

An Exploration of the Physical Activity Experiences of Northern Aboriginal Youth:
A Community-Based Participatory Research Project

By

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Abstract

The purpose of this community-based participatory research was to explore the physical activity experiences of Northern Aboriginal youth. Drawing upon interpretive phenomenological analysis (IPA; Smith, Flowers, & Larkin, 2009) as a method of inquiry, 14 Aboriginal youth between the ages of 13-19 years participated in interviews and photovoice to generate data. The integrated indigenous-ecological model (Lavallée & Lévesque, 2013) was used as a theoretical framework, whereby the model supported the development of the interview guide and the interpretation of research findings. All interviews were audio-recorded and transcribed verbatim, and data were analyzed using the steps for IPA as described by Smith and Osborn (2003). Five themes that represent the physical activity experiences of Northern Aboriginal youth were identified: (a) encompassing meanings, (b) “makes me feel awesome”, (c) connected to the land, (d) better with friends and family, and (e) needs spaces. Findings suggest that Northern Aboriginal youth have a broad and encompassing definition of physical activity, and that participation in physical activity can have various holistic benefits. As well, youth described through their voices and photographs how on the land programming can support youth in feeling connected to their culture and identities. The voices of Northern Aboriginal youth have generally been overlooked in the physical activity literature, and this research makes a significant contribution by sharing their unique physical activity experiences.

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Preface

This research is an original work by Beth Ellen Warner Hudson. The research project, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board, Project name “Evaluation of the Fort Providence Pilot Project”, Study ID: Pro00038683, August 28, 2013.

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Dedication

This thesis is dedicated to my mother, Kathy Mil Warner-Hudson, my god-mother, Judy Cathryn Shannon, and my birth-mother, Teri Willier. Without their love, sacrifices, and support I would not be who, or where, I am today.

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I would like to thank my supervisory committee, both Dr. John Spence and Dr. Lauren Sulz, for giving me the opportunity to defend and explain the reasoning behind why I believe this research is so important, and for giving me feedback that gave validation to my efforts.

Finally, I would like to acknowledge my father, Barry, and my friends, family, and colleagues, for their unwavering support and kindness during my time as a graduate student. It wasn't always easy, and I am incredibly grateful for your presence, wisdom, and encouragement.

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Introduction

Participation in physical activity has been an important part of my life for as long as I can remember. As a child I was constantly moving around, running, jumping, walking, falling, and rolling. I was always finding new activities to involve myself in and was always encouraged to learn, grow, and discover new things through movement. My parents focused on enrolling me in a variety of recreational camps, leagues, and lessons so that I had a chance to explore all of the options that were available to me. Looking back, I cannot think of a period of time that I was not involved in some sort of physical activity program. Eventually I started to focus primarily on sport and found myself training competitively for specific goals. As I learned how to achieve goals and overcome obstacles through sport and recreation, I discovered a passion for structured physical activity that led me to taking positions and roles as a sport facilitator and coach for various organizations and clubs. During my time as a physical education and recreation undergraduate at the University of Alberta I found myself transitioning back to focusing my leisure time on participating in, or facilitating, a broader spectrum of physical activities again. More recently, I have been a facilitator of play and focused on learning how to encourage youth to be active and creative through unstructured games and activities. This brief summary of my experiences is to demonstrate my knowledge and familiarity with an extensive list of activities that fit under the definition of “physical activity”.

My education so far includes a Bachelor of Science in Kinesiology and a Certificate in Aboriginal Sport and Recreation from the University of Alberta. I found that being able to explore my own First Nations¹ ancestry and the historical and contemporary experiences of

¹ The term First Nations, now commonly used as a replacement for the term ‘Indian’, refers to Canada’s Indigenous peoples, both status and non-status (Aboriginal Affairs and Northern Development Canada, 2013)

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Aboriginal² peoples in sport and recreation have driven my interests in further exploring this subject matter. I am interested in gaining a better understanding of the physical activity experiences of Aboriginal youth. I have found that my own background in physical activity, sport, and recreation has given me a unique perspective to use while examining the questions that I have about physical activity.

During my final year as an undergraduate and my first year as a Master's student, I was able to spend 5 weeks in the summer working in a small Aboriginal community in the Northwest Territories. I facilitated play programming for the youth and was able to integrate into the community in such a way that allowed for me to engage with the youth and build relationships that I am sure will last a lifetime. I was able to participate in the daily activities that these youth engage in across a variety of domains. I was welcomed by the school to sit in classrooms and go on outings with the youth, given access to the Friendship Centre and all other recreational facilities, and spent the afterschool hours and weekends finding ways to facilitate physical activity and play around the community. I noticed that during school hours youth would run around during recess, gym classes, and even had physical activity breaks integrated into certain classes throughout the day. Many outings and on the land lessons were focused on teaching youth about traditional ways of living that included hiking, walking, berry picking, swimming, boating, running, climbing, chopping wood, setting up camps, gathering supplies, and carrying equipment. Children in the community were provided with opportunities to spend a week during the Spring and Fall having classes and lessons at the traditional camp just outside of the community. The children would spend most of the day running around playing games with classmates while the teachers helped to cook and organize supplies for the day. During after

² Statistics Canada (2011) recognizes Aboriginal peoples as individuals who identify as First Nations, Métis, or Inuit.

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school hours youth seemed to spend their time walking around the community and playing basketball, baseball, or games at the playgrounds.

I am interested in better understanding the physical activity experiences of youth in a Northern Aboriginal community because my experiences in the community have opened my eyes to the gaps in the literature that exist surrounding the portrayal of Northern Aboriginal youth and their physical activity experiences. I currently hold the position of a physical literacy coordinator in the hamlet of Fort Providence, and having strong relationships with various members of the community presented me with the opportunity to engage in community-based participatory research (CBPR) with the youth. It is my hope that by supporting an opportunity for Northern youth to have their voices heard, future research can ensure that physical activity interventions and programming can be better suited to their needs and desires.

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Literature Review

Research aimed at examining and understanding the health and physical activity profiles of Aboriginal peoples has been a topic that has received much attention in recent years. The life expectancy among Aboriginal Canadians is much lower than the general population, which is indicative of the health disparities faced by Canada's Aboriginal peoples (Katzmarzyk, 2008). Chronic disease levels, such as type 2 diabetes mellitus, metabolic syndrome, and cardiovascular disease have risen drastically, and overweight/obesity levels have also dramatically risen in prevalence across Aboriginal populations in Canada (Young & Katzmarzyk, 2007). Many of these health concerns have been a result of the colonization process, which has resulted in the dissolution of traditional Aboriginal lifestyles by means of assimilative processes; Aboriginal peoples have suffered great changes in their socio-economic, cultural, and political ways of life, which have significantly increased the health burdens faced by this population (Reading & Wein, 2009). These changes have also influenced the ways in which Aboriginal peoples engage in physical activity throughout their lifetime. The transition from a traditionally nomadic and active lifestyle to a Westernized, sedentary lifestyle has resulted in low levels of physical activity among Aboriginal peoples (Foulds, Warburton, & Bredin, 2013).

Broadly speaking, the health benefits of physical activity participation are vast and not limited to a singular domain of health (Blom, Bronk, Coakley, Lauer, & Sawyer, 2013; Tremblay, Shephard & Brawley, 2007). Aboriginal peoples who engage in physical activity can experience further benefits that are potentially more relevant to their cultural backgrounds. Lavallée (2008) looked specifically at the physical activity benefits that Aboriginal people experienced through participation in a martial arts program. Participants spoke about how they felt disconnected from their cultural identities and that the physical activity program allowed

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them to reclaim their identities and find a place that provided them with a sense of belonging.

The ability to participate in culturally relevant physical activity programming provided the participants with a safe space and an opportunity to challenge the obstacles that they felt were the result of colonization (Lavallée, 2008). The benefits documented in this study were further broken down into physical, emotional, mental, and spiritual domains. Participants in a similar study reported significant physical improvements, including losing weight and feeling fit (Lavallée, 2007). Participation in physical activity also led to a reduction in stress and negative feelings, as well as the opportunity to feel like a part of a social group and experience spiritual growth (Lavallée, 2007). Physical activity research with Aboriginal peoples suggests that participating in physical activity can have a positive impact on the holistic health for Aboriginal peoples.

Research with Aboriginal youth also suggests that youth are aware of the potential health benefits that can result from a variety of physical activities (Critchley et al., 2006). Cargo, Peterson, Lévesque and Macaulay (2007) described how Aboriginal youth understand that the benefits of physical activity far exceed the physical domain and that physical activity is often perceived quite holistically. McHugh (2011) found that Aboriginal youth see physical activity as a way to improve their health in a variety of different ways, with youth indicating that physical activity has benefits that exist in all domains of health (i.e., physical, emotional, mental, spiritual). Physical activity was described as a way to become “better, faster, and stronger” and also an opportunity to build confidence and self esteem (McHugh, 2011). However, it was evident that the participants in McHugh’s study struggled with how to use words to describe their understandings of physical activity. Questions were raised as to what activities constitute

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physical activity, and if traditional and family activities, such as going to the park with family or bike riding with dad, would be considered physical activity (McHugh, 2011).

Given the potential benefits of physical activity, there is relatively strong support for physical activity promotion among Aboriginal peoples. However, within the vast physical activity and sport literature, relatively little has been done to identify and explore the experiences and relationships that Aboriginal youth have with physical activity (McHugh, 2011). Aboriginal peoples are, as has been explained in the literature, the experts of their own experiences and their voices should be heard (McHugh, 2011). Many recommendations in the literature express the need for more qualitative research to explore the physical activity and sport experiences of Aboriginal youth (Mason & Koehli, 2012; McHugh et al., 2013a). Research suggests that the implementation of physical activity programs, whether as a preventative measure for health outcomes or simply as a community initiative to provide more opportunities for youth, are more likely to be successful when activities are culturally relevant and built around the unique needs and resources of the community (McHugh, 2011; McHugh, Kingsley, & Coppola, 2013b; Pigford et al., 2013). There is no ‘blanket approach’ to physical activity programming Canada-wide, especially in First Nations and Aboriginal communities that have such unique and distinctive characteristics³.

To provide opportunities to increase the physical activity of Aboriginal youth, there is a need to gain a better understanding of the kinds of activities in which the youth would want to participate. There is also a need to clarify how Aboriginal youth define physical activity. There is a likelihood that the data that exists on the physical activity levels of Aboriginal youth fail to encompass all of the physical activity in which youth participate (Findlay & Kohen, 2007). There

³ Aboriginal Affairs and Northern Development Canada (2013) recognize a total of 617 First Nations groups in Canada.

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is little known about “physical activity for Aboriginal children in Canada who... may share with their community a different perspective on physical activity” (Findlay & Kohen, 2007, p. 186). It is important to find a way to better conceptualize what physical activity means to these youth so that programmers, decision-makers, and researchers can move forward in creating and implementing relevant and effective physical activity interventions and opportunities. Until Aboriginal youth and researchers are able to better communicate what physical activity means, physical activity literature may perpetuate an inaccurate portrayal of the physical activity of Aboriginal youth from different communities and regions in Canada.

Recent research suggests that Aboriginal youth view physical activity through a holistic lens and that physical activity shares a strong relationship with their cultural identities. For instance, findings by Tang and Jardine (2016), who worked closely with the Yellowknives Dene First Nation (YK Dene) in the Northwest Territories to better understand their conceptualization of physical activity, found that the YK Dene highly valued cultural physical activities as they were a “way of life” when on the land. Activities like chopping wood, building fires, using chainsaws, hauling water, scraping moosehide, and traditional games were examples of ways that Dene youth are active while on the land (Tang & Jardine, 2016). Participating in these cultural activities not only resulted in individuals being active, but the activities also fostered a sense of inclusion and connectivity and therefore supported a heightened sense of spiritual health (Tang & Jardine, 2016). Tang and Jardine (2016) explained that “the terminology of physical activity was fluid [for the YK Dene]. We came to use it synonymously with active living, traditional way of life, and healthy lifestyle. Culture and traditions grounded all findings” (p. 221). In addition to conceptualizing the cultural and traditional foundations of physical activity, Aboriginal youth have also described how participation in traditional physical activities

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can lead to a number of holistic outcomes (Kerpan & Humbert, 2015; Sasakamoose, Scerbe, Wenaus, & Scandrett, 2016). Kerpan and Humbert (2015) argued that, when compared to contemporary physical activity or sports, traditional physical activities can offer additional benefits. By participating in traditional activities Aboriginal youth are not only physically active, but they are “learning about their heritage, practicing creativity, confirming their identity, and experiencing spiritual growth” (p. 1411).

Aboriginal youth and adults have expressed the desire to have access to physical activities that include Aboriginal values and relevance to their culture (McHugh, Kingsley, & Coppola, 2013b). Specifically, McHugh et al. (2013b) described how the physical activity of Aboriginal youth needs the support of their Aboriginal communities. Research by Lavallée (2007) also linked physical activity that included Aboriginal values to a greater sense of personal growth and transferability of skills learned in these activities to other aspects of the participants’ lives. One participant in this study explained how the opportunity to engage in culturally relevant physical activity helped to “fill the void” that she felt existed in her life, and that the physical activity program acted as “spirit food” (p.144). While little research has been done in regards to the effectiveness of culturally relevant physical activity in the long-term, designing and implementing these programs is certainly a step forward. Culturally sensitive and inclusive programming may help to increase the participation levels and physical activity rates of Aboriginal youth (Mason & Koehli, 2012). By engaging in research with Northern Aboriginal youth it may be possible to gain a deeper understanding of the physical activity components that are necessary for enhanced participation.

In addition to culturally relevant or inclusive programming, empowerment has also emerged as a key component that may influence the physical activity of Aboriginal youth

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(Skinner, Hanning, & Tsuji, 2006). Skinner et al. (2006) suggest that empowerment is a crucial factor that should be included in future public health interventions aimed at improving the health profiles of Aboriginal youth across Canada. Skinner et al. (2006) described empowerment as “a suggestion which could enable the community to build their capacity for healthier living” (p. 154). They found that empowerment was associated with many themes and sub-themes, including trust, resources, and opportunities. Interviews with members of a First Nations community revealed that individuals felt disempowered when they had the absence of control over the choices that they could make in regards to their family’s health, and that empowerment was critical to their ability and perception of how to achieve a health lifestyle in the community (Skinner et al., 2006). It is important for First Nations communities to be able to increase the control that they have over their own health strategies, including physical activity opportunities, and for empowerment to be enhanced.

Despite the many potential benefits of physical activity, research that has focused on the physical activity of Aboriginal peoples has also suggested that there are likely various barriers that prevent Aboriginal youth from participating in physical activity. These barriers to physical activity can be structural, institutional, interpersonal, and/or cultural (Mason & Koehli, 2012). For instance, Aboriginal youth in a research study conducted by Mason and Koehli (2012) described how the racial discrimination they experienced in physical activity settings resulted in their exclusion from physical activity opportunities. A lack of culturally relevant opportunities, economic disparity, and a lack of gender specific options have also been identified by Aboriginal youth as barriers for physical activity (Kirby, Lévesque, & Wabano, 2007). Remote Aboriginal populations are likely to face unique challenges for physical activity engagement, as a lack of capacity at the community level and less opportunity for support will likely hinder general

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physical activity programs (Skinner et al., 2006). It is important that programmers and researchers are aware of the physical, emotional, social, political, and cultural barriers that exist in Aboriginal communities when planning and implementing physical activity programming for Aboriginal youth. Finding ways for Aboriginal youth, and Northern Aboriginal youth in particular, to engage in more physical activity requires an understanding about the significant barriers that these youth face so that ways of overcoming these barriers can be developed.

The physical activity literature makes many recommendations for future research, which have helped to identify where the gaps in Aboriginal youth physical activity research exist. Mason and Koehli (2012) suggest that more studies are needed that directly consult Aboriginal youth so that we can gain a better understanding of their barriers and challenges from the perspective of the youth, including research that focuses on broader Canadian contexts. In their research policy document, “Promotion of Physical Activity in Rural, Remote, and Northern and Natural Settings in Canada”, POWER UP! Coalition Linking Action and Science Prevention (2016) specifically identifies a call to action that emphasizes quality research and policy development for remote/Northern communities. Their recommendations include creating opportunities for collaboration among rural and remote/Northern researchers, community members, and practitioners within the area of physical activity policy development, implementation, and evaluation. As well, recommendations call for research, including qualitative research, that can effectively represent the unique context of rural and remote/Northern communities. These calls to action are based on the evidence synthesis that POWER UP! conducted, which included the current and existing literature focused on physical activity in rural, remote, and northern communities in Canada. In summary, POWER UP! asserts that “there is a need for significant additional primary research using scientifically robust

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methods to address current research gaps and limitations” (p. 5). This research, which is focused on the physical activity experiences of Northern Aboriginal youth, addresses some of the current limitations and gaps in the physical activity literature.

Researchers have outlined the importance of including Aboriginal youth throughout the research process and made recommendations for including Aboriginal youth in community-based participatory research in the future (McHugh, Holt, & Andersen, 2015b; Petrucka et al., 2016). Specifically, McHugh et al. (2015b) state that Aboriginal youth should be included as equal partners in research, as their unique experiences have generally been overlooked in the physical activity and sport research. They also assert that such collaborative or partnership approaches are necessary for engaging in relevant and respectful research with Aboriginal peoples. Petrucka et al. (2016) also argued that collaborative approaches are necessary when working with Aboriginal youth and they described how youth who were engaged in their collaborative research processes eventually took on leadership roles and gained a heightened sense of empowerment, increased confidence, and ownership through co-development and co-delivery of their results.

Various researchers have outlined the importance of engaging Aboriginal youth as research partners, and provide valuable insight on how inclusion and consultation can lead to findings that not only advance the physical activity literature but, more importantly, are meaningful to Aboriginal youth. The purpose of this community-based participatory research (CBPR) was to explore the physical activity experiences of Northern Aboriginal youth.

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Methods

This research was guided by a CBPR framework. Participatory or collaborative approaches have been used by various researchers who have engaged Aboriginal youth in physical activity or sport research (e.g., Blodgett, Schinke, Smith, Peltier, & Pheasant, 2011; McHugh et al., 2013b; Sasakamoose et al., 2016). One of the key strengths of this type of research is the mutually reinforcing partnership that forms through the integration of the researchers' academic and theoretical expertise with the participants' lived experiences and knowledge of the environment within which they live (Cargo & Mercer, 2008). As well, CBPR is an effective form of research when working with Aboriginal populations as the knowledge is generated through a process that is culturally relevant and directly linked to the lived experiences of the participants (Jacquez, Vaughn, & Wagner, 2013).

Community-based participatory research is an approach to research that is utilized so that members of the community can become involved as co-researchers and local research approaches can be employed (Blodgett et al., 2011). An important component of CBPR is that the community with which the researcher is working is included in as many stages of the research as possible to ensure that the community's input and consent is included throughout. Researchers who engage in CBPR also seek to equitably engage community members by drawing on their knowledge and experiences, and they seek to build community capacity (Minkler & Wallerstein, 2003). CBPR is an important approach to consider when working with Aboriginal populations because it "acknowledges the different ways of knowing, giving equal weight to scientific expressions of knowledge and traditional or cultural expressions of knowledge" (Fletcher, 2003, p. 30). This approach to research allows for the researcher and community to both contribute their expertise to a project, resulting in a relationship that supports

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trust, reciprocity, respect, and collaboration. Fletcher (2003) outlines nine basic principles for engaging in CBPR with Aboriginal Communities. Such principles include focusing on issues that are important to community members, engaging community members as partners throughout the research process, and adhering to ethical guidelines that respect the interests of Aboriginal peoples. As outlined in the following sections, this research was planned and developed around these core tenants.

Interpretive Phenomenological Analysis

This project drew upon interpretive phenomenological analysis (IPA) as a method of inquiry to explore the physical activity experiences of youth in a Northern Aboriginal community. IPA has been developed as a way to understand how individuals make sense of the world in which they live (Smith & Osborn, 2003). Bevan (2014) describes how phenomena are presented in different ways to individuals, known phenomenologically as modes of appearing. IPA is used as a method for understanding the lived experiences of individuals and exploring their relatedness or involvement with the particular phenomenon being looked at (Smith, Flowers & Larkin, 2009). Phenomenological approaches have been shown to be an effective way of understanding personal and subjective experiences of Aboriginal youth (Stewart, 2009). IPA best suited this CBPR project because it acknowledges that the research process is dynamic and fluid, and that gaining an understanding of the phenomena at hand requires adaptability and compromise on the side of the researcher so that the perspectives of the participants are best represented (Smith & Osborn, 2003). IPA is of great value when exploring complex and novel research questions because of its adaptability and acceptance of various methods of data generation (Smith & Osborn, 2003).

Ethical Considerations

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This research project maintained ethical rigor by respecting and following the guidelines put forward by the Tri-Council Policy Statement 2 (TCPS2; Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2010) when working with Aboriginal peoples. The TCPS2 describes how research conducted by non-indigenous researchers in Aboriginal communities in the past has invoked a sense of mistrust and apprehension within these communities due to the unethical practices that were often used (Canadian Institute of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2010). Although the TCPS2 outlines a number of guidelines, of particular relevance to this research is the call for community-based or participatory research approaches. Previously used approaches have failed to reflect Aboriginal world views and the result of this research has sometimes been problematic or been unsuccessful at positively impacting the communities where the research was conducted. As research practices have evolved methodologies that align with, or are based upon, Aboriginal beliefs and values have been designed and communities have become more involved in research practice (e.g., through CBPR). There are more and more Aboriginal scholars contributing to the research as academics and community researchers (Canadian Institute of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2010), which has helped to increase dialogue and knowledge translation between Aboriginal communities and academia.

Aboriginal peoples and children have both been identified as ‘at-risk’ or vulnerable populations and therefore special considerations were needed to ensure that these vulnerable populations were not harmed or disrespected in any way throughout the research process

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(Wotherspoon & Schissel, 2001). For example, in order to meet these needs, I made a significant effort to design a research proposal that is guided by a CBPR approach. I worked with a research partner from the Northern community where this project took place (i.e., Fort Providence) and, as noted below, she was involved throughout the planning stages to ensure that the methods align with the desires and expectations of the community. I continued to support and maintain this partnership for the duration of the project.

Research Partnership

This research took place in the hamlet of Fort Providence, which is a community located approximately 300 kilometers southwest of Yellowknife in the Northwest Territories. The community itself exists close to the mouth of the Mackenzie River just west of Great Slave Lake. The population of Fort Providence is approximately 800 people, although many live outside of the hamlet boundaries. The Aboriginal population within Fort Providence is primarily a combination of Dene, represented by the Deh Gah Gotie Dene Band, and Métis, represented by the Fort Providence Métis Nation, which are both considered to exist under the broader Dehcho First Nations⁴ that encapsulates many communities along and around the Mackenzie River (traditionally referred to as the Dehcho River).

This research project was developed and enhanced through discussions with a Fort Providence community member. Partnering with members of a community allows for community members and academics to contribute their own unique perspectives and strengths to develop and engage in a more holistic research practice, and will enhance the transformative possibilities and the understanding of the given phenomenon by giving the research project local context (Blodgett et al., 2011; Israel, Schulz, Parker & Becker, 1998; Wallerstein & Duran,

⁴ According to the Dehcho First Nations website (Dehcho First Nations, 2010)

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2006). The purpose of this research was to explore the physical activity experiences of youth in a Northern Aboriginal community, and partnering with an individual from Fort Providence supported the tenant of CBPR that highlights the importance of involving community members throughout the research process. It was important to me that the research partner be an active youth in the community who I had previously developed a relationship with, and who was extremely familiar with all of the physical activity initiatives and programs that exist in the community and the school.

My research partner, Christina, is now 19 years old and has lived in Fort Providence for her entire life. She is currently in her first year of study at the University of Alberta and was closely involved with the project during her grade 11 and grade 12 years at the Deh Gah School in Fort Providence. She is an avid participator in school athletics and has represented the Northwest Territories at the North American Indigenous Games, the Arctic Winter Games, and the Canada Winter Games. She is passionate about athletics, nutrition, and physical activity. Christina has provided insightful comments and feedback throughout the research design process and continued as a research partner for the duration of the project. Christina specifically recommended the data generation methods used in this project when various options were explored. She believes that providing youth with the opportunity to express themselves through photovoice was a novel and interesting way for them to share their perspectives and experiences with physical activity. By combining interviews (one-on-one and sharing circles) with photovoice, Christina described how youth were excited to share their experiences. Christina was instrumental in the verification process as she helped to confirm and identify themes and sub-themes. She was also able to assist in member checking and acted as the liaison between the community and myself when I was not able to be in the community.

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The Integrated Indigenous-Ecological Model

The integrated indigenous-ecological model, as described by Lavallée and Lévesque (2013) was used as a theoretical framework for this research. The integrated indigenous-ecological model closely resembles the social ecological model, but was developed specifically for sport, recreation, and physical activity promotion among Aboriginal peoples. The model outlines how sport and recreation opportunities and experiences can be influenced by the various ecological leverage points (i.e., intrapersonal, interpersonal, organizational, community, policy/systems/environments), and the centre of the model (i.e., the intrapersonal) is represented by the four realms (i.e., mental, spiritual, physical, emotional) that make up the whole person. Unique to this model is the integration of the medicine wheel (i.e., four quadrants [mental, physical, spiritual, emotional] make up an individual) and indigenous teachings, which acknowledge that the various ecological leverage points take place on Mother Earth. Lavallée and Lévesque (2013) described how each of the ecological leverage points, beginning with the individual and ending with the physical environment (or in teaching from the medicine wheel the acknowledgement of all of creation, known and unknown), are constantly interacting with each other. They described how the five ecological leverage points are interconnected and responsible for the overall health of an individual, which includes mental, physical, emotional, and spiritual domains of health.

For this research the integrated indigenous-ecological model was used to support the development of questions asked during the data generation period, and the model supported the interpretation of findings. Lavallée and Lévesque (2013) specifically recommend using the model when engaging in physical activity and sport promotion projects with Aboriginal communities. During the data generation of this research, one-on-one interviews and sharing

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circles were held and the interview guides were developed using the guidance of integrated indigenous-ecological model. Questions were formed by taking into account the various levels of influence that impact an individual, focusing primarily on how these levels may impact the physical activity experiences of Aboriginal youth. Lavallée and Lévesque (2013) explain that helping individuals to see how broader societal factors can influence their health behaviors can allow for a shifting of perspective from blaming oneself to recognizing the various levels of influence that contribute to ill health. In terms of physical activity promotion for Aboriginal youth, using this model may be one way of helping youth to explore different ways of enhancing their health profiles and shifting away from the detrimental effects of colonialism on their consciousness (Lavallée & Lévesque, 2013).

Data Generation

This CBPR project sought to better understand the physical activity experiences of Aboriginal youth in a Northern community. Aboriginal youth who live in Northern rural communities have not had their voices well represented in the physical activity literature (Giles, 2008). Data was generated through interviews, including one-on-one interviews and sharing circles, and photovoice. One-on-one interviews (e.g., Mason & Koehli, 2012), photovoice (e.g., McHugh et al., 2013a), and sharing circles (e.g., Lavallée, 2009) have all been identified in the literature as recommended methods to use when working with Aboriginal communities. These processes of data generation allowed for the youth to share their experiences with physical activity both verbally and visually instead of relying solely on verbal dialogue for data generation. The school, who granted permission for this project to take place within the building, acted as the primary location for data generation to take place because of its central location and the familiarity that the youth already have with the building. The interviews and photovoice

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discussion were held within the building after school hours. Many youth also chose to have their interviews take place at the local coffee shop, where they felt more comfortable having these discussions in an informal atmosphere.

Critical to this research project was obtaining free, informed, and ongoing consent from community members - a key principle recommended by the TCPS2 (Canadian Institute of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2010) when working with Aboriginal peoples. All youth who were interviewed provided informed consent. While informed consent was obtained, it was beneficial for this CBPR project to have relationships already built within the community. My experiences in the North, specifically in and around the community of Fort Providence, has resulted in many key relationships being built and such relationships supported the various processes of data generation. Additionally, my research partner, Christina, also had strong relationships with all of the youth who were interviewed, and was able to help identify youth who may be interested in and comfortable participating.

Participants. A total of 14 Aboriginal youth between the ages of 13-19 participated in this research. Participants were youth who self-identify as Aboriginal, a term that encompasses status/non-status First Nations, Métis, and Inuit populations (National Aboriginal Health Organization, 2014). Statistics Canada (2011) and previous research with Aboriginal youth (Belanger, Barron, McKay-Turnbull & Mills, 2003) have identified youth as being between 15 to 24 years of age, which guided the reasoning for this age bracket. The age bracket was slightly widened to include participants who were 13 years old following discussions with Christina and other youth from the community, who confirmed that there was a large pool of 13 year old students who may be interested in participating. Extracurricular high school and junior high

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sports have played a significant role in Christina's physical activity experiences in Fort Providence and she asserted that working with this age bracket would allow for more rich discussions.

Consistent with the phenomenological aspects of this study, it was important to ensure that participants had the necessary 'lived experiences' to be able to answer the questions being explored. For researchers to be able to articulate a description of the given phenomenon means that participants must have experience(s) with the phenomenon (Moustakas, 1994; Creswell, 2013). Participants were purposefully selected to help ensure that the research question was answered and in-depth and relevant information was acquired (Patton, 2002; Creswell, 2013). This homogenous sampling is integral for IPA to be an effective method of inquiry due to the smaller number of participants and the importance of each participant being able to share detailed stories, thoughts and feelings regarding the subject matter being researched (Smith et al., 2009). Christina, my research partner, has a strong knowledge about, and relationships built within, the community and she helped to identify and recruit youth who fit within the research parameters.

Interviews. There was a total of six one-on-one interviews completed and two sharing circles. The sharing circles were made up of four participants each, all of whom agreed that they felt more comfortable answering the questions together instead of being separated into one-on-one interviews. Pseudonyms that were chosen at random have been given to each participant to protect anonymity. It was through community and participant consultation that resulted in the choice to assign random pseudonyms, as none of the youth felt that they wanted to be responsible for picking their own. For the group interviews, participants were described as participating in "Group A" or "Group B", both of which were made up of junior high students.

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While interviewing is the most common form of data generation in IPA and community-based studies, and general guidelines can be found in the literature, there is little in terms of specific instruction outlining how interviews should be undertaken by the novice researcher (Bevan, 2014). Mason and Koehli (2012) propose that one-on-one interviews are a critical method to assess the diverse physical activity experiences of Aboriginal youth, which also suits the explicit needs for IPA (Smith et al., 2009). One-on-one interviews give participants the opportunity to speak freely and reflectively, and to express their experiences in great depth (Smith et al., 2009). Previous research by Mason and Koehli (2012) and McHugh (2011) have also used one-on-one interviews as a method for their physical activity research with Aboriginal youth and have demonstrated how interviews can allow for rich and in-depth data to be collected. One-on-one interviews also provide a safe space for youth to discuss content that they may feel uncomfortable sharing in front of their peers (Mason & Koehli, 2012), and because of the relationships that I had already built with many of the youth in the community, I believed that they felt comfortable and safe speaking to me about their experiences. Sharing circles, on the other hand, are similar to group interviews or focus groups in that participants share experiences in a group setting. However, Lavallée (2009) explained how sharing circles hold sacred meaning for many Aboriginal cultures. Sharing circles are often used to promote and support cultural protocols, and they are meant to be moderated by an individual who has a strong understanding of local cultural practices (Lavallée, 2008). Within this research, I co-facilitated the sharing circles with Christina.

One-on-one interviews and sharing circles followed an open-ended, semi-structured format where participants were encouraged to explore their own meanings of physical activity (Patton, 2002), which was a critical element for this study to successfully share the youth's

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personal experiences with the phenomenon that was being explored. Moustakas (1994) explains that an important goal of the qualitative interview method should be to provide participants with an interactive, informal interview process, which we strove to achieve at each step of the data collection timeline. Each interview was audio recorded and transcribed verbatim.

Interviews provided participants with the opportunity to share their perspectives in a meaningful and explicit manner that allowed for a greater understanding of their experiences (Patton, 2002). For this CBPR project, interviewing was an important part of engaging with the youth and was an opportunity for them to share their experiences with physical activity unabridged. The interview guide was designed using recommendations by Creswell (2013), McNamara (2009), Smith et al., (2009), and Turner (2010), the latter of whom has focused on interview guides for the novice researcher. When interviewing for a study that is phenomenological in nature it is important that a detailed description about the meaning of the phenomenon be achieved (Creswell, 2013). In order to do this, in-depth interviews are required that allow for the same general areas of information to be discussed and collected from each participant (McNamara, 2009). The importance of designing a general interview guide allowed for flexibility and a conversational flow to develop, and helped to keep the researcher from losing control or direction of the interview by providing prompts to keep the interview on track (Creswell, 2013; McNamara, 2009; Turner, 2010). Interview questions, which were informed by the integrated indigenous-ecological model, were designed to be open-ended so that the participants could choose to answer using their own terms. Follow-up questions were also included in case participants had a hard time interpreting or understanding a question or did not wish to answer; these follow-up questions were used to redirect or refocus the direction of the interview in the event that it went off-track (Creswell, 2013; Turner, 2010). Ten questions were

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used to guide each interview, and the interview guide can be found in Appendix A. It is important to note that the wording of the questions on the interview guide were slightly altered from the original plan based on the results of a pilot interview that took place before the data collection officially began (Turner, 2010).

Photovoice. Eight of the youth who participated either in the one-on-one interviews or sharing circles also participated in the photovoice aspect of this research. Photovoice has been recognized as a participatory research approach (Castleden, Garvin & Huu-ay-aht First Nation, 2008; McHugh et al., 2013a), and as an approach to research that encourages youth to express their perspectives and personal narratives in a creative and non-verbal format (Castleden et al., 2008; McHugh et al., 2013a). Photovoice has been identified as an approach that is useful when working with marginalized populations as a way to help encourage and empower participants, and has been used in many health-related research projects (Castleden et al., 2008). However, the uses of such visual research approaches, including photovoice, have not been well documented within the physical activity literature (McHugh et al., 2013a). The use of photovoice for this research project was meant to provide the youth with an alternative method for sharing their knowledge and expertise. Christina confirmed that photovoice would be a novel approach that would be of interest to the youth.

Consistent with the photovoice process outlined by McHugh et al. (2013a), participants were given a digital camera and asked to take photos of places and objects in their community that best represent their experiences with physical activity. I supplied the cameras and a printer for printing their pictures once they were finished. The photovoice project took place over two afternoons so that the participants had ample time to think about what and/or where would have meaning for them. Participants had a couple of hours each afternoon with the cameras and

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returned them after each session. Participants then identified one photo that best represented their experiences of physical activity. The photograph was then printed and, during a sharing circle, participants were provided with an opportunity to explain the meaning and experiences that their photograph represents.

Two sharing circles were hosted to provide participants the opportunity to describe their photographs. One of the sharing circles consisted of three high school students, and the other of five junior high school students. Participants were not forced or coerced into sharing and were simply encouraged to engage in discussion when they felt comfortable enough to do so. The sharing circle with the junior high group was challenging as they found it challenging to provide detailed explanations for their photographs, beyond simply explaining that the spaces they photographed held meaning for them. The high school group each shared a detailed story about their photos. Included in this research are those photographs that were accompanied by explanations as to the meaning of the photograph. Photographs that would have compromised the anonymity of participants were not included.

Data Analysis

Transcription of all interviews, including one-on-one interviews and sharing circles, took place immediately after they were completed. Listening and re-listening to the audio recordings enhanced the accuracy of transcription (Wagstaff & Williams, 2014). It is important to note that concurrent data generation and data analysis occurred at the beginning of the first interview. Mayan (2009) stresses the importance of concurrent generation and analysis so that important concepts, or “gems”, are not overlooked, and to help ensure that the research being done added as much relevance and novel concepts to the literature as possible.

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Data analysis followed the steps described for IPA by Smith and Osborn (2003). First, themes were developed from each individual transcript. Notes in the lefthand margin identified interesting and/or significant phrases that existed in each transcript (Smith & Osborn, 2003). Each transcript was read and reread in extreme detail so that I became as familiar as possible with each account. I was diligent in recognizing novel and unique ideas and thoughts within each individual transcript, and noted the similar themes that emerged from each interview (Smith & Osborn, 2003). Significant statements that were identified during this process were used to develop a list of non-repetitive and non-overlapping statements that represented the phenomenon from the perspective of the participants (Creswell, 2013; Moustakas, 1994). I then chose to comment on “similarities and differences, echoes, amplifications and contradictions in what a person is saying” (Smith & Osborn, 2003, p. 67).

Following the first step of analysis, I then began looking for connections between the themes. I examined each transcript for superordinate themes individually. Smith and Osborn (2003) recommend clustering the themes so that connections can be easier to identify. Each cluster, made up of similar themes found in the transcript, was then given a name and became a superordinate theme (Smith & Osborn, 2003). It is during this process where certain themes were dropped if they did not fit within the superordinate themes being produced, or if they were weak in evidence (Smith & Osborn, 2003). Once I had finished analyzing the first transcript, I then continued analyzing the rest of the transcripts from scratch, or used the initial transcript to help orient how the following transcripts were themed (Smith & Osborn, 2003). When the interpretive portion of analysis was over, I then began to construct a final table of superordinate themes (Smith & Osborn, 2003).

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Once I had a final list of themes, I then moved on to the last step of interpretive phenomenological data analysis: the write up. A narrative account was created from the themes found in each transcript and served as the “final statement outlining the meanings inherent in the participants’ experience” (Smith & Osborn, 2003, p. 76). It was important for me to distinguish verbatim examples from each participants’ transcripts and my own interpretation of the accounts (Smith & Osborn, 2003). In the Results section of this thesis I focus on the emergent thematic analysis, while the Discussion links the analysis to the current literature (Smith & Osborn, 2003).

Verification. Verification is an important stage in the qualitative research process as it is needed to maintain the rigor of a research study by ensuring that the research that has been completed is both reliable and valid (Morse, Barrett, Mayan, Olson, & Spiers, 2002). Mayan (2009) defines verification as “the process of checking, confirming, disconfirming, and accounting for variability, and being certain, even if your goal is to represent uncertainty” (p. 108). For this research it was important that the opinions and perspectives of the Aboriginal youth who participated were accurately represented, and the categories and themes garnered through the process of analysis had to be confirmed. Because qualitative research is verbose and often rich with detail (Morse et al., 2002), it was important for my research partner and I to “[move] back and forth between design and implementation to ensure congruence among question formulation, literature, recruitment, data collection strategies, and analysis” (p. 17). Using effective verification strategies are how rigor is affixed in a research study (Mayan, 2009).

In this research project I used 6 verification strategies in an attempt to ensure that rigor was met and that the findings of the study are worth paying attention to (Mayan, 2009). The verification strategies used were enacted throughout the stages of data generation and data analysis. The first strategy was to keep a *personal journal* throughout the data collection period

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as a way to “serve as a record of the researcher’s assumptions, perspectives on how the research in unfolding, frustrations, challenges, and highlights” (Mayan, 2009, p. 111). The results of the journal were not meant to be shared with the committee or team members, but helped to shed light on any data that may be altered due to abnormal occurrences that happened during the data collection stage (Mayan, 2009). The second strategy was ensuring that *concurrent collection and analysis of data* took place so that the researcher could identify unique characteristics of the phenomenon being studied (Mayan, 2009). The third verification strategy was ensuring that the *sampling* that took place included participants who have the appropriate lived experiences to be able to generate in-depth and rich descriptions of the phenomenon being studied (Mayan, 2009). The fourth strategy was *member checking*, which involved “taking data, analyses, interpretations, and conclusions back to the participants so that they can judge the accuracy and credibility of the account” (Creswell, 2013, p. 252). This provided the participants with the opportunity to confirm that their perspectives were being accurately represented and gave them the opportunity to make any changes that they felt were vital in the representation of the data. The fifth strategy was to *triangulate the data*, which meant that the categories and themes developed from this research were linked back to the literature as a way to corroborate what has been found (Creswell, 2013). The sixth verification strategy was to ensure that *methodological coherence* had been met throughout the duration of this research study so that congruence exists between the theoretical perspective and research question and rigor is not compromised (Mayan, 2009).

In an effort to remain methodologically coherent and ensure that this community-based participatory research project adhered to the highest qualitative research standards, Schinke, Smith and McGannon’s (2013) criteria for consideration was also applied during the verification stages. Schinke et al.’s (2013) traits for judging community research include: *localizing research*

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methods/practices so that local behaviours, emotions, and beliefs are favoured, *decentralizing university academics* by having the researcher step back and focus on facilitating and supporting community participation and knowledge sharing, *prolonged engagement and consultation* with community members through reciprocal relationship building, and *engaging in community driven research* by developing partnerships with members of the community and building the project around the interests and needs of the community. While this research project had been developed through community consultation and guided by CBPR literature, considering Schinke et al's (2013) guidelines also supports the rigor of this research.

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Results

The purpose of this research was to explore the physical activity experiences of Northern Aboriginal youth. The physical activity experiences of participants are represented by five themes: (a) encompassing meanings, (b) “makes me feel awesome”, (c) connected to the land, (d) better with friends and family, and (e) needs spaces. Direct quotes from participants are presented to support each theme. It is important to note that all themes are not mutually exclusive and share an interconnectedness that shapes the whole picture. Photos that the participants took are also included within the themes to give additional content that are representative of their physical activity experiences. Some photos are omitted to protect anonymity but, when possible, descriptions of such photos are included to provide insight into participants’ physical activity experiences.

Encompassing meanings

Most participants found it difficult to explain physical activity using a single definition, but had a lot of insight to share about what physical activity means to them. In articulating their understandings of what constitutes physical activity, some participants argued that physical exertion would need to be moderate to vigorous to be considered physical activity, while others argued that even the thumb and hand movement needed for video games would count as physical activity. The encompassing nature of physical activity can be seen by the variety of structured and unstructured activities in which the youth chose to participate (see Appendix B: Physical Activity list). Though the list is comprehensive, it’s important to note that different activities are likely to take place depending on the season. The majority of physical activities listed take place during the spring/summer/fall months or inside, but during the long winter months there are different physical activities that may take place. *Alia* pointed out that during the winter months

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“we go to [Horn River on snowmobiles] and we check the nets and we set rabbit snares and we build [snowmen] and we play hide and seek in the dark and we go snowshoeing” as examples of some of the differences between winter and summer physical activities. Girls from the Group A interview added that “building caves” and “skidooing” were some of the things that they liked to do with friends during the winter months. *Koda* shared that “in the winter time there’s lots of physical stuff that we gotta do like get wood, chop wood, make fire, learn how to build a shelter, try to set a net, [and go trapping]” as well as “skiing, snowshoeing, and skidooing”.

Not only did participants describe specific activities that are very encompassing, but they described the reasons for physical activity as very encompassing. For instance, *Raven* described how physical activity is important at a community level, saying that “physical activity is a big part [of life] for people here just cause there’s honestly nothing else to do here. It’s kind of like, school work, go home, and go to the gym. It’s something to do.” Additionally, the reasons for engaging in physical activity are not always “good” reasons. In one of the small group interviews a few of the stories that the youth shared had a deviant component. These stories included trespassing, climbing buildings, egging houses, and even running from the cops. They described how they “play cops and robbers... tag... hide and go seek...” Participants described these activities as “bad things... like you know behind the Aurora store, we go behind there and climb those trucks... we go swimming at the bank behind the hotel... we get chased by the cops too” (Group A). One of the youth added “I egged someone’s house on halloween” (Group A). Participants described how even those activities that are perceived as bad or deviant behaviours can be physical activity, and something that they enjoy doing.

Willow, one of the girls from the Group A interview, talked about deviant physical activity. She shared a photograph and summarized a physical activity experience she had that

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involved sneaking out and swimming in the Mackenzie River (Figure 1). In describing her photograph she said:

I stayed over at [a friend's] house, and then that's when we stayed out 'til 6 o'clock in the morning, like at 4 O'clock we were talkin' about sneaking out while her mom was sleeping. And then we snuck out to go swimming at 4 o'clock in the morning, so then we got our stuff ready and went down the bank, and then we just jumped in the water, it was cold. It wasn't cold for me, but it was cold for [my friend], and that's when she was getting scared because in case her mom might wake up. So then we went back, and then we went back up to her house, and that's when 1 hour later her mom woke up before she caught us, and then we put our clothes in the dryer.



Figure 1. The Mackenzie River during the winter months. Fort Providence, NT.

“Makes me feel awesome”

Regardless of the type of physical activity in which the youth described as physical activity, the various activities were typically described using relatively positive descriptors. For

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instance, *Mariah* described physical activity as “fun, because I push myself to get fit, and stuff”, *Artemis* said it “makes me feel awesome”, and *Alia* appreciates that physical activity “gets me places”. *Luna* shared that when she engages in physical activity like “running I’ll be like ‘oh my god it’s the worst thing ever’, but if we’re doing something I like in combinations of stuff I’m really happy, it gets me going and brings my energy up and I just feel good”.

Participants were most expressive in their belief that physical activity is strongly linked to health and healthy behaviors. *Mariah* stated “I want to be healthy” as a reason for participating in physical activity. Similarly, one of the girls from Group A explained that physical activity “keeps my heart going, keeps it healthy” and “keeps me strong, keeps me active”. The same participant expressed that physical activity makes her feel like she “can do lots... I’m invincible”. *Artemis* said that physical activity made them “feel 10x stronger... [and that they] can do 10x more stuff”. Also acknowledging the important role of physical activity in overall health, *Raven* stated “if I don’t exercise I just feel so terrible, tired and kind of not motivated to workout, and I just wanna take a nap or... just wanna do nothing.”

Some of the participants also articulated a clear link between physical activity with an increased awareness of their diet and the foods they chose to eat. *Artemis* said that being physically active made him “eat healthier” and that it led him to make more conscientious decisions when deciding what foods to consume. He explained how making healthy choices was important to him, and that being physically active and burning more calories allowed him to be less strict with his diet instead of limiting his food options. *Artemis* had lost a considerable amount of weight recently and credited most of his success to learning how to work out and exercising regularly; “I got a job at the fitness center. All I do is work out over there. So

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probably like at least once a day I work out, except on Sundays and Saturdays.” *Luna* also described food as fuel for physical activity:

Physical activity keeps me healthy like we gotta eat the right food. I like working out so you gotta eat the right food to work out to give you energy, you can’t just be eating chips all the time and expecting to have all this energy to work out.

The majority of the youth shared that they chose to participate in physical activity to keep healthy, feel better, lose weight, and meet fitness goals. Physical activity provides them with an opportunity to “feel [happy], awesome, cool, weird, [and] silly” (Group A). It is also a way for youth to have “fun, because I can push myself to get fit and stuff... I want to be healthy” (*Mariah*). Physical activity was also important for youth to feel comfortable in their bodies. One participant stated “physical activity makes me happy because it helps me to get to where I want to be with my body” (*Luna*) and that “physical activity makes me happy, like I could be in the shittiest mood... ever and then I would go and I’ll work out and I’ll feel great after that and I just love that feeling” (*Luna*).

Connected to The Land

Participants shared stories to suggest that they seek out physical activity opportunities that take place outside and provide opportunities to connect with the land. Some of the youth attribute this relationship with the land to their culture, and some contribute it to the location of their community in a Northern and rural environment. A few participants described the land as a resource for physical activity, specifically as an accessible setting for participating in physical activity. Some participants described how their identity, as well as their connection to ancestors and their culture, were stronger when they engaged in outdoor physical activity.

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Group A had quite a bit to share about physical activity on the land. One of the girls argued that physical activity “has to be outside” for it to even count. She explained that physical activity on the land is “fun because there’s bushes...I really love nature and I explore a lot”, and “[I] feel like a true... person”. She also stated that she enjoyed physical activity on the land because she “[likes] to learn [and likes] to climb”. Another one of the girls from Group A linked physical activity on the land with her Aboriginal identity by explaining that she “[felt] like an Indian” (Dene) while playing outdoors and that “I enjoy it cause for me it feels like I’m connecting with my ancestors”. She brought up how Dene laws influence her physical activity on the land. For instance, “play fair”, “have fun”, “participate”, “play safe”, and “teamwork” are all traditional teachings that she grew up learning about from her elders. Another one of the girls from Group A told us that “when I grow up I’m gonna be in the bushes”, referencing her desire to learn to live on the land like her ancestors and family did years ago. She shared that “when I am on the land I feel a little weak and a little strong sometimes... healthy, sneaky, [and] proud”. *Alia* agreed that being active on the land was important because “It makes me feel... I feel happy”.

Luna, Alia, and Raven shared similar thoughts about their relationship with the land and how this relationship to the land helped them to mitigate the impact of technology on their daily lives and health. *Luna* explained that “when I am on the land I am doing something different. It is away from social media and stuff and you just feel connected with the land.” *Alia* mentioned that she felt like being on the land helped her disconnect from social media and technology “cause there’s not internet or stuff like that”. *Raven* echoed that “you’re feeling more energized” when on the land “cause you’re away from all of the cell phones and stuff”. *Luna* further elaborated:

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When you're out on the land you've gotta do stuff a lot more, like it's going to be added to you. Like 'now I'm here,' now you've really gotta work like if you want to go get wood, you gotta go out and chop some wood and stuff like that. If you want food you gotta go and set snares [to catch your food]... it gets me going and brings my energy up and I just feel good.

Raven agreed that by being on the land "you know that you are getting stronger in some way, instead [of being at home eating], so it's just a good feeling".

It is important to note that not all youth felt that land-based physical activity had a connection to their cultural identities, and that "[people] try to make [cultural physical activity] sound like it's different [from regular physical activity] when it's not" (Group B). To some youth there is not a significant draw to "cultural physical activities", which for Dene people often take place out on the land in traditional locations, or outside at the arbour in town.

Better with friends and family

Overall, physical activity was described by participants as more enjoyable with friends and family. Some youth described how they would choose to not participate in physical activity if they did not have friends with whom to engage. Participants also spoke about how their family influences their physical activity. For some, family members facilitated family camping trips, which in their community are both a common leisure activity and a traditional way of life. While camping, or being out on the land, family members all work hard in camp and youth felt that they were encouraged to be more active on the land.

Mariah, who enjoys working out, explained that "I need company" and "I don't like working out alone", and agreed that her family members can greatly influence her physical activity levels. When her friends are active and working out with her, "it feels better". *Artemis*

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agreed and added “it’s awkward when it’s just you and your trainer”. He further elaborated that being physically active with his classmates was “better, totally better, cause like your peers help cheer you on”. *Luna* added that “my friends encourage me. Like if my friends are doing it then I’m going to want to do it too, even if I still do it alone I’ll encourage them to do it with me”.

When asked how her family influences the kinds of physical activities she participates in, *Alia* answered that “they tell me to go outside if I’m sitting inside or play outside or they’ll say go see your friends”. She mentioned that she “[feels] happy because it’s fun” to be able to participate in physical activity with her friends. *Luna* said that her parents play a big role in motivating and encouraging her to stay fit and active; “My mom always pushes me, she will always encourage me to go even if I do not want to. My dad too.” *Mariah* also shared that she “[plays] outside with [her] dog sometimes, and plays hide-and-go-seek outside”.

Raven shared that her parents and friends played a big role in motivating and supporting her active lifestyle. She explained that “my dad or my mom put me in hockey when I was young, [and] soccer” but expressed concern that there weren’t as many opportunities in the community as there used to be; “I know not a lot of parents do that anymore. ‘Cause there aren’t any programs for that. There’s no hockey teams like for minors. There’s no soccer teams, there’s no teams besides the badminton team. I think if we got more parents to put their kids in, kids would wanna be in it.” In regards to how her friends influence her physical activity, she explained how her friends always motivate her to work out; “Oh yeah, me and [my friend] we go like work out and with [my other friend] we always work out, and so if they go [work out] then it’s like I wanna go. It’s kind of a group thing and it’s way more fun. She said,

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You get to see your friends and hangout and get close with them and learn new things with them. Say you go to soccer, you go to soccer and you like get more interested and you like [playing because] you get to do that together.

Given that the participants live in a community that is rural and relatively far from other communities in the North, participants described how physical activity provides an opportunity for them to travel to other communities. The participants explained how they participate in certain physical activities so they have the chance to visit their friends or meet new people from other places. *Alia* spoke about how she “played soccer in Grande Prairie and other places for tournaments... [like] Fort Simpson, Hay River, and Yellowknife”. *Mariah* shared similar travel experiences. One of the girls from Group B went to “track and field in [Hay River]... Fort Resolution for Run in the Mud, but the mud dried because of the heat outside... Yellowknife for swimming, and Fort Resolution for broomball”. *Luna* also had extensive travelling experiences from participating in sport in the community. She has gone to the Arctic Winter Games representing the Northwest Territories twice: “I got to go to Arctic Winter Games because of... table tennis. I had to train with that and I got to go... I’m gonna try out and hopefully I’ll make it again and go to Greenland”. *Koda* noted that traveling allowed him to “[meet] new friends”. Similarly, *Mariah*, stated, “I like seeing my friends when I go to soccer tournaments out of town” and she indicated that she enjoyed participating in the physical activity because of the travel opportunities.

The youth voiced a need for persons and resources in the community to make physical activity opportunities accessible for them. Without individuals (e.g., family, friends, teachers, volunteers, recreation staff) and resources to make physical activity opportunities available, it is unlikely that these youth would participate in the activities with which they are currently

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involved. For example, trips outside of the community are a very common way to provide youth with additional physical activity opportunities, but can only be facilitated when there are staff and volunteers able to help out. *Alia* explained that without members of the community to help run events then she “wouldn’t be able to go on any trips... [because the coaches and volunteers] help with fundraising to get us places and they help book hotels and give us places to stay and they do everything”. *Mariah* said that “when someone steps up to coach or run practices, youth want to participate... I just wanna practice more, that’s it, and then I’ll probably get to do it”.

Needs spaces

The need for community spaces for physical activity was also a common theme discussed by participants. “Spaces”, in the words of the participants, are specific landmarks/resources within or around the community where physical activity can occur. These spaces may be staffed or run by volunteers, or exist outdoors as a product of the environment and community infrastructure. In a small community like Fort Providence, the resources and spaces for extensive physical activity programming are limited. Many of the physical activities mentioned by the youth were unstructured or took place outside of the gymnasium or recreation building. This theme outlines the spaces that the youth identified as important for their physical activity, and why they are needed to keep them active.

The gymnasium at the school was identified as the most common space for physical activity to take place. Many of the youth chose to take photos of this space in order to better portray and explain the meaning of this space to them. *Alia* said “I like to play ball, soccer, badminton, floor hockey, and volleyball [in the school gym]” to explain why she wanted to take a photo of the gym (see Figure 2). When asked about why she chose to take a photo of the

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school, one of the girls from Group A explained; “We do physical activity there, we learn, we do other stuff and we do activities and everything.”



Figure 2. The gymnasium in Deh Gah Elementary and Secondary School.

Mariah also took a photo of the school gym (see Figure 3) and said “I like playing basketball a lot... that’s the only place where you can play basketball”.



Figure 3. Playing basketball in the Deh Gah school gymnasium.

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Participants frequently referred to the importance of having access to fitness equipment and facilities for their physical activity needs. “This photo represents my physical activity because I work in a gym and I do fitness training there and that’s where I spend most of my time” explained *Luna* (see Figure 4). “I spend most of my time there, I work there, and that’s where I always work out too.” *Artemis* also took a photo inside the other fitness facility in the community, which is not included to protect anonymity. He shared,

My photo is about me and my current trainee at the fitness centre... That’s where I started. I started working out there a good 14-15 months ago. And I’m here now, like 65 pounds later and like lots of muscles later.

The fitness facilities have been important spaces for these youth who use fitness as a way to live healthier lives.



Figure 4. Cartwheels outside of the fitness room inside the gymnasium.

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The unique geography of the community also played an important role in the physical activity experiences of the youth. The river was often cited as a space where physical activity experiences took place, where youth often go for camps with the school or their families, or for day trips, games, and other events. *Artemis* mentioned that the Mackenzie river is “pretty unique to this community” and that he would “go fishing and everything, trapping on it, snaring on it... all the cultural things around that”. *Ashley* took a photo of the river (see Figure 5) and explained that “We go fishing, hunting, trapping [along the river]” and went on to tell an elaborate story about falling into the river and getting wet with her friends and having to run home in soaked clothes. The Mackenzie River was a space identified by many of the youth as a unique feature of their community and a frequently used space for physical activity. *Artemis* shared that “when I go canoeing, I love that... I feel good doing that”. When his brother visits from University “we [go] swimming a lot... down the river... [and] go tubing all the way off of Big Rivers” (the local gas station 5 kilometres down the highway). He referred to the Mackenzie River as “our lake, our river” which shows the sense of connectedness he felt to the space. It was also identified as a means to access other locations for physical activity, like their family camps and cabins.



Figure 5. The Mackenzie river in the winter months, facing east.

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In addition to the river, the youth also described how the playground at their school is an important space for being physically active. *Brittany* took a photo of the playground outside of the school (see Figure 6). She explained that “when we were younger we’d play there” and felt that taking a photo of the playground was an important space to share. *Mariah* mentioned that she goes “swimming, tubing, biking, walking, play in the park sometimes, [and] play soccer at the ball diamond”.



Figure 6. The playground outside of the school.

The youth were clear that having spaces for physical activity was an important factor in their physical activity experiences. Within their community, they specifically identified the school gymnasium, playground, fitness centre, and the river as their important spaces. Half of these spaces are supervised or run by the recreation staff and volunteers in the community. Without key adults available to open these spaces, then they are inaccessible for the youth to use and therefore these adults play a significant role in the physical activity experiences for these youth. The playground and river were identified as important spaces that were accessible for youth at all times and in every season.

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Discussion

This research makes a significant contribution to the physical activity literature by sharing the physical activity experiences of Northern Aboriginal youth. As discussed by McHugh (2011) and Young and Katzmarzyk (2007), there is a deficiency of information about the physical activity experiences of Aboriginal youth. Additionally, there have been specific calls to action to engage in quality physical activity research projects with remote/Northern communities to address the scarcity of research that has been focused on these populations (POWER UP!, 2016). Although physical activity is recommended and promoted as a means to combat the health challenges faced by this population, the scarcity of Aboriginal-specific physical activity research provides little foundation for moving forward with physical activity interventions. As suggested by Findlay and Kohen (2007), “Aboriginal children in Canada...may share with their community a different perspective on physical activity” (p.186). Instead of generalizing Aboriginal youth across Canada as one homogenous population, it is important to recognize the diversity of Aboriginal groups throughout Canada and to share the unique experiences of the various groups.

Giles (2007) emphasized the need for physical activity programming that is informed by locally defined needs, and the findings from this current research provide important considerations when working with Northern Aboriginal youth. Recognizing that youth are the experts of their own realities is a step forward in finding ways to identify meaningful and culturally appropriate methods to enhance their health and well-being through physical activity. The results from this current study address the recommendations by Mason and Koehli (2012), who argued that more research that consults Aboriginal youth is needed so that we can learn more about their unique perspectives. By sharing the stories and experiences of Northern

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Aboriginal youth, this research helps to enhance understandings of the unique physical activity experiences of Northern Aboriginal youth in Canada.

An important contribution of this research is that it highlights the manner in which on the land programming and activities can connect youth with their Aboriginal culture. Being on the land is an important facet of daily life for many Aboriginal people in Canada. For instance, in their research focused on the experiences of a Northern Canadian Indigenous population, Cunsolo Willox et al. (2013) discuss how the land is central to culture and community life, and the land serves as a source of wellness and health. More specifically, they argued that the land provides ancestral linkages, sustenance, and opportunities to express pride and happiness. While it has been well documented that culturally appropriate physical activity is an important factor for Aboriginal people (McHugh et al., 2013b; Tang & Jardine, 2016), this research supports a better understanding of a physical activity *context* (i.e., on the land) that may facilitate culturally relevant physical activity. Youth from this current study expressed that engaging in on the land activities (e.g., chopping wood, trapping, setting nets) resulted in them feeling more connected to their culture, specifically identifying with the core Dene laws that are unique to the Dene Zhatie. Participants explained how being on the land made them feel stronger, healthier, and more energized. These results support the findings by Lavallée (2008) who found that Aboriginal people who engaged in culturally relevant physical activity developed a sense of belonging and the opportunity to reclaim their cultural identities. Additionally, this research supports the assertion by McHugh et al. (2013b) that Aboriginal youth are interested in participating in culturally relevant physical activity, and that catering to the unique needs and resources of the community is one way to help encourage Aboriginal youth to be active. Supporting Aboriginal

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youth in building strong relationships with their cultural identities through on the land programming may be one way to positively impact the physical activity experiences of youth.

While cultural physical activities that take place on the land (e.g., the river) are important to consider, it is also important to note that a sole focus on *cultural* physical activities may not enhance the physical activity of all Aboriginal youth. Some youth in this study felt that cultural physical activity did not play a large role in their lives and that they didn't feel there was any difference between the cultural activities and contemporary activities in which they participate. This finding is unique in that it counters the notion that has been generated in the literature (e.g., Lavallée, 2008; McHugh et al., 2013b), which suggests that culturally based physical activity is important or necessary for Aboriginal youth. Cultural activities, like trapping, may be a critical piece for some Aboriginal youth, but should not be the sole method for enhancing and improving the physical activity of all Aboriginal youth. It is important that the voices of all Aboriginal youth are heard, and an inclusive and holistic approach is taken when attempting to engage these youth in physical activity that includes opportunities for youth to participate in a variety of sports, activities, and play.

Shifting the focus to the natural environment, and not necessarily to the specific activity, may be another way to enhance the physical activity experiences of youth in this community. As described by participants in this study, the river plays a crucial role in how youth in this community interact with, and experience, nature as part of their physical activity. Tang and Jardine (2016) found that land and traditional practices were important factors that played a role in the physical activity practices of the Yellowknives Dene, an Aboriginal group close in location to where this current research took place. Specifically, Tang and Jardine (2016) found that not only is the land, and on-the-land programming, is integral to people's cultural identity

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and spiritual health. Similarly, within this current study, youth described how their families take them out to camp, nets for fish are set up throughout the year, and various community events take place along the river banks. As noted by Cunsolo Willox et al. (2013), Aboriginal people can experience improved health and wellness through participation in traditional and on the land activities just from being away from the community. The river in Fort Providence has played a significant role in the traditional teachings and culture that the Dehcho First Nations have experienced for generations. Gaining a better understanding about the significance of the river and developing physical activity programming around this landmark may be one way to help improve the physical activity levels of the youth in this community.

Having spaces to engage in physical activity was a common theme shared by the youth in this research, and sheds light on an important component of their physical activity experiences. The youth identified a few key spaces, within and around their community, that play significant roles in their physical activity. The river, the school gym, the playground, and the fitness center were all identified as spaces where the youth felt comfortable and encouraged to participate in physical activity. Young participants in a study conducted by DyckFehderau, Holt, Ball and Willows (2013) in the rural Alexander First Nation in Alberta identified similar spaces in and around their community. In particular, participants in DyckFehderau et al.'s (2013) study identified spaces in the community, like the ice rink, community trails, and basketball court, that were places where they would meet up with others to be active. The participants described how enhancing and using these spaces could improve their healthy living. These findings, combined with those of the current study, suggest that Aboriginal youth are aware of the various spaces and place in their communities where they can be active. Understanding where youth feel safe and encouraged to be active is an important factor to consider in terms of

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enhancing their physical activity experiences. Yousefian, Ziller, Swartz and Hartley (2009) looked at the concerns that rural youth had regarding their physical activity behaviours, and found that youth often cited that they were afraid of certain areas due to crime, threatening behavior, and other safety concerns. In addition to having safe access to outdoor spaces (e.g., the river), having indoor spaces is a critical factor for engaging youth in physical activity in this Northern community, since extreme weather and environmental factors (e.g., heavy snowfall, freezing temperatures, bug swarms) may impact their experiences.

Participants in this study described how social support from their friends, families, and community members is necessary to support positive physical activity experiences. Whether it be for companionship, motivation, supervision, or fundraising, participants clearly voiced the need to have others' support to engage in physical activity. Participants explained that family and friends play a crucial role in their motivation and enjoyment of being physically active. As well, they described how community staff and volunteers are necessary for implementing and delivering physical activity programming. McHugh, Coppola, Holt and Andersen (2015a) highlighted the importance of social and community support for enhancing the physical activity experiences of Aboriginal youth. As well, Skinner et al. (2006) have previously found that remote Aboriginal populations face a set of unique challenges, and that a lack of support from local governments and a lack of capacity at the community level may hinder youth's participation in physical activity. Findings from the current study, combined with those of McHugh et al. (2015a) and Skinner et al. (2006), emphasize the value of having a recreation department and active volunteers within communities to support the physical activity of Aboriginal youth. This is important information to share with local governments and funders so that adequate resources are spent enhancing these areas.

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Identifying how Northern Aboriginal youth conceptualize physical activity is an important step in better understanding the types of activities that should be incorporated into physical activity programming. Findings from this current study suggest that youth struggle to define physical activity; instead participants shared a broad and encompassing definition of physical activity that is only limited to include bodily movement. Tang and Jardine (2016), in their physical activity research with the Yellowknives Dene, found that their definition of physical activity was multifaceted and fluid, and that they came to use the term “synonymously with active living, traditional way of life, and healthy lifestyle” (p. 221). To demonstrate their expansive understanding of physical activity for this research, the youth who participated in the current study shared over 70 examples of what they consider to be physical activity. These examples ranged from contemporary sport and games (e.g., basketball and soccer), to unstructured play (e.g., playing in the bushes), working (e.g., setting up camp), and a variety of traditional activities (e.g., hunting, trapping), and many activities were exclusive to certain environments (e.g., the river) or seasons (e.g., skidooing, swimming; Appendix B). This diversity of activities supports Findlay and Kohen’s (2007) notion that current physical activity research likely fails to encapsulate all activities that Aboriginal youth consider to be physical activity.

This current study is not the first to suggest that Aboriginal youth have holistic and encompassing views of physical activity. For instance, McHugh (2011) also found that Aboriginal youth did not consider physical activity to be limited to just sports but, instead, physical activity includes various activities that require energy and Aboriginal youth are well aware of the activities they can do to be physically active. It’s important that results such as these are shared so that researchers and practitioners who work with Aboriginal youth and communities are aware of the broader understanding that Aboriginal peoples have regarding

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physical activity. Perhaps approaching physical activity research and programming with Aboriginal populations could be enhanced using a broader lens that supports a more holistic, encapsulating, and fluid understanding of physical activity.

Findings from this research also show that the physical activities in which Northern Aboriginal youth engage, may include those activities that are generally deemed “deviant” (e.g., egging houses, climbing buildings). This findings suggests that a “dark side” may exist in physical activity, similar to what has been reported in the literature as the “dark side” of leisure, also known as “Deviant Leisure” (Caldwell & Smith, 2006; Drozda, 2006). Drozda (2006) gave an example of how auto-theft committed by youth may fit under the broad concept of “casual leisure”, which helps in understanding the reasoning behind why youth choose to engage in certain activities in their free-time that are considered criminal or deviant. Youth may want to experience the positive feelings or “thrill” that can be experienced from participating in these activities, or they simply may engage in these activities for play, relaxation, or entertainment (Drozda, 2006). One way to prevent youth from participating in these activities is to direct their interests “towards non-deviant and non-criminal free-time activities” (Drozda, 2006, p. 129), which is relevant for this research as it demonstrates the importance of providing youth with opportunities to engage in physical activities that are of interest and value to them. Results from Drozda’s research, much like this current study that is focused on sharing the voices and perspectives of Aboriginal youth, provides context and ideas for researchers and programmers who want to develop and implement physical activity initiatives that are meaningful and of value for the population at hand.

This current study suggests that Aboriginal youth from this Northern community are aware of the benefits of physical activity, and they actively engage in physical activity to achieve

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these benefits. Participants explained that they participate in physical activity because it makes them feel good, feel stronger, feel awesome, and feel healthy. They were also vocal about how being physically active and “fit” played a role in influencing their health and healthy behaviours. McHugh et al. (2013a) and Critchley et al. (2006) have also found that Aboriginal youth are aware of how physical activity can play a significant role in their health and well-being; not only can physical health be enhanced, but emotional and mental well-being can be positively affected through physical activity as well. Cargo et al. (2007) also argued that Aboriginal youth understand the holistic benefits of engaging in physical activity; the benefits surpass the physical domain and can influence other areas of their lives as well. Critchley et al. (2006) also shared that Aboriginal youth were aware of various health benefits of engaging in both structured and unstructured activities. To create relevant physical activity programming for Aboriginal peoples, it is essential to consider Aboriginal peoples’ ways of knowing and perspectives (McHugh et al., 2013b). Northern Aboriginal youth are well aware of the benefits of being physically active and youth can be active contributors to helping in the development of programming to improve their health.

Based on the findings of this research and the recommendations by Lavallée and Lévesque (2013), the integrated indigenous-ecological model may be a useful framework for future researchers who want to engage in physical activity research with Aboriginal populations. Though the model was primarily used to shape the interview guides for this current research, findings from this research suggest it can support comprehensive insights into the unique perspectives of Aboriginal youth. Most notably, findings from this research highlight the importance of considering “Mother Earth” and the cultural implications that this has for Aboriginal youth. The youth who participated in this project were clear in sharing that they have

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a unique relationship with the land, or Mother Earth, that is deeply rooted in their culture and traditions. As well, this relationship with the land influences various levels of their inter- and intra-personal relationships, including their relationships with their community, their family/friends, and themselves. The model emphasizes the importance of understanding that a person's health and well-being expands beyond the physical realm and is better reflected using a holistic lens that also considers the emotional, social, and mental aspects of an individual. Future researchers should consider using the integrated indigenous-ecological model, as such theories support a greater understanding of the realities of Aboriginal peoples.

Finally, as a whole, the findings from this research provide important considerations for some of the calls to action outlined in the Truth and Reconciliation Commission (TRC) report and the goals set forth by the Canadian Sport Policy in relation to Aboriginal peoples. For instance, Call # 89 by the TRC states:

We call upon the federal government to amend the Physical Activity and Sport Act to support reconciliation by ensuring that policies to promote physical activity as a fundamental element of health and well-being, reduce barriers to sports participation... and build capacity in the Canadian sport system, are inclusive of Aboriginal peoples.

(Truth and Reconciliation Commission of Canada, 2015, p. 10)

This research supports this claim by confirming the significance that physical activity plays in the lives of Aboriginal youth, specifically in how it relates to their domains of health and well-being. This research is also an example of how inclusive and respectful research methodologies can help to identify ways to reduce barriers to sport participation, and build capacity within an Aboriginal community; these are important to consider when developing sport policies that are designed with this population in mind. As well, in an effort to make sport accessible and to

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enhance the quality of sport for all Canadians, *Sport Canada's Policy on Aboriginal Peoples' Participation in Sport* (Canadian Heritage, 2005) identified four goals that were focused on enhanced participation, enhanced excellence, enhanced capacity, and enhanced interaction.

Findings from this current study provide unique insights into how physical activity programmers could work to achieve these four goals within Northern Aboriginal communities. In the updated Canadian Sport Policy (2012), Aboriginal Affairs was identified as a key sector involved in, and influenced by, sport participation. Findings from research such as this current study, can provide policy makers with the in-depth and necessary knowledge that is needed to address the unique sport and physical activity needs of Northern Aboriginal youth.

Limitations and Future Directions

This study, like all research, has limitations. First, it is important to note that the small sample size does not reflect the perspectives of all community members or those of all Northern Aboriginal people. Northern Aboriginal communities are not one homogenous group, and there are many different and distinct Aboriginal groups that stretch across the Northwest Territories. It is important to recognize the uniqueness of the lived experiences of Aboriginal youth from across Canada, and not rely solely on the findings of this research to represent Aboriginal youth as a whole. In future research, encouraging participants from a wide variety of backgrounds and experiences would enhance the data available when making claims about the physical activity of Northern Aboriginal youth. Second, participants were purposefully selected to participate in this research based on their “lived experiences” with the phenomena being studied (i.e., physical activity), a central tenant of IPA. Therefore, the findings that were shared by the youth in this study do not include the voices of youth who may not be regularly physically active, and who would have their own unique experiences with physical activity in the community. By including

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a broader sample, it may be possible to better understand the diverse perspectives of Northern Aboeiginal youth. Finally, the results from this study were limited to the data generated during the relatively short timeline that data generation occurred. Expanding the participant pool and utilizing research methods that better allow for youth to share their experiences with physical activity over a longer timeline may provide a more in-depth and broader understanding of Aboriginal youth's physical activity experiences.

Conclusion

This research suggests that Northern Aboriginal youth have a holistic and encompassing understanding of physical activity, and are aware of the benefits of being physically active. These findings expand on the previous literature regarding the physical activity experiences of Aboriginal youth by working closely with a Northern Aboriginal community and sharing the voices and lived experiences that these youth have with physical activity. The implications that cultural physical activity plays an important role in the lives of Aboriginal youth is enhanced by this research as it highlights the impact that cultural physical activity (e.g., on the land activities) have on these youth. This research also highlights the importance of having various levels of support for Aboriginal youth to be physically active in their communities. Various community spaces were identified and stories were shared that contributed to a more in-depth understanding of Aboriginal youth's physical activity experiences. This research demonstrates that by listening to the stories and experiences of Aboriginal youth, it is possible to gain an in-depth understanding of the realities that these youth face when engaging in physical activity in their communities.

This research also demonstrates that engaging in CBPR with Aboriginal youth will not only make a contribution to the physical activity literature, but Aboriginal youth are eager to

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engage in the research process when provided with the opportunity. By having a local Aboriginal youth as a research partner, culturally appropriate research methods were chosen that were also appealing to youth participants. It is my hope that future collaborative research can be done using methods like this so that more Aboriginal youth can be excited and motivated to share their voices in the literature.

References

- Aboriginal Affairs and Northern Development Canada. (2015). *First Nations* [online]. Retrieved from <https://www.aadnc-aandc.gc.ca/eng/1100100013791/1100100013795>
- Belanger, Y., Barron, L., McKay-Turnbull, C., & Mills, M. (2003). *Urban Aboriginal Youth in Winnipeg: Culture and Identity Formation in Cities*. Winnipeg, MB: Canadian Heritage.
- Bevan, M. T. (2014). A Method of Phenomenological Interviewing. *Qualitative Health Research, 24*(1), 136-144. doi:10.1177/1049732313519710
- Blodgett, A. T., Schinke, R. J., Smith, B., Peltier, D., & Pheasant, C. (2011). In Indigenous words: Exploring vignettes as a narrative strategy for presenting the research voices of Aboriginal community members. *Qualitative Inquiry, 17*(6), 522-533.
- Blom, L., Bronk, K., Coakley, J., Lauer, L., & Sawyer, T. (2013) Maximizing the benefits of youth sport. *American Alliance for Health, Physical Education, Recreation and Dance, 84*(7), 8-13.
- Caldwell, L. L., & Smith, E. A. (2006). Leisure as a Context for Youth Development and Delinquency Prevention. *Australian & New Zealand Journal of Criminology (Australian Academic Press), 39*(3), 398-418. doi:10.1375/acri.39.3.398
- Canadian Heritage. (2005). *Sport Canada's Policy on Aboriginal People's Participation in Sport*. Retrieved from <http://publications.gc.ca/collections/Collection/CH24-10-2005E.pdf>
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada. (2010). *TCPS 2-Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*. Retrieved from http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf

PHYSICAL ACTIVITY EXPERIENCES

Canadian Sport Policy. (2012). Retrieved from <http://sirc.ca/csp2012>

Cargo, M., & Mercer, S. (2008). The value and challenges of participatory research: Strengthening its practice. *Annual Review of Public Health, 29*, 325-350. doi: 10.1146/annurev.publhealth.29.091307.083824.

Cargo, M., Peterson, L., Lévesque, L., & Macaulay, A. C. (2007). Perceived wholistic health and physical activity in Kanien'keha:ka youth. *Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health, 5*(1), 87-109.

Castleden, H., Garvin, T., & Huu-ay-aht First Nation (2008). Modifying Photovoice for community-based participatory Indigenous research. *Social Science & Medicine, 66*(6), 1393-1405. doi:10.1016/j.socscimed.2007.11.030

Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches*. Los Angeles : SAGE Publications, c2013.

Critchley, K. A., Walton, F., Timmons, V., Bryanton, J., McCarthy, M. J., & Taylor, J. (2006). Personal health practices around physical activity as perceived by the Aboriginal children of Prince Edward Island. *Journal of Aboriginal Health, 3*(1), 26–33.

Cunsolo Willox, A., Harper, S. L., Edge, V. L., Landman, K., Houle, K., & Ford, J. D. (2013). The land enriches the soul: On climatic and environmental change, affect, and emotional health and well-being in Rigolet, Nunatsiavut, Canada. *Emotion, Space & Society, 6*(6), 14-24. doi:10.1016/j.emospa.2011.08.005

Dehcho First Nations. (2010). *DFN Member Communities*. Retrieved from www.dehcho.org/members.htm

Drozda, C. (2006). Juveniles Performing Auto Theft: An Exploratory Study into a Deviant

PHYSICAL ACTIVITY EXPERIENCES

- Leisure Lifestyle. *Leisure/Loisir: Journal of The Canadian Association For Leisure Studies*, 30(1), 111-132.
- DyckFehderau, D., Holt, N. L., Ball, G. D., & Willows, N. D. (2013). Feasibility study of asset mapping with children: identifying how the community environment shapes activity and food choices in Alexander First Nation. *Rural & Remote Health*, 13(1), 1-11.
- Findlay, L. C., & Kohen, D. E. (2007). Aboriginal children's sport participation in Canada. *Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health*, 5(1), 185-206.
- Fletcher, C., (2003). Community-based participatory research relationships with Aboriginal communities in Canada: an overview of context and process. *Pimatisiwin: A journal of Aboriginal and Indigenous community health*, 1(1), 27-62.
- Foulds, H. A., Warburton, D. R., & Bredin, S. D. (2013). A systematic review of physical activity levels in Native American populations in Canada and the United States in the last 50 years. *Obesity Reviews*, 14(7), 593-603. doi:10.1111/obr.12032
- Giles, A.R. (2007). From the special editor. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 5(1), 3-4.
- Giles, A.R. (2008). Beyond "add women and stir": Politics, feminist development, and Dene Games. *Leisure/Loisi*, 32(2), 489-512. doi:10.1080/14927713.2008.9651419
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19, 173-202. doi:10.1146/annurev.publhealth.19.1.173
- Jacquez, F., Vaughn, L. M., & Wagner, E. (2013). Youth as partners, participants or passive recipients: A review of children and adolescents in community-based participatory

PHYSICAL ACTIVITY EXPERIENCES

- research (CBPR). *American Journal of Community Psychology*, 51(1), 176-189.
doi:10.1007/s10464-012-9533-7
- Katzmarzyk, P. T. (2008). Obesity and physical activity among Aboriginal Canadians. *Obesity*, 16(1), 184-190. doi:10.1038/oby.2007.51
- Kerpan, S., & Humbert, L. (2015). Playing together: The physical activity beliefs and behaviors of urban Aboriginal youth. *Journal of Physical Activity & Health*, 12(10), 1409-1413. doi:10.1123/jpah.2014-0533
- Kirby, A.M., Lévesque, L., & Wabano, V. (2007). A qualitative investigation of physical activity challenges and opportunities in a northern-rural, Aboriginal community: Voices from within. *Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health*, 5(1), 5-24.
- Lavallée, L.F. (2007). Physical activity and healing through the medicine wheel. *Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health*, 4(1), 127-153.
- Lavallée, L.F. (2008). Balancing the medicine wheel through physical activity. *Journal of Aboriginal Health*, 4(1), 64-71.
- Lavallée, L.F. (2009). Practical application of an Indigenous research framework and two qualitative Indigenous research methods: Sharing circles and Anishnaabe symbol-based reflection. *International Journal of Qualitative Methods*, 8(1), 21-40.
- Lavallée, L., & Lévesque, L. (2013). Two-eyed seeing: Physical activity, sport, and recreation promotion in Indigenous communities. In Forsyth, J., & Giles, A. (Eds.), *Aboriginal peoples & sport in Canada: Historical foundations and contemporary issues* (pp. 206-228). Vancouver: UBC press.

PHYSICAL ACTIVITY EXPERIENCES

- Mason, C., & Koehli, J. (2012). Barriers to physical activity for Aboriginal youth: Implications for community health, policy, and culture. *Pimatisiwin: A Journal of Aboriginal & Indigenous Community Health*, 10(1), 97-107.
- Mayan, M. J. (2009). *Essentials of qualitative inquiry*. Walnut Creek, CA : Left Coast Press.
- McHugh, T. F. (2011). Physical activity experiences of Aboriginal youth. *Native Studies Review*, 20(1), 7-26.
- McHugh, T. F., Coppola, A. M., Holt, N. L., & Andersen, C. (2015a). "Sport is community:" An exploration of urban Aboriginal peoples' meanings of community within the context of sport. *Psychology of Sport & Exercise*, 18, 75-84. doi:10.1016/j.psychsport.2015.01.005
- McHugh, T. F., Holt, N. L., & Andersen, C. (2015b). Community-based sport research with Indigenous youth (Investigación deportiva basada en la comunidad con jóvenes indígenas). *Retos*, 28, 219-224.
- McHugh, T. F., Coppola, A. M., & Sinclair, S. (2013a). An exploration of the meanings of sport to urban Aboriginal youth: a photovoice approach. *Qualitative Research In Sport, Exercise & Health*, 5(3), 291-311.
- McHugh, T. F., Kingsley, B. C., & Coppola, A. M. (2013b). Enhancing the relevance of physical activity research by engaging Aboriginal peoples in the research process. *Pimatisiwin: A Journal Of Aboriginal & Indigenous Community Health*, 11(2), 293-305.
- McNamara, C. (2009). *General guidelines for conducting interviews*. Retrieved from <http://managementhelp.org/evaluatn/interview.htm>
- Morse, J., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2), 1-19.

PHYSICAL ACTIVITY EXPERIENCES

Moustakas, C. E. (1994). *Phenomenological research methods*. Thousand Oaks, Calif. : Sage, c1994.

Minkler, M., & Wallerstein, N. (2003). *Community based participatory research for health*. San Francisco, CA : Jossey-Bass.

National Aboriginal Health Organization. (2014). *About*. Retrieved from <http://www.naho.ca/about/>

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Petrucka, P., Bickford, D., Bassendowski, S., Goodwill, W., Wajunta, C., Yuzicappi, B., & ... Rauliuk, M. (2016). Positive Leadership, Legacy, Lifestyles, Attitudes, and Activities for Aboriginal Youth: A Wise Practices Approach for Positive Aboriginal Youth Futures. *International Journal Of Indigenous Health*, 11(1), 177-197.
doi:10.18357/ijih111201616017

Pigford, A. E., Ball, G. C., Plotnikoff, R. C., Arcand, E., Fehderau, D. D., Holt, N. L., & ... Willows, N. D. (2013). Community-based participatory research to address childhood obesity: Experiences from Alexander First Nation in Canada. *Pimatisiwin: A Journal Of Aboriginal & Indigenous Community Health*, 11(2), 171-185.

POWER UP! Coalition Linking Action and Science for Prevention. (2016). *Promotion of Physical Activity in Rural, Remote, Northern and Natural Settings in Canada: Report on Evidence Synthesis Findings & Outcomes from a National Priority-setting conference*. School of Public Health, University of Alberta. Retrieved from <http://www.placeresearchlab.com/promotion-of-physical-activity-in-rural-remote-and-northern-settings-in-canada/#1489419169938-61474273-9aa4>

PHYSICAL ACTIVITY EXPERIENCES

- Reading, C., & Wein, F. (2009). *Health inequalities and social determinants of health for Aboriginal people*. Victoria: National Collaborating Centre for Aboriginal Health.
- Sasakamoose, J., Scerbe, A., Wenaus, I., & Scandrett, A. (2016). First Nation and Métis Youth Perspectives of Health. *Qualitative Inquiry*, 22(8), 636-650.
doi:10.1177/1077800416629695
- Schinke, R. J., Smith, B., & McGannon, K. R. (2013). Pathways for community research in sport and physical activity: Criteria for consideration. *Qualitative Research In Sport, Exercise & Health*, 5(3), 460-468.
- Skinner, K., Hanning, R. M., & Tsuji, L. S. (2006). Barriers and supports for healthy eating and physical activity for First Nation youths in northern Canada. *International Journal of Circumpolar Health*, 65(2), 148-161.
- Smith, J.A., Flowers, P., & Larkin, M. (2009). *Interpretive phenomenological analysis: Theory, method and research*. Sage Publications.
- Smith, J.A. & Osborn, M. (2003) Interpretative phenomenological analysis. In J.A. Smith (Ed.), *Qualitative Psychology: A Practical Guide to Research Methods*. London: Sage.
- Statistics Canada. (2011). *Aboriginal peoples in Canada: First Nations People, Métis, and Inuit* (Catalogue no. 99-011-X2011001). Retrieved from <http://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-011-x/99-011-x2011001-eng.pdf>
- Stewart, S. L. (2009). Participatory action research: Exploring indigenous youth perspectives and experiences. *Indigenous Policy Journal*, 20(3).
- Tang, K., & Jardine, C. G. (2016). Our way of life: Importance of Indigenous culture and tradition to physical activity practices. *International Journal Of Indigenous Health*, 11(1), 211-227. doi:10.18357/ijih111201616018

PHYSICAL ACTIVITY EXPERIENCES

- Tremblay, M. S., Shephard, R. J., & Brawley, L. R. (2007). Research that informs Canada's physical activity guides: An introduction. *Applied Physiology, Nutrition, And Metabolism*, 32(S2E), S1-S8. doi:10.1139/H07-104
- Truth and Reconciliation Commission. (2015). *Truth and Reconciliation Commission of Canada: Calls to Action*. Retrieved from <http://www.trc.ca/websites/trcinstitution/index.php?p=905>
- Turner, D. I. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754-760.
- Wagstaff, C., & Williams, B. (2014). Specific design features of an interpretative phenomenological analysis study. *Nurse Researcher*, 21(3), 8-12.
- Wallerstein, N. B., & Duran, B. (2006). Using community-based participatory research to address health disparities. *Health Promotion Practice*, 7(3), 312-323. doi:10.1177/1524839906289376
- Wotherspoon, T., & Schissel, B. (2001). Business of placing Canadian children and Youth 'at-risk'. *Canadian Journal of Education*, 26(3), 321-339. doi:10.2307/1602211
- World Health Organization. (2014). Retrieved from http://www.who.int/topics/physical_activity/en/
- Young, T. K., & Katzmarzyk, P. T. (2007). Physical activity of Aboriginal people in Canada. *Applied Physiology, Nutrition & Metabolism*, 32(S2E), S148-S160. doi:10.1139/H07-110
- Yousefian, A., Ziller, E., Swartz, J., & Hartley, D. (2009). Active living for rural youth: Addressing physical inactivity in rural communities. *Journal of Public Health Management And Practice*, 15(3), 223-231.

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Appendix A

Interview Guide: One-on-one and group interviews

1. Tell me about the kinds of physical activities you like to participate in.
2. How does physical activity play a role in your life?
3. Please share with me some examples of physical activities that you enjoy.
4. How do your friends/family influence the kinds of physical activities that you participate in? Do you prefer to participate in physical activity with friends and/or family? How do you feel when engaging in physical activity with others?
5. How does your school influence your physical activity? What sort of physical activity experiences have you had while in school?
6. How do you feel about being physically active outside? How does being on the land influence your physical activity choices? Describe how you feel when you are being physically active outside or on the land?
7. How does your culture play a role in what physical activities you participate in? Please share any examples that may relate to your physical activity and your culture? How do you feel when engaging in cultural physical activities?
8. How does physical activity impact your health? How do you feel when you participate in physical activity? Please share an example of when physical activity has impacted your health or well-being.
9. Describe some experiences you've had while being physically active in your community. Any experiences from outside of your community?

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10. Please share any additional stories or experiences that you have had with physical activity in the past or present. Do you think you'll want to participate in physical activity in the future? How so?

PHYSICAL ACTIVITY EXPERIENCES

Appendix B

Comprehensive List of Physical Activities Shared by Participants (verbatim)

basketball	tag	track and field	hiking
hide and seek	cops and robbers	run in the mud	rafting
running	soccer	broomball	jumping
skidooing	bump	hand games	ping-pong/table tennis
biking	warm ups	adventures	gym class
quad rides	playing outside	berry picking	floor hockey
swimming	boating	building fires	trapping
trips out of town	canoeing	high kick	fitness training
walking	push ups	playing in the park	cross fit
shopping	getting wood	capture the flag	cardio training
drifting/tubing	hauling wood	checking nets	muscle building
games	chopping wood	rabbit snaring	spinning
drawing/writing	fixing meat	snowshoeing	paddling
videogames	fishing	cutting spruce boughs	paddle boarding
skating	killing/hunting	volleyball	kayaking
building caves	animals	badminton	softball
climbing trees	skiing	exercise/workouts	baseball
making trails	sledding	rangers	rock climbing