Black River First Nation

4.2.1 The Concept Map

Beginning with the point map, (see Figure 6) the results from the arrangement of the 75 statements generated by the participants, were organized using multidimensional scaling to identify clusters of statements that are conceptually similar according to how they were sorted by the participants. Organized by hierarchical cluster analysis, the point-cluster map depicting the two-dimensional organization of sorted themes was created using data from the seven participants. Upon examination of Black River’s point-cluster map (see Figure 7), I noted that the content of the clusters was organized in the most conceptually distinct way at a 6-cluster solution and had the lowest average bridging values of .43, .36, .14, .26, .25 and .17 per cluster.

Figure 6. Point map (Black River First Nation)
Figure 7. 6-Cluster solution point-cluster map (Black River First Nation)

The calculated stress value representing the ‘goodness of fit’ of the map was 0.27, which is an acceptable value as it falls between .21 and .37 (Kane & Trochim, 2007). Participants felt that the 6-Cluster Solution accurately represented their data, thus no changes were made to the concept map. Figure 8 presents the cluster titles, or themes, that emerged from the interpretation session.
The following themes were agreed upon during the participant interpretation session:

*Family Connections – Shawéjigewiin, Education Systems Promoting Black River’s Way of Life, Resource Collaboration, Development & Ownership, Miino Piimatiziwin (Good Life), Food Security, and Healthy Wholistic Self-Care Choices.*

### 4.2.2 Pattern Matching

The pattern match graph in Figure 9 depicts aggregate ratings data for the six clusters.
In general, the emerging priorities of *Family Connections* – *Shawéjigewiin*, *Healthy, Wholistic Self-Care Choices*, *Education Systems Promoting Black River’s Way of Life*, *Resource Collaboration, Development & Ownership*, *Food Security* and *Miino Pimatisiwin* were rated higher than their corresponding levels of possibility. The theme of *Family Connections* – *Shawéjigewiin* emerged as the highest priority ($\bar{X} = 3.56$) while *Miino Pimatisiwin* ($\bar{X} = 3.02$) is the lowest ranked. The cluster with the highest perceived possibility is *Education Systems Promoting Black River’s Way of Life* ($\bar{X} = 3.33$) and the cluster with the lowest perceived possibility is *Food Security* ($\bar{X} = 2.90$). The maximum and minimum values of the possibility construct reveal that overall, participants perceived the possibility of each cluster as falling between somewhat possible and possible on the 4-point Likert scale. Conversely, participants situated all six themes between a priority and a top priority on the 4-point Likert scale. The Pearson correlation coefficient between mean possibility and priority ratings was $r = 0.80$, suggesting a positive, strong correlation between what is a priority and what is possible.

*Figure 9. Pattern matching graph (Black River First Nation)*

<table>
<thead>
<tr>
<th>Priority Rating</th>
<th>Possibility Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Connections - Shawéjigewiin</td>
<td></td>
</tr>
<tr>
<td>Healthy Wholistic Self-Care Choices</td>
<td></td>
</tr>
<tr>
<td>Education Systems Promoting Black River’s Way of Life</td>
<td></td>
</tr>
<tr>
<td>Resource Collaboration, Development &amp; Ownership</td>
<td></td>
</tr>
<tr>
<td>Food Security</td>
<td>2.60</td>
</tr>
<tr>
<td>Miino Pimatisiwin (Good Life)</td>
<td>2.60</td>
</tr>
<tr>
<td>Education Systems Promoting Black River’s Way of Life</td>
<td></td>
</tr>
<tr>
<td>Family Connections - Shawéjigewiin</td>
<td>3.60</td>
</tr>
<tr>
<td>Healthy Wholistic Self-Care Choices</td>
<td>3.60</td>
</tr>
<tr>
<td>Resource Collaboration, Development &amp; Ownership</td>
<td>3.60</td>
</tr>
<tr>
<td>Miino Pimatisiwin (Good Life)</td>
<td>3.02</td>
</tr>
<tr>
<td>Food Security</td>
<td>r = 0.80</td>
</tr>
</tbody>
</table>
4.2.3 Bivariate Value Plots

The perceived possibility and priority ratings from the six participants were used to generate a bivariate value plot or ‘Go-Zone’, reflecting the mean perceived possibility rating (y-axis) and mean priority rating (x-axis) of the individual cluster statements. For ease of reading the bivariate value plots, one has been created for each cluster (see Appendix M for Bivariate Value Plots). Table 2 depicts the numbered statements from each cluster according to which ‘Go-Zone’ they belong to.

Table 2. Statements organized by go-zone (Black River First Nation)

<table>
<thead>
<tr>
<th>Cluster Titles</th>
<th>Statement Numbers within Each Go-Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Priority and High Possibility</td>
</tr>
<tr>
<td>Family Connections - Shawéjigewiin</td>
<td>1 and 35</td>
</tr>
<tr>
<td>Education Systems Promoting Black River’s Way of Life</td>
<td>18, 19 and 36</td>
</tr>
<tr>
<td>Resource Collaboration, Development &amp; Ownership</td>
<td>7, 9, 12, 14, 16, 22, 28, 34, 39, 51 and 55</td>
</tr>
<tr>
<td>Miino Pimatisiwin</td>
<td>38, 58 and 66</td>
</tr>
<tr>
<td>Food Security</td>
<td>24, 60 and 65</td>
</tr>
<tr>
<td>Healthy Wholistic Self-Care Choices</td>
<td>29, 49, 54, 59, 64 and 70</td>
</tr>
</tbody>
</table>

Note: See Appendix G for numbered final statement list.
4.3 Brokenhead Ojibway Nation

4.3.1 The Concept Map

The point map illustrates the arrangement of the 75 participant-generated statements, organized according to their conceptual similarity using multidimensional scaling (see Figure 10).

Organized by hierarchical cluster analysis, the point-cluster map depicting the two-dimensional organization of sorted themes was created from the data provided by the 12 participants. I found the 7-Cluster Solution presented in Figure 11 to be the most relevant and meaningful distribution of statements based on my analysis of the bridging values and content of clusters. Upon examination of Brokenhead’s concept map, I noted that the content of the clusters was most understandable at a 7-cluster solution with the lowest average bridging values of .5, .6, .46, .33,
.26, .28 and .56 per cluster. The calculated stress value representing the ‘goodness of fit’ of the map was 0.31, which is an acceptable value as it falls between .21 and .37 (Kane & Trochim, 2007).

![Figure 11. 7-Cluster solution point-cluster map (Brokenhead Ojibway Nation)](image)

Participants did not recommend any changes to the cluster solution during the interpretation session. The following thematic titles were agreed upon during this session: *Family Wholistic Healing* – “Role Modeling Positive Lifestyles for Future Generations”, *Reclaiming & Repurposing our Self-Identity as Indigenous People*, *Life Skills & Education*, *Health Healing & Knowing our Ancestral Ways*, *Providing & Sharing Information to Create Social Change* – “The Healing Journey”, *Creating a Safe Addiction-Free Community Through Connection*, and *Balancing Wholistic Lifestyle* (see Figure 12 for the final 7-cluster concept map).
4.3.2 Pattern Matching

The pattern match graph in Figure 13 depicts aggregate ratings data for the seven clusters.
In general, the cluster priority ratings are higher than their corresponding levels of possibility. Priority rating values of ranked clusters reveal that *Family Wholistic Healing* is the highest perceived priority (\(\bar{x} = 3.50\)) while the cluster with the lowest perceived priority is *Life Skills & Education* (\(\bar{x} = 3.26\)); the graph shows very little distance between priority rankings. The cluster with the highest perceived possibility rating is *Family Wholistic Healing* (\(\bar{x} = 3.27\)), while the cluster with the lowest perceived possibility is *Creating a Safe, Addiction-Free Community Through Connection* (\(\bar{x} = 2.89\)). Overall, participants perceived the possibility of each cluster as falling between *somewhat possible* and *possible*. Conversely, participants situated all seven themes between *a priority* and *a top priority* on the 4-point Likert scale. The Pearson correlation coefficient between mean possibility and priority ratings was \(r = 0.67\), suggesting a positive, strong correlation between what is a priority and what is possible.
4.3.3 Bivariate Value Plots

The perceived possibility and priority ratings from the 12 participants were used to generate a bivariate value plot, or ‘Go-Zone’, reflecting the mean perceived possibility rating (y-axis) and mean priority rating (x-axis) of the individual cluster statements. For ease of reading the bivariate value plots, one has been created for each cluster (see Appendix N for Bivariate Value Plots). Table 3 depicts the numbered statements from each cluster according to which ‘Go-Zone’ they belong to.

Table 3. Statements organized by go-zone (Brokenhead Ojibway Nation)

<table>
<thead>
<tr>
<th>Cluster Titles</th>
<th>Statement Numbers within Each Go-Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High Priority and High Possibility</td>
</tr>
<tr>
<td>Family Wholistic Healing</td>
<td>38, 39 and 42</td>
</tr>
<tr>
<td>Reclaiming &amp; Repurposing our Self-Identity as Indigenous People</td>
<td>33, 68, 71, 73 and 74</td>
</tr>
<tr>
<td>Life Skills &amp; Education</td>
<td>23, 61, 66 and 75</td>
</tr>
<tr>
<td>Health, Healing &amp; Knowing our Ancestral Ways</td>
<td>37 and 64</td>
</tr>
<tr>
<td>Providing &amp; Sharing Information to Create Social Change</td>
<td>5, 47, 63 and 65</td>
</tr>
<tr>
<td>Creating a Safe, Addiction-Free Community Through Connection</td>
<td>2, 7 and 8</td>
</tr>
<tr>
<td>Balancing Wholistic Lifestyle</td>
<td>29, 41, 57, 59 and 67</td>
</tr>
</tbody>
</table>

Note: See Appendix H for numbered final statement list
4.4 Concept Map Interpretation Session Outcomes

During the community interpretation sessions of the concept maps, much of the discussion centered on reaching consensus about the ‘theme’ (i.e., naming) of each map cluster and interpreting the rating results using pattern matching and bivariate value plot graphs. Participants shared that the concept mapping exercise helped create a common foundation that the diverse group of CMT participants could build on together, even coming from different sectors in the community (e.g., health, recreation, environment, etc.).

Most participants were very engaged in the research process and very interested in the results from the rating data that translated their individual responses into collective themes. For the most part, participants felt that the themes had accurately captured their responses; however, they did express surprise at the discordant rankings between priorities and the often-lower rated possibilities. Participants speculated that their lower possibility ratings were likely due to a lack of perceived power to address many prioritized aspects of wellness within the community. Achieving wellness as conceptualized by each of these communities would require changes at many levels, policy, organizational, individual; participants felt that some changes were not under their individual control. Discussion about issues of power and control emphasized the importance of having a diverse group of community members attend the CMT and further, participate within the coalition moving forward. It also highlighted the specific importance of having those who hold leadership positions within the community be part of the CMT process. Community leaders typically have the ability to make certain systemic, and structural changes that are not accessible to most other community members.

Since this was the first time each community saw the compilation of data that had resulted from the concept mapping activities, they were not yet sure how the data would be used outside of the CMT. Some of the communities indicated that they intended to share the concept mapping results with those who hold leadership positions in the community to hopefully disseminate them further. Overall, the interpretation sessions served to share with each
community the information they created through concept mapping. It was determined that the results would serve as a catalyst through which continued discussion about community mobilization could take place. Each community needed more time to digest the results of their concept mapping activity before strategizing upon its utility. Therefore, in order to ensure further utility of the concept mapping results, another follow-up session focusing on activity planning is needed.
Chapter 5

General Discussion

5.1 Research Summary

This research aimed to address the need for Indigenous community-led conceptualizations of wellness in order to inform the creation of more culturally relevant and applicable indicators of Indigenous community wellness. Several recurring themes related to balance and wholism, connectedness, and the importance of Indigenous language and culture were prominent in all three communities. Community-specific history, context, ideals, and resources were constant touchstones during our many exchanges about community wellness. This discussion focuses on the main research purpose, centering on the contribution of this research to understand how community wellness is conceptualized, with a view to inform the development of relevant wellness indicators to assess the eventual impact of community mobilization efforts in each community.

Each community’s conceptualization of wellness is directly reflective of those who participated in the research. The communities expressed that these maps are not intended to be generalizable to represent their community as a whole, since not every community member’s voice is represented. Instead, it is only an accurate representation of the perspectives of those who attended and participated in the CMT. Further, it must be acknowledged that these conceptualizations primarily reflect the perspectives of self-identified women as there were not many self-identified men, and no participants that self-identified as two-spirited, transgendered, gender fluid, gender queer, or non-binary were present at the CMT.

The dominant presence of women is consistent across all KSDPP CMT deliveries and more broadly within the field of Indigenous health promotion. This is because the work being done within this field is in line with the roles and responsibilities that are often taken on by the women, who are the fabric that create the community and hold it together.
Within a Rotinonhsyón:ni context, the participation of women in the CMT is a reflection of traditional gender roles wherein the women are present in the community at all times. The women are keepers of wellness and are often medicine people (although men can be medicine people too). The role of women differs from that of men who would often be away from the community to carry out their roles and responsibilities to hunt and protect the community. Similarly, within an Ojibway context, the women also play a dynamic role in the political, economic, and social life of their communities. Although certain tasks are more appropriate for men and others for women (e.g., hunting and trapping for men and gathering and gardening for women), to a large extent, domains overlap within the Ojibway culture so that men and women often work together in mutually dependent roles (Buffalohead, 1983). The dominant presence of women at the CMT within the two Ojibway communities is reflective of their traditional gender roles as well.

Currently, within Indigenous communities, the presence of patriarchal governance systems exist as a direct effect of colonization and assimilative policy (Indian Act, 1985). This has resulted in the destruction of the matriarchy within Indigenous communities and has led to a contemporary culture of blended gender roles. Increasingly, women are securing leadership roles within health, community service, education and politics (Porterfield & Kleiner, 2005). Although this could be a result of the wider women’s rights movement, it does allow Indigenous women to adopt roles and responsibilities within their community that are closer to the roles and responsibilities they held prior to colonization. Since the CMT brought together participants that were employees of organizations/institutions that have a mandate consistent with community mobilization activities for type 2 diabetes prevention and community wellness promotion more generally, it is not surprising that the majority of participant were women.
5.2 Emerging Themes

Five salient themes emerging from the concept mapping exercise to address the main research purpose (i.e., to understand how community wellness is conceptualized) will be elaborated here. These themes provide insight about Indigenous conceptualizations of wellness across the three participating First Nations communities (See Figure 14 for all three community concept maps). Although these common themes emerge, each community’s concept map is distinct, highlighting that the meaning of wellness within each community is directly related to their local history, context, ideals, and resources.

![Concept Maps of Tyendinaga, Black River First Nation, and Brokenhead Ojibway Nation](image)

Figure 14. All three community concept maps.

5.2.1 Balance and Wholism

Each community expressed that community wellness involves balance between many aspects. It is well documented in the literature that Indigenous conceptualizations of community wellness universally emphasize a wholistic view, often described as a balance of multidimensional aspects (Anderson et al., 2006). For the Anishinaabe communities in Manitoba, the medicine wheel, including the physical, mental, emotional, and spiritual aspects of our being were often brought up. For the Rotinohsyonni community in Ontario, the three pillars including Skën:nen, Ka’nikonhri:yo tâ:non Kasehstênhêra – Peace/Calmness, A good mind, Power/Strength, as well as Konnoronkwatsera tâ:non Ka’nikonhri:yo – Love and a Good Mind,
were all frequently mentioned as wholistic aspects of community wellness. Though these aspects often appear to be relevant primarily at the individual level, they can be translated to other socioecological levels as well.

5.2.2 Intergenerational Relationships

Throughout the results, it is clear that kinship relationships, and prioritizing the younger generations are important aspects of community wellness for Indigenous communities. The universal importance of cherishing and nurturing the youth and the generations that have yet to come is well documented (Elder Jim Dumont, 2014). Participants mentioned the principle of Seven(th) generation thinking. Within both the Anishinaabe and Rotinonhsyón:ni communities, this principle is based on the philosophy that for every decision made and action taken today, there will be an impact that will affect the next seven generations to come. Adhering to this principle during decision making and taking action for type 2 diabetes prevention mobilization would serve as a mechanism for sustaining wellness for the generations to come.

As described by Elder Jim Dumont (2014), “being rooted in family, community and within creation as extended family, is the foundation of belonging and relationships.” In this way, the importance of family and youth extend further than the nuclear family. The focus of participants’ descriptions was around the importance of nurturing intergenerational relationships between the youth and the older generations, regardless of family relations. Doing so facilitates a reciprocal process of intergenerational knowledge translation between the youth and the older generations. Privileging the perspectives of youth and nurturing their skillsets was a central aspect of intergenerational relationships for the purpose of facilitating community wellness.

5.2.3 The Importance of Indigenous Language and Culture

When describing wellness, each community echoed the importance of the revitalization of traditional knowledge, ceremonies and their Indigenous languages. Another aspect that was frequently brought up was ancestry and knowing your family lines. Each of these aspects of
community wellness described by the participants contribute to formative processes such as building a strong sense of identity, purpose, value system, practices, and worldview (Kirmayer et al., 2011). It is no coincidence that sustaining and maintaining cultural continuity, specifically through the use of Indigenous language, has been shown to decrease rates of suicide within Indigenous communities (Chandler & Lalonde, 1998; Hallett et al., 2007). Cultural continuity is the contemporary preservation of traditional culture (Chandler & Lalonde, 1998).

Culture has also been described as something that is potentially enduring or continuously linked through processes of historical transformation (Kirmayer et al., 2007). The revitalization and inclusion of Indigenous language and culture was frequently referred to as something that could foster wellness within each of the three communities. Though, unfortunately participants also noted that traditional knowledge is often scarce and sometimes still stigmatized. A transition to a full inclusion of Indigenous ways of knowing and doing may serve to provide great benefit for Indigenous people, but will require an amazing feat, very quickly, as many first language-holding Elders and knowledge keepers are soon returning to sky world. Interestingly, in one community, Caring for our Elders was deemed important enough to honour as its own theme, even though their concept map was not originally organized that way. The emphasis of the importance of our Elders in collective community wellness was echoed across the communities.

5.2.4 Connectedness and Interconnectedness

In discussing the relationship between community wellness and individual wellness, each community stated that they are one and the same. The universal acceptance that everything is connected means that we cannot have one without the other. The Rotinonhsyón:ni community shared the word tewatatê:ken, meaning we are all related or that we are all connected together. This connectedness extends throughout all of creation as, onkwe’shón:’a tâ:non akwé:kon teyotirihwayenawákon – everyone and everything is connected. Thus, given this interconnectedness, achieving wellness requires connectedness. Disconnect of any form would
disrupt the symbiotic relationship between the self and one’s ecology, thereby affecting the wellness of both (Kirmayer et al., 2011; Richmond et al., 2007).

The inclusion of multiple socioecological levels within each community’s concept map was evident. The final concept map created by each community contained a cluster related to the individual level, usually about healthy lifestyles, self-care or wholistic healing. The maps also contained a cluster representing relationships between people usually through interpersonal relationships, intergenerational relationships or community connectedness. The environmental level was represented in terms of connection to land, and vitality of food systems. Both organizational and political levels were also represented in the concept maps through clusters representing data systems, social change, education, resource development, infrastructure and leadership. Overall, this demonstrates that much of what promotes community wellness originates outside of the individual and the key is to work to balance and create harmony among all elements within both the personal and collective aspects of life (Elder Jim Dumont, 2014; First Nations Health Authority, 2015).

5.2.5 Food and Environmental Systems

The final most salient theme that appeared within each community’s conceptualization of wellness was the connection between food and the environment. Participants often identified the importance of the environment in relation to food systems. Community wellness is being able to have an environment conducive to eating nutritious foods, utilizing traditional food systems, and maintaining food security (Delormier et al., 2017). Going hand-in-hand with this is being able to have an environment conducive to participating in physical activity to foster community wellness (Baillie et al., 2016; Paradis et al., 2005). As demonstrated by each conceptualization, the relationship between the self and the land is fundamental to community wellness, and further to our existence (Big-Canoe & Richmond, 2014). Although colonial processes have transformed the relationships that can be had between ourselves and our environment through dispossession from
traditional lands and lifestyles, a connection such as the one between the self and the environment is so instinctual that it could never be completely severed by processes of modern transformation (Alfred & Corntassel, 2005).

5.3 Community Perceptions of Priority and Possibility

The rating and sorting of wellness statements to generate community wellness priorities and possibilities provide further insight into how each community conceptualizes wellness. Priorities were quite similar across the three communities. The highest priority themes in each of the three communities were 7th Generation Thinking, Family Connections – Shawéjigewiin and Family Wholistic Healing, indicating that all three communities placed the highest priority on statements related to nurturing family relations and youth. The themes rated as the second highest priority by each community were Nutrition & Food Security and Personal Wellness & Balance, Healthy, Wholistic Self-Care Choices and Balancing Wholistic Lifestyle. It appears that ideas around maintaining a healthy lifestyle physically, mentally, emotionally and spiritually are also very consistent with Indigenous values that carry across different nation groups (Elder Jim Dumont, 2014; Graham & Leeseberg Stamler, 2010).

Possibility ratings, which represent the likelihood that a given priority can be addressed, varied across the three communities. Priorities rated as most possible included Nutrition & Food Security, Education Systems Promoting Black River’s Way of Life, and Family Wholistic Healing, while priorities rated with the second highest level of possibility were 7th Generation Thinking, Family Connections – Shawéjigewiin, and Balancing Wholistic Lifestyle. Interestingly, ideas related to individual level healthy lifestyles, family relations and education are perceived as most possible by the communities. This is not surprising as these areas are where individuals likely have the most control. Priorities that were considered to be of lower possibility included Leadership & Infrastructure, Interconnectedness, Community Connection, Food Security, Miino Pimatisiwiin (Good Life), Creating a Safe, Addiction-Free Community Through Connection and
Sharing Information to Create Social Change. Many of these themes would require either a strong collective response, or support from higher levels of leadership (Smylie & Anderson, 2006). These findings are consistent with the health promotion literature in which individual level health behaviour change interventions tend to be prioritized over environmental interventions (Golden & Earp, 2012) despite calls for collaborative, multilevel, culturally situated community interventions that have greater potential to create sustained community-level impact (Trickett et al., 2011).

In sum, when considered collectively, the data reveal consistencies across the communities’ conceptualizations of wellness, corroborating previous research (Graham & Leeseberg Stamler, 2010; Kirmayer et al., 2011; Quinless, 2015; Richmond et al., 2007) while also revealing nuances that are unique to each community’s local context and culture indicating that place matters (Anderson et al., 2006).

5.4 Strengths

A major strength of this project was its success in adhering to participatory research principles; the full engagement of community members in the analysis and interpretation of findings was commendable. Even within community-based participatory research projects, the analysis phase does not often take a full participatory approach (Khodyakov et al., 2013). Often, participant involvement is limited to member validation of the researcher-led analysis rather than involvement in active data analysis. There is strong consensus within the literature that meaningful involvement throughout the data continuum is required, especially when working in partnership with Indigenous communities (Anderson et al., 2006; Smylie et al., 2012).

Centering community-based Indigenous knowledge and Indigenous approaches to wellness was a priority for this research. I chose to use the method of concept mapping first, because it allowed for a participatory method of analysis, and second, because it ensured everyone’s voice was considered equally in the process. Though concept mapping is not an
Indigenous research method, it allowed for the inclusion of talking circles which are an Indigenous approach to sharing knowledge. Concept mapping has been supported within the literature as one research tool that is helpful in supporting communities in the process of conceptualizing health and wellness and further identifying priorities for measurement (Margaret Cargo et al., 2019; Dawson et al., 2013; Firestone et al., 2014; Smylie et al., 2012). This project was able to share three Indigenous communities’ perspectives on wellness in a way that is relevant and applicable.

Another strength of this project was the way in which the research was integrated into the CMT intervention component. The research had direct relevance to what trainees were learning and the research activities yielded immediate benefit to the participants’ efforts to create a vision and plan for their community’s type 2 diabetes prevention mobilization efforts, likely creating ownership over the research findings and the mobilization outputs (Petrucka et al., 2012).

5.5 Limitations

The attrition and addition of participants across the different phases of data collection resulted in the recommended participant sample size for the sorting and rating phase in Black River being slightly lower than what was recommended by Kane & Trochim (2007) to achieve valid and reliable results. However, since the brainstorming phase was completed through the Wellness Indicator Talking Circles, I would argue that the data resulting from this phase was especially rich because participants had the opportunity to share stories and to build off of the stories shared by other participants. Furthermore, given that the research purpose was not to create a generalizable conceptualization of wellness for all Indigenous peoples, the lower-than-recommended sample size for sorting and rating in Black River should not affect the ability of their concept map to be used by the CMT participants.

Since this research project was ancillary to the larger KSDPP CMT research project, this project’s concept mapping activities took place within the context of other research activities
going on during the training. This meant that the schedule was often shuffled around to accommodate additional concept mapping activities. It would have been ideal to have spent an entire day discussing the results of the concept mapping activities in the interpretation phase so as to mitigate the need for a follow-up session for activity planning. However, the execution of the CMT project was done in the best way possible given the nature of the CMT and the ancillary research project taking place at the same time.

During my time as a master’s student, I have learned that building relationships is the foundation to completing Indigenous community-based research in a good way. While I can say that I have made a strong effort to build relationships with the Kahnawake Schools Diabetes Prevention Project and within Tyendinaga, I cannot say that I have been able to be as present as I would have liked to be in Black River First Nation or Brokenhead Ojibway Nation. Although I was fortunate to be able to travel to Manitoba to be present three times in each community to attend their CMT Part I, CMT Part II, and Reporting Back Visit, I was not able to stay in those communities for a long enough period of time to really get to know the people and the community context outside of the CMT.

If I were to do this project over again, I would ideally spend a lot more time building relationships with the participating communities. As a master’s student, with responsibilities to fulfill within a tight two-year timeline, it was ultimately not possible for me to spend the time needed to build stronger, more meaningful relationships within each of the communities involved in this project. However, it is my intention to maintain relationships with each of these communities and continue this work during my doctoral studies.

5.6 Contributions to Indigenous Health Research

The contemporary, dominant narrative about Indigenous health is that it is suffering in comparison to the health of the general population. The positioning of the Indigenous population as less than the non-Indigenous population is an overt act of oppression and marginalization of
Indigenous peoples by the colonial nation state (Anderson et al., 2006; Smylie et al., 2012). This is because constant comparisons erase the unique experiential differences between Indigenous peoples’ and non-Indigenous peoples’ existence on Turtle Island. The positioning of Indigenous peoples’ health in this way contributes to perpetuating stereotypes of Indigenous peoples, placing inherent blame upon the individual for the state of their health (Geddes, 2015). Further, these comparisons do not contribute to finding a solution to the health disparities and inequalities experienced by Indigenous peoples in comparison to non-Indigenous peoples.

Something that stood out to me when examining the five most salient themes that emerged from the data was that they relate directly to the history of destructive colonial and assimilative policy implementation (Truth and Reconciliation Commission of Canada, 2015b). The first thing that was stolen from Indigenous peoples was land. Policies upholding this theft directly affect food security, traditional food systems, connection to land and destruction of the environment. The next thing stolen from Indigenous peoples was their families. The youth were taken from their families in the name of education through the residential school system, the 60s Scoop and currently by the Child Welfare System (MacKay, 1952; Truth and Reconciliation Commission of Canada, 2015a). Today, these policies directly affect experiences of intergenerational trauma, coping through addictions, familial dysfunction, disconnection from family and community, child apprehension and overrepresentation within the child welfare and correctional systems (Truth and Reconciliation Commission of Canada, 2015b).

Legislation was also implemented to make all aspects of Indigenous traditions, practices, language and governance illegal (Indian Act, 1985; Lougheed, 1920). Today, this directly affects the loss of cultural identity, disconnection from cultural traditions, practices, stories, knowledge, and ceremonies, the extinction or risk of extinction for many Indigenous languages, the current existence of the Indian Act governance system (Indian Act, 1985; Truth and Reconciliation Commission of Canada, 2015b) and ignorance of Indigenous sovereignty. Further, the
interconnectedness of all of these past experiences and current realities indicate that reclaiming community wellness will require a wholistic and balanced multi-dimensional response.

Each of these strategic assaults to the livelihood of Indigenous peoples affected all generations, including the next 7 generations of those that have yet to come. This provides further evidence that the health of Indigenous peoples is suffering today as a result of colonization. This is not something that we can just ‘get over’ because it happened in the past. It is clear that the effects are still being felt by Indigenous peoples today and that there are strategic assaults still taking place.

The conceptualizations of wellness shared by each community involved in this research make very clear that achieving wellness will involve actions that address the effects of colonization and that foster social justice for Indigenous peoples on Turtle Island. It is not a coincidence that each of the most salient themes reflect something that has been overtly targeted by the colonial nation state for destruction.

The colonial agenda seeks to eradicate Indigenous peoples. I question whether or not an Indigenous person or community can truly carry out their own conceptualization of wellness, while under the control of the colonial nation state. Solutions ultimately lie in making change to social, economic, and political contexts (Smylie et al., 2012). The findings from this research suggest that at a grassroots level, we can begin healing by picking up the pieces of what is left of our connection to the land, our family, the children, youth and elders, our language and our culture to embody what we understand as wellness. Further, in order to change the narrative of Indigenous peoples’ health, we must change the ways in which the indicators are being measured to be more reflective of Indigenous realities.

5.6.1 Changing the Measurement of Indigenous Wellness

By building a foundation for the development of community-level wellness indicators, this project sought to contribute to the production of high-quality data that is relevant to the
community. It also sought to ensure that the future collection of data serves to reduce rather than perpetuate social injustices. The work of Smylie et al (2012) outlines four strategies to facilitate the transformation of health and social data systems into tools for community empowerment. The four strategies include a community-centric approach, changing what we measure, cross-community and cross-sector partnerships and alliances and the integration of data systems with social, economic and political levers for change (Smylie et al., 2012). In line with recommendations provided, this project was structured in a way that focuses on addressing the first two strategies.

Adopting a community-centric approach involved using a method where the community was at the center of the creation of the data system. This project is only the first stage of the process, though the use of a participatory method of analysis ensured that the community’s voice was central. As the researcher, I was constantly reminding myself of the need to be comfortable in adopting a paradigm where the community, not the researcher, controls the data. This meant that all ethical considerations outlined by the CMT Code of Conduct were followed at all times. Therefore, keeping each community informed, and gathering feedback from all three communities involved before making any decisions, was diligently respected.

Deciding what gets measured as community wellness is the purview of the community that will be using the community wellness indicators. The current project allowed for foundational work to be done that positions each community to customize their assessment of wellness in a way that accurately reflects local community context, needs and resources. In the case of this research, though there were core similarities between each community’s conceptualization of wellness, the three concept maps were ultimately quite distinct. This is because the meaning of wellness for each community directly relates to their local context, needs and resources. This was especially evident through the analysis of data at the statement level. Each statement represents something that could demonstrate wellness within the community, and therefore could be measured to assess levels of wellness according to their priorities. Drawing
only from the similarities found within this research at the higher-order thematic level would miss these specificities in indicators that have been prioritized individually by each community. This indicates that moving away from a generalizable framework of community wellness in favour of a standardized process for developing community-led conceptualizations of community wellness is a valuable option to explore further.

5.7 Future Directions

Based on the four strategies outlined by Smylie et al. (2012), this project is well positioned to produce additional research opportunities. Each of the communities that participated in this project are well equipped to begin discussing the creation of community-led evaluation measures. Since they also participated in the CMT, they also have a community-led intervention whose impact will need to be evaluated. With these opportunities for future community-centric approaches to research, we are well equipped to address strategies three and four, creating cross-community, cross-sector partnerships and alliances and the integration of data systems with social economic and political levers for change (Smylie et al., 2012).

The tangible benefit left to the communities by this research is a community-defined conceptualization of wellness that can be used to guide further strategic planning and evaluation of community mobilization efforts. For this to happen, follow-up activities to facilitate the process of finding further utility and meaning in these data will need to take place in each community. Therefore, future directions for research as a result of this project would be to revisit the concept maps and to co-create specific goals and action plans as well as a custom wellness measurement tool.

In one of the Wellness Indicator Talking Circles, a participant emphasized that “We are not a program.” For me, this drew attention to the currently fragmented approach to promoting health and wellness. Many aspects of wellness as conceptualized by these Indigenous communities will not be addressed by implementing another program. They can only be
addressed by grounding health promotion in social justice and by shifting away from the current model of fragmentary service delivery. Working toward self-determination and sovereignty over health services and data systems is another aspect of consideration for future directions for the field of Indigenous health promotion. There is a clear desire from communities to shift toward grounding their health promotion practices and data collection more firmly within Indigenous worldviews and traditional practices.

Future directions for me could include the natural next steps of this project to further explore the communities’ evaluation of their mobilization efforts. Based on what I have learned throughout this project, all future research directions for me will explore the promotion of health and wellness through the lens of Onkwehonwe’néha. My understanding of wellness is that it is embedded in Onkwehonwe’néha. I now believe more firmly that in order to address the health disparities affecting our people we must get back to our original ways of knowing and being. This was a theme that recurred strongly throughout each community’s conceptualization of wellness. I believe that there is a lot to learn about our worldview, knowledge, and practices embedded within Indigenous language and practice. Therefore, language learning and acquisition are fundamentally important for improving health and maintaining wellness both individually and at the community level. The intersection between language/cultural revitalization and Indigenous health promotion is something I am interested in exploring further during my studies as a doctoral student.

5.8 Conclusion

In summary, concept mapping was used to facilitate the participatory analysis of Wellness Indicator Talking Circles completed as part of the CMT. Local stakeholders participated in the identification, organization and analysis of their own unique conceptualization of wellness. The concept maps created, represent the aggregated perceptions of a diverse sample of participants from each community. Collectively, the data reveal consistencies among each
community’s conceptualization of wellness, which supports the existing literature. However, individually, both the sorting and rating data reveal nuances that are unique to each community, depending on their local contexts and cultures. These specificities call into question the generalizability of wellness conceptualizations and evaluation tools for use across different nations, and different places.

The process of creating a conceptualization of community wellness has proven to be inherently valuable as it is paramount that all health promotion and management of health data be designed to target local needs (Smylie & Anderson, 2006). Moving forward, these findings will continue to be discussed with each community as they launch their community coalition and start executing their mobilization efforts for type 2 diabetes prevention.

In conclusion, this research has been successful in adding to current understandings of Indigenous conceptualizations of wellness. By adopting what has been cited in the literature as a community-centric approach to develop an understanding of community wellness within three First Nations communities, this research has the potential to respond to calls within the literature to address the need for more relevant and representative measures of Indigenous health and wellness (Smylie et al., 2012). The process undertaken in this research to create a community-led conceptualization of wellness is beneficial in itself as it is the first step in the self-determination of health data systems within Indigenous communities. Self-determined and self-governed data systems will lead to more representative, relevant and useful information for communities, which has the potential to translate into more effective health policy, programs and services that make change within the social systems that currently maintain health inequities.
When a Rotinonhsyón:ni speaker finishes makes a public address within the longhouse, it is proper for them to proclaim that there are limitations of subjectivity. Therefore, it is proper for me to proclaim that if I have made any mistakes, or if I have omitted things, it was not done intentionally. The words I have shared are a reflection of the best I can do in this moment based on my current knowledge and positionality. With welcoming sentiments to individual subjectivity, I want to end by leaving this piece open for conversation. I here follow in the established practice with some closing words:


_I have now arrived at the place where I end my words. Of all of the things I discussed, it was not my intention to leave anything out. If something was forgotten, I leave it to each individual to make it right in their own mind. That’s all of the words I have._
References


https://doi.org/10.1111/j.1477-7053.2005.00166.x


Bagot, C. (1845). *Report on the affairs of the Indians in Canada: Laid before the Legislative Assembly, 20th March 1845 [Sections 1 & 2—"Bagot Commission"- Legislative journals of the Legislative Assembly of the Province of Canada, 1845: Appendix EEE”]*. Queen’s University Printer, Kingston Ont.


http://jps.library.utoronto.ca/index.php/youthengage/article/view/02-02


*Black River—SERDC*. (n.d.). Retrieved November 11, 2019, from

https://serdc.mb.ca/index.php?option=com_content&view=article&id=18&Itemid=33


George, R. (1763). *The Royal Proclamation—October 7, 1763*.


Government of Canada, S. C. (2020a, January 14). *Aboriginal Community Data Initiative Portrait, 2016 Census – Black River First Nation (First Nation/Indian band or Tribal*


prevention research. *Environmental Health Perspectives, 113*(10), 1463–1471. 
https://doi.org/10.1289/ehp.7675


https://doi.org/10.1177/10901981112459050


WHO. (1948). *Preamble to the Constitution of WHO as adopted by the International Health Conference, New York, 19 June—22 July 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of WHO, no. 2, p. 100) and entered into force on 7 April 1948*.


Appendix A

Thesis Change Statement

No significant changes from the approved thesis proposal occurred.

Date of thesis proposal: December/2018.
Appendix B
KSDPP Review and Approval Process for Ethically Responsible
Research Certificate of Approval

KAHNNAWÁ:KE SCHOOLS DIABETES PREVENTION PROJECT
Kahnawá:ke Ts’i lonherwahentáhkwa Teiskonwehentáhkwa Rotío’táti’ Tahattiatste
Center for Research & Training in Diabetes Prevention
P.O. Box 989, Kahnawake Mohawk Territory
Quebec, Canada J0L 1B0
Phone: 450-635-4374
Fax: 450-635-7214
info@ksdpp.org

Review and Approval Process for Ethically Responsible Research
Certificate of Approval

The Community Advisory Board of the Kahnawá:ke Schools Diabetes Prevention Project has
granted approval:

For the Research Proposal Project entitled:

A Strengths-Based Community-Driven Framework of Wellness Developed by Indigenous
Communities across Turtle Island

Proposed by:

Name of Researcher: Brittany McBeath
Academic Supervisor: Lucie Lévesque
Department: School of Kinesiology and Health Studies
Institution: Queen’s University
Month and Date of CAB Approval: December 18th, 2019

Confirmed by the CAB Executive Committee:

Signature: [Signature]
Name: [Name]
Date: [Date]

*Daily physical activity, healthy eating habits & a positive attitude can prevent diabetes
Thiu’tewenhišenrá:ke ti nišakwéniion sutia’ takaričlo’okt tainon’ kahnwičio čéek.
Tóka’ emtehne’ nišenbhrakéntacho’ewi ničton níč’ e tenká’tu’ne ne tiasunwehentáhkwe:naru’ne*
Appendix C

Research Ethics Board Approvals

January 04, 2019

Dr. Lucie Levesque
Professor
School of Kinesiology and Health Studies
Queen's University
KHS Building
28 Division Street
Kingston, ON, K7L 3N6

Dear Dr. Levesque:

RE: Amendment for your study entitled: GSKHS-260-17 Mobilizing Indigenous Knowledge for Community-Driven Wellness; TRAQ # 6921182

Thank you for submitting your amendment requesting the following changes:

1) To use a participatory mixed method analysis: concept mapping;

2) To add two additional phases: (1) online thematic sorting and rating of key statements, and (2) a concept map interpretation session;

3) To send an email to stakeholders who participated in the focus group with instructions and a link to complete the online thematic sorting and rating of key statements using the Concept System CS Global Max software, with an additional in-person meeting to take place following the sorting and rating;

4) Concept Mapping Interpretation Protocol (v. 2018/12/21);

5) Email to Participants for Concept Mapping Online Sorting and Rating (v. 2018/12/21);


By this letter, you have ethics approval for these changes.

Good luck with your research.

Sincerely,

[Signature]

Dean Tripp, Ph. D
Chair
General Research Ethics Board

c.: Mr. Alex McComber, Miss Brittany Mcbeath, Mr. Colin Baillie, Mr. Andrea Ianni, Ms. Donna Ivimey, Dr. Treena Delormier, Miss Alexandra Morrison, and Dr. Ann Macaulay, Co-investigators
January 04, 2019

Dr. Lucie Levesque
Professor
School of Kinesiology and Health Studies
Queen's University
KHS Building
28 Division Street
Kingston, ON, K7L 3N6

Dear Dr. Levesque:

RE: Amendment for your study entitled: GSKHS-261-17 Community Mobilization Training for Diabetes Prevention: Implementation and scale-up of a best practice training model for diverse Indigenous communities; TRAQ # 6021180

Thank you for submitting your amendment requesting the following changes:

1) To include minor changes to the wording of the Demographics & Community Readiness Questionnaire with regard to questions relating to community stability and infrastructure, as recommended by community contacts;

2) Demographics & Community Readiness Questionnaire (v. 2018/12/20);

3) Updated Letter of Information/Consent Form – Black River First Nation (v. 2018/12/21);

4) Updated Social Network Questionnaire – Black River First Nation specific (v. 2018/12/21).

By this letter, you have ethics approval for these changes.

Good luck with your research.

Sincerely,

[Signature]

Dean Tripp, Ph. D.
Chair
General Research Ethics Board

c.: Ms. Donna Ivimey, Mr. Colin Baillie, Dr. Ann Macaulay, Mr. Andrea Ianni, Mr. Alex McComber, Dr. Treena Delormier, Miss Brittany Mcbeath, and Miss Alexandra Morrison, Co-investigators
June 20, 2017

Dr. Lucie Levesque
Professor
School of Kinesiology and Health Studies
Queen's University
KHS Building
28 Division Street
Kingston, ON, K7L 3N6

GREB Ref #: GSKHS-260-17; TRAQ # 6021182
Title: "GSKHS-260-17 Mobilizing Indigenous Knowledge for Community-Driven Wellness"

Dear Dr. Levesque:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "GSKHS-260-17 Mobilizing Indigenous Knowledge for Community-Driven Wellness" for ethical compliance with the Tri-Council Guidelines (TCPS 2 (2014)) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (Article 6.14) and Standard Operating Procedures (405.001), your project has been cleared for one year. You are reminded of your obligation to submit an annual renewal form prior to the annual renewal due date (access this form at http://www.queensu.ca/traq/signon.html; click on "Events"; under "Create New Event" click on "General Research Ethics Board Annual Renewal/Closure Form for Cleared Studies"). Please note that when your research project is completed, you need to submit an Annual Renewal/Closure Form in Romeo/traq indicating that the project is 'completed' so that the file can be closed. This should be submitted at the time of completion; there is no need to wait until the annual renewal due date.

You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one year period (access this form at http://www.queensu.ca/traq/signon.html; click on "Events"; under "Create New Event" click on "General Research Ethics Board Adverse Event Form"). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example, you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To submit an amendment form, access the application by at http://www.queensu.ca/traq/signon.html; click on "Events"; under "Create New Event" click on "General Research Ethics Board Request for the Amendment of Approved Studies". Once submitted, these changes will automatically be sent to the Ethics Coordinator, Ms. Gail Irving, at the Office of Research Services for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Sincerely,

John Freeman, Ph.D.
Chair
General Research Ethics Board

c: Mr. Alex McComber, Miss Brittany Mcneath, Mr. Colin sillie, Mr. Andrea Ianni, Ms. Donna Ivimey, Dr. Treema Delormier, Miss Alexandra Morrison, and Dr. Ann Mcauley, Co-investigators
Dr. Lucie Levesque, Chair, Unit REB
June 20, 2017

Dr. Lucie Levesque  
Professor  
School of Kinesiology and Health Studies  
Queen's University  
KHS Building  
28 Division Street  
Kingston, ON, K7L 3N6  

GREB Ref #: GSKHS-261-17; TRAQ # 6021180  
Title: "GSKHS 261-17 Community Mobilization Training for Diabetes Prevention: Implementation and scale-up of a best practice training model for diverse Indigenous communities"

Dear Dr. Levesque:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "GSKHS 261-17 Community Mobilization Training for Diabetes Prevention: Implementation and scale-up of a best practice training model for diverse Indigenous communities" for ethical compliance with the Tri-Council Guidelines (TCPS 2 (2014)) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (Article 6.14) and Standard Operating Procedures (405.001), your project has been cleared for one year. You are reminded of your obligation to submit an annual renewal form prior to the annual renewal due date (access this form at http://www.queensu.ca/traq/signon.html; click on "Events"; under "Create New Event" click on "General Research Ethics Board Annual Renewal/Closure Form for Cleared Studies"). Please note that when your research project is completed, you need to submit an Annual Renewal/Closure Form in Romeo/traq indicating that the project is 'completed' so that the file can be closed. This should be submitted at the time of completion; there is no need to wait until the annual renewal due date.

You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one year period (access this form at http://www.queensu.ca/traq/signon.html; click on "Events"; under "Create New Event" click on "General Research Ethics Board Adverse Event Form"). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example, you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To submit an amendment form, access the application by at http://www.queensu.ca/traq/signon.html; click on "Events"; under "Create New Event" click on "General Research Ethics Board Request for the Amendment of Approved Studies". Once submitted, these changes will automatically be sent to the Ethics Coordinator, Ms. Gail Irving, at the Office of Research Services for further review and clearance by the GREB or GREB Chair.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Sincerely,

John Freeman, Ph.D.  
Chair  
General Research Ethics Board  

c: Ms. Donna Ivmey, Mr. Colin Baillie, Dr. Ann Macaulay, Mr. Andrea Ianni, Mr. Alex McComber, Dr. Treena Delormier, Miss Brittany Mcbeath, and Miss Alexandra Morrison, Co-investigators  
Dr. Lucie Levesque, Chair, Unit REB  
FAES Research Ethics Board  
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 47-0618

Project Title: Mobilizing Indigenous knowledge for community-driven wellness

Principal Investigator: Professor Treena Delormier  Department: School of Human Nutrition

Co-investigators: Prof. L. Levesque (Lead PI; Queens); A. McComber (McGill)

Funding: CIHR

Approval Period: July 22, 2018 – July 21, 2019

The FAES REB reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

Lynda McNeil  
Associate Director, Research Ethics

* Approval is granted only for the research and purposes described.
* Modifications to the approved research must be reviewed and approved by the REB before they can be implemented.
* A Request for Renewal form must be submitted before the above expiry date. Research cannot be conducted without a current ethics approval. Submit 2-3 weeks ahead of the expiry date.
* When a project has been completed or terminated, a Study Closure form must be submitted.
* Unanticipated issues that may increase the risk level to participants or that may have other ethical implications must be promptly reported to the REB. Serious adverse events experienced by a participant in conjunction with the research must be reported to the REB without delay.
* The REB must be promptly notified of any new information that may affect the welfare or consent of participants.
* The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this study.
* The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.
Research Ethics Board Office  
Faculty of Agricultural and Environmental Sciences

Macdonald Campus  
2111 Lakeshore  
Saint-Anne-de-Bellevue, QC H9X 3V9  
Email: lynda.mcneil@mcgill.ca  
Tel: (514)398-6831  
Website: www.mcgill.ca/macdonald/research/compliance/human/

FAES Research Ethics Board  
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 130-0818

Project Title: Community Mobilization Training for Diabetes Prevention: Implementation and scale-up of a best practice training model for diverse Indigenous communities

Principal Investigator: Professor Treena Delormier

Department: School of Human Nutrition

Co-Investigators: Prof. L. Levesque (Lead PI-Queens); A. McComber (McGill)

Funding: CIHR

Approval Period: August 15, 2018 – August 14, 2019

The FAES REB reviewed and approved this project by delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

Lynda McNeil  
Associate Director, Research Ethics

* Approval is granted only for the research and purposes described.  
* Modifications to the approved research must be reviewed and approved by the REB before they can be implemented.  
* A Request for Renewal form must be submitted before the above expiry date. Research cannot be conducted without a current ethics approval. Submit 2-3 weeks ahead of the expiry date.  
* When a project has been completed or terminated, a Study Closure form must be submitted.  
* Unanticipated issues that may increase the risk level to participants or that may have other ethical implications must be promptly reported to the REB. Serious adverse events experienced by a participant in conjunction with the research must be reported to the REB without delay.  
* The REB must be promptly notified of any new information that may affect the welfare or consent of participants.  
* The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this study.  
* The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.
Appendix D
Letter of Information and Consent Form

Letter of Information and Consent v. 2018-12-20
‘Community X’

Community Mobilization Training for Diabetes Prevention

Letter of Information for Participants attending the KSDPP Community Mobilization Training – ‘Community X’

You are invited to participate in a research study to evaluate the Kahnawake Schools Diabetes Prevention Project (KSDPP) Community Mobilization Training model in diverse Indigenous communities and a research study examining community wellness indicators. The studies are funded by the Canadian Institutes for Health Research (CIHR) (Pathways-PI3-151327 and Catalyst #IAW-151691).

Principal Investigators: Lucie Lévesque, Queen’s University; Alex M. McComber, KSDPP; and Treena Delormier, McGill University

Local Team Members: Community CRA X’

General Information: The KSDPP Community Mobilization Training (CMT) for Diabetes Prevention and Healthy Lifestyles was developed in 2001. CMT aims to engage Indigenous community members, through hands-on learning, to develop and implement wholistic health promotion and diabetes prevention strategies in their community. The main goals of the research studies are:

1) to understand the factors, conditions and type of social systems necessary for the successful implementation and scale up of the CMT; and

2) to better understand the Indigenous wellness indicators used by CMT community stakeholders and to develop tools to measure these wellness indicators as part of future evaluations of the CMT training.

Description of the Research: The overall research study involves several components and involves KSDPP participants and organizations, participants from communities who have previously attended a CMT workshop, and participants from communities who will receive the CMT. You are being asked to be part of this study because you are a new participant attending the CMT in your community.

For this part of the study, you are being invited to participate in the following:
**Questionnaire:**

- **Questions re demographics:** The questions will ask about your self-identification, education, your organization and job title and will take less than five minutes to complete. This is to give us general information about who is taking the training.

- **Questions re community readiness:** These questions are about the readiness level of your community in terms of promotion of healthy lifestyles. This is to give us more information on the needs of the communities participating in the training. This questionnaire will take about 15 minutes to complete.

**Activities during CMT event:**

- **Wellness Indicators:** As part of the CMT event, participants will be asked to share their insight into Indigenous community wellness indicators, through a talking circle. The facilitated session will be recorded and transcribed, and then analyzed by the CMT research team to identify common and emerging themes. The Talking Circle will last about 45 minutes. A few weeks after the CMT, we will send you an email with a link to an online system that asks you to review the ideas that came from the talking circles, **and to sort and rank those ideas.** The task will take approximately one hour. No special software will be required. We will meet at another time to hold an interpretation session to share the results and ask for your feedback on the groups of ideas your community came up with.

- **Internal Strengths & Weaknesses, and External Opportunities & Threats (SWOT) Analysis Worksheet:** As part of the CMT, participants will have the chance to identify their organization/community’s internal strengths and weaknesses and external opportunities and threats in relation to diabetes prevention and healthy lifestyles promotion, through a facilitated discussion and completion of a SWOT analysis worksheet. You will be asked to submit a copy of the completed worksheet to the CMT research team to help identify facilitators and barriers to implementing a mobilization strategy in communities. This activity will take about 45 minutes to complete.

- **Social Network Charting:** For this part of the study, we want to understand CMT participants’ social networks (relationships with other organizations). You, along with others attending the CMT, will be given social network table that asks about your organization and about the various organizations you connect to in fulfilling...
your duties. You will be invited to submit a copy of this worksheet as part of the research project during the training. This activity will take about 30 minutes to complete.

- **Cultural Grounding:** As part of the CMT event, participants will be asked to share their insight on the role of culture and traditions for the promotion of healthy lifestyles, and on their understanding of community, through a **talking circle**. The facilitated session will be recorded and transcribed, and then analyzed by the CMT research team to identify common and emerging themes. The Talking Circle will last about 45 minutes.

**Risks:** There are no known risks for participating in this project.

**Benefits:** Participating in the CMT may help your professional development in terms of how to mobilize your community for diabetes prevention and wellness. Tools developed may assist you and/or your organization in conducting your job, or fulfilling your organization’s mandate. We believe the CMT project will contribute to understanding how the KSDPP CMT model can be adapted and implemented successfully in other Indigenous communities.

**Compensation:** You will be given $10 for each of the six days of the CMT training. (maximum $60) that you participate in the activities during the CMT delivery as a thank you for your involvement. You will be given another $20 for participating in the follow up concept mapping activities. Food and beverages will be provided at the training.

**Sharing Results of the Study:** Research results and knowledge generated by the CMT may be published in peer-review journals, in other publications and at conferences. All research results will be presented first to the local Community Advisory Circles and Project Advisory Circle before being published locally, nationally or internationally.

**Confidentiality/Anonymity:** Given the nature of your work, you may be recognized as someone who participated in these research studies. The CMT project code of research ethics requires that all research analyses, interpretations and results be presented to and discussed by all partner organizations to ensure accuracy and to avoid misunderstanding.

Your identity will be known to other talking circle participants and all participants in the talking circles will be asked in writing and verbally to respect the confidentiality of the group. We will ask you to sign below to indicate that you will keep all comments made during the talking circles confidential and not discuss what happened during the talking circles outside the CMT Event.
It is important to us to protect your privacy. These are the actions/ steps being taken to ensure this:

- Your name will not appear in the transcription of the recorded talking circles. Each participant will be assigned a participant code.
- All paper research data and forms will be locked in a safe at Queen’s University and will be accessible only to the CMT researchers. Electronic recordings and data will be password protected and stored behind a computer firewall.
- Only group data will be reported and submitted for sharing or for any publication journals/conferences; your name will not be used without your permission.
- As a participant of the talking circles, you may be quoted in the reports. In such case, a pseudonym will be used instead of your name. No confidential information will be quoted.
- All paper and electronic data will be returned to the community, after project requirements have been met.
- Any information that you feel would compromise your privacy can be removed or reworded to protect your privacy.

**Right to refuse questions or to leave the study:** Your participation in this study is completely voluntary and you may refuse to answer any questions you do not wish to answer.

**You may refuse or withdraw from each activity by doing the following:**

**Demographic and Community Readiness Questionnaire :**
You will have the option to complete the questionnaire or refuse. You may withdraw your data after the CMT event by contacting Donna Ivimey (Research Coordinator) at ivimeyd@queensu.ca; 613-533-6000 ext. 79130 up to two months following the CMT session.

**Social Networking. SWOT Analysis Worksheets:** These activities are part of the core CMT training. At the end of each CMT research activity, you will be asked to submit a card which contains your participant code and the name of the activity. If you do not wish your information for that activity included as part of the research project, there will be a place for you to indicate your withdrawal from that research activity. You may withdraw your data after the CMT event by contacting Donna Ivimey (Research Coordinator) at ivimeyd@queensu.ca; 613-533-6000 ext. 79130 up to two months following the CMT session. Regardless of whether you withdraw from a research activity, you will be given a copy of your worksheets for your own purposes.
Talking Circles – These circles will be recorded. If you do not wish to be recorded, you can leave the meeting during this time. To withdraw from a talking circle after it has started, you can simply leave the circle at any time or let the facilitator know that you would no longer like to participate. Given the nature of a talking circle, it will not be possible for you to withdraw your information once you participate.

Concept Mapping Interpretive Session: this is a group activity and if you do not wish to provide input into this research activity, you may step out of the activity. As a group activity, individual input will not be identified as such. Given this, it will not be possible for you to withdraw your information once you participate.

For More Information
If you have any questions about this study or require additional information, please contact the principal investigator for this project, Dr. Lucie Lévesque (613-533-6000 ext. 78164 or levesqu@queensu.ca

For questions about your rights or welfare as a participant in this research study, you may contact the Research Ethics Board at Queens University: chair.GREB@queensu.ca; toll free at 1-844-535-2988; or the Manager, Research Ethics of McGill University at 514-398-6831 or lynda.mcneil@mcgill.ca.

If you have any concerns about the research project, you may contact the KSDPP. A CAB member will serve as ombudsperson for the project. They can be contacted at 450-635-4374.

Consent
1. I have read and understood the consent form and have been given a copy.
   □ Yes
   □ No

2. I have had sufficient time to consider the information provided and to ask questions, and have received satisfactory responses to my questions. I understand that I may ask the researcher questions about the research at any time.
   □ Yes
   □ No
3. I understand that my personal information will be kept confidential and the data will only be used for research purposes.
   □ Yes
   □ No

4. I understand that my participation is voluntary and that I am completely free to refuse to participate or to withdraw from this study up to two months after the CMT session (except for talking circles and concept mapping) and still be entitled to benefits from KSDPP and KSDPP related activities.
   □ Yes
   □ No

5. I have read this form and freely consent to participate in this study.
   □ Yes
   □ No

6. I understand that talking circles will be recorded. If I do not wish to be recorded, I will not participate in the talking circle.
   □ Yes
   □ No

7. I understand that what I say during the recorded talking circles may be quoted, with a pseudonym, in the reports.
   □ Yes
   □ No

8. I will keep all comments made during the talking circles confidential and not discuss what happened during the talking circles outside the CMT Event.
   □ Yes
   □ No

9. I would like a copy of the research findings.
   □ Yes
   □ No
   If yes, please send to the following email address: __________________________

Printed Name of Participant  Signature of the Participant  Date

I have reviewed the consent form with the participant and provided the participant with a copy for their records.

Printed Name of Researcher  Signature of the Researcher  Date
Appendix E
Talking Circle Guide

Mobilizing Indigenous Knowledge for Community-Driven Wellness

Talking Circle Guide
V dated 2018-08-16

Date of Talking Circle: __________________________

Facilitator: __________________________
INTRODUCTION

Welcome to this talking circle of people who are attending the *KSDPP Community Mobilization Training*. The main purpose of this talking circle is to better understand the conceptualization of community wellness by CMT community stakeholders to inform the development of tools to measure these indicators as part of future evaluations of the CMT training. Another purpose of this talking circle is to give you the opportunity to share your experiences. There are three main topics that I will put out for your comments and stories. From this focus, we may veer into other interesting and relevant topics. To ensure that everyone gets equal chance to talk, this talking stick (rock or sacred object) will be passed around counter-clockwise and will give the right to talk to the person holding it.

Questions guide

1. **First of all, please take a moment to reflect on what wellness means to you.**
   (Give participants a minute to reflect)

   With one or two sentences, please describe what is wellness is for you.
   (Write down the key words on 2 columns on a flip chart)

   Probes:
   - **Wellness levels**
     - Ecological model
       - Individual
       - Interpersonal
       - Community
       - Organizational
       - Policy
     - Medicine wheel dimensions
       - Emotional
       - Mental
       - Spiritual
       - Physical
• Traditions, decolonization, connection to the land, healthy lifestyles

**How are individual and community wellness related or influencing each other?**

Probes:
• How can community wellness, or lack thereof, influence individual wellness? How can individual wellness, or lack thereof, influence community wellness?
• Are they related to the point of making one?

2. **How would you proceed to evaluate if wellness is present in your community?** What are elements that you could observe or measure that would help you to know if there is a low or a high level of wellness in the community? It can be either elements that you have already observed within your community, or indicators that you wish to observe in the future.

Probes:
• Community level
  • Environment
  • Activities
• Organizational level
• Policy level
• Interpersonal level

• The 4 quadrants of the medicine wheel:
  • Emotional: Awareness of not only our own feelings, but also how we connect to others.
  • Spiritual: Our spirit is our essence - what we are at our core.
  • Mental: The brain continues to grow throughout our lives but like our body, heart and spirit, we must feed it good things.
  • Physical: First, there is the need to feed and nourish the body so that it has everything it needs to perform at its optimum capacity. The body also needs exercise. As with everything balance is the key.

• Connection to the land

• Interpersonal: relationships with others
  • All our relations
  • Family
- Family
- Friends
- Animals
- Ancestors
- Co-workers
Appendix F
Tyendinaga Final Statement List

“Wellness can be demonstrated in our community by…”:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Doing better for our kids and grandkids.</td>
</tr>
<tr>
<td>2</td>
<td>Elders sharing their stories with the next generation.</td>
</tr>
<tr>
<td>3</td>
<td>Normalizing healthy foods and creating positive attitudes toward physical activity.</td>
</tr>
<tr>
<td>4</td>
<td>Keeping a balance in all aspects of individual health (mental, physical, emotional, spiritual) and also all aspects of our life (home, job, family) and within the community.</td>
</tr>
<tr>
<td>5</td>
<td>Fighting against the normalization of cannabis, getting control over the epidemic of cannabis addiction and being able to share your opinion safely.</td>
</tr>
<tr>
<td>6</td>
<td>A group of like-minded people coming together to work toward wellness.</td>
</tr>
<tr>
<td>7</td>
<td>Knowing your neighbors and having or taking the time to stop in to say hello, have tea, play cards, and help them out with anything they need.</td>
</tr>
<tr>
<td>8</td>
<td>Feeling safe within the community, not feeling afraid to walk down the street.</td>
</tr>
<tr>
<td>9</td>
<td>A sense of community, and sense of belonging.</td>
</tr>
<tr>
<td>10</td>
<td>Avoiding the build-up of emotion within the self, to make sure that we help each other instead of lashing out at each other.</td>
</tr>
<tr>
<td>11</td>
<td>Creating a healthy environment within our community so the people can be healthy, and vice versa.</td>
</tr>
<tr>
<td>12</td>
<td>Being more connected.</td>
</tr>
<tr>
<td>13</td>
<td>Being able to see changes or improvements in the community (ex. Roads being serviced).</td>
</tr>
<tr>
<td>14</td>
<td>Organized community meetings</td>
</tr>
<tr>
<td>15</td>
<td>Loving and respecting each other, being happy together.</td>
</tr>
<tr>
<td>16</td>
<td>Healthy incentives or snacks being served at programming, events, and meetings.</td>
</tr>
<tr>
<td>17</td>
<td>Fairness, equality, everyone having fair access to services and care.</td>
</tr>
<tr>
<td>18</td>
<td>Being responsible and accountable to supporting others, especially those that need it.</td>
</tr>
<tr>
<td>19</td>
<td>Everyone being on the same level, no one being better than others.</td>
</tr>
<tr>
<td>20</td>
<td>Accepting, and understanding each other. Acknowledging that despite our differences we all come together to make one community.</td>
</tr>
<tr>
<td>21</td>
<td>A community that is highly educated.</td>
</tr>
<tr>
<td>22</td>
<td>A community that is empowered.</td>
</tr>
<tr>
<td>23</td>
<td>Acceptance and inclusion of those who did not grow up inside the community, or that come from outside of the community.</td>
</tr>
<tr>
<td>24</td>
<td>No more gossip.</td>
</tr>
<tr>
<td>25</td>
<td>Sharing.</td>
</tr>
<tr>
<td></td>
<td>Being able to get things done without direction, or without leadership.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Being protective of your community, even if there are issues happening inside.</td>
</tr>
<tr>
<td></td>
<td>Role modelling from community members as part of living their everyday life.</td>
</tr>
<tr>
<td></td>
<td>Honesty, openness, and no more misleading, misrepresenting of both good or bad news.</td>
</tr>
<tr>
<td></td>
<td>Healing our community so we can be caring for the Elders, like it is traditionally supposed to be.</td>
</tr>
<tr>
<td></td>
<td>Following the original teachings to stay away from the mind changers that have been allowed within the community.</td>
</tr>
<tr>
<td></td>
<td>Living by our original teachings, the Iroquoian way of knowing (Sken:nen, Kanihkonhri:yo, Kasehstenshera - Peace, Power, Righteousness) (Konnoronkwatsera - Love) (Ka'nikonhri:yo - To have a good mind).</td>
</tr>
<tr>
<td></td>
<td>Our culture, because it already encompasses everything that wellness is. It talks about where we come from, where we're going, and it already has it all laid out for us.</td>
</tr>
<tr>
<td></td>
<td>Taking the teachings from the Kayanerenkó:wa (Great Law of Peace), and living by them.</td>
</tr>
<tr>
<td></td>
<td>Tewataté:ken, we are all related or we are all connected together. There is not a difference between community wellness or individual wellness, it all affects each other.</td>
</tr>
<tr>
<td></td>
<td>Having enough employment opportunities.</td>
</tr>
<tr>
<td></td>
<td>Lower turnover rates in jobs, more consistency.</td>
</tr>
<tr>
<td></td>
<td>Wellness within not only yourself, but also the environment, and thus your lifestyle.</td>
</tr>
<tr>
<td></td>
<td>Clean water access for all of the community.</td>
</tr>
<tr>
<td></td>
<td>No smoking allowed in the restaurants.</td>
</tr>
<tr>
<td></td>
<td>Making good products more visible, and bad products less visible in stores.</td>
</tr>
<tr>
<td></td>
<td>Loving and valuing your family (large or small), and friends.</td>
</tr>
<tr>
<td></td>
<td>More vegetables being planted in people’s gardens and being eaten by community members.</td>
</tr>
<tr>
<td></td>
<td>Restaurants serving healthy foods, more options for healthy foods to fuel our bodies.</td>
</tr>
<tr>
<td></td>
<td>Teaching everyone how to buy healthy food at the grocery store on a budget.</td>
</tr>
<tr>
<td></td>
<td>Sufficient funding and resources, but not being reliant upon it to get things done.</td>
</tr>
<tr>
<td></td>
<td>Healing the hurt in the community (i.e. From colonization, oppression, lateral violence, broken hearts, etc.).</td>
</tr>
<tr>
<td></td>
<td>Seeing everyone, including the elders doing better.</td>
</tr>
<tr>
<td></td>
<td>Learning from the successes of other communities.</td>
</tr>
<tr>
<td></td>
<td>Many different things, the meaning is different for everyone, but it has to be something that makes us personally feel good and healthy, not a perfect textbook number.</td>
</tr>
<tr>
<td></td>
<td>Having a place to call home.</td>
</tr>
<tr>
<td></td>
<td>Having the infrastructure to meet the needs of the community. (i.e. treatment centre, long-term care home)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>53</td>
<td>Being proud to care for the older generations when they become ill or can no longer care for themselves.</td>
</tr>
<tr>
<td>54</td>
<td>Leadership prioritizing wellness and encouraging the community.</td>
</tr>
<tr>
<td>55</td>
<td>Leadership putting steps in place to create a healthy community.</td>
</tr>
<tr>
<td>56</td>
<td>Role modelling from the leadership as part of their responsibility.</td>
</tr>
<tr>
<td>57</td>
<td>Seeing the community outside more.</td>
</tr>
<tr>
<td>58</td>
<td>Gardens.</td>
</tr>
<tr>
<td>59</td>
<td>Growing participation from the community in programming, in a wellness strategy, in events, etc.</td>
</tr>
<tr>
<td>60</td>
<td>Having this group of like-minded individuals keep coming together to build towards our goals.</td>
</tr>
<tr>
<td>61</td>
<td>Being true to yourself, loving who you are, and being yourself no matter who you are with.</td>
</tr>
<tr>
<td>62</td>
<td>Valuing and taking care of yourself.</td>
</tr>
<tr>
<td>63</td>
<td>Having control.</td>
</tr>
<tr>
<td>64</td>
<td>More positivity and happiness within the community to balance out the negativity.</td>
</tr>
<tr>
<td>65</td>
<td>More trust.</td>
</tr>
<tr>
<td>66</td>
<td>Self-confidence and pride.</td>
</tr>
<tr>
<td>67</td>
<td>Celebrating the positive things and documenting how far we have come.</td>
</tr>
<tr>
<td>68</td>
<td>Determination in whatever we work towards.</td>
</tr>
<tr>
<td>69</td>
<td>Being progressive, and willing to move forward.</td>
</tr>
<tr>
<td>70</td>
<td>More programming available (i.e. sports, recreation, family-oriented programming, fitness, etc.).</td>
</tr>
<tr>
<td>71</td>
<td>Successful promotion strategies for programming.</td>
</tr>
<tr>
<td>72</td>
<td>More people talking about healthy lifestyles and available programming,</td>
</tr>
<tr>
<td>73</td>
<td>Consistent attendance tracked at programming.</td>
</tr>
<tr>
<td>74</td>
<td>Having an understanding of your purpose, knowing what is in your heart so you can live a good, productive life.</td>
</tr>
<tr>
<td>75</td>
<td>Role modelling healthy behaviours and getting excited about them.</td>
</tr>
<tr>
<td>76</td>
<td>The children being happy to go to school.</td>
</tr>
<tr>
<td>77</td>
<td>Continuing the nutrition program at school.</td>
</tr>
<tr>
<td>78</td>
<td>Health promotion, and health education being prioritized within the classroom and within the curriculum. (i.e. including cooking classes, hands-on cultural activities, sun safety, tobacco cessation, cannabis awareness, head lice prevention).</td>
</tr>
<tr>
<td>79</td>
<td>More options to improve transportation (i.e. ride share program).</td>
</tr>
<tr>
<td>80</td>
<td>Valuing our language and culture.</td>
</tr>
<tr>
<td>81</td>
<td>Volunteers that are reliable, committed and show up for the youth consistently.</td>
</tr>
<tr>
<td>82</td>
<td>Wholistic health in all aspects of the self (mentally, physically, spiritually, emotionally), the family unity, the home, workplace, and in the community.</td>
</tr>
<tr>
<td>83</td>
<td>Having more opportunities, programming, and facilities that are for the children and youth.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>84</td>
<td>Children and youth getting better grades at school.</td>
</tr>
<tr>
<td>85</td>
<td>Measuring happiness and wellness in the youth.</td>
</tr>
<tr>
<td>86</td>
<td>Instilling healthy habits in the youth starting at home. (i.e. bringing healthy foods to school for lunch, positive attitudes toward physical activity, positivity, self-awareness, healthy mind/body/spirit).</td>
</tr>
<tr>
<td>87</td>
<td>Children being involved in physical activity.</td>
</tr>
<tr>
<td>88</td>
<td>Prioritizing the kids.</td>
</tr>
<tr>
<td>89</td>
<td>The current, and next generation of youth.</td>
</tr>
</tbody>
</table>
Appendix G
Black River First Nation Final Statement List

“Wellness can be demonstrated in our community by…”:

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Doing something for our kids, our grandchildren, and great grandchildren to be considerate of the wellness of the next generation.</td>
</tr>
<tr>
<td>2</td>
<td>Looking ahead to the future, not dwelling on the past.</td>
</tr>
<tr>
<td>3</td>
<td>The two live Buffalos!</td>
</tr>
<tr>
<td>4</td>
<td>Taking advice from others and making your own choice about what you want to work on for yourself.</td>
</tr>
<tr>
<td>5</td>
<td>Avoiding consumerism.</td>
</tr>
<tr>
<td>6</td>
<td>Access to the other side of the river again, a beautiful place for gardens.</td>
</tr>
<tr>
<td>7</td>
<td>Forming partnerships with other organizations, and leadership.</td>
</tr>
<tr>
<td>8</td>
<td>Listening to the youth, learning from their perspective and changing our own perspectives to consider new ones.</td>
</tr>
<tr>
<td>9</td>
<td>Being able to relate and communicate freely with others (Ex. Between co-workers, community members, family, friends, etc.).</td>
</tr>
<tr>
<td>10</td>
<td>Talking to and treating the youth as young adults (Ex. explaining to them what they did wrong, so they understand why they should not do it again).</td>
</tr>
<tr>
<td>11</td>
<td>Gathering the community together using food.</td>
</tr>
<tr>
<td>12</td>
<td>Community members working together.</td>
</tr>
<tr>
<td>13</td>
<td>Visiting each other’s homes and taking the time to talk with each other.</td>
</tr>
<tr>
<td>14</td>
<td>Planning something to try to stop all the drug use, drinking and driving from continuing.</td>
</tr>
<tr>
<td>15</td>
<td>Avoiding the pressures of consuming drugs and alcohol.</td>
</tr>
<tr>
<td>16</td>
<td>Resiliency in people who are getting an education and becoming leaders.</td>
</tr>
<tr>
<td>17</td>
<td>Children learning how to use technology at school.</td>
</tr>
<tr>
<td>18</td>
<td>Teachers providing a positive educational experience to students in the community from daycare to grade 10.</td>
</tr>
<tr>
<td>19</td>
<td>The youth wanting to continue their education (Ex. University, college, high school, trade, apprenticeship, etc.).</td>
</tr>
<tr>
<td>20</td>
<td>Securing money to create jobs for people in the community.</td>
</tr>
<tr>
<td>21</td>
<td>Access to affordable, good quality land and soil for gardening.</td>
</tr>
<tr>
<td>22</td>
<td>Fixing the land and keeping the river water clean.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>23</td>
<td>Fruit trees around the community.</td>
</tr>
<tr>
<td>24</td>
<td>Eating healthy balanced meals.</td>
</tr>
<tr>
<td>25</td>
<td>Affordable food prices.</td>
</tr>
<tr>
<td>26</td>
<td>Food security everywhere.</td>
</tr>
<tr>
<td>27</td>
<td>A beautiful, growing garden for all community members and multiple personal vegetable gardens at people's homes.</td>
</tr>
<tr>
<td>28</td>
<td>Having a well-educated, committed, and qualified leader in power.</td>
</tr>
<tr>
<td>29</td>
<td>Taking care of myself, and others in the best way I can. (Ex. Managing household tasks, fending for the needs of your kids, caring for pets, etc.).</td>
</tr>
<tr>
<td>30</td>
<td>Having access to the proper facilities in the community (Ex. Library, gym, computer room, arena, etc.).</td>
</tr>
<tr>
<td>31</td>
<td>Updating and upgrading our buildings.</td>
</tr>
<tr>
<td>32</td>
<td>Having a radio station.</td>
</tr>
<tr>
<td>33</td>
<td>Clean systems for waste removal and recycling.</td>
</tr>
<tr>
<td>34</td>
<td>Family-oriented programming.</td>
</tr>
<tr>
<td>35</td>
<td>Involving the younger kids in sports with older kids to bring more people together.</td>
</tr>
<tr>
<td>36</td>
<td>Elder's working in the Ojibway class.</td>
</tr>
<tr>
<td>37</td>
<td>Involvement from the whole community in events (Ex. Preparing and seeding the garden).</td>
</tr>
<tr>
<td>38</td>
<td>Continued involvement from community members, even after initial interest.</td>
</tr>
<tr>
<td>39</td>
<td>Making sure we all do our part to learn, listen and participate.</td>
</tr>
<tr>
<td>40</td>
<td>Young adults volunteering to help out in the community.</td>
</tr>
<tr>
<td>41</td>
<td>Family Fun! Doing things that your children like to do (Ex. Playing with them).</td>
</tr>
<tr>
<td>42</td>
<td>Keeping fit and active because of your children.</td>
</tr>
<tr>
<td>43</td>
<td>Not having kids being apprehended.</td>
</tr>
<tr>
<td>44</td>
<td>Being nice to people even if they aren't nice to you by ignoring the negativity and focusing on yourself.</td>
</tr>
<tr>
<td>45</td>
<td>Adapting to the change, realizing that it will take work and time, but being willing to just start somewhere.</td>
</tr>
<tr>
<td>46</td>
<td>Things being brighter and more meaningful.</td>
</tr>
<tr>
<td>47</td>
<td>Taking care of and valuing what we have.</td>
</tr>
<tr>
<td>48</td>
<td>Just being yourself and not worrying about what everybody else thinks.</td>
</tr>
<tr>
<td>49</td>
<td>Smiling, laughing, and sharing positive energy.</td>
</tr>
<tr>
<td>50</td>
<td>Slowing down.</td>
</tr>
<tr>
<td>51</td>
<td>Having lots of different programming available for people to look forward to (Ex. Breakfast programs, recreation programs, after-school programs, J.P. program, organized sports, arts/crafts, sewing, youth dances, outdoor activities, etc.).</td>
</tr>
<tr>
<td>52</td>
<td>Sitting with your family and talking to them without being busy on our phones, or laptops.</td>
</tr>
<tr>
<td>53</td>
<td>Reduced bullying at school.</td>
</tr>
<tr>
<td>54</td>
<td>Healthy relationships (Ex. With your families, with your children, with coworkers, with team members, etc.).</td>
</tr>
<tr>
<td>55</td>
<td>Starting from the bottom and working your way up and coming back to the community to build your people up too.</td>
</tr>
<tr>
<td>56</td>
<td>Our teachers smoking at the back of the school, out of sight.</td>
</tr>
<tr>
<td>57</td>
<td>Leading by example for your children, so they can live a healthier life.</td>
</tr>
<tr>
<td>58</td>
<td>Having positive, healthy role models in the community - especially in higher positions (Ex. Chief and Council).</td>
</tr>
<tr>
<td>59</td>
<td>Role modelling and teaching about good parenting to others in the community.</td>
</tr>
<tr>
<td>60</td>
<td>Hunting and fishing in a safe way.</td>
</tr>
<tr>
<td>61</td>
<td>Having stores that are Anishinaabe owned.</td>
</tr>
<tr>
<td>62</td>
<td>Sharing our knowledge and experiences with the younger generations so they can teach their children and grandchildren.</td>
</tr>
<tr>
<td>63</td>
<td>Sharing the things we have and teaching our kids to share too.</td>
</tr>
<tr>
<td>64</td>
<td>Limiting electronic use at home.</td>
</tr>
<tr>
<td>65</td>
<td>Hunting, preparing and storing your own wild meat.</td>
</tr>
<tr>
<td>66</td>
<td>Using Indian medicine to fix sicknesses to make us well.</td>
</tr>
<tr>
<td>67</td>
<td>Youth using Ojibway when talking to Elders and at daycare.</td>
</tr>
<tr>
<td>68</td>
<td>Celebrating culture at school.</td>
</tr>
<tr>
<td>69</td>
<td>Busses running in the community.</td>
</tr>
<tr>
<td>70</td>
<td>Having balance and feeling well in all aspects of your health (physical, mental, emotional, spiritual).</td>
</tr>
<tr>
<td>71</td>
<td>Using active transportation as motivation to walk to school or work.</td>
</tr>
<tr>
<td>72</td>
<td>Doing something that makes you feel well inside (Ex. Youth dedicating themselves to extra curriculars because they enjoy them.).</td>
</tr>
<tr>
<td>73</td>
<td>Being able to manage your stress.</td>
</tr>
<tr>
<td>74</td>
<td>Participating in prevention to break the long history of sicknesses like Diabetes.</td>
</tr>
<tr>
<td>75</td>
<td>Coming to work with a positive attitude and having a positive, non-judgmental workplace.</td>
</tr>
</tbody>
</table>
Appendix H
Brokenhead Ojibway Nation Final Statement List

“Wellness can be demonstrated in our community by…”:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Having sobriety in our people, not letting addiction control us.</td>
</tr>
<tr>
<td>2</td>
<td>A decrease in addiction to and the abuse of drugs and alcohol.</td>
</tr>
<tr>
<td>3</td>
<td>A decrease in gaming addiction related to gambling.</td>
</tr>
<tr>
<td>4</td>
<td>The way you look and the way you walk.</td>
</tr>
<tr>
<td>5</td>
<td>Having communication amongst everyone, people opening up and talking about issues so they can be dealt with.</td>
</tr>
<tr>
<td>6</td>
<td>Confidentiality within our community.</td>
</tr>
<tr>
<td>7</td>
<td>Having more opportunities to sit together just to listen, share, and listen to information no matter how young the child or how old the person, we need to listen to each other and stop bickering about what is the right thing</td>
</tr>
<tr>
<td>8</td>
<td>The community coming together to work together as a team, instead of working against each other to make sure everyone's wellbeing is intact.</td>
</tr>
<tr>
<td>9</td>
<td>Moving from individualistic to collectivistic thinking remembering that we're all connected in everything that we do.</td>
</tr>
<tr>
<td>10</td>
<td>Removing the separation between programs because we are all connected. We're not a program, and one person isn't responsible for addictions, or public health, or education, we need to look at it from a wholistic standpoint.</td>
</tr>
<tr>
<td>11</td>
<td>The community coming together to be united, caring, and genuinely loving of each other despite our differences.</td>
</tr>
<tr>
<td>12</td>
<td>People coming back to the community (i.e. to heal, to share knowledge gained from education, etc.).</td>
</tr>
<tr>
<td>13</td>
<td>Sharing powerful teachings between communities and nations.</td>
</tr>
<tr>
<td>14</td>
<td>Visiting each other's homes</td>
</tr>
<tr>
<td>15</td>
<td>Pow wow dancing to bring joy to the self and others.</td>
</tr>
<tr>
<td>16</td>
<td>Understanding and sharing knowledge about the basic protocol in our life journey through knowing about the clan system and creation story to build the foundation of knowing who we are as Anishinaabe people to make our community healthy for the next generation.</td>
</tr>
<tr>
<td>17</td>
<td>The women helping to build up the men by providing opportunities to the men in the community as protectors of our fires.</td>
</tr>
<tr>
<td>18</td>
<td>Maintaining and carrying on with our ceremonies given to us (i.e. the sweat, pipe ceremony &amp; songs, euthanization ceremony).</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>19</td>
<td>Reclaiming the loss of our language by using the resources out there to learn to speak the Ojibway language and teach our children as our language is 100% more meaningful than English (Ex. Zaagi'idiwin, gi-zaagi'in, that's 101% meaning to tell your people that I love you).</td>
</tr>
<tr>
<td>20</td>
<td>Allowing our people to die at home, supporting families to care for that person and reclaiming our traditional practices and sharing our stories around the process of death and dying so people know what is going on when they are on that journey.</td>
</tr>
<tr>
<td>21</td>
<td>Everyone participating in ceremonies, fulfilling their role and responsibility as part of their clan to decrease the disconnect in our community and to keep healthy on a daily basis.</td>
</tr>
<tr>
<td>22</td>
<td>Abiding by the 7 Grandfather Teachings.</td>
</tr>
<tr>
<td>23</td>
<td>Going to school, finishing school, or going back to school so you can serve and help heal your people.</td>
</tr>
<tr>
<td>24</td>
<td>Focusing your energy towards your family.</td>
</tr>
<tr>
<td>25</td>
<td>Being self-determined.</td>
</tr>
<tr>
<td>26</td>
<td>Increased governance by the way of the clan system (i.e. Bears are responsible for policing, wolves are responsible for the outside to ensure safety, etc.) and increased guidance from Elders for decision making and appointing our leaders.</td>
</tr>
<tr>
<td>27</td>
<td>Taking proper vitamins and minerals to keep healthy and fit.</td>
</tr>
<tr>
<td>28</td>
<td>Kids taking part in keeping fit and eating healthy.</td>
</tr>
<tr>
<td>29</td>
<td>Being passionate about using exercise to manage type 2 Diabetes.</td>
</tr>
<tr>
<td>30</td>
<td>Having a healthy lifestyle including healthy eating and physical activity.</td>
</tr>
<tr>
<td>31</td>
<td>Keeping physically fit to manage your mental health.</td>
</tr>
<tr>
<td>32</td>
<td>Role modelling healthy behaviours and balance so others can see you and follow what you are doing.</td>
</tr>
<tr>
<td>33</td>
<td>Being able access traditional cultural spiritual resources to connect spiritually with your Anishinaabe roots, and traditional ceremonies and lodges no matter how you were brought up.</td>
</tr>
<tr>
<td>34</td>
<td>Having the option to choose what we want to follow, whether it be the traditional path, a faith-based, or nothing at all.</td>
</tr>
<tr>
<td>35</td>
<td>Having a strong sense of identity, knowing and growing your understanding of who you are, and who we are as a people.</td>
</tr>
<tr>
<td>36</td>
<td>Knowing where you actually come from and having a connection to your ancestors. That's the only way we are going to be able to bring life to some of the issues and press back because a lot of people still have that pain from the loss of not knowing their ancestors.</td>
</tr>
<tr>
<td>37</td>
<td>Understanding our history as Anishinaabe people and learning about the colonization of our people.</td>
</tr>
<tr>
<td>38</td>
<td>Taking care of myself, taking care of my children, my grandchildren and the children I work with.</td>
</tr>
<tr>
<td>39</td>
<td>Keeping true to yourself and who you are as an Indigenous person.</td>
</tr>
<tr>
<td>40</td>
<td>Keeping yourself busy.</td>
</tr>
<tr>
<td>41</td>
<td>Balancing your overall wholistic health (i.e. mind, body, spirit).</td>
</tr>
<tr>
<td>42</td>
<td>Seeing happiness and smiling faces.</td>
</tr>
<tr>
<td>43</td>
<td>Being able to self-regulate.</td>
</tr>
<tr>
<td>44</td>
<td>Feeling like you are right where you are supposed to be, like you are on the right path knowing how you can reach your goals.</td>
</tr>
<tr>
<td>45</td>
<td>People doing their own healing work, so it doesn't affect their families, and not expecting others to do that healing work for them.</td>
</tr>
<tr>
<td>46</td>
<td>Acknowledging that the pain may never go away, it just becomes a pain that is easier to deal with that no longer controls you and being able to recognize other's pain so you can help them.</td>
</tr>
<tr>
<td>47</td>
<td>Being open.</td>
</tr>
<tr>
<td>48</td>
<td>Living in harmony with everything around us.</td>
</tr>
<tr>
<td>49</td>
<td>Managing the effects of intergenerational trauma within the family unit.</td>
</tr>
<tr>
<td>50</td>
<td>Having assessments in place to make sure we are seeing progress and what kind of progress we are getting (i.e. statistics).</td>
</tr>
<tr>
<td>51</td>
<td>Tracking personal fitness assessments for the youth at school for their own progress.</td>
</tr>
<tr>
<td>52</td>
<td>Measuring wellness by going out and looking while you drive through the community to see what is there.</td>
</tr>
<tr>
<td>53</td>
<td>Getting the perspectives of different individuals, the young kids, youth, elders and in between because we all have perspectives, we were all raised differently, and we all have different teachings.</td>
</tr>
<tr>
<td>54</td>
<td>Having enough information about our population in the community (i.e. how quickly it is growing, ages, median income, preparation for aging population or baby boom).</td>
</tr>
<tr>
<td>55</td>
<td>Having a census created by First Nations for First Nations to help with community development, understanding our programs and how they need to change to adapt to our people.</td>
</tr>
<tr>
<td>56</td>
<td>A preference for eating healthy foods more than greasy foods and bad stuff.</td>
</tr>
<tr>
<td>57</td>
<td>Gardening in the summer.</td>
</tr>
<tr>
<td>58</td>
<td>Collecting berries out in the bush and storing them for the winter.</td>
</tr>
<tr>
<td>59</td>
<td>The presence of saskatoon berries and other foods natural to this area.</td>
</tr>
<tr>
<td>60</td>
<td>Dogs being taken care of.</td>
</tr>
<tr>
<td>61</td>
<td>Seeing people's yard in good shape.</td>
</tr>
<tr>
<td>62</td>
<td>Positivity and positive energy.</td>
</tr>
<tr>
<td>63</td>
<td>People coming to programming.</td>
</tr>
<tr>
<td>64</td>
<td>Our people beginning to understand what reconciliation is all about.</td>
</tr>
<tr>
<td>65</td>
<td>People asking for help (i.e. counselling, etc.) and allowing people to help even if there are personality clashes, or they don't always agree with them.</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>66</td>
<td>Maintaining the progress, you have made and being able to mobilize other people.</td>
</tr>
<tr>
<td>67</td>
<td>Laughing at work.</td>
</tr>
<tr>
<td>68</td>
<td>Families coming back together, spending time together and children growing up together.</td>
</tr>
<tr>
<td>69</td>
<td>Accessing the resources that are here and being productive with the resources (i.e. the organization in the community, child tax dollars to support families).</td>
</tr>
<tr>
<td>70</td>
<td>More houses to accommodate all the people coming home to the community.</td>
</tr>
<tr>
<td>71</td>
<td>Positively influencing the next generation of life (i.e. focusing on the children &amp; grandchildren).</td>
</tr>
<tr>
<td>72</td>
<td>Children laughing and playing.</td>
</tr>
<tr>
<td>73</td>
<td>The children being more connected to our culture and traditional ways, abiding by the 7 teaching and teaching them that they are universal values, introducing the children to the lodge, giving them spirit names, raising the children in the culture so they can continue through different times in their own journey.</td>
</tr>
<tr>
<td>74</td>
<td>Our children knowing who their leaders are.</td>
</tr>
<tr>
<td>75</td>
<td>Making sure that young parents are prepared and have an understanding of how to be a parent.</td>
</tr>
</tbody>
</table>
Appendix I

Online Sorting Activity Instructions Email

E-mail to participants:

Good morning,

I hope this e-mail finds you doing well!

Below, you will find a link to the online “CS Global Max” software, which helps you sort and rate the brainstormed ideas in response to, “What does wellness mean to you?” The research team has generated # of different responses to the question based on the talking circles, and now it is up to you to sort these statements into different thematic clusters and rate each statement on its importance and feasibility to measure in your community. If at any point you experience any difficulties using or accessing the software, please e-mail or give me a call at h.mcbeth@queensu.ca or 905-244-3585.

A few key considerations:

- The “sorting and rating” activity will take approximately one hour. When you click on the link for the first time, you will be given an anonymized username and password. Please write this down so that you can return to your session if you need to, or if you’d like to complete the activity over a few sessions.
- There are 3 tasks in this stage:
  1. **Sorting**: You will need to sort all of the statements into clusters of similarly grouped ideas. How you group them is up to you! Please remember to name your piles, as otherwise we may not understand the logic behind your grouping. As well, please do not create clusters such as “Miscellaneous” or “Unsorted” – if an idea doesn’t fit into a pile, then the statement can be its own pile, just name it accordingly. A sample screen shot of the sorting stage is attached.
  2. **Rating – Importance**: You will be asked to rate each brainstormed item on its importance (1 – not at all important; 5 – very important). When you are done with this section, please remember to also rate based on likelihood.
  3. **Rating – Likelihood**: You will be asked to rate each brainstormed item on its feasibility to be measured in your community (1 – not at all feasible; 5 – very feasible). When you are done with this section, you have completed the activity!
- You will receive $10 as a thank you for participating in this sorting exercise and $10 for the follow-up mapping exercise. You will receive your $20 at the follow-up mapping session.

The link to the Sorting and Rating activity is here (). Sorting and rating will remain open until [Date].

If at any point you have any questions or experience any difficulty with the CS Global Max software, please contact ….

Thank you for your participation to date. We are looking forward to further discussing the results!

Sincerely,
Brittany McBeath
Appendix J

Sorting and Rating Activity Instructions

SORTING INSTRUCTIONS:

In this activity, you will categorize the statements, according to your view of their meaning or theme. To do this, you will sort each statement into piles in a way that makes sense to you.

1. Read through the statements in the “Unsorted Statements” column to the left.

2. To begin sorting, click your first statement and bring the statements into the workspace (behind this pop-up) by dragging and dropping them. When you let go, you will be asked to name the pile that you created. You may choose to name your pile now or start sorting and name your piles later. Group the statements for how similar in meaning or theme they are to one another. Give each pile a name that describes its theme or contents.

3. After you've created your first pile, continue to drag and drop statements into new piles or existing piles.
   
   - **To create a new pile**, drag a statement into a blank area of the workspace. You will see a green checkmark and "New Pile" when you bring it over to the workspace.
   - **To add to a pile**, drag and drop the statement into the existing pile you wish to add to. When the destination pile turns green, drop your statement.
   - **Please note** you can move statements back into "Unsorted statements," or move statements in between piles at any time if you change your mind.

4. When there are no unsorted statements remaining on the left, and all of your piles have names, you have completed this part of the activity. Please click on "save and finish," which will pop up once there are no “unsorted statements” remaining.

A few tips:

Please remember to name your piles. To name your piles, or change the name of any of your piles, click on "Edit pile name" at the top of the screen, and select the pile's name that you wish to change. Do not leave any piles as "Unnamed Pile #".

**Do NOT** create piles according to priority, or value, such as 'Important', or 'Hard to Do.'

**Do NOT** create piles such as 'Miscellaneous' or 'Other' that group together dissimilar statements. Put a statement alone in its own pile if it is unrelated to all the other statements. Make sure every statement is put somewhere. Do not leave any statements in the Unsorted Statements column.

People vary in how many piles they create. Usually 5 to 20 piles work well to organize this number of statements.

To minimize this window, please click the triangle in the top right corner. To exit, please press the X. To reopen the instructions, please click on the red question mark, labelled "Instructions."
RATING INSTRUCTIONS:

Please rate the following statements, in the range indicated below.

Rating Question 1: Should this be prioritized in our community?

Please use the following scale of 1 to 4 to choose your rating for each statement:

1 = not a priority
2 = somewhat a priority
3 = a priority
4 = a top priority.

Rating Question 2: Is this possible for our community?

Please use the following scale of 1 to 4 to choose your rating for each statement:

1 = not possible
2 = somewhat possible
3 = possible
4 = very possible, or already happening.
Appendix K
Interpretation Session Protocol

Concept Mapping: Interpretation Session Protocol

The objectives for Phase III:
- Present the initial final cluster solution to the community
- Identify cluster outliers in order to redraw cluster boundaries
- Name cluster categories in a meaningful way
- Discuss findings and their implications for the evaluation

The agenda below provides a schedule in order to achieve these objectives. It is likely that presenting, refining, and naming the maps will overlap. Sixty to Seventy minutes total to finalize clusters and cluster names will provide plenty of time to discuss the results.

Draft Agenda

<table>
<thead>
<tr>
<th>ITEM</th>
<th>ACTIVITY</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Consent Process: Consent forms, honoraria, participant information forms</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Opening Words from Knowledge Keeper</td>
<td>5 minutes</td>
</tr>
<tr>
<td>2</td>
<td>Concept Mapping: Presenting the Map</td>
<td>15 minutes</td>
</tr>
<tr>
<td>3</td>
<td>Concept Mapping: Refining and Naming</td>
<td>30 minutes</td>
</tr>
<tr>
<td>4</td>
<td>Implications for the Evaluation</td>
<td>25 minutes</td>
</tr>
</tbody>
</table>
  - Go Zone

Closing Words from Knowledge Keeper & Any questions? Next steps...

Consent Process
Written consent has been or will be obtained from all participants. Participants initially consented to participate in the concept mapping process at our initial brainstorming meeting, and the research team are aware of those who have consented. Consent will be obtained from any new participants, by signing the original consent form and filling out the participant information form. All participants will receive honoraria ($10 cash) and will sign the Honoraria Acknowledgement form.
1. Opening Words from Knowledge Keeper
   - Start the meeting off with local protocol.

2. Concept Mapping: Presenting the Map
   There are four main maps we will be showing to the group: the point map, point-cluster map, the 
   cluster solution map, and pattern matching graphs. We’ll show the Go Zone when we get to 
   Implications for the Evaluation.
   - Looking at the point map, there are a few things to pay attention to:
     - There’s no X or Y axis on this map - you can look at it in any which way you like. 
       Each statement has a point on the map. The location of the point is determined by 
       that point’s sorting relationship with other points.
     - Points that are close together on the outside of the map, indicate that there was 
       strong consensus from most sorters that these points were related.
     - Points towards the centre of the map are points that had less agreement from the 
       group, or points that could belong in more than one category.
     - Points that are far apart, for example, those on the complete opposite side of the 
       map, are points that participants thought were unrelated.
   - Looking at the point-cluster map, there are a few things to pay attention to:
     - The points are now grouped together in a cluster. The clusters are determined by 
       how often points were sorted together.
     - However, it is important to keep in mind that statements in the middle (where 
       there may have been less agreement about where that point belongs) still have to 
       go into one of the categories, which may not actually be the point’s best fit. We 
       will go through what is in each cluster soon.
   - Looking at pattern matching graphs, there is one thing to note:
     - Some of the clusters are rated higher than others. We will discuss your thoughts 
       about these differences.

3. Concept Mapping: Refining and Naming
   - Have the group read through the list of statements in each cluster. It will likely take 
     participants at least one read-through to familiarize themselves with the brainstormed 
     statements. Since all participants may not have completed sorting and rating and/or been 
     present at the brainstorming session, this is particularly important.
   - Once participants have a feel for each cluster (after one round of reviewing), have the 
     group identify any outliers in that cluster. We could go through the clusters one by one, 
     starting with clusters where it appears there is more consensus. We can determine if the 
     statement is better placed elsewhere in an iterative way, and can redraw cluster 
     boundaries accordingly.
• **Probing questions – Evaluation:**
  → Talk about the broader evaluation’s next steps
  → Ex. Engaging youth in the evaluation is something that you rated as important and likely. What are some of the ways in which we could do this?
  → Thinking about methods you’re interested in using or have used, what are some of the methods that could help us evaluate these wellness indicators to capture the impacts of the CMT? What would these methods look like in your community’s context?
  → Ex. The clusters on the map suggest that partnerships are rated as very important and very likely. How can we measure partnerships in your community’s context?

**Conclusion**
- Closing words from knowledge keeper
- Questions?
- Reiterate next steps

**To Print:**
- Additional consent forms (15)
- Additional participant information forms (15)
- Cluster statement list for all participants (25)
- Map print outs for all participants (5 maps for 25 copies)
- Top 2-3 cluster names for each category, as determined by the software

**To Bring:**
- Printed materials
- Post-it notes and pens
- Recorder
- Cash
- Any slides: to project the maps and go zone diagrams

**Facilitation Challenges and Tips:**
*If silence...*
- Switch gears: have group do work individually or in pairs
- Keep it moving – move along to an easier cluster, ask probing questions

*If no cluster name or unhappy with cluster name...*
- Make it individual: have everyone write a suggested name on a post-it note
- Ask the group to circle key words in that cluster
- Encourage descriptive adjectives
- Encourage ownership over the map – we want names where we can look at the map and are able to confidently say, “Yes! That’s [this community]!”
Appendix L
Tyendinaga Bivariate Value Plot Figures

Figure 15. 7th Generation Thinking Bivariate Value Plot
Figure 16. Nutrition & Food Security Bivariate Value Plot
Figure 17. Community Environment Bivariate Value Plot
4. Keeping a balance in all aspects of individual health (mental, physical, emotional, spiritual) and also all aspects of our life (home, job, family) and within the community.
15. Loving and respecting each other, being happy together.
42. Loving and valuing your family (large or small), and friends.
61. Being true to yourself, loving who you are, and being yourself no matter who you are with.
29. Honesty, openness, and no more misleading, misrepresenting of both good or bad news.
38. Wellness within not only yourself, but also the environment, and thus your lifestyle.
47. Healing the hurt in the community (i.e. From colonization, oppression, lateral violence, broken hearts, etc.).
64. More positivity and happiness within the community to balance out the negativity.
82. Wholistic health in all aspects of the self (mentally, physically, spiritually, emotionally), the family unit, the home, the workplace, and in the community.

6. A group of like-minded people coming together to work toward wellness.
18. Being responsible and accountable to supporting others, especially those that need it.
66. Self-confidence and pride.
75. Role modelling healthy behaviours and getting excited about them.
10. Avoiding the build up of emotion within the self, to make sure that we help each other instead of lashing out at each other.
25. Sharing.
28. Role modelling from community members as part of living their every day life.
50. Many different things, the meaning is different for everyone but it has do something that makes us personally feel good and healthy, not a perfect textbook number.
63. Having control.

Figure 18. Personal Wellness & Balance Bivariate Value Plot
Figure 19. Community Connection Bivariate Value Plot
Figure 20. Interconnectedness Bivariate Value Plot

20. Accepting, and understanding each other. Acknowledging that despite our differences we all come together to make one community.
51. Having a place to call home.
57. Seeing the community outside more.
60. Having this group of like-minded individuals keep coming together to build towards our goals.

35. Tewataté:ken, we are all related or we are all connected together. There is not a difference between community wellness or individual wellness, it all affects each other.
65. More trust.

12. Being more connected.
68. Determination in whatever we work towards.
19. Everyone being on the same level, no one being better than others.
24. No more gossip.
Figure 21. Leadership & Infrastructure Bivariate Value Plot

17. Fairness, equality, everyone having fair access to services and care.
39. Clean water access for all of the community.
52. Having the infrastructure to meet the needs of the community. (i.e. treatment centre, long-term care home).
54. Leadership prioritizing wellness, and encouraging the community.
55. Leadership putting steps in place to create a healthy community.

36. Having enough employment opportunities.
46. Sufficient funding and resources, but not being reliant upon it to get things done.

13. Being able to see proposed changes or improvements actually happening in the community (ex. Roads being serviced, water treatment).
49. Learning from the successes of other communities.
79. More options to improve transportation (i.e. ride share program).
81. Volunteers that are reliable, committed and show up for the youth consistently.

26. Being able to get things done without direction, or without leadership.
37. Lower turnover rates in jobs, more consistency.
Appendix M

Black River First Nation Bivariate Value Plot Figures

Figure 22. Family Connections - Shawéjigewiin Bivariate Value Plot

1. Doing something for our kids, our grandchildren, and great grandchildren to be considerate of the wellness of the next generation.
35. Involving the younger kids in sports with older kids to bring more people together.

8. Listening to the youth, learning from their perspective and changing our own perspectives to consider new ones.
10. Talking to, and treating the youth as young adults (Ex. explaining to them what they did wrong, so they understand why they should not do it again).
41. Family Fun! Doing things that your children like to do (Ex. Playing with them).

57. Leading by example for your children, so they can live a healthier life.
62. Sharing our knowledge and experiences with the younger generations so they can teach their childre and grandchildren.
63. Sharing the things we have and teaching our kids to share too.
74. Participating in prevention to break the long history of sicknesses like Diabetes.

15. Avoiding the pressures of consuming drugs and alcohol.
40. Young adults volunteering to help out in the community.
Figure 23. Education Systems Promoting Black River’s Way of Life Bivariate Value Plot
Figure 24. Resource Collaboration, Development & Ownership Bivariate Value Plot
Figure 25. Miino Pimatisiwiin (Good Life) Bivariate Value Plot

- 38. Continued involvement from community members, even after initial interest.
- 58. Having positive, healthy role models in the community - especially in higher positions (Ex. Chief and Council).
- 66. Using Indian medicine to fix sicknesses to make us well.
- 13. Visiting each other’s homes, and taking the time to talk with each other.
- 37. Involvement from the whole community in events (Ex. Preparing and seeding the garden).
- 46. Things being brighter and more meaningful.
- 26. Food security everywhere.
Figure 26. Food Security Bivariate Value Plot
Figure 27. Healthy, Wholistic Self-Care Choices Bivariate Value Plot

29. Taking care of myself, and others in the best way I can. (Ex. Managing household tasks, tending for the needs of your kids, caring for pets, etc.).
40. Healthy relationships (Ex. With your families, with your children, with coworkers, with team members, etc.).
59. Role modelling and teaching good parenting to others in the community.
64. Limiting electronic use at home.
70. Having balance, and feeling well in all aspects of your health (physical, mental, emotional, spiritual).

2. Looking ahead to the future, not dwelling on the past.
42. Keeping fit and active because of your children.
43. Not having kids being apprehended.
52. Sitting with your family, and talking to them without being busy on our phones, or laptops.
44. Being nice to people even if they aren’t nice to you by ignoring the negativity and focusing on yourself.
48. Just being yourself and not worrying about what everybody else thinks.
73. Being able to manage your stress.

4. Taking advice from others and making your own choice about what you want to work on for yourself.
50. Slowing down.
72. Doing something that makes you feel well inside (Ex. Youth dedicating themselves to extra curriculars because they enjoy them.).
Appendix N
Brokenhead Ojibway Nation Bivariate Value Plot Figures

Figure 28. Family Wholistic Healing Bivariate Value Plot
33. Being able to access traditional cultural spiritual resources to connect spiritually with your Anishnaabe roots, and traditional ceremonies and lodges no matter how you were brought up.
68. Families coming back together, spending time together and children growing up together.
71. Positively influencing the next generation of life (i.e. focusing on the children & grandchildren).
73. The children being more connected to our culture and traditional ways, abiding by the 7 teaching and teaching them that they are universal values, introducing the children to the lodge, giving them spirit names, raising the children in the culture so they can continue through different times in their own journey.
74. Our children knowing who their leaders are.

18. Maintaining and carrying on with our ceremonies given to us (i.e. the sweat, pipe ceremony & songs, euthanization ceremony).
19. Reclaiming the loss of our language by using the resources out there to learn to speak the Ojibway language and teach our children as our language is 100% more meaningful than English (Ex: Zaagi’idiwin, gi-Zaagi’in, that’s 101% meaning to tell your people that I love you).
20. Allowing our people to die at home, supporting families to care for that person and reclaiming our traditional practices and sharing our stories around the process of death and dying so people know what is going on when they are on that journey.
21. Everyone participating in ceremonies, fulfilling their role and responsibility as part of their clan to decrease the disconnect in our community and to keep healthy on a daily basis.
22. Abiding by the 7 Grandfather Teachings.
26. Increased governance by the way of the clan system (i.e. Bears are responsible for policing, wolves are responsible for the outside to ensure safety, etc.) and increased guidance from Elders for decision making and appointing our leaders.

Figure 29. Reclaiming and Repurposing our Self-Identity as Indigenous People Bivariate Value Plot
Figure 30. Life Skills & Education Bivariate Value Plot
Figure 31. Health, Healing & Knowing our Ancestral Ways Bivariate Value Plot
Figure 32. Providing & Sharing Information to Create Social Change Bivariate Value Plot
Figure 33. Creating a Safe, Addiction-Free Community Through Connection Bivariate Value Plot

2. A decrease in addiction to, and the abuse of drugs and alcohol.
7. Having more opportunities to sit together just to listen, share, and listen to information. No matter how young the child or how old the person, we need to listen to each other and stop bickering about what is the right thing.
8. The community coming together to work together as a team, instead of working against each other to make sure everyone's wellbeing is intact.

1. Having sobriety in our people, not letting addiction control us.
6. Confidentiality within our community.

3. A decrease in gaming addiction related to gambling.
52. Measuring wellness by going out and looking while you drive through the community to see what is there.

11. The community coming together to be united, caring, and genuinely loving of each other despite our differences.
14. Visiting each other's homes.
Figure 34. Balancing Wholistic Lifestyle Bivariate Value Plot
Appendix O
Turtle Shell Concept Maps by Shemia Nelson

Figure 35. Turtle shell concept map (Tyendinaga)
Figure 36. Turtle shell concept map (Black River First Nation)
Figure 37. Turtle shell concept map (Brokenhead Ojibway Nation)