

INDIGENOUS PEOPLES' PHYSICAL ACTIVITY

Introduction

The link between physical activity and improved physical health is strong. Physical activity, which includes all sports and recreation as well as traditional activities and games, increases strength and energy, improves mental health, prolongs life, and helps prevent and control chronic diseases, including cardiovascular disease, diabetes mellitus, cancer, hypertension, obesity, and bone and joint diseases (First Nations Information Governance Centre [FNIGC], 2018; Lavallée & Lévesque, 2013; Pelletier et al., 2017; Warburton & Bredin, 2019; Wicklum et al., 2019). The physical exertion required for optimal health ranges from moderate (e.g., riding a bike in a non-hilly area, walking swiftly) to vigorous (e.g., jogging, aerobic dancing). Canada's Physical Activity and Healthy Eating Guide (Canada, 2021) recommends that children engage in at least 60 minutes of moderate to vigorous physical activity daily and that adults, including seniors, engage in at least 150 minutes weekly.



First Nations, Inuit, and Métis Peoples are strongly aware of the connections between physical activity and holistic health—that is physical, mental, spiritual, and emotional well-being (Coppola et al., 2020; Hudson et al., 2020; Lavallée & Lévesque, 2013; McHugh et al., 2019). Data show the correlation between Indigenous Peoples' 1 physical activity and their overall wellness. The 2018 First Nations Regional Health Survey (FNIGC, 2018) found that individuals who were active were more likely to report having excellent health, normal weight, and fewer health conditions. According to this survey, active people also tended to consume more nutritious foods, including traditional foods, have

good support, and feel in balance physically, emotionally, mentally, and spiritually. Holistic benefits of physical activity include feelings of cultural connectedness (Ironside et al., 2020), cultural knowledge and knowledge transmission through traditional activities (Abraham, 2021; Arellano et al., 2019; johnson & Ali, 2020), and improved mental health (Redvers, 2020). Yet, there is a much higher incidence of obesity and chronic diseases among Indigenous Peoples when compared with the general Canadian population, which is often attributed to sedentary behaviours (FNIGC, 2018), as well as higher levels of mental health challenges (Valeggia & Snodgrass, 2015). The solution

¹ "Indigenous" is used to refer to the three distinct groups of peoples: First Nations, Inuit, and Métis. In general, we use it here rather than "Aboriginal," the adjective used to refer to Indigenous Peoples in the *Canadian Constitution Act*, Section 35(2). We recognize the diversity and cultural integrity both among and within these groups.



to these challenges cannot be reduced to racist remarks such as "Indigenous Peoples need to exercise more!" There are many complex and intersecting barriers to improving physical activity among First Nations, Inuit, and Métis children and adults.

This fact sheet, adapted from the National Collaborating Centre for Indigenous Health's Indigenous Sports and Recreation Programs and Partnerships across Canada: A Literature Review and Environmental Scan (Sutherland, 2021), offers general information on Indigenous Peoples' health and physical activity. Its focus is on sports and physical recreation, including traditional activities. It provides an overview of barriers and facilitators to First Nations, Inuit, and Métis Peoples' participation in sports and recreation. It also outlines best practices for improving policy making, research, and programs, and makes recommendations for further research.

Sports, recreation, and reconciliation

Physical activity has been valued throughout Indigenous history as a significant means for managing physical fitness and health at every life stage (Ironside et al., 2020). However, colonialism significantly altered Indigenous Peoples' experience with physical activity, and sport became an assimilation tactic (Henhawk & Norman, 2019; Te Hiwi, 2021). For example, at residential schools, students participated in mainstream sports such as hockey and football rather than engaging in traditional activities such as lacrosse (Forsyth, 2014 as cited in Rutkowski, 2018).

Part of reconciliation is decolonizing sports and recreation, which requires involving Indigenous Peoples in decision making about physical activity policies and programs. Five of the 94 Calls to Action (CTA) in the Truth and

Reconciliation Commission (TRC) of Canada (TRC, 2015) focus on sports and reconciliation:

- CTA 87 is centred on public education, calling for representation of Indigenous athletes in Canada's story of national sport.
- CTA 88 is focused on ensuring the long-term development and growth of Indigenous athletes and ongoing support for the North American Indigenous Games (NAIG).
- CTA 89 is about inclusivity of Indigenous Peoples in policies that promote physical activity. It focuses on reducing barriers to sports participation, increasing pursuit of excellence in sports, and building capacity in the Canadian sports system.
- CTA 90 also aims attention at inclusivity of Indigenous Peoples, with specific reference to the following: 1) funding for and accessibility to community sports programs that reflect Indigenous Peoples' diverse cultures and traditional sporting activities; 2) an elite athlete development program for Indigenous athletes; 3) culturally relevant training for coaches, trainers, and sports officials; and 4) anti-racism awareness training.
- CTA 91 concentrates on collaboration with Indigenous communities on international sporting events and respect for Indigenous Peoples' territorial protocols.





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In 2016, the federal government officially adopted the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), promising to put the articles into effect in Canadian law.² Article 24(2) asserts that, "Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health. States shall take the necessary steps with a view to achieving progressively the full realization of this right" (United Nations General Assembly, 2007). Article 31 emphasizes that "Indigenous peoples have the right to maintain, control, protect and

develop their [...] sports and traditional games [...]. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions."

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organized sports among First Nations, Inuit, and Métis Peoples wherever they reside—on- or off-reserve, in urban centres, or in rural or remote communities, from coast to coast to coast (Government of Canada, 2021a; Government of Canada, 2021b). For example, the Government of Canada is partnering with the Aboriginal Sport Circle to support Indigenous youth and sport initiatives in Indigenous sport leadership, culturally relevant sport programming, the North American Indigenous Games (NAIG), and Sport Canada's data and research (Government of Canada, 2021b).

² On June 16, 2021, the Canadian Senate voted to pass the *United Nations Declaration on the Rights of Indigenous Peoples Act* (Bill C-15) into law. The Act received Royal Assent five days later, on June 21, 2021.

Barriers to physical activity

Multiple barriers to First Nations, Inuit, and Métis Peoples' ability to fully participate in sports and recreation may be encountered at any time across the lifespan. Many of these are ultimately the result of multiple "-isms" (Hayhurst et al., 2015; McKee & Forsyth, 2019; Stout, 2018; Wicklum et al., 2019; Wilk et al., 2019). For example, the oftstated belief that people's failure to engage in physical activity is a "lifestyle choice" does not take into account the complex and intersecting factors of racism, sexism, classism, ableism, and so on that may be obstructing physical activity (Forsyth, 2014; Wicklum et al., 2021).

Importantly, the location, availability, accessibility, or nature of facilities can impede participation in physical activity for Indigenous Peoples both on- and off-reserve and in urban, rural, and remote settings (Akande et al., 2019; Akande et al., 2021). These include cases where there are few nearby playgrounds, no all-purpose facilities or generally

poor infrastructure for sports and recreation, limited public transit options, cold temperatures, or lack of snow removal. Physical activity may also be hindered by safety concerns, such as whether facilities or walking trails are safe or can be safely accessed. Fears about crime, loose dogs, and poor roads and lighting are barriers to travelling to and using facilities (Gerrard et al., 2018; Hsu & Warburton, 2018; Stout, 2018; Wicklum et al., 2019). Cost is also a barrier (Mason et al., 2019). For example, Indigenous individuals wishing to engage in traditional physical activities (e.g., hunting, fishing, trapping, gathering wild plants) may not be able to afford the related costs (Kumar et al., 2019).

Many of the barriers to engaging in physical activity for Indigenous Peoples of all ages are mirrored in the experiences of Indigenous youth. These include: a lack of, or limited access to, community spaces for physical activity (Bean & Forneris, 2016; Hudson et al., 2020; Murray et al., 2017; Nykiforuk et al., 2018); programs being defunded, even when they have been successful (MacGregor, 2017); facilities in disrepair, including broken basketball nets,

areas with glass and garbage, no fencing and lighting, no skating options, and vandalism (DyckFehderau et al., 2013); and elevated crime rates or perceived danger within a neighbourhood (Kerpan & Humbert, 2015). Though some subsidized sports programs exist for Indigenous youth, many young people still face financial barriers, such as the unaffordability of equipment or travel-related expenses, including bus fare (Mason et al., 2019). Unstable or unsupportive environments are also barriers: for example, frequent moves to new locales can decrease youth participation in community activities (Goodman et al., 2019), as can a lack of parental motivation to encourage children to be physically active (Mason et al., 2019; Wilk et al., 2019).

Racism, sexism, bullying, and discrimination can also be barriers to youth's participation in physical activities (Wilk et al., 2018), both in school and elsewhere (Kentel & McHugh, 2014; Mason et al., 2019). Young Indigenous women are particularly susceptible to challenges to participation in exercise (Mason et al., 2019); for example, Indigenous women



seeking sport opportunities "may experience a lack of respect, low levels of influence, lack of opportunity, inequality, and few women in decision-making positions" (Ferguson et al., 2019, p. 1). However, while Indigenous women are generally less physically active than Indigenous males (Wilk et al., 2018), some young Indigenous women reported a reduction in experiences with racial bullying when they participated in sport and physical activity (Mason et al., 2019).

Facilitators of physical activity

Physical activity may be enhanced in many ways: by community, family, and social supports; through role models; via group activities; and through culturally relevant programs and a commitment to selfdetermination that enhance cultural pride and a sense of belonging. To be truly rooted in Indigenous ways of knowing and being, practices, programs, and policies related to sports and physical activity, including traditional games, should be considered holistically—as working in relationship with each other to develop an individual spiritually, emotionally, mentally, and physically (Akbar et al., 2020; Coppola et al., 2020; Gerrard et al., 2018; Hudson et al., 2020; Mason et al., 2019; Petrucka et al., 2016; Tang et al., 2016).



The importance of community, family, and social support to improved physical activity among Indigenous populations cannot be overstated. These supports provide significant cultural benefits and enhance pride in individual participants (Akande et al., 2021; Ironside, 2019; McHugh et al., 2015; Stronach & Maxwell, 2020). Indigenousspecific community support enhances cultural physical activities at a community level, such as at powwows (DeRiviere, 2019), and improves participation more broadly, such as at the North American Indigenous Games (NAIG) (Lavallée, 2020; Reyes, 2022). Traditional physical activities (e.g., song, dance) increase community bonding and enhance cultural identity (Good et al., 2021). Bringing people together through group activities can also foster greater physical activity and wellness since they promote "a sense of belonging and community" (Kerpan & Humbert, 2015, p.

1412). Programs in Friendship Centre settings can also encourage increased physical activity (McGuire-Adams, 2017). Friends, families, and community support are particularly important for encouraging positive physical activity experiences among Indigenous youth (Coppola et al., 2020; Hudson et al., 2020; Mason et al., 2019; McHugh et al., 2019; Wicklum et al., 2019).

The presence of a range of Indigenous role models—from extended family members, to coaches, to elite Indigenous athletes, to any exemplary community members—also improves physical activity program uptake by Indigenous Peoples (Forneris et al., 2016; Hall, 2016; Mason et al., 2019; McGuire-Adams, 2017; McHugh et al., 2019). For women, having women role models can also facilitate increased physical activity (Hsu & Warburton, 2018).

Facilitation in action:

Each year, the Indspire Awards recognizes a champion role model in sport. The 2022 recipient was Terry Felix (Sts'ailes First Nation, BC), the first Indigenous athlete living in North America to play on a professional soccer team (the Vancouver Whitecaps).

Indigenous Peoples' increased "success in shaping their sporting lives against colonial imposition" and their "efforts to shape their physical activities (and cultural practices, more broadly) highlight their efforts to revitalize and restore their traditions and cultures into their contemporary lives" (Te Hiwi, 2021, p. 51). Their commitment to Indigenous self-determination in physical activity "has led to the creation of all-Aboriginal events like the North American Indigenous Games" (Paraschak & Tirone, 2015, p. 109). Sport for Development and Peace (SDP) programming³ has also promoted self-determination (Hayhurst & Giles, 2013).

Decolonized physical activity and community-driven programming, infused with cultural pride, can also improve individual and community well-being (McGuire-

Adams, 2017; Wicklum et al., 2021). For example, some Anishinaabeg women engaged in decolonizing their physical activity through promoting gwesayjitodoon indo bimaadiziiwin (meaning "to transform oneself into a better life") (McGuire-Adams, 2017). In other words, they sought transformation through self-determined physical activity, through which they aimed to achieve personal empowerment and confidence as well as greater well-being for themselves, their families, and their communities (McGuire-Adams, 2017).

Culturally relevant programming facilitates physical activity for all ages, including Indigenous senior citizens (Brooks-Cleator, 2019; Gerrard et al., 2018), and improves Indigenous women's participation in sports and recreational activities (Wicklum et al., 2021). Cultural programming emphasizing traditional activities and ties to the land (e.g., hunting, fishing, gathering, running as ceremony and healing, jingle dress dancing, jigging, archery, drumming) is important for improving physical activity among Indigenous populations (Dubnewick et al., 2018; FNIGC, 2018; Hatala et al., 2020; Hudson et al., 2020; Kerpan & Humbert,

2015; McGuire-Adams & Giles, 2018; McHugh et al., 2019; Sasakamoose et al., 2016; Tang et al., 2016). This might also include playing on Treaty Day, 4 powwows, and setting up teepees (Pigford et al., 2012). Outdoor adventure leadership experiences, in which young people are exposed to such activities as canoe excursions in their traditional territories, are important for youth's resilience and well-being (Ritchie et al., 2014). Access to traditional activities is also important for Indigenous youth who may be away from their communities for post-secondary education, or possibly work, but who still want to increase their physical activity in culturally relevant ways (Ferguson & Philipenko, 2016; Van Dyk & Weese, 2019).

Facilitation in action:

Waterways Recreation is a youthfocused and Indigenous-led nonprofit organization. It partners with Indigenous communities and organizations across Manitoba to promote wellness and culturally relevant recreation for Indigenous youth through canoe programs.



³ SDP programs use sports, play, and other forms of physical activity to reach specific development and peace goals. These initiatives empower participants and communities, who are actively involved in their development.

⁴ Treaty Day recognizes and honours the Nation-to-Nation relationships formed between Indigenous Nations and the federal government. Specifically, it memorializes when Treaties were signed by Indigenous Nations and government officials, beginning in the 18th century. Treaty Day is celebrated on different dates across the country.



To improve (...) young people's emotional, spiritual, mental, and physical well-being, it is also important for program and service planning and research to be strengths-focused.

Best practices

What are some best practices for ensuring First Nations, Inuit, and Métis Peoples of all ages have the resources and supports needed to get and stay physically active? Below are some recommendations from relevant and recent research—much of it Indigenous-and community-led.

Empower Indigenous youth and be strengths-focused

For Indigenous youth to take control of their wellness, the spaces in which they play must be empowering. For example, spaces may actively encourage youth leadership opportunities (Halsall & Forneris, 2016; Mason et al., 2019; Petrucka et al., 2016). To encourage positive youth development (commonly referred to as PYD)—that is, to improve young people's emotional, spiritual, mental, and physical well-being—it is also important for program and service planning and research to be strengths-focused (Baillie et al., 2017; Halsall, 2016; Kerpan & Humbert, 2015; McGuire-Adams & Giles, 2018; Rand & Gray, 2018; Warburton & Bredin, 2019). Research that focuses strictly on health gaps between Indigenous and non-Indigenous populations, without properly aiming attention at Indigenous health and well-being practices, perpetuates a colonial framework (McGuire-Adams, 2018).

Increase connections between partners

Partnerships can enhance programs and services for Indigenous Peoples of all ages, as many individuals and organizations offer different strengths and resources. One central programmer (e.g., Sport Canada) cannot independently understand and meet the unique needs of a specific community; thus, decentralized programming through the engagement of local partners is a vital part of program success (Coppola et al., 2020; Hudson et al., 2020; van Luijk et al., 2020). Of course, too many partners can create organizational headaches (Arellano et al.,

2018), so striking a balance is important. It is also important to be wary of partners, such as resource extraction companies or other profit-driven stakeholders, whose interests may be linked to offsetting the damage they may otherwise be doing to traditional territories (Arellano et al., 2018, Millington et al., 2019; van Luijk et al., 2020).

Respect the cultural, linguistic, and economic diversity of Indigenous communities

Although Indigenous communities may share certain attributes (e.g., rural, Northern), they are nevertheless culturally, linguistically, and economically diverse. With this in mind, researchers must appreciate that their findings are not broadly applicable across communities (Halsall & Forneris, 2016; Hudson et al., 2020; McHugh et al., 2015; Nykiforuk et al., 2020). Researchers and programmers seeking to promote successful local, community-driven sport

programs need to work with individual communities to come to a better understanding of what "community" means to them (McHugh et al., 2015) and engage these communities in their own program development (Paraschak & Heine, 2019).

Build capacity

More training, funding, scouting, and cross-cultural education is required to increase sports, recreation, and physical activity among Indigenous Peoples. Capacity building also means improving and expanding infrastructure to enhance opportunities for sports and recreation for Indigenous Peoples in all regions of Canada and across the lifespan. Plans for capacity building need to be Indigenous-led and local. Especially in rural, remote, and Northern settings, stakeholders should examine "how capacity building is defined; who decides what capacity is needed; who the trainers are; and who needs support" (Nykiforuk et al., 2018, p. 430).

Indigenize and decolonize research, policy, and programming

Centuries of land dispossession have compromised the relationship between First Nations, Inuit, and Métis Peoples and the land. A colonial definition of what comprises sports and physical activity has further deteriorated these populations' cultural identities and their experiences with recreation (Davie, 2019; Ellsworth & O'Keeffe, 2013; Richmond, 2018). For reconciliation to be possible, sports research, policies, and programs must incorporate Indigenous traditions and values and place greater value and emphasis on traditional land-based activities (Hudson et al., 2020; Mason et al., 2019; McGuire-Adams & Giles, 2018; Paraschak & Heine, 2019; Peers & Link, 2021; Strachan et al., 2018). This means that sports research, policy, and programming (including organized sports and physical education) need to be more inclusive and respectful of

Indigenous knowledges (Bruner et al., 2016; Fletcher et al., 2018; Forneris et al., 2016; Hudson et al., 2020; Mason et al., 2019; Norman et al., 2019; Te Hiwi, 2021).

Although research is becoming more Indigenized—in other words, it is increasingly encompassing Indigenous points of view and involving more Indigenous methodologies, such as Sharing Circles and storytelling (Cull et al., 2018)—it must be further decolonized (Boulé & Mason, 2019; McGuire-Adams & Giles, 2018; Norman & Hart, 2016; Wicklum et al., 2019). That is, attitudes to the research process that prioritize Western methodologies and treat subjects (e.g., Indigenous Peoples) as inferior and passive need to be dismantled. Research and resultant policies and programs must be culturally and geographically relevant, and they must be Indigenousand community-led, including leadership by youth (Akbar et al., 2020; Hudson et al., 2020; Mason et al., 2019; McHugh et al., 2015; Nykiforuk et al.,

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2018; Paraschak & Heine, 2019; Petrucka et al., 2016). Researchers must approach "Indigenous physical cultures" in a way that "fosters and reclaims physical culture as a site of cultural growth and self-determination" (Norman & Hart, 2016, p. 439).

Using arts-based methods (e.g., theatre performances, storytelling, photography) in communitybased sports research can also be beneficial (Hatala et al., 2020; Kentel & McHugh, 2014). For example, one study used photovoice—a participatory and visual research methodology where participants document and reflect on experiences though photos they have taken—to explore urban Indigenous youth perspectives about health and resilience in a Canadian innercity. For 12 months, 38 youth (Plains Cree, Métis) participated in this project, taking part in in-depth interviews, talking circles, and photography. The project also applied a "Two-Eyed Seeing" framework, which means drawing from Indigenous and Western ways of knowing. The project concluded that nature is central to wellness, even for urban Indigenous youth, and that being in natural spaces (e.g., parks) in urban areas is a valid way to experience nature's benefits every day (Hatala et al, 2020).

Recognize the link between employment disparities and health

There is a proven link between employment disparities and health (Kolahdooz et al., 2015) that can be partially addressed through sport and physical activity. This starts at high school, where completion rates are lower among Indigenous Peoples than the non-Indigenous population (Statistics Canada, 2018). The connection between playing sports/participating in clubs and finishing high school is well established (Arriagada, 2015), as is the connection between high school completion and gainful employment (Uppal, 2017). These findings suggest that playing sports in school leads to a greater likelihood of high school completion, which leads to an improved chance at gainful employment, which has a positive

Taken together, these best practices begin at a research level and extend to the policies and programs that research informs. Above all, research must be localized, Indigenized, decolonized, strengths-based, participatory, and creative. It must not favour Western paradigms over Indigenous methodologies or mainstream practices over traditional ones.

effect on health.

Areas for further research/improved programming

While improvements are being made to research, policy, and programming related to sports and recreation, much more still needs to be done to ensure that Indigenous Peoples at every stage in the lifespan—and regardless of where they live—have safe, relevant, and empowering opportunities to improve their physical activity. To achieve this, further critical research and improved programming is needed in several areas.

In terms of research and programming, much more needs to be done to address the unique needs of Indigenous people who identify as 2SLGBTQI+. Some Indigenous people who selfidentify as such feel uncertain about Canada's openness to integrating members of queer communities (Fondation Jasmin Roy, 2017). Similarly, considerable improvement needs to be made in sports and recreation research and programming for Indigenous people living with a physical or intellectual disability. 5 While there is much research attention on the Canadian population living with disabilities more generally, there is limited research focusing on First Nations, Inuit,

⁵ Canada employs a social model to define the term "disability." This model, developed by people with disabilities, considers environmental barriers (e.g., inaccessible washrooms) as a significant contributor to the difficulties confronted by persons who have a physical or intellectual disability. In short, the barriers are external to the individuals with disabilities and not a result of the disabilities themselves (Human Skills and Resources Development Canada, 2013).



and Métis Peoples specifically (Hahmann et al., 2019). More also needs to be done to find ways to engage Indigenous older adults and senior citizens in physical activity (Brooks-Cleator, 2019; Brooks-Cleator & Giles, 2016). Given the population growth of Indigenous Peoples in Canada who are over 65 years (Statistics Canada, 2017), such a shortcoming in research and programming is significant.

With respect to youth, more research is needed on how physical activity programs promote positive youth development (PYD) among Indigenous populations (Baillie et al., 2017; Halsall & Forneris, 2016; Hudson et al., 2020; Mason et al., 2019; Strachan et al., 2018). In particular, understanding youth development from Indigenous perspectives (including using a Two-Eyed Seeing approach) needs to be more thoroughly considered (Bruner et al., 2019). More critical attention also needs to be paid to Indigenous Peoples' experiences with bullying in sports to ensure all participants feel safe, regardless of their race (Kentel & McHugh, 2014; Nykiforuk et al., 2018).

Finally, given Indigenous Peoples' strong awareness of the connections between physical activity and holistic health, the relationship between physical health specifically and holistic health more broadly, including for Indigenous youth (McHugh et al., 2019), must be further researched in the hopes that the programs, services, and policies resulting from this research will be grounded in Indigenous value systems.

Conclusion

While physical activity is only one determinant of health among many physical, social, spiritual, and emotional determinants of health affecting First Nations, Inuit, and Métis Peoples across Canada, it is nevertheless critical for improving health and well-being. Drawing on strengths-based approaches to creating policies and programs, showcasing role models inside and outside the community, encouraging family and community support, confronting racism and sexism in systems and individuals, and decolonizing mainstream sport and physical education are vital ways to inspire activity among Indigenous Peoples of all ages, skills levels, orientations, and physical and intellectual abilities.



References

- Abraham, A. (2021, Feb. 25). Test your strength with this traditional Inuit game, the kneel jump. *CBC News*. Retrieved August 29, 2022, from www.cbc.ca/news/canada/ottawa/kneel-jump-inuit-winter-game-indigenous-cool-with-cold-ottawa-1.5899002
- Akande, V. O., Fawehinmi, T. O., Ruiter, R. A. C., & Kremers, S. P. J. (2021). Healthy dietary choices and physical activity participation in the Canadian Arctic: Understanding Nunavut Inuit perspectives on the barriers and enablers. *International Journal of Environmental Research and Public Health*, 18(3), 940. https://doi.org/10.3390/ijerph18030940
- Akande, V. O., Ruiter, R. A. C., & Kremers, S. P. J. (2019). Environmental and motivational determinants of physical activity among Canadian Inuit in the Arctic. *International Journal of Environmental Research and Public Health*, 16(3), 2437. https://doi.org/10.3390/ijerph16132437
- Akbar, L., Zuk, A. M., & Tsuji, L. J. S. (2020). Health and wellness impacts of traditional physical activity experiences on Indigenous youth: A systematic review. *International Journal of Environmental Research and Public Health*, 17, 8275. https://doi.org/10.3390/ijerph17218275
- Arellano, A., Friis, J., & Stuart, S. A. (2019). Pathways to reconciliation: The kitcisakik land-based education initiative. *Leisure = Loisir*, 43(3), 389-417. https://doi.org/10.1080/149 27713.2019.1629832
- Arellano, A., Halsall, T., Forneris, T., & Gaudet, C. (2018). Results of a utilization-focused evaluation of a Right to Play program for Indigenous youth. *Evaluation and Program Planning*, 66, 156-164. http://dx.doi.org/10.1016/j.evalprogplan.2017.08.001
- Arriagada, P. (2015). Participation in extracurricular activities and high school completion among off-reserve First Nations people. *Statistics Canada: Insights on Canadian Society*. Statistics Canada, Catalogue no. 75-006-X.
- Baillie, C. P. T., Galaviz, K. I., Emiry, K., Bruner, M W., Bruner, B. G., & Lévesque, L. (2017). Physical activity interventions to promote positive youth development among indigenous youth: A RE-AIM review. *Translational Behavioral Medicine*, 17, 43–51. https://doi.org/10.1007/s13142-016-0428-2
- Bean, C., & Forneris, T. (2016). Exploring stakeholders' experiences of implementing an ice hockey programme for Inuit youth. *Journal of Sport for Development, 4*(6), 7-20. https://jsfd.files.wordpress.com/2020/08/bean.exploring. stakeholders.hockey.program.pdf

- Boulé, K. L., & Mason, C. W. (2019). Local perspectives on sport hunting and tourism economies: Stereotypes, sustainability, and inclusion in British Columbia's hunting industries. *Sport History Review*, *50*(1), 93-115. [Abstract]. https://doi.org/10.1123/shr.2018-0023
- Brooks-Cleator, L. A. (2019). First Nations and Inuit older adults and aging well in Ottawa, Canada [Unpublished doctoral dissertation]. University of Ottawa. http://dx.doi.org/10.20381/ruor-23390
- Brooks-Cleator, L. A., & Giles, A. R. (2016). Culturally relevant physical activity through elders in motion: physical activity programming for older Aboriginal adults in the Northwest Territories, Canada. *Journal of Cross-Cultural Gerontology*, 31, 449-470. https://doi.org/10.1007/s10823-016-9307-z
- Bruner, M. W., Hillier, S., Baillie C. P. T., Lavallee, L. F., Bruner, B. G., Hare, K., Lovelace, R., & Lévesque, L. (2016). Positive youth development in Aboriginal physical activity and sport: A systematic review. *Adolescent Research Review*, 1, 257-269. https://doi.org/10.1007/s40894-015-0021-9
- Bruner, M. W., Lovelace, R., Hillier, S., Baillie, C., Bruner, B. G., Hare, K., Head, C., Paibomsai, A., Peltier, K., & Lévesque, L. (2019). Indigenous youth development through sport and physical activity: Sharing voices, stories, and experiences. *International Journal of Indigenous Health*, 14(2), 222-251. https://doi.org/10.32799/ijih.v14i2.31945
- Canada. (2021). Canada's food guide: Physical activity and healthy eating. Retrieved June 3, 2022, from https://food-guide.canada.ca/en/tips-for-healthy-eating/physical-activity-healthy-eating/#section-3
- Coppola, A. M., Holt, N. L., & McHugh, T-L. F. (2020). Supporting Indigenous youth activity programmes: A community-based participatory research approach. *Qualitative Research in Sport, Exercise, and Health, 12*(3), 319-335. https://doi.org/10.1080/2159676X.2019.1574880
- Cull, I., Hancock, R. L. A., McKeown, S., Pidgeon, M., & Vedan, A. (2018). *Pulling together: A guide for front-line staff, student services, and advisors.* BCcampus. https://opentextbc.ca/indigenizationfrontlineworkers/
- Davie, J. (2019). An exploration of connections with the land in an urban sport context among Indigenous youth [Unpublished Master's thesis]. University of Alberta. https://era.library.ualberta.ca/items/e0178053-b9db-4c8e-b963-8d563d53371e/view/5e8aad47-e7b9-4fba-aa54-72024b83dd16/Davie_Jenna_201905_MSc.pdf

- DeRiviere, L. (2019). How can community-university engagement address family violence prevention? One child at a time. *Aboriginal Policy Studies*, 7(2), 3-28. https://doi.org/10.5663/aps.v7i2.28897
- Dubnewick, M., Hopper, T., Spence, J. C., & McHugh T.-L. F. (2018). "There's a cultural pride through our games": Enhancing the sport experiences of Indigenous youth in Canada through participation in traditional games. *Journal of Sport and Social Issues*, 42(4), 207-226. https://doi-org.prxy. lib.unbc.ca/10.1177%2F0193723518758456
- DyckFehderau, D. Holt, N. L., Ball, G. D., Alexander First Nation Community, & 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 and Remote Health, 13*, 2289.
- Ellsworth, L., & O'Keeffe, A. (2013). Circumpolar Inuit health systems. *International Journal of Circumpolar Health*, 72(1), 21402. https://doi.org/10.3402/ijch.v72i0.21402
- Ferguson, L., & Philipenko, N. (2016). "I would love to blast some pow music and just dance": First Nations students' experiences of physical activity on a university campus. *Qualitative Research in Sport, Exercise and Health, 8*(2), 180-193. https://doi.org/10.1080/2159676X.2015.1099563
- Ferguson, L., Epp, G. B., Wuttunee, K., Dunn, M., McHugh, T., & Humbert, M. L. (2019). "It's more than just performing well in your sport. It's also about being healthy physically, mentally, emotionally, and spiritually": Indigenous women athletes' meanings and experiences of flourishing in sport. *Qualitative Research in Sport, Exercise and Health*, 11(1), 1-19.https://doi.org/10.1080/2159676X.2018.1458332
- First Nations Information Governance Centre (FNIGC). (2018). *National report of the First Nations regional health survey phase 3: Volume two*. https://fnigc.ca/wp-content/uploads/2020/09/53b9881f96fc02e9352f7cc8b0914d7a_FNIGC_RHS-Phase-3-Volume-Two_EN_FINAL_Screen.pdf
- Fletcher, T., Lorusso, J., & Halas, J. (2018). Redesigning physical education in Canada. In H. A. Lawson (Ed.), *Redesigning physical education: An equity agenda in which every child matters* (pp. 134-145). Routledge.
- Fondation Jasmin Roy. (2017). According to "LGBT realities", the first pan-Canadian survey on LGBT communities conducted by CROP for the benefit of the Fondation Jasmin Roy, 13% of the Canadian population belongs to the LGBT community. *Cision*, August 9. Retrieved December 4, 2020, from https://www.newswire.ca/news-releases/according-to-lgbt-realities-the-first-pancanadian-survey-onlgbt-communities-conducted-by-crop-for-the-benefit-of-the-fondation-jasmin-roy-13-of-the-canadian-population-belongs-to-the-lgbt-community-639432223.html

- Forneris, T., Bean, C., & Halsall, T. (2016). Positive youth development programming with marginalized populations. In N. L. Holt (Ed.), *Positive youth development through sport* (2nd ed., pp. 168-179). Routledge.
- Forsyth, J. (2014). Aboriginal sport in the city: Implications for participation, health, and policy in Canada. *Aboriginal Policy Studies*, *3*(1-2), 21707. https://doi.org/10.5663/aps. v3i1-2.21707
- Gerrard, E., Lai, H., & Warburton, D. (2018). Culturally appropriate physical activity interventions with Indigenous communities in Canada. *The Health & Fitness Journal of Canada*, 11(2), 122-128. https://doi.org/10.14288/hfjc. v11i2.255
- Good, A., Sims, L., Clarke, K., & Russo, F. A. (2021). Indigenous youth reconnect with cultural identity: The evaluation of a community- and school-based traditional music program. *Journal of Community Psychology, 49*(2), 588-604. https://doi.org/10.1002/jcop.22481
- Goodman, A., Snyder, M., Wilson, K., & Whitford, J. (2019). Healthy spaces: Exploring urban indigenous youth perspectives of social support and health using photovoice. *Health & Place*, 56, 34-52. https://doi.org/10.1016/j. healthplace.2019.01.004
- Government of Canada. (2021a, June 23). *More sport opportunities for youth in Indigenous communities* [News release]. Retrieved August 24, 2022, from https://www.canada.ca/en/canadian-heritage/news/2021/06/more-sport-opportunities-for-youth-in-indigenous-communities.html
- Government of Canada. (2021b). *Sports and reconciliation*. Retrieved June 8, 2022, from https://www.rcaanc-cirnac.gc.ca/eng/1524505883755/1557512006268
- Hahmann, T., Badets, N., & Hughes, J. (2019). Indigenous people with disabilities in Canada: First Nations people living off reserve, Métis and Inuit aged 15 years and older. *Aboriginal Peoples Survey*. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/89-653-x/89-653-x2019005-eng.htm.
- Hall, M. A. (2016) *The girl and the game: A history of women's sport in Canada* (2nd ed.). University of Toronto Press.
- Halsall, T. G. (2016). Evaluation of a sports-based positive youth development program for First Nations youth: Experiences of community, growth and youth engagement [Unpublished doctoral dissertation]. University of Ottawa.
- Halsall, T., & Forneris, T. (2016). Challenges and strategies for success of a sport-for-development programme for First Nations, Métis and Inuit youth. *Journal of Sport for Development*, 4(7), 39-57.
- Hatala, A. R., Njeze, C., Morton, D., Pearl, T., & Bird-Naytowhow. (2020). Land and nature as sources of health and resilience among Indigenous youth in an urban Canadian context: A photovoice exploration. *BMC Public Health*, 20, 538. https://doi.org/10.1186/s12889-020-08647-z

- Hayhurst, L. M. C., & Giles, A. (2013). Private and moral authority, self- determination, and the domestic transfer objective: Foundations for understanding sport for development and peace in Aboriginal Communities in Canada. *Sociology of Sport Journal*, 30(4), 504-519. https://doi-org.prxy.lib.unbc.ca/10.1123/ssj.30.4.504
- Hayhurst, L. M. C., Giles, A. R., Radforth, W. M., & the Vancouver Aboriginal Friendship Centre Society. (2015). "I want to come here to prove them wrong": Using a post-colonial feminist participatory action research (PFPAR) approach to studying sport, gender and development programmes for urban Indigenous young women, *Sport in Society*, 18(8), 952-967. https://doi.org/10.1080/17430437. 2014.997585
- Henhawk, D., & Norman, R. (2019). Indigenous peoples, sport and sustainability. In R. Millington, & S. C. Darnell, *Sport, Development and Environmental Sustainability* (pp. 163–177). Routledge.
- Hudson, B. W., Spence, J. C., & McHugh, T.-L. F. (2020). An exploration of the physical activity experiences of Northern Aboriginal youth: A community-based participatory research project. *Qualitative Research in Sport, Exercise and Health*, 12(1), 108-124. https://doi.org/10.1080/2159676X.2019.1584123
- Human Skills and Resources Development Canada. (2013). *Federal disability reference guide*. Government of Canada. https://publications.gc.ca/collections/collection_2013/rhdcc-hrsdc/HS64-17-2013-eng.pdf
- Hsu, Y.-S., & Warburton, D. E. R. (2018). A review of physical activity status in Canadian Indigenous populations and current physical activity guidelines and evaluation methods. *The Health & Fitness Journal of Canada*, 11(2), 113-121. https://doi.org/10.14288/hfjc.v11i2.256
- Ironside, A. (2019). *Cultural and social determinants of Indigenous peoples of Canada's physical activity and sedentary behaviours* [Unpublished Master's thesis]. University of Saskatchewan. https://harvest.usask.ca/bitstream/handle/10388/12217/IRONSIDE-THESIS-2019.pdf?sequence=1&isAllowed=y
- Ironside, A., Ferguson, L. J., Katapally, T. R., & Foulds, H. J. A. (2020). Cultural connectedness as a determinant of physical activity among Indigenous adults in Saskatchewan. Applied Physiology, Nutrition, and Metabolism, 45(9), 937-947. https://doi.org/10.1139/apnm-2019-0793
- johnson, j. & Ali, A. E. (2020). Paddling as resistance? Exploring an Indigenous approach to land-based education amongst Manitoba youth. *Diaspora, Indigenous and Minority Education*, *14*(4), 205-219. https://doi.org/10.1080/1559569 2.2019.1669015
- Kentel, J. L., & McHugh T.-L. F. (2014). "Mean mugging": An exploration of young Aboriginal women's experiences of bullying in team sports. *Journal of Sport & Exercise Psychology*, 37, 367-378. https://doi.org/10.1123/jsep.2014-0291

- Kerpan, S., & Humbert, L. (2015). Playing together: The physical activity beliefs and behaviors of urban Aboriginal youth. *Journal of Physical Activity and Health, 12*, 1409-1413. http://dx.doi.org/10.1123/jpah.2014-0533
- Kolahdooz, F., Nader, F., Yi, K. J., & Sharma, S. (2015) Understanding the social determinants of health among Indigenous Canadians: Priorities for health promotion policies and actions. *Global Health Action*, 8(1), 27968. https://doi.org/10.3402/gha.v8.27968
- Kumar, M. B., Furgal, C., Hutchinson, P., Roseborough, W., & Kootoo-Charello, S. (2019). Harvesting activities among First Nations people living off reserve, Métis and Inuit: Time trends, barriers and associated factors. *Aboriginal Peoples Survey*. Statistics Canada. Retrieved April 19, 2021, from https://www150.statcan.gc.ca/n1/pub/89-653-x/89-653-x2019001-eng.htm
- Lavallée, L. (2020). (Re)creating recreation and sport activities in Indigenous communities: A health-promotion approach for social work. In S. Savard & S. Todd (Eds). *Canadian perspectives on community development* (pp. 19-43). University of Ottawa Press.
- Lavallée, L., & Lévesque, L. (2013). Two-eyed seeing: Physical activity, sport, and recreation promotion in Indigenous communities. In J. Forsyth & A. R. Giles (Eds.), Aboriginal Peoples & sport in Canada: Historical foundations and contemporary issues (pp. 206-228). UBC Press.
- MacGregor, R. (2017). "The program meant everything to me." *The Globe and Mail*, April 9. https://www.theglobeandmail.com/sports/hockey/nunavik-youth-hockey-program-started-by-joe-juneau-shutting-down-leaving-communitytorn/article34643428/
- Mason, C. W., McHugh T.-L. F., Strachan L, & Boule, K. (2019). Urban Indigenous youth perspectives on access to physical activity programmes in Canada. *Qualitative Research in Sport, Exercise and Health*, 11(4), 543-558. https://doi.org/10.1080/2159676X.2018.1514321
- McGuire-Adams, T. (2017). Anishinaabeg women's stories of wellbeing: Physical activity, restoring wellbeing, and confronting the settler colonial deficit analysis. *Journal of Indigenous Well-Being*, 2(3), 90-104.
- McGuire-Adams, T. (2018). Indigenous women's physical activity and wellbeing practices: New research. *WellSpring*, 29(8), 1-4. https://www.centre4activeliving.ca/media/filer_public/e0/77/e077cd0d-75eb-4bfb-9eb8-15e1b8f8dc0a/2018-aug-indigenous-women.pdf
- McGuire-Adams, T., & Giles, A. R. (2018). Anishinaabekweg dibaajimowinan (stories) of decolonization through running. *Sociology of Sport Journal*, *35*, 207-215. https://doi.org/10.1123/ssj.2017-0052

- McHugh, T.-L. F., Coppola, A. M., Holt, N. L., & Andersen, C. (2015). "Sport is community:" An exploration of urban Aboriginal peoples' meanings of community within the context of sport. *Psychology of Sport and Exercise, 18*, 75-84.
- McHugh, T.-L. F., Deal, C. J., Blye, C.-J., Dimler, A. J., Halpenny, E. A., Sivak, A., & Holt, N. L. (2019). A meta-study of qualitative research examining sport and recreation experiences of Indigenous youth. *Qualitative Health Research*, 29(1), 42-54. https://doi.org/10.1177%2F1049732318759668
- McKee, T., & Forsyth, J. (2019). Witnessing painful pasts: Understanding images of sports at Canadian Indian residential schools. *Journal of Sport History, 46*(2), 175-188. https://doi.org/10.5406/jsporthistory.46.2.0175
- Millington, R., Giles, A. R., Hayhurst, L. M. C., van Luijk N., & McSweeney, N. (2019). "Calling out" corporate redwashing: The extractives industry, corporate social responsibility and sport for development in Indigenous communities in Canada. *Sport in Society, 22*(12), 2122-2140. https://doi.org/10.1080/17430437.2019.1567494
- Murray, J., Paupanekis, E., Moscou, K., & Rempel, K. (2017). Working together to support First Nation, Métis, and Inuit Youth success: A policy framework prepared by the Youth Community Circle. Centre for Aboriginal and Rural Education Studies, Brandon University. https://www.brandonu.ca/bu-cares/files/2020/01/Working-Togetherto-Support-First-Nation-Metis-and-Inuit-Youth-Success-A-Policy-Framework-Prepared-by-the-Youth-Community-Circle.pdf
- Norman, M. E., & Hart, M. A. (2016). Moving between worldviews: Indigenous physical cultures through Indigenous eyes. In B. Smith & A. C. Sparkes (Eds)., *Routledge handbook of qualitative research in sport and exercise* (pp. 438-442). Routledge.
- Norman, M. E., Hart, M., & Petherick, L.-A. (2019). Indigenous gender reformations: Physical culture, settler colonialism and the politics of containment. *Sociology of Sport Journal*, *36*, 113-123. https://doi.org/10.1123/ssj.2018-0130
- Nykiforuk, C. I. J., Atkey, K., Brown, S., Caldwell, W., Galloway, T., Gilliland, J., Kongats, K., McGavock, J., & Raine, K. D. (2018). Promotion of physical activity in rural, remote and northern settings: A Canadian call to action. *Health Promotion and Chronic Disease Prevention in Canada*, 38(11), 419-435. https://doi.org/10.24095/hpcdp.38.11.03
- Paraschak, V., & Heine, M. (2019). Co-transforming through shared understandings of land-based practices in Sport for Development and Peace. In R. Millington, & S. C. Darnell (Eds.), *Sport, development and environmental sustainability* (pp. 178-194). Routledge.

- Paraschak, V., & Tirone, S. (2015). Ethnicity and race in Canadian Sport. In J. Crossman & J. Scherer (Eds.), *Social dimensions of Canadian sport and physical activity* (pp. 90-115). Pearson.
- Peers, D., & Link, L. (2021). Rereading histories of inclusive recreation, physical education, and sport. In C. Adams (Ed.), *Sport and recreation in Canadian history* (pp. 203-226). Human Kinetics Publishers.
- Pelletier, C. A., Smith-Forrester, J., & Klassen-Rossa, T. (2017). A systematic review of physical activity interventions to improve physical fitness and health outcomes among Indigenous adults living in Canada. *Preventive Medicine Reports*, 8, 242-249. https://doi.org/10.1016/j. pmedr.2017.11.002
- Petrucka, P., Bickford, D., Bassendowski, S., Godwill, W., Wajunta, C., Yuzicappi, B., Yuzicappi, L., Hackett, P., Jeffery, B., & Rauliku, M. (2016). Positive leadership, legacy, lifestyles, attitudes, and activities for Aboriginal youth. *International Journal of Indigenous Health, 11*(1), 177-197. https://doi.org/10.18357/ijih111201616017
- Pigford, A.-A. E., Willows, N. D., Holt, N. L., Newton, A. S., & Ball, G. D. C. (2012). Using First Nations children's perceptions of food and activity to inform an obesity prevention strategy. *Qualitative Health Research*, 22(7), 986-996. https://doi.org/10.1177/1049732312443737
- Rand, M., & Gray, C. (2018). Creating physically active Indigenous communities through Path to Prevention: Report recommendations. Cancer Care Ontario. https://sportforlife.ca/wp-content/uploads/2018/03/D2_-_Path_to_Prevention_MichelleRand.pdf
- Redvers, J. (2020). "The land is a healer": Perspectives on land-based healing from indigenous practitioners in northern Canada. *International Journal of Indigenous Health*, 15(1), 90-107. https://doi.org/10.32799/ijih.v15i1.34046
- Reyes, A. (2022). A study exploring Indigenous women athlete's experiences with physical activity and sport (Unpublished Master's thesis). University of British Columbia. https://open.library.ubc.ca/collections/ubctheses/24/items/1.0412905
- Richmond, C. (2018). The relatedness of people, land, and health: Stories from Anishinabe Elders. In M. Greenwood, S. de Leeuw, & N. M. Lindsay (Eds.), *Determinants of Indigenous Peoples' health: Beyond the social* (2nd ed., pp. 167-186). Canadian Scholars' Press.
- Ritchie, S. D., Wabano, M.-J., Russell, K., Enosse, L, & Young, N. L. (2014). Promoting resilience and wellbeing through an outdoor intervention designed for Aboriginal adolescents. *Rural and Remote Health*, *14*, 2523. Available at https://www.rrh.org.au/journal/article/2523
- Rutkowski, C. (2018). Sport used as a tool for assimilation. *UM Today News*, February 17. University of Manitoba. Retrieved June 8, 2022, from https://news.umanitoba.ca/sport-used-as-a-tool-for-assimilation/

- Sasakamoose, J.-L., Scerbe, A., Wenaus, I., & Scandrett, A. (2016). First Nation and Métis youth perspectives of health: An Indigenous qualitative inquiry. *Qualitative Inquiry, 22*(8), 636-650. https://doi.org/10.1177%2F1077800416629695
- Statistics Canada. (2017). Aboriginal peoples in Canada: Key results from the 2016 Census. Government of Canada. https://www150.statcan.gc.ca/n1/daily-quotidien/171025/dq171025a-eng.htm
- Statistics Canada. (2018). *The educational attainment of Aboriginal peoples in Canada*. Government of Canada. https://www12.statcan.gc.ca/nhs-enm/2011/as-sa/99-012-x/99-012-x2011003_3-eng.cfm
- Stout, R. (2018). The built environment: Understanding how physical environments influence the health and well-being of First Nations peoples living on-reserve. National Collaborating Centre for Aboriginal Health.
- Strachan, L., McHugh, T.-L., & Mason, C. (2018). Understanding positive youth development in sport through the voices of Indigenous youth. *Journal of Sport and Exercise Psychology, 40*, 293-302. https://doi.org/10.1123/jsep.2018-0035
- Stronach, M., & Maxwell, H. (2020). Developing sport for Indigenous women and girls. In E. Sherry & K. Rowe (Eds.), *Developing sport for women and girls* (pp. 95-109). Routledge.
- Sutherland, J. (2021). *Indigenous sports and recreation programs and partnerships across Canada: A literature review and environmental scan*. National Collaborating Centre for Indigenous Health. https://www.nccih.ca/495/Indigenous_sports_and_recreation_programs_and_partnerships_across_Canada__A_literature_review_and_environmental_scan. nccih?id=10346
- Tang, K., Community Wellness Program, & 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. https://doi.org/10.18357/ijih111201616018
- Te Hiwi, B. (2021). Indigenous peoples' cultures and physical activities. In C. Adams (Ed.), *Sport and recreation in Canadian history* (pp. 57-76). Human Kinetics Publishers.
- Truth and Reconciliation Commission (TRC) of Canada. (2015). Honouring the truth, reconciling for the future: Summary of the Final Report of the Truth and Reconciliation Commission of Canada. http://www.trc.ca/assets/pdf/Honouring_the_Truth_Reconciling_for_the_Future_July_23_2015.pdf
- United Nations General Assembly. (2007). United Nations Declaration on the Rights of Indigenous Peoples: Resolution/adopted by the General Assembly, 2 October 2007, A/RES/61/295. https://www.refworld.org/docid/471355a82. html

- Uppal, S. (2017). Young men and women without a high school diploma. *Insights on Canadian Society, May 17*, 1-20. Statistics Canada. Retrieved December 16, 2020, from https://www150.statcan.gc.ca/n1/pub/75-006-x/2017001/article/14824-eng.htm
- Valeggia, C. R., & Snodgrass, J. J. (2015). Health of indigenous peoples. *Annual Review of Anthropology*, 44(1), 117-135. https://doi.org/10.1146/annurevanthro-102214-013831
- Van Dyk, C., & Weese, W. J. (2019). The undeniable role that campus recreation programs can play in increasing Indigenous student engagement and retention. *Recreational Sports Journal*, 43(2), 126-136. https://doi.org/10.1177/1558866119885191
- van Luijk, N., Giles, A. R., Frigault, J., Millington, R., & Hayhurst, L. M. C. (2020). "It's like, we are thankful. But in the other way...they are just killing us too": Community members' perspectives of the extractives industry's funding of recreational and cultural programmes in Fort McKay, Alberta. *Leisure/Loisir*, 44(1), 77-104. https://doi.org/10.108 0/14927713.2020.1745670
- Warburton D. E. R., & Bredin, S. S. D. (2019). Health benefits of physical activity: A strengths-based approach. *Journal of Clinical Medicine*, 8(12), 2044. https://doi.org/10.3390/jcm8122044
- Wicklum, S., Sampson, M., Henderson, R., Wiart, S., Perez, G., Cameron, E., Willis, E., Crowshoe, L., & McBrien, K. (2019). Results of a culturally relevant, physical activity-based wellness program for urban Indigenous women in Alberta, Canada. *International Journal of Indigenous Health*, 14(2), 169-204. https://doi.org/10.32799/ijih.v14i2.31890
- Wicklum, S., Willis, E., Amson, A., McGuire, K. A., Crowshoe, L. L., McBrien, K., & Henderson, R. (2021). A systematic literature review of physical activity-based health programs for indigenous women: Impacts on physical activity levels, obesity, and community building. *SAGE Open, 11*(2), 1-13. https://doi.org/10.1177/21582440211016845
- Wilk, P., Maltby, A., Cooke, M., & Forsyth, J. (2018). Correlates of participation in sports and physical activities among indigenous youth. Aboriginal Policy Studies, 7(1), 62-83. https://doi.org/10.5663/aps.v7i1.28563
- Wilk, P., Maltby, A., Cooke, M., & Forsyth, J. (2019). The effect of parental residential school attendance and parental involvement on indigenous youth's participation in sport and physical activity during school. International Journal of Indigenous Health, 14(2), 133-149. https://doi.org/10.32799/ijih.v14i2.32958

HOW TO USE THIS FACT SHEET

REFLECT

Talk to others in your community, reflect on the content of this fact sheet, and contemplate how you could make a difference in the health and well-being for yourself, your family or your community.



ENGAGE

Find local friendship centers, community organizations or groups where you can volunteer or participate in healthy positive actions. You too can share knowledge and make a difference in the health and well-being of First Nations, Inuit, and Métis Peoples' of Canada.

sharing knowledge · making a difference partager les connaissances · faire une différence もらみももからいけらない ・ へぐこがいいのでも

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