# ENHANCING THE RELEVANCE OF Physical Activity Research by Engaging Aboriginal Peoples in the Research Process

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# Abstract

The purpose of this research was to identify relevant and respectful research topics and questions that address the physical activity of urban Aboriginal youth. A community-based research partnership was developed among three members of a Canadian university and two members of an Aboriginal organization. As a result of this partnership, six community consultations with 10-15 Aboriginal youth and stakeholders took place over three months. Consultations were recorded and transcribed, and a thematic analysis was conducted. Community consultations supported the identification of physical activity research topics and questions that need more attention. Using the words of the participants, findings are represented in five themes: (1) "motivator as the parent," (2) "it's still word of mouth," (3) "incorporate culture," (4) "it's all about the money," and (5) "you're treated a little bit different." In addition, notions of "sport," "community," and "culture" are notable threads that span the five themes. The findings led to the development of an overarching research question for a recently awarded national research grant. This research is a practical example of how Aboriginal peoples can and should be involved in the identification of relevant physical activity research questions.

**Keywords:** Aboriginal, youth, physical activity, sport, culture, community consultations, qualitative, Canada

# INTRODUCTION

The health benefits of physical activity are well established, and research has documented the effectiveness of regular physical activity in the prevention of several chronic diseases, including diabetes and obesity (Warburton et al., 2006). Physical activity is often promoted in an effort to address health, and it is promising to know that Aboriginal<sup>1</sup> youth understand the importance of regular physical activity to reduce the risk of chronic diseases such as obesity and diabetes (Perry and Hoffman, 2010). Despite the known health benefits of physical activity, recent research has suggested that only an average of 7% of young people in Canada meet the recommended level of 60 minutes of moderate-to-vigorous physical activity per day (Colley et al., 2011). Few published studies have exclusively focused on the physical activity rates of young Aboriginal peoples in Canada. Of the studies that have included Aboriginal youth, the First Nations Information Governance Centre (FNIGC, 2012) reported that less than half of First Nations youth are considered active. Similarly, a recent systematic review of the physical activity of Native American peoples in Canada and the United States found inactive levels of physical activity were reported by more than one-third of children and youth (Foulds et al., 2013). It is critical to focus on the physical activity of Aboriginal youth, since many are not active enough to receive health benefits.

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<sup>1 &</sup>quot;Aboriginal peoples" is an encompassing term that includes those individuals who identify as First Nations, Inuit, or Métis (Statistics Canada, 2008).

There is relatively little research or published knowledge regarding the factors that influence the physical activity of Aboriginal youth (Willows, 2005). Some studies (e.g., Coble and Rhodes, 2006) have documented the barriers to physical activity, but Mason and Koehli (2012) described the need for more research that highlights the perspectives of Aboriginal youth. Grounded in the words of participants, their research provided a rich understanding of the various physical activity constraints (e.g., racism, transportation, facilities) experienced by Aboriginal youth in Edmonton and Morley, Alberta. The voices of Aboriginal youth were also highlighted in a recent study by McHugh (2011), which shed light on some of the benefits (e.g., builds bonds) and constraints (e.g., financial burden) of being physically active. By providing opportunities for Aboriginal youth to share their diverse and rich experiences, researchers are gaining a better understanding of the complexities surrounding their physical activity participation and experiences. A history of colonization in Canada has had a negative impact on the health of Aboriginal peoples through various social determinants of health (Loppie Reading and Wien, 2009), and the detrimental impact of colonization has likely affected the physical activity of Aboriginal youth. The health challenges and broader inequity issues experienced by Aboriginal peoples are justification for the development of culturally relevant physical activity programming driven by locally identified needs (Giles, 2007).

Various researchers (e.g., McHugh and Kowalski, 2011; Sutherland et al., 2007) have described the importance of working with Aboriginal communities to develop culturally relevant programs. McHugh and Kowalski (2011) engaged Aboriginal youth from a Saskatoon school community in participatory action research to address body image through a variety of initiatives, including physical activity programs. Similarly, in their work with a remote First Nation community, Sutherland et al. (2007) highlighted the importance of gathering community input for health promotion programming. Although it is promising to see that Aboriginal peoples are being more actively engaged in physical activity research, there is still a need for more physical activity research that is driven by the needs and wants

of Aboriginal youth. The voices and experiences of Aboriginal peoples, and Aboriginal youth in particular, are noticeably absent in the vast physical activity research literature. For research to be relevant and respectful, it is critical to include Aboriginal peoples throughout the entire research process, including the identification of research topics and questions.

The purpose of this research was to engage Aboriginal youth and stakeholders in a development project focused on identifying relevant and respectful research topics and questions that address the physical activity of urban Aboriginal youth. More specifically, a unique funding opportunity from a national research agency supported the critical processes of: (a) creating a community-based research partnership, and (b) conducting community consultations to identify physical activity research topics and questions that are relevant to urban Aboriginal youth.

# **COLLABORATIVE METHODS**

Various Aboriginal scholars (e.g., Battiste, 2002; Smith, 1999) have written about the importance of including Aboriginal peoples in the research process. Edwards et al. (2008) highlighted the value of including community experience and expertise when engaging in research with Aboriginal peoples. The critical need to include Aboriginal peoples in the research process has also been established by Castellano (2004) who argued that Aboriginal peoples have the right to participate as partners in research that generates knowledge affecting Aboriginal peoples. Aboriginal youth have also voiced the critical need for their inclusion in research. A report by the Royal Commission on Aboriginal Peoples (RCAP, 1996) stated that Aboriginal youth want to be part of the development of solutions for the various challenges experienced by their communities. Thus, Aboriginal youth should be actively involved in addressing important health challenges, such as those associated with physical inactivity.

Community-based participatory research involves participants in all aspects of the research process (Daley et al., 2010). Nevertheless, participants are often not included in the identification of research topics; participants more often become involved in the research during the data collection. It has been argued by Battiste and Henderson (2000) that researchers need to be more responsive and responsible to the knowledge of the participants by having their direct input in the development of research projects.

Engaging Aboriginal peoples in the research process from the very beginning, including the development of the research topic and question, will also enhance the likelihood that the research is ethical. As suggested by Battiste (2002), the single most important ethical principle of Aboriginal research is that Aboriginal peoples should have control of their own knowledge. Since customary approaches to research typically distance Aboriginal peoples from the construction and legitimization of knowledge, Bishop (2005) noted that Aboriginal peoples have many concerns about who is in control of the research and who will benefit from it. Battiste stressed that the only way to ensure that Aboriginal peoples are in control of research is to involve them throughout the whole research process. The methodological approach utilized in this research (i.e., communitybased participatory research) ensured that participants were involved throughout the entire research process.

# Community-based Partnership and Consultations

A research partnership was developed among three women from a Canadian university (researcher, graduate student, and research assistant) and two women from an Aboriginal organization (manager, staff member) within one of the Edmonton School Divisions.<sup>2</sup> The research assistant and one staff member self-identified as Aboriginal people and the other three partners identified as non-Aboriginal people. All members of the partnership have experience engaging in research with Aboriginal peoples. They understand and adhere to the various ethical guidelines and principles for engaging in research with Aboriginal peoples such as those outlined in Chapter 9 of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2010).

Our previous research experience with Aboriginal peoples (McHugh and Kowalski, 2011) has shed light on the critical role of community partnerships in the overall success of research projects. Fletcher (2003), in his work with Aboriginal communities, argues that the most critical phase of research is the initial contact and relationship building. Thus, the development of a research partnership was a critical first step in this development project. All five members of the research partnership met two times per month for three months to establish a research partnership. Each meeting lasted approximately 1 hour and the discussion focused on sharing guiding research perspectives, values, and overarching goals for the project.

As a result of the strong research partnership that developed, one of the members from the Aboriginal organization agreed to become the known sponsor for the research. A known sponsor is someone who has a legitimate relationship with the group of interest (Patton, 2002), which in this case was Aboriginal youth and stakeholders interested in the physical activity of Aboriginal youth (e.g., family members, school staff). The known sponsor recruited participants within Edmonton, organized consultation locations, and co-facilitated consultations.

Upon receiving ethical approval from our university research ethics board, six community consultations took place over three months. All consultations were audio-recorded and transcribed verbatim. Various researchers (e.g., Daley et al., 2010; Fleming et al., 2006; McIntyre et al., 2001; Shea et al., 2011) have demonstrated the strength of using focus groups and talking circles in research with Aboriginal peoples. Despite their uniqueness, focus groups and talking circles both support participants in sharing their knowledge and experience in group settings. Within this project, the partnership used the term "community consultation" to describe the group setting for sharing knowledge and experience because consultation has been identified as a critical feature of research with Aboriginal peoples (Smith, 2005).

<sup>2</sup> The two women from the Aboriginal organization were active partners throughout all phases of this research project. However, in an effort to support their anonymity, the name of their organization is not revealed.

Each consultation consisted of 10-15 participants, which included Aboriginal youth (14-18 years old), family members, and school staff members who live in Edmonton. Each participant took part in one consultation, and a total of 68 people participated. An Elder associated with the school district also engaged in a consultation to share his knowledge with respect to the project purpose. The known sponsor and either the graduate student or research assistant co-facilitated each consultation. Participants were informed of the study purpose and were asked questions (e.g., What type of physical activity research would be meaningful for Aboriginal youth? What don't we understand about the physical activity of Aboriginal youth?) to identify physical activity research topics and questions relevant to Aboriginal youth. The encompassing nature of the term "physical activity" is documented in physical activity research focusing on the unique perspectives of Aboriginal youth (e.g., Mason and Koehli, 2012; McHugh, 2011). Such research supports the contention that Aboriginal peoples may not make a distinction between the terms sport, recreation, and physical activity (Canadian Heritage, 2005). Since the intent of this research was to identify relevant physical activity research questions, the research partnership wanted to provide participants with an opportunity to speak about physical activity as it is understood and defined by them. Therefore, participants were not provided with a specific definition of the term "physical activity" prior to the consultations. Each consultation lasted approximately 1 hour and, as recommended by Creswell (1998), took place at a location and time that was convenient to participants. Thus, each consultation took place at either a local school or community centre.

## DATA ANALYSIS

Members of the partnership analyzed community consultation data using the general 6-step qualitative data analysis process outlined by Creswell (2007). Step 1 involved organizing and preparing all of the community consultation transcripts. The intent of step 2 was to read the transcripts and gain a general sense of the participants' experiences. Step 3 was the detailed analysis, which involved coding, or the process of organizing material into chunks, segmenting text into categories, and then labeling categories or themes with a term (Rossman and Rallis, 1998). Step 4 was the development of theme descriptions based on the words of the participants. Members of the partnership decided in step 5 how the themes would be represented, which in this case was a narrative passage that outlines five themes. Step 6 was interpretation of the data. These interpretations are presented in the discussion.

Findings were verified using various strategies outlined by Creswell (1998) and Morse et al. (2002). Specifically, sampling was appropriate (Morse et al., 2002) in that participants with relevant knowledge participated in the study. Triangulation of sources developed a deeper understanding (Creswell, 1998). Participants with different viewpoints (i.e., Aboriginal youth and stakeholders) were included to develop a deeper understanding of the important physical activity research topics and questions. Because the processes of data collection and analysis are interrelated and inform one another, data was collected and analyzed concurrently (Morse et al., 2002). Research themes were presented to a group of interested participants for member-checking or verifying findings (Creswell, 1998). Participants were given the option to add, alter, or delete themes, and through this process the themes were refined. A particularly positive aspect of member-checking with Aboriginal peoples is the recognition that participants are the "knowers" of their contexts and environments and must be included in the reflection and reconstruction of their experiences and knowledge (Smith, 1999). Bishop (2005) described how research from a Eurocentric standpoint has generally misrepresented or silenced the experiences and knowledge of Aboriginal peoples. Memberchecking was a critical component of ensuring that participants' knowledge was accurately represented. Finally, thick, rich description was utilized by sharing the knowledge of the participants through direct quotations (Creswell, 1998).

## FINDINGS

Community consultations supported the identification of physical activity research topics and questions that were perceived as needing more attention. In an effort to clearly and succinctly highlight the knowledge shared by the participants, members of the partnership agreed that a thematic representation of identified research topics and questions was most appropriate. Although the findings of the consultations are represented as somewhat distinct themes, it is important to note that the themes are interrelated. The five themes, supported by the words of the participants, are: (1) "motivator as the parent," (2) "it's still word of mouth," (3) "incorporate culture," (4) "it's all about the money," and (5) "you're treated a little bit different." In addition, notions of sport, community, and culture are notable threads that span the five themes.

#### "MOTIVATOR AS THE PARENT"

Throughout all of the consultations it was clear that participants want to gain a better understanding of the role that parents play in their child's participation in physical activity. Parents were considered responsible for getting their child active at a young age so that physical activity is viewed as something positive. As suggested by one parent,

I think you [parents] need to start when they're young to get them on the right track. If you don't start them young, then when they're seven, eight, nine, and once they get to the school age, they don't want to do it because they've never been taught it. You have to be the motivator as the parent. You have to be the one to show them what to do so they do it.

This participant argued that when Aboriginal youth do not want to be physically active, it is because they have never been taught the many positive benefits of physical activity.

The participants also argued that being a good role model is likely part of being a motivating parent. The importance of positive role modeling was articulated by one participant who said,

If your parents aren't going to get off the couch to take you to hockey, you're not going to want to do that when you're 15 either.

This participant made the argument that youth learn behaviours, such as physical activity or sedentary behaviours, from their parents and it is not fair to expect youth to be active when they have not been introduced to such behaviours by their parents. Similarly, another participant stated,

> Because you'll often see or you'll hear that if parents read a lot, their kids read a lot. So if parents are involved in physical activity, if they're dancing, or whatever they're doing, the kids are going to learn to dance.

If parents engaged in physical activities, this participant argued, youth would follow their behaviour.

Participants also argued that there is a need to better understand the way parents provide youth with the "tools" and "skills" to get involved in physical activity. As suggested by one participant,

I think it's the parents ... not giving them [their children] the skills and the communication that they need to have that voice and to speak and to go and join in the sport.

This participant argued that many youth likely have the physical skills to participate in physical activity, but not the necessary confidence to get involved, particularly in organized sport. Participants argued that parents could motivate their children to become physically active by teaching them the skills, such as communication skills, to facilitate their involvement in physical activity.

#### "It's still Word of Mouth"

Although there was agreement that parents need to take responsibility to get their children involved in physical activity, many suggested that a lack of access to information about physical activity programs is often a barrier to youth physical activity and that this barrier needs to be better understood. One participant simply stated that the main barrier that prevents her children from being involved in physical activity is "lack of information about available programs." Another father concurred, "It is really difficult to know how to get kids into programs." When he discussed getting his sons into hockey, he said that he did not know where to get equipment or where to find the programs to sign them up. For example, he heard of a program that gives free equipment to youth, but he did not know how to find this program. These participants made it very clear that they wanted to support youth to be physically active, but lack of access to information about physical activity opportunities is often a prominent barrier to participation.

Many participants stressed the need to better understand the relevance of barriers associated with access to information for Aboriginal peoples. As suggested by one participant,

> Often our families are moving a lot and kids are coming and going from different schools and so everybody may not have web access.

The participants also explained that many of the forms to register in structured physical activities are primarily available online. Similarly, programs that provide free equipment to deserving youth are often advertised online and therefore likely not accessible for many youth. The challenge associated with communicating through telephones was also articulated, "And sometimes their [parents] phone was cut off, it's still word of mouth." Participants argued that telephones or web access might not be the best way to communicate with some Aboriginal peoples. "Word of mouth" was described as one of the best ways to distribute information about physical activity programs to Aboriginal youth. However, participants recognize that this practice is considered a thing of the past since the Internet is now the primary means for communicating such information.

Although participants described the many barriers associated with access to information, they also described the potential role of schools, and school staff, in distributing information. As suggested by a participant,

> I think our principals are pretty good when you send them information. They're pretty good at distributing to families and so on.

As a person who offers physical activity programs to Aboriginal youth, she believes that schools might be one of the best avenues for communicating with youth about physical activity opportunities. Similarly, another participant argued,

Well in many ways we're lucky because we're a school district, so we see the kids regularly. And if we can get them to buy in, then we can usually get the families to buy in and find out their contact information.

Thus, participants recognized access to information as a key barrier to physical activity for Aboriginal youth, but also argued for more research to explore the potential role of schools in providing youth with information regarding physical activity programs.

#### "It's All about the Money"

The impeding cost associated with participating in various physical activities, particularly more organized sport, was also discussed in all consultations. One participant stated, "Finances play a big part of not being in sport." Participants expressed a need for more research regarding ways in which youth can overcome this barrier, described as the primary reason for youth not participating in many physical activities. One participant explained,

> I think a big barrier is definitely the money. 'Cause I got my guy in hockey, so there's money used for lessons, which is like through the roof. Not to mention the equipment that he needs just to even play and he's constantly growing out of it. That's a lot of money, even when you're trying secondhand or trading stuff, it's still a lot of money. We did a tournament and that's another couple hundred right there.

Another participant expressed very similar sentiments,

> To actually play organized sport needs money. It's all about the money and the equipment and what kind of equipment you have. So I think that plays a big factor why Aboriginal youth don't participate. A lot of families don't have \$800 extra a month to put towards an organized sport.

Participants argued that costs associated with various physical activities are likely a barrier experienced by all youth but Aboriginal youth are particularly limited by costs of physical activity.

Recognizing that costs associated with particular activities are inevitable, another participant identified the need to find ways to overcome such costs. She said,

The cost is a challenge, especially for parents who are on a tight budget. Are there programs that can help?

She argued that if parents could find financial support to cover the cost associated with some of the physical activities, it would increase the number of Aboriginal youth participating in physical activity. Building on this notion, another participant argued,

> It would be nice to see more opportunities for some of the physical activities that they do engage in to lead to employment, like refereeing games if they've had lots of experiences with hockey or soccer. Using that skill to actually get some money out of it and do some part-time work.

Alongside the notion that financial barriers limit Aboriginal youth's physical activity participation, the idea that youth might financially benefit from their physical activity involvement, is an area of study that was identified as needing more attention.

#### "You're Treated a little Bit Different"

The participants in the community consultations described the discrimination that is often experienced by Aboriginal youth, and how it could affect their physical activity. Participants argued that discrimination "is not a thing of the past" and that more research is needed to explore how it affects the physical activity of Aboriginal youth. One participant clearly articulated the importance of exploring discrimination,

> The whole discrimination factor is important to look at. 'Cause I know just with my son, he played competitive high school basketball. I mean, he had to face stuff like being called "chief" and all that kind of stuff in our high schools. Like those are our high schools we work in, and he faced that. He was the only native kid on his team, he was the only brown kid on his team. So it's [discrimination] totally there. And how much does that keep our kids off those teams?

Another participant expressed similar sentiments,

Like how hard is it for our kids [Aboriginal youth] to try out for a basketball team or volleyball team when they're the only brown kid in that change room? What does that feel like?

Many of the examples of discrimination were described within more structured or organized sport contexts, but the participants argued that such an experience in organized sport could influence the attitudes for youth to participate in any physical activity. When describing examples of discrimination, participants made it clear that discrimination comes in many forms. As suggested by one participant,

Not that people are always saying things, but just action and the way that you're treated a little bit differently, and looked at a little bit differently.

This participant was clear that discrimination may not come in the form of specific derogatory terms; it can be subtle if Aboriginal youth are just treated "differently." Many of the participants had very clear examples of how offensive terms are often used when referring to Aboriginal peoples involved in sport. In talking about her brother who is a professional athlete, one participant said, "He still gets, 'Hey chief.' He still gets that stuff." The examples provided by participants demonstrate that discrimination can take many forms.

The manner in which Aboriginal youth deal with discrimination also emerged from the consultations. One participant explained,

A lot of kids will reflect whatever they hear from home. Like parents' attitudes about whether they're going to be proud of who they are, or whether they're going to let discrimination hold them back. A lot of them [youth] seem to reflect what they've heard at home.

Participants argued that parents need to teach their children how to cope with discrimination, but this did not negate the importance of working to eliminate discrimination. Participants were very clear that more research is needed to better understand the impacts of discrimination on Aboriginal youth physical activity, and how this discrimination can be eliminated.

#### "Incorporate our Culture"

Participants argued that research should explore how Aboriginal culture could support Aboriginal youth's participation in physical activity. As suggested by one participant,

> Maybe since it's [physical activity] directed for, or to Aboriginal people, try to incorporate our culture and some other things that we would do for physical activity.

Even those participants who do not feel particularly connected to their Aboriginal culture argued that an incorporation of such culture into youth physical activity could support participation. As suggested by one participant,

> My daughter's in jingle dancing. I mean, that's the only Aboriginal thing; we don't know our culture. We weren't raised around our culture so this is all learning for us.

She further described how she is happy that her daughter is getting involved in her culture through dancing because now she is being more active.

Participants argued that Aboriginal culture could be incorporated into physical activities by ensuring that Aboriginal peoples are in charge of programming. One participant argued,

> Not only that the groups would be there for them, but that there's Aboriginal people in charge and providing service whichever it may be like dance, hockey, swimming. That it's led by their own community, so they feel comfortable.

Building on this, participants argued that if Aboriginal peoples were in charge of programming, then physical activities that are often engaged in by Aboriginal peoples would likely receive more recognition. As argued by one participant,

In the community that I work in, on the weekends, they're [youth] usually on the powwow trail. So that is activity as well.

She argued that even though dance is a cultural activity it should also be recognized as physical activity. Similarly, another participant explained,

> We were able to get the high school students credit for being part of the dance troupe. And that year we got them recognized as a sports team and they got medals just like all the other teams did.

Participants argued that this recognition by the school could be an important step for incorporating Aboriginal culture into physical activity programs.

Participants also mentioned the many teachings in Aboriginal culture that are particularly relevant to sport. As stated by a participant, tion, it's a natural thing. Those trees in the forest they compete against one another for the sun and water. Just the whole talk he gave was a nice way to look at it.

As argued by this participant, there is value in incorporating the teachings from Aboriginal culture into sport and physical activity. Thus, it is important to explore the role that Aboriginal culture plays in supporting youth to be physically active.

# DISCUSSION

This research makes a notable methodological contribution to the physical activity research literature. Although there are encouraging examples of health research that has actively involved Aboriginal peoples in research processes (e.g., Kirby et al., 2007; McHugh and Kowalski, 2011; Shea et al., 2011), there is still an absence of physical activity research that involves Aboriginal peoples in the identification of relevant research questions. As argued by Smith (1999), the only way to ensure that Aboriginal peoples benefit from research is to actively engage them in all phases of the research process and the creation of knowledge. This research serves as a practical example of how Aboriginal peoples can and should be involved in physical activity research, including the identification of research topics and questions.

This research is also significant in that it highlights physical activity research topics and questions that are important to urban Aboriginal youth and stakeholders. The themes presented suggest that participants want more research focused on potential barriers to physical activity. This is not particularly surprising given that Aboriginal youth may face many barriers that can prevent them from living an active, healthy lifestyle (Brown et al., 2005). It is important to note that the barriers described by the participants in this study must be understood within the urban context in which the participants live. The determinants of health for Aboriginal peoples vary across and within rural, urban, settlement, and reserve communities (Loppie Reading and Wien, 2009). Although some findings from this research may be transferable to communities outside urban centres, the primary strength of this research is that it provided an opportunity for urban

I remember at powwow one year we had an Elder get up and MC and he was talking about competi-

Aboriginal youth to share their insights. Relatively little is known about the experiences and perspectives of urban Aboriginal peoples (Environics Institute, 2010) and given that more than half of Canada's Aboriginal population lives in urban centres (Statistics Canada, 2008), it is critical that their voices are heard.

Various studies have explored the barriers and factors related to the physical activity of Indigenous peoples<sup>3</sup> (e.g., Coble and Rhodes, 2006; Nelson et al., 2010); therefore, another descriptive research study might not be particularly novel. However, in addition to identifying the importance of barriers, common across all themes were notions of sport, community, and culture. Members of the partnership met three times over a one month period to "make sense of the findings" and develop an overarching research question based on the shared knowledge of the participants. From these meetings the following overarching research question was developed: How can fostering a sense of community enhance sport opportunities for Aboriginal youth? This research question was presented to a group of interested participants as part of the member-checking process, and they agreed that it was representative of the knowledge they shared in the community consultations.

This overarching research question moves beyond a sole focus on barriers, to a more comprehensive view of how communities can address such barriers. For example, participants in this study argued that parents or guardians play an important role in youth physical activity. However, if parental support is not available could a sense of connection to a community support youth in being physically active? Findings from previous research suggest that this is a possibility. For example, Coble and Rhodes (2006) identified the social environment or knowing someone who exercises as an important correlate of physical activity among Native Americans. Similarly, Nelson and colleagues (2010) described how Indigenous young people identified family influences as important in encouraging participation in physical activity. It is possible that if Aboriginal

youth do not feel the support of their parents, they could in turn find valuable support from other members of their community.

Some of our previous work (McHugh, 2011) has suggested that communities may play an important role in supporting Aboriginal youth to overcome sport participation barriers. The relationship between family income and participation in physical activities among all youth is well established (Ferreira et al., 2007). Furthermore, various studies have suggested that poverty (e.g., Dogra et al., 2010), economic disparity (e.g., Kirby et al., 2007), and financial barriers (e.g., McHugh, 2011) are factors that may limit physical activity participation among Aboriginal peoples. Would connection to a community make it possible for youth to navigate some of the financial barriers? For example, programs may exist within their communities that cover the cost of equipment or program registration. It is possible that a connection to community could enhance sport opportunities for Aboriginal youth.

In addition to financial barriers, could communities support Aboriginal youth in overcoming barriers related to the discrimination identified by participants? Previous research (e.g., Schinke et al., 2010) suggests that Aboriginal adolescent athletes in mainstream sport may have to negotiate responses to racism and discrimination. Are there systems in place within communities to support youth in addressing racism? Iwasaki's (2006) research with Aboriginal peoples showed how culturally based activities, such as dancing, may be a useful means to address racism. Thus, communities could offer culturally based activities to address discrimination and support sport opportunities for Aboriginal youth.

Not only is it important to understand the role of community in supporting sport opportunities for Aboriginal youth, but it is also important to better understand Aboriginal youth's meanings of community. In their work with Australian Aboriginal peoples, Thompson and colleagues (2000) argued that the complex meanings that Aboriginal peoples tie to their community need to be considered in physical activity research. However, the challenge associated with trying to define community was noted in some of our previous research with Aboriginal

<sup>3</sup> The term Indigenous refers to Aboriginal people internationally (National Aboriginal Health Organization [NAHO], n.d.). In this paper, the term refers to Aboriginal people in Australia and the United States.

youth (McHugh and Kowalski, 2009). Smith (1999), has argued that people can belong to a number of different communities and that communities are self-defined spaces. Our research (McHugh and Kowlski, 2009, 2011) demonstrates that communities typically form around the goals and interests of a particular group. Given the potential for communities to enhance sport opportunities for Aboriginal youth, an understanding of Aboriginal youth's meanings of community is crucial.

The use of the term sport rather than physical activity in the overarching research question was a purposeful decision. Despite this project's broader focus on physical activity, most of the discussion in community consultations was focused specifically on sport. It is possible that Aboriginal youth have an encompassing view of sport, which includes more traditional activities (e.g., hunting, trapping; First Nations Information Governance Centre, 2007). Furthermore, as suggested in Sport Canada's Policy on Aboriginal Peoples' Participation in Sport, the holistic perspective of many Aboriginal peoples does not distinguish between sport, physical activity, and recreation as such activities are interrelated and play a critical role in personal well-being (Canadian Heritage, 2005). Thus, in an effort to support the words of the participants and to enhance relevance, the term sport was used.

When exploring the role of communities in supporting sport opportunities for Aboriginal youth, it will also be important to better understand their meanings of culture. Throughout the consultations many participants used the terms community and culture interchangeably. Participants also regularly made reference to Aboriginal culture, suggesting there is a singular Aboriginal culture that is adhered to by Aboriginal peoples in Canada. However, the knowledge shared throughout the consultations made it very clear that participants recognize the diversity among Aboriginal peoples and that there are various Aboriginal cultures. Although colonization has had a negative impact on Aboriginal cultures, RCAP (1996) argued that such cultures are still vibrant and distinctive. Similarly, Kirmayer et al. (2003, p. S19) argued that within all cultures there

is variation in attitudes, knowledge, and practice, and cultures are often viewed as "local worlds that are constantly in flux." Researchers must work with Aboriginal youth to better understand their meanings of culture and identify ways to enhance sport opportunities for Aboriginal youth.

#### CONCLUSION

The primary purpose of this paper was to identify relevant and respectful research topics and questions regarding the physical activity of urban Aboriginal youth. The knowledge shared in this study supported the development of an overarching research question, which subsequently formed the foundation of a recently awarded SSHRC Insight Development Grant. The belief that Aboriginal peoples should be involved as equal partners in research is well established (e.g., Battiste, 2002), yet the inclusion of participants in the identification of research topics is not necessarily common practice. This research, however, is a practical example of how Aboriginal youth and stakeholders can be actively engaged in the research process. Although not common in the past, more funding opportunities from national agencies (e.g., SSHRC) are supporting development projects such as the one described above. Bostock and Freeman (2003) explained the importance of working with and including youth when promoting recommendations, which in this case is the recommendation for future physical activity research. Recognizing that participants are the experts in matters of their lives (Boog, 2003), should make researchers more willing to include participants in the identification of research topics and questions. Including participants in this critical part of the research process makes it likely that research will have more relevant outcomes for participants.

#### References

Battiste, M. (2002). Decolonizing university research: Ethical guidelines for research involving Indigenous populations. In G. Alfredsson and M. Stavropoulou, eds., Justice Pending: Indigenous Peoples and other Good Causes. The Hague: Martinus Nijhoff Publishers, pp. 33–44.

- Battiste, M.A. and Henderson, J.H. (2000). Protecting Indigenous Knowledge and Heritage: A Global Challenge. Saskatoon, SK: Purich.
- Bishop, R. (2005). Freeing ourselves from neocolonial domination in research. In N.K. Denzin and Y.S. Lincoln, eds., *The SAGE Handbook of Qualitative Research.* Third edition. Thousand Oaks, CA: Sage Publications, pp. 109–138.
- Boog, B.W.M. (2003). The emancipatory character of action research, its history and the present state of the art. *Journal of Community & Applied Social Psychology*, *13*, 426–438.
- Bostock, J. and Freeman, J. (2003). 'No limits': Doing participatory action research with young people in Northumberland. *Journal of Community & Applied Social Psychology*, *13*, 464–474.
- Brown, J., Higgitt, N., WIngert, S., Miller, C., and Morrissette, L. (2005). Challenges faced by Aboriginal youth in the inner city. *Canadian Journal* of Urban Research, 14, 81–106.
- Canadian Heritage (2005). Sport Canada's policy on Aboriginal peoples' participation in sport. Minister of Public Works and Government Services Canada, *Catalogue No. CH24-10/2005.* Retrieved 2 August 2013 from http://www.pch.gc.ca/eng/.
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (2010). *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*. Retrieved 2 August 2013 from <u>http://www.pre.ethics.gc.ca/</u> <u>pdf/eng/tcps2/TCPS\_2\_FINAL\_Web.pdf</u>.
- Castellano, M.B. (2004). Ethics of Aboriginal research. Journal of Aboriginal Health, January, 98–114.
- Coble, J.D. and Rhodes, R.E. (2006). Physical activity and Native Americans: A review. *American Journal of Preventative Medicine*, *31*, 36–46.
- Colley, R.C., Garriguet, D., Janssen, I., Craig, C., Clarke, J., and Tremblay, M.S. (2011). *Physical Activity of Canadian Children and Youth: Accelerometer Results from the 2007–2009 Canadian Health Measures Survey.* Health Reports (StatisticsCanada, Catalogue no. 82-003-XPE), 22(1).

- Creswell, J.W. (1998). *Qualitative Inquiry and Research Design: Choosing Among Five Traditions.* Thousand Oaks, CA: Sage Publications.
- (2007). Qualitative Inquiry and Research Design: Choosing Among Five Traditions. Second edition. Thousand Oaks, CA: Sage.
- Daley, C.M., James, A.S., Ulrey, E., Joseph, S., Talawyma, A., Choi, W.S., Greiner, K.A., and Coe, M.K. (2010).
  Using focus groups in community-based participatory research: Challenges and resolutions. *Qualitative Health Research*, 20, 697–706.
- Dogra, S., Meisner, B.A., and Ardern, C.I. (2010). Variation in mode of physical activity by ethnicity and time since immigration: A cross-sectional analysis. International Journal of Behavioral Nutrition & Physical Activity, 7, 75–85.
- Edwards, K., Lund, C., Mitchell, S., and Andersson, N. (2008). Trust the process: Community-based researcher partnerships. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health, 6*, 187–199.
- Environics Institute (2010). Urban Aboriginal peoples study: Main report [online].Toronto. Retrieved 13 July 2013 from <u>http://uaps.ca/wp-content/uploads/2010/03/UAPS-Main-Report\_Dec.pdf</u>.
- Ferreira, I., Van Der Horst, K., Wendel-Vos, W., Kremers, S., Van Lenthe, F.J., and Brug, J. (2007). Environmental correlates of physical activity in youth — a review and update. *Obesity Reviews*, *8*, 129–154.
- First Nations Information Governance Centre (FNIGC, 2012). First Nations Regional Health Survey (RHS) 2008/2010: National Report on Adults, Youth and Children Living in First Nations Communities. Ottawa: First Nations Information Governance Centre.
- Fleming, T.L., Kowalski, K.C., Humbert, L.M., Fagan, K. R., Cannon, M.J., and Girolami, T.M. (2006). Bodyrelated emotional experiences of young Aboriginal women. Qualitative Health Research, 16, 517–537.
- 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,* 27–62.

- Foulds, H.J.A., Warburton, D.E.R., and Bredin, S.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.
- Giles, A.R. (2007). From the special editor. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health, 5,* 3–4.
- Iwasaki, Y. (2006). Culturally meaningful leisure as a way of coping with stress among Aboriginal individuals with diabetes. *Journal of Leisure Research, 38,* 321– 338.
- Kirby, A.M., Levesque, L., and 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 and Indigenous Community Health, 5*, 5–24.
- Kirmayer, L., Simpson, C., and Cargo, M. (2003). Healing traditions: Culture, community and mental health promotion with Canadian Aboriginal peoples. *Australasian Psychiatry*, 11 (Supplement), S15–S23.
- Loppie Reading, C. and Wien, F. (2009). *Health Inequalities and Social Determinants of Aboriginal Peoples' Health.* Prince George: National Collaborating Centre for Aboriginal Health.
- Mason, C. and Koehli, J. (2012). Barriers to physical activity for Aboriginal youth: Implications for community health, policy, and culture. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, 10(1), 97–108.
- McHugh, T.-L.F. (2011). Physical activity experiences of Aboriginal youth. *Native Studies Review, 20,* 7–26.
- McHugh, T.-L.F. and Kowalski, K.C. (2011). "A new view of body image": A school-based participatory action research project with young Aboriginal women. *Action Research*, 9, 220–241.
- (2009). Lessons learned: participatory action research with young Aboriginal women. *Pimatisiwin:* A Journal of Aboriginal and Indigenous Community Health, 7(1), 117–131.
- McIntyre, L., Wien, F., Rudderham, S., Etter, L., Moore, C., MacDonald, N., Johnson, S., and Gottschall, A. (2001). An Exploration of the Stress Experience of Mi'kmaq On-reserve Female Youth in Nova Scotia.

Halifax, NS: Maritime Centre of Excellence for Women's Health.

- Morse, J.M., Barrett, M., Mayan, M., Olson, K., and Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1, 1–18.
- National Aboriginal Health Organization (NAHO) (n.d.). *Publications: Terminology.* Retrieved 25 September 2012, from <u>http://www.naho.ca/publications/</u> <u>topics/terminology/</u>.
- Nelson, A., Abbott, R., and Macdonald, D. (2010). Indigenous Australians and physical activity: Using a social-ecological model to review the literature. *Health Education Research*, 25, 498–509.
- Patton, M.Q. (2002). *Qualitative Research & Evaluation Methods.* Third edition. Thousand Oaks, CA: Sage Publications.
- Perry, C. and Hoffman, B. (2010). Assessing tribal youth physical activity and programming using a community-based participatory research approach. *Public Health Nursing*, 27, 104–114.
- Rossman, G.B. and Rallis, S.F. (1998). *Learning in the Field.* Thousands Oaks, CA: Sage.
- Royal Commission on Aboriginal Peoples (1996). *Report of the Royal Commission on Aboriginal Peoples*. Ottawa, ON: Government of Canada.
- Schinke, R.J., Blodgett, A.T., Yungblut, H.E., Eys, M.A., Battochio, R.C., Wabano, M.J., Peltier, D., Ritchie, S., Pickard, P., Recollet-Saikonnen, D. (2010). The adaptation challenges and strategies of adolescent aboriginal athletes competing off reserve. *Journal* of Sport and Social Issues, 34, 438–456.
- Shea, J.M., Poudrier, J., Chad, K., and Atcheynum, J.R. (2011). Understanding the healthy body from the perspective of First Nations girls in the Battlefords Tribal Council region: A photovoice project. *Native Studies Review*, 20, 27–57.
- Smith, L.T. (1999). Decolonizing Methodologies: Research and Indigenous Peoples. London: Zed Books Ltd.
- (2005). On tricky ground: Researching the Native in the age of uncertainty. In N.K. Denzin and Y.S. Lincoln, eds., *The SAGE Handbook of Qualitative Research.* Third edition. Thousand Oaks, CA: Sage Publications, pp. 85–107.

- Statistics Canada (2008). Aboriginal Peoples Highlight Tables, 2006 Census. Retrieved 13 July 2013 from http://www12.statcan.ca/census-recensement/2006/dp-pd/hlt/97-558/index.cfm?Lang=E.
- Sutherland, C., Skinner, K., Hanning, R.M., Montgomery, M., and Tsuji, L.J.S. (2007). A Cree perspective on gathering community input for physical activity programming in the Mushkegowuk Territory. *Pimatisiwin, 5*, 169–184.
- Thompson, S.J., Gifford, S.M., and Thorpe, L. (2000). The social and cultural context of risk and prevention:
  Food and physical activity in an urban Aboriginal community. *Health Education & Behavior, 27*, 725–743.
- Warburton, D.R.E., Nicol, C.W., and Bredin, S.S.D. (2006). Health benefits of physical activity: The evidence. *Canadian Medical Association Journal, 174*, 801–809.
- Willows, N.D. (2005). Overweight in Aboriginal children: Prevalence, implications and solutions. *Journal of Aboriginal Health, 2,* 76–85.

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