Indigenous Youth in Ontario School-Based Health and Physical Education Programs: A Scoping Review

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Abstract

This paper documents one step in the Ontario Physical and Health Education Association’s evidence-informed response to the Truth and Reconciliation Commission of Canada. This step entailed a scoping review to chart the English-language peer-reviewed empirical literature published between 2000-2020 related to Indigenous children and youth and Indigenous traditions, cultures, and perspectives in Ontario health and physical education (HPE) and school-based physical activity and health programming. Searches of targeted academic databases, journals, and article reference lists identified seven relevant articles. Charting of these articles revealed an emphasis on school-based physical health programs/interventions for elementary-aged Indigenous children in primarily remote Northern communities. Charting also revealed a paucity of, and considerable need for, research related to: the HPE context, particularly at the secondary school level; a diversity of Indigenous populations in a diversity of locations within Ontario; and Indigenous traditions, cultures, and perspectives in HPE and school-based physical activity and health programming.

Keywords: Indigenous; Scoping Review; Health and Physical Education; Ontario

Résumé

Cet article décrit une étape de la réponse basée sur les données probantes de la « Ontario Physical and Health Education Association » à la commission Vérité et réconciliation au Canada. Cette étape est une revue de littérature des recherches empiriques, évaluées par les pairs, en anglais publiées entre 2000 et 2020 portant sur les enfants et jeunes autochtones et sur ces traditions autochtones, sur ces cultures, sur les perspectives de l’éducation physique et à la santé en Ontario de même que sur les programmes portant sur l’activité physique et la santé dans les écoles. Une lecture attentive des bases de données pertinentes, des revues et des listes de référence des articles a permis d’identifier sept articles en lien avec ces sujets. Une analyse de ces articles a révélé une attention particulière portée aux programmes / interventions en santé dans le milieu scolaire en priorité auprès des enfants autochtones dans les communautés éloignées du nord. L’analyse a également révélé une rareté, et un besoin de recherche, sur les thèmes suivants : le contexte de la santé et de l’éducation physique, spécifiquement à l’école secondaire; la diversité des populations autochtones à divers endroits en Ontario; les traditions et cultures autochtones, et les perspectives en santé et éducation physique et les programmes d’activité physique et santé en milieu scolaire.

Mots clés : autochtone; revue de littérature; santé et éducation physique; Ontario
Introduction

The genesis of this paper dates back to 2017, when the Ontario Physical and Health Education Association (Ophea) began to develop its response to the Truth and Reconciliation Commission of Canada’s (TRC) 94 Calls to Action (TRC, 2015a). This list of 94 interconnected action items signalled the need for urgent and substantive change across all sectors of Canadian society to advance reconciliation between Indigenous and non-Indigenous people in Canada, especially at the state level. Reconciliation is needed to redress the ongoing impact of the Indian residential school system\(^1\), which was part of a much larger colonial project aimed at severing Indigenous peoples’ ties to their land, eradicating their cultures and identities, and encouraging them to assimilate into Canada’s body politic (TRC, 2015b). Reconciliation, as defined by the TRC (2015b), is “about coming to terms with events of the past in a manner that overcomes conflict and establishes a respectful and healthy relationship among people going forward” (p. 6). Ophea’s CEO, board of directors, and staff—who predominately identify as White, settler-Canadians\(^2\)—undertook a long-term planning process to understand how the TRC applies to the association and how they, as representatives of an influential non-profit organization, could contribute to reconciliation. This process was guided by the third author, Cree scholar and Ophea board of director member, Janice Forsyth.

The fact that the Ophea team saw the need to reflect on the TRC and develop new pathways forward is not insignificant given the association’s position of authority within the province. Established in 1921, Ophea plays a considerable role in shaping health and physical education (HPE) policy and programming for Ontario’s English and French public schools. Not only does it reach nearly 2.1 million youth through 72 school boards and 4,934 schools throughout the province annually, it works with all local public health units in Ontario and regularly publishes HPE resources that are used by schools throughout Canada (including independent schools, as well as federally funded First Nation, Métis, and Inuit-governed schools). With this kind of power and influence, Ophea—with its vision to effect positive change in schools so that “all children and youth value and enjoy the lifelong benefits of healthy, active living” (Ophea, n.d., para. 1)—has the potential and responsibility to play a critical role in advancing reconciliation within the province and perhaps beyond.

One lesson the Ophea team learned from reading the TRC’s Executive Summary and the 94 Calls to Action is the complex nature of addressing historical and contemporary injustices toward Indigenous people in education—Ophea’s most obvious entry point to the TRC. In other words, they realized the Calls to Action for education must be understood in relation to other relevant areas identified in the report, such as child welfare, health, language and culture, and

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\(^1\) The Indian Residential School system is described by the TRC (2015b) as “created for the purpose of separating Aboriginal children from their families, in order to minimize and weaken family ties and cultural linkages, and to indoctrinate children into a new culture—the culture of the legally dominant Euro-Christian Canadian society, led by Canada’s first prime minister, Sir John A. Macdonald. The schools were in existence for well over 100 years, and many successive generations of children from the same communities and families endured the experience of them” (p. v).

\(^2\) By ‘settler-Canadians’ we are referring to those peoples whose ancestors are not Indigenous to the land that is now Canada. This includes those who are recent migrants and those whose families migrated generations ago. This term encompasses a wide range of peoples, as Lowman and Barker have described, settler-Canadians “are a multi-ethnic people, encompassing vast disparities of wealth and economic opportunity, huge ranges of education and experience, and a massive variety of ways of identifying with respect to gender, sexuality, and other overlapping markers of identity who, all the same, are complicit in settler colonialism” (p. 69).
sports. Taking an intersectional approach to understanding the TRC was a purposeful step that the Ophea team took to prepare itself for the possibility of engaging in new directions that would challenge their understandings of HPE. For instance, many if not most Indigenous people view knowing their Indigenous language, and how their language is rooted in the land, as an important part of their individual and collective well-being. Michi Saagiig Nishnaabeg scholar Leanne Betasamosake Simpson describes this generally accepted knowledge in her poetic description of ‘land as pedagogy’ for people of the Anishinaabeg nation (Simpson, 2014). Practically, this means HPE policy and curricula might, at the very least, be infused with local Indigenous languages and Indigenous land-based practices. In short, viewing HPE as part of an intimate, interconnected whole connected to broader Indigenous culture means the Ophea team will be in a better position theoretically, philosophically, and practically to understand and respond to Indigenous needs and priorities for HPE.

This learning also informed the next step in the association’s long-term planning process, which is the focus of this paper: systematically gathering peer-reviewed context-specific sources to serve as a foundation for evidence-informed responses to the TRC’s Calls to Action. Our overarching question became: What is the extent, nature, and range of peer-reviewed empirical literature focused on the support and success of Indigenous students and Indigenous traditions, cultures, and perspectives in Ontario school-based HPE? To put the matter another way, what does the literature tells us about what Indigenous people need and want with respect to HPE in Ontario? This research question was adapted from the vision statement of the document which frames the policy context for Indigenous education in Ontario: the 2007 Ontario First Nation, Métis, and Inuit Education Policy Framework. This vision statement declares:

First Nation, Métis, and Inuit students in Ontario will have the knowledge, skills, and confidence they need to successfully complete their elementary and secondary education in order to pursue postsecondary education or training and/or to enter the workforce. They will have the traditional and contemporary knowledge, skills, and attitudes required to be socially contributive, politically active, and economically prosperous citizens of the world. All students in Ontario will have knowledge and appreciation of contemporary and traditional First Nation, Métis, and Inuit traditions, cultures, and perspectives. (Ontario Ministry of Education, p. 7)

This research question was selected as it would allow for the identification of emphases and gaps among the evidence-based, context-specific sources available to inform Ontario teachers’ support of Indigenous students and Indigenous content in HPE, which does not appear to have been previously investigated in Ontario or other Canadian provinces/territories. It was also our view and intention that this information regarding emphases and gaps could then be used to highlight resource development priorities and future research directions for Ontario HPE teachers, scholars, and professional associations (such as Ophea), as well as to inform the work of the province’s educational leaders and policymakers, and perhaps even researchers and professional associations in other jurisdictions who wish to replicate our search in their own context.

**Method – Scoping Review**

Given our aim to examine the extent, nature, and range (i.e., number, type, and variety) of literature on a particular topic to identify emphases and gaps in the literature that can guide future professional resource development and academic research, the method of a scoping review was selected as it is a method intended to “map” (Arksey & O’Malley, 2005, p. 20) or “chart” (p. 22)
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the sources available on a particular topic. Scoping reviews can be understood as a method “commonly used for ‘reconnaissance’ - to clarify working definitions and conceptual boundaries of a topic or field… to summarize and disseminate research findings, to identify research gaps, and to make recommendations for future research” (Peters et al., 2015, p. 141). Scoping reviews do not, however, assess research quality as systematic reviews do. Rather, the purpose of a scoping review is to chart or categorize research, rather than to evaluate it (McEvoy et al., 2015). Scoping reviews vary in protocol but can be understood to generally proceed in the following phases: (a) identification of relevant sources (via various search and screening methods); (b) charting of sources; and (c) reporting on learnings from the charting of sources.

Phase One: Identifying Relevant Sources

Initial Search Boundaries

The search for relevant sources was initially bounded by the following criteria. Articles were to be: (a) English-language3; (b) full-text; (c) empirical investigations4; (d) published within the time period of 2000 to present (i.e., early-mid 2020)5; and (e) pertain to the K-12 schooling context in Ontario (either public or federally funded First Nation, Métis, and Inuit-governed schools). Scoping reviews allow for further inclusion/exclusion criteria to be determined post-hoc during the screening process as increased familiarity with the literature enables the formulation of more relevant criteria (McEvoy et al., 2015). The updated criteria of this research are reported in the sections that follow.

Search Methods

Three search methods were used in this investigation: (a) searches of academic research databases; (b) searches of targeted peer-reviewed academic journals; and (c) searches of the reference lists of articles identified via the two former search methods.

Initial Database Searches. In consultation with an academic librarian, the following databases were selected as the most relevant repositories from which to search for articles: (a) Academic Search Ultimate ([ASU] including Sport Discus which indexes approximately 5,000 peer-reviewed journals from across 21 fields; (b) Proquest Education Journals ([PEJ] including CBCA Education, ERIC, and Sports Medicine and Education Index), which indexes approximately 1,000 peer-reviewed journals on the theory and practice of education at all levels; and (c) Web of Science (WOS), which includes over 160 million sources from over 250 subject areas. Initial searches of these databases were conducted using the previously described criteria as filters (i.e., English-language only; full-text only; publication year range: 2000-2020) and the following search terms: “Indigenous” OR “Aboriginal” OR “First Nation, Métis, and Inuit” OR “First Nation” AND “physical education” OR “physical and health education” OR “health and physical education.”

3 While the authors recognize that some relevant articles may have been published in French given Canada’s status as a bilingual country, this research was limited to English-language literature only given the limits in our own linguistic capacities.

4 By empirical investigations we mean original research in which a research design is specified, data are analyzed, and findings are reported. Theoretical/conceptual papers, position papers, and commentaries were excluded.

5 A combination of several factors informed the rationale for the selection of the year 2000 starting point, these include: (a) the release of Ontario HPE curriculum in 1998 (Grades 1-8) and 1999 (Grades 9-12); (b) the Council of Ministers of Education, Canada (CMEC) listing Indigenous education as a “priority issue” in the year 2004; (c) the 2007 publication of the Ontario First Nation, Métis, and Inuit Education Policy Framework; and (d) the year 2000 can be considered a time of transition to a new era in Ontario HPE as Francis and Lathrop (2011) highlighted the 1970s to 2000 as an era marked by the decline of movement education and the prominence of fitness/sport-based education.
The results that these initial searches returned were screened by examining each article’s record details and abstract (as well as the full-text when needed). This screening process revealed that the search focus and boundaries would have to be expanded as very few articles were returned (i.e., ASU: 35 articles; PEJ: 40 articles; and WOS: 34 articles) and only two of these articles met the initial inclusion criteria (i.e., related to school-based HPE in Ontario). Various ways to expand the search were considered, for example: (a) from Ontario-only to Canada-wide; (b) from peer-reviewed only to also include non-peer reviewed; (c) from empirical only to also include conceptual works; (d) from Ontario K-12 school-based HPE only to also include Ontario university-based HPE programming; and (e) from Ontario K-12 school-based HPE programming only to also include K-12 school-based physical activity and health programming. Expanding to a Canada-wide search was decided against given that HPE is the mandate of the provincial/territorial government, rather than the federal government, and there are some important contextual differences across provinces/territories. For example, Ontario is one of only three Canadian provinces/territories where health and physical education are combined into one subject area (Kilborn et al., 2016). Furthermore, different Indigenous peoples reside in different parts of Canada, so to expand the search across Canada could result in an approach that leans further toward generalizations. As well, our aim was to support the vision and direction provided by the 2007 Ontario First Nation, Métis, and Inuit Education Policy Framework. This is not to say that literature on this topic from other parts of Canada (or even other countries) could not have meaningful implications for the Ontario context, but simply that an Ontario-specific approach was a culturally-appropriate delimitation, especially for Ophea, an association charged with and dedicated to serving Ontarians in particular. Ultimately, the authors decided that an expansion from including only articles reporting on Ontario K-12 school-based HPE to include other school-based physical activity and health programming in the province would be most consistent with and relevant to the work and interest of Ontario HPE teachers, would still be aligned with the aforementioned Ontario First Nation, Métis, and Inuit Education Policy Framework (2007), and would allow for other important criteria (i.e., English, full-text, peer-reviewed, empirical, published after year 2000) to remain in place. Therefore, the research question was updated to the following: What is the extent, nature, and range of the peer-reviewed empirical literature related to the support and success of Indigenous children and youth and Indigenous traditions, cultures, and perspectives in Ontario school-based HPE as well as school-based physical activity and health programming (emphasis on revised elements)?

Revised/Final Database Searches. An iterative process of trial and error was used to determine a set of revised search terms that would return the most relevant results for the newly expanded research focus. The final revised search terms included: “Indigenous” OR “Aboriginal” OR “First Nation, Métis, and Inuit” OR “First Nation” AND “physical education” OR “physical

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6 That is, beyond the generalization inherent in taking an Ontario-wide approach rather than an approach specific to particular Indigenous communities (given the differences between the traditions, cultures, and perspectives of Indigenous communities within, and not only across, the provinces/territories).

7 By focusing only on empirical literature, we do not wish to suggest that conceptual literature (which may reflect alternative ways of knowing) does not offer important information that could be relevant, but rather that such a broad search was beyond the scope of this investigation.

8 In Ontario, school-age children and youth may be those between the ages of 4 and 21 (as schooling is mandatory in the province between the ages of 6-18 and open to students as young as 4 and as old as 21; Education Act, R.S.O. 1990, E-2).
and health education” OR “health and physical education” OR “sport”9 OR “physical activity” OR “recreation” OR “leisure” OR “wellness” OR “well-being” OR “wellness” OR “well-being” OR “land-based” (emphasis on new elements)10.

Searches of the databases with the new search terms and previously determined filters (i.e., English-language only; full-text only; year range: 2000-2020) returned: 2234 articles in ASU; 332 articles in PEJ; and 1187 articles in WOS. A first glance at these results revealed that they included many articles from other national contexts (e.g., Australia, the United States of America). Therefore, following further consultation with an academic librarian, the geographical “Canada” filter was applied in each database. The application of this filter refined the results to: 130 articles in ASU; 94 articles in PEJ; and 535 in WOS. Following an initial screening of the record details and abstracts for a number of the returned articles in each database, this dataset was deemed to be both a manageable and relevant one from which to carefully review articles for inclusion or exclusion.

The careful review of search results entailed examining each article’s record details and abstract (as well as the full-text when needed) to determine whether it met the criteria of being an empirical investigation that pertained to Indigenous children/youth and/or Indigenous traditions, cultures, and perspectives in Ontario school-based HPE or school-based physical activity and health programming. Articles that met the criteria in a narrow way were excluded. For example, articles reporting on studies that did not investigate HPE, physical activity programming, or health programming within schools and instead investigated the physical activity or health characteristics of Indigenous children and youth at school sites were excluded. In contrast, articles that reported on, for example, studies of relevant after-school programming, school-based mental health and nutrition programming, and curricular analyses were included. A log was maintained in Microsoft Excel in which it was noted how each search result/article articulated with each inclusion and exclusion criterion. This log allowed us to have a record of articles which otherwise would have met the criteria but were (a) based in a province/territory other than Ontario, and/or (b) specific to the higher education context in Ontario.

After duplicates across the three databases were eliminated, a total of five articles were determined to meet the study criteria. At this stage the “Canada” filter was removed, and the larger set of search results were scanned to ensure no relevant articles were missed. This action resulted in the inclusion of an additional two articles, for a total of seven. The PDFs of these seven articles were downloaded and saved for subsequent charting (described in later sections).

**Targeted Journal Search.** In an effort to identify articles meeting the study criteria that were not returned in the database search, a search of targeted journals was conducted. The search of targeted journals began with those journals which housed the seven articles identified through the database search (i.e., *Health Behavior and Policy Review; Health Education; Journal of Community Health; Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health; The

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9 We use “sport” in this paper to refer to any meaningful physical cultural practice that takes place within the schooling context. This can include organized competitive sports (which are part of many school programs, be they intramural, interscholastic, or after-school) but goes well beyond that to include such things as traditional physical land-based practices. This broader view aligns with Indigenous ways of understanding the relationship between physical activity and well-being.

10 The search terms “health” and “health education” were considered but ultimately abandoned as their use resulted in too many results being returned that were entirely irrelevant (e.g., related to ‘healthcare’ and ‘public health education’ respectively). Search terms related to specific movement forms were considered (e.g., dance, gymnastics, etc.) but were also abandoned as they did not result in any meaningful differences in the returned results.
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Journal of Primary Prevention; The Journal of Nutrition; and The Open Nutrition Journal). No additional articles meeting the study criteria were identified through the searching of these journals. The search of targeted journals continued with the searching of a number of regional, national, and international HPE, physical activity, health, sport, and Native studies journals (i.e., Aboriginal Policy Studies; AlterNative: An International Journal of Indigenous Studies; Body & Society; Canadian Journal of Public Health; Canadian Journal of Native Studies; Canadian Review of Sociology; Decolonization: Indigeneity, Education & Society; European Physical Education Review; International Journal of Indigenous Health; Indigenous Policy Journal; International Review for the Sociology of Sport; Journal of Aboriginal Health; Journal of Indigenous Studies; Journal of Physical Activity and Health; Journal of Physical Education, Recreation, and Dance; Journal of Sport and Social Issues; Journal of Teaching in Physical Education; Patterns of Prejudice; Physical and Health Education Journal; PHEnex; Physical Education and Sport Pedagogy; Postcolonial Studies; Quest; Research Quarterly for Exercise and Sport; Settler Colonial Studies; Social Theory & Health; Sociology of Sport Journal; Sport, Education & Society; Women in Sport and Physical Activity Journal). No additional articles meeting the study criteria were identified through the searching of these journals.

Reference List Search. The reference lists of the seven articles identified in the database search were reviewed in a final effort to reveal further articles meeting the study criteria. No additional articles meeting the study criteria were identified as a result of this search process.

Included Articles. Ultimately, a total of seven articles were identified through the search processes and are charted and reported on in the sections that follow. A summarizing visualization of the search process is outlined in Figure 1.
Figure 1

Summary of Phase One: Search for Relevant Sources

Phase Two: Charting of Sources

Basic information was extracted from each of the seven identified articles (see Table 1). This information pertained to the articles: (a) author(s); (b) journal; (c) research aim/purpose; (d) research design; and (e) key findings. To inform our work, a detailed summary of these and other characteristics of each article was also generated but is not shared in this manuscript.
### Table 1

**Basic Information Extracted from Collected Articles**

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Journal</th>
<th>Research Aim/Purpose</th>
<th>Research Design</th>
<th>Key Findings</th>
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<tr>
<td>Crooks, Exner-Cortens, Burm, Lapointe, &amp; Chiodo (2016)</td>
<td><em>Journal of Primary Prevention</em></td>
<td>Investigate the effects of a culturally-relevant school-based mentoring program for FNMI* youth (in a large Southwestern Ontario school board) that focuses on promoting mental well-being and the development of cultural identity (i.e., strengths-based protective factors)</td>
<td>Mixed-methods exploratory longitudinal study: FNMI students who participated in one or two years of a mentoring program (as well as a control group of those who did not) were asked to complete surveys (measuring mental health, cultural identity, school climate, and life satisfaction) and participate in interviews (asking about mentoring and broader school experience)</td>
<td>Those students who participated in one or two years of mentoring demonstrated better mental health and improved cultural identity than those who did not participate in the mentoring program. The mentoring program helped participants (particularly girls) develop their intrapersonal (e.g., cultural identity) and interpersonal skills (e.g., meet new people) and enhanced their cultural (e.g., medicine wheel) and healthy relationships (e.g., conflict resolution) knowledge base. Ultimately, multiple years of a culturally-relevant school-based mentoring program was determined to be a promising approach for promoting well-being among FNMI youth.</td>
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<td>Gates, Hanning, Gates, Isogai, Metatawab in, &amp; Tsuji (2011)</td>
<td><em>The Open Nutrition Journal</em></td>
<td>Evaluate the implementation of a five-week comprehensive school-wide vegetable and fruit program for Grade 6 to 8 FN*** students in a remote Northern Ontario FN community (Fort Albany)</td>
<td>Students’ nutrition knowledge, self-efficacy, and intentions were measured by questionnaire (n=18) before and after program Post-program impressions were measured by: (a) focus group with teachers; (b) questionnaires with students; and (c) questionnaires with parents</td>
<td>Program (despite needing modifications for cultural relevance) was found to improve knowledge of, exposure to, and preferences for vegetables and fruit, but did not impact dietary intentions or self-efficacy. Teachers reported that more visual materials, education about sugar and diabetes, and external instructors were desired. “School nutrition programs may be popular and effective in shifting knowledge and preferences to consume healthy foods, but no sustained benefit can be achieved without addressing barriers to healthy, affordable food access in remote communities” (p. 1)</td>
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<tr>
<td>Author(s)</td>
<td>Journal/Publication</td>
<td>Aimed to:</td>
<td>Measured:</td>
<td>Findings</td>
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<td>Gates, Hanning, Gates, Stephen, Fehst, &amp; Tsuji (2016a)</td>
<td><em>Journal of Community Health</em></td>
<td>(a) obtain objective measures of anthropometry, physical activity and fitness; (b) identify group level differences by sex, body mass index, waist circumference and body fat categories; and (c) assess the barriers and supports to physical activity for Grade 6 and 7 FN students in a remote FN community in Northern Ontario (Kashechewan)</td>
<td>(a) anthropometry via body mass index, waist circumference, body fat percentage; (b) physical activity via accelerometry; and (c) fitness levels via shuttle run, resting blood pressure, partial curl-up, handgrip, sit and reach</td>
<td>63% of participating FN children and youth were overweight or obese 86% met Canada’s physical activity guidelines (with boys more active than girls) Themes in the barriers and supports to physical activity included: motivation, role models, personnel and facilities, environment and programs Findings support community’s desire for school-based physical activity programming and the need to focus on girls’ participation</td>
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<td>Gates, Hanning, Gates, Stephen, Fehst, &amp; Tsuji (2016b)</td>
<td><em>Health Behavior and Policy Review</em></td>
<td>Evaluate the process and health outcomes of a 9-month after-school sports program for Grade 6 and 7 FN youth in a remote Northern Ontario FN community (Kashechewan)</td>
<td>Changes in anthropometry (body mass index, waist circumference), physical activity (accelerometry) and fitness (shuttle run, handgrip, partial curl-ups, and sit and reach) were measured from pre- to post-program Program successes and challenges were measured through a student focus group, interview with program coordinator, and questionnaire with teachers</td>
<td>Following the program, youth increased participation in moderate to vigorous physical activity by 47.9 minutes/day. Boys completed an additional 10.5 shuttle run stages. Muscular strength improved by 8.2 kg for boys and 5.6 kg for girls Despite some barriers (i.e., inconsistent personnel, limited facilities), this after-school sports program in a FN school was determined to be sustainable and associated with increased physical activity and fitness, especially among boys Girls should be targeted in physical activity programming, as the sport activities offered may not have been of interest to them</td>
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<tr>
<td>Author(s)</td>
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<td>Isogai, Gates, Gates, Hanning, &amp; Tsuji (2011)</td>
<td><em>Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health</em></td>
<td>Evaluate the efficacy of the delivery of the educational component of a six-week comprehensive school-based nutrition program for kindergarten to Grade 5 FN students in a remote FN community in Northern Ontario (Fort Albany). Examined program instructor’s teaching notes and reflections and conducted focus groups with teachers and students about their impressions of the program. Lecture style of teaching was ineffective when used for more than 10-15 minutes. Visual aids should be used extensively when presenting information in such programs. Number of hands-on and group work activities should be maximized in such programs. Restricting student time to complete a task was ineffective, room for flexibility is important.</td>
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<td>Petherick (2017)</td>
<td><em>Health Education</em></td>
<td>Explore issues of race and culture in Ontario’s recently revised secondary school HPE curriculum. Curriculum analysis through Critical Race Theory and Whiteness lens. The new ‘teaching strategies’ component of the recently revised curriculum offers entry points for engaging students in learning about culture and race. This is significant when compared to other recently revised HPE curricula internationally. There is emphasis on FNMI identities (although no other cultural identities) in the curriculum. The emphasis on FNMI peoples is specifically in relation to eating and substance abuse in the curriculum. More could be done to ensure that: (a) FNMI peoples are not referred to in deficit terms (and without the broader context of colonization recognized); (b) other cultural identities are not left out; and (c) dominant (i.e., White) health knowledges are not presented as cultureless.</td>
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Saksvig, Gittelsohn, Harris, Hanley, Valente, & Zinman (2005) *The Journal of Nutrition* Evaluate the results of a one-year culturally-appropriate school-based diabetes prevention program for Grades 3, 4, and 5 FN students in a remote FN community in Northern Ontario (Sandy Lake) Pre/post-test single sample design including four measures: (a) anthropometry (body mass index, body fat percentage); (b) 24-h diet recall; (c) student questionnaire regarding health knowledge and behaviour; and (d) parent questionnaire regarding family characteristics and influence on intervention Program was associated with improved knowledge and psychosocial factors related to healthy eating and dietary fiber intake of students. Environmental aspects of the program were found to be important in achieving these outcomes (e.g., school-wide policy banning unhealthy foods). The in-class physical activity component of program was lacking due to limited training for teachers and lack of reinforcement from research team Did not find reduction in obesity Cost of this school-based program and burden to teachers is low; greatest cost is funding local person(s) to coordinate components of program

**Phase Three: Findings from the Charting of Sources**

The charting of sources revealed findings about the collected articles in terms of: focus/topic; journal; study type/methods; study population; and school-based component.

**Focus/Topic**

The seven collected articles can be described as covering five topics: school-based nutrition programs (Gates et al., 2011; Isogai et al., 2011); school-based physical activity programs (Gates et al., 2016a, 2016b); school-based diabetes prevention programs (a mix of nutrition education and physical activity provision – Saksvig et al., 2005); school-based mentoring programs for mental health and cultural identity (Crooks et al., 2016); and the representation of race and culture within Ontario’s secondary school HPE curriculum (Petherick, 2017). It is important to note that the two articles reporting on nutrition programs are based on the same program/study and the two articles reporting on physical activity programs are also based on the same program/study.

**Journal**

The seven collected articles were published in journals that can be categorized as related to health (e.g., primary prevention for high-risk behaviours, community health, health behaviour, health policy, health education, or Aboriginal and Indigenous health) or nutrition. The primary/intended audiences of these journals are various kinds of healthcare researchers and/or professionals in the first instance, and clinical nutrition researchers and/or professionals in the second instance.

**Study Type and Methods**

Apart from Petherick’s (2017) curricular analysis (investigated via the theoretical lenses of Critical Race Theory and Whiteness) and Gates et al.’s (2016a) investigation of barriers and supports to physical activity (investigated via environmental scan and focus group), the other studies were all evaluations of school-based programs/interventions. These evaluations included investigating: changes in mental well-being and cultural identity following a mentoring program

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*FNMI = First Nation, Métis, and Inuit

**FN = First Nation
(Crooks et al., 2016 – investigated via pre/post-questionnaire and post-program interviews); changes in nutritional knowledge, self-efficacy, and intentions following nutrition education programs (Gates et al., 2011 – investigated via pre/post-questionnaire and focus groups; Saksvig et al., 2005 – investigated via 24-hour diet recall and pre/post-program questionnaires); changes in anthropometry, physical activity, and fitness following a physical activity program (Gates et al., 2016b – investigated via pre/post measures of Body Mass Index, waist circumference, accelerometry, shuttle run, handgrip, partial-curl-ups, sit and reach, as well as post-program interviews and questionnaires); and the efficacy of program delivery in a nutrition education program (Isogai et al., 2011 – investigated via researchers’ program delivery notes and post-program focus groups).

**Study Population**

Of those studies involving human research (that is, excluding Petherick’s [2017] curricular analysis), all but one was located in remote First Nation communities in Northern Ontario. Most of these remote communities were in the James Bay region (predominately Cree), with the research of Gates et al. (2011) and Isogai et al. (2011) taking place in Fort Albany and the research of Gates et al. (2016a, 2016b) taking place in Kashechewan, while the work of Saksvig et al. (2005) took place on the other side of the province in Sandy Lake (predominately Ojibway-Cree). The work of Crooks et al. (2016) took place in an unnamed large school district in Southwestern Ontario. Nearly all of the studies focused on the elementary school level (Gates et al., 2011; Gates et al., 2016a, 2016b; Isogai et al., 2011; Saksvig et al., 2005), while Crooks et al. (2016) focused on both the (upper-year) elementary school level as well as the secondary school level, and Petherick (2017) focused exclusively on the secondary school level. As for the participants included in these studies, all included Indigenous children and/or youth, while Gates et al. (2016a, 2016b) and Isogai et al. (2011) also included teachers, Saksvig et al. (2005) also included parents, and Gates et al. (2011) included all three (i.e., children and/or youth, teachers, and parents).

**School-Based Component**

As dictated by the inclusion criteria of the study, all of the research reported in the collected articles articulated with a component of schools in some way. Three articles – those by Gates et al. (2011), Isogai et al. (2011), and Saksvig et al. (2005) – reported on initiatives integrated directly into class time (subject area unknown), and which also extended beyond the classroom (e.g., included corresponding school-wide policy [e.g., healthy food policy], family/community involvement; and/or extracurricular school programming [e.g., snack program]). One article, by Gates et al. (2016a), reported on an elective after-school program, while another, by Crooks et al. (2016), reported on an elective program offered at students’ lunch-hour breaks. Finally, although Petherick’s (2017) article did not report on human research, it was school-based as it was concerned with the curriculum policy which governs HPE in the province.

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11 Because we appreciate that there are no standardized geographical indicators for what ‘remote’ (nor rural, nor isolated) means in Canada, and as such interpretations vary widely within and across sectors as well as among provinces and territories (Assembly of First Nations, 2018), we wish to clarify how the term was used in each paper. Gates et al. (2011) and Gates et al. (2016a) used the term without definition or further explanation but did also provide the descriptor of ‘isolated’, while Gates et al. (2016b), Isogai et al., (2011), and Saksvig et al. (2005) provided the additional detail that the remote communities involved in their research are only accessible year-round by plane.
Discussion

One of the main findings of this investigation is how little relevant research was identified and thus, how little context-specific, peer-reviewed empirical information there is available about Indigenous young people and Indigenous traditions, cultures and perspectives in Ontario HPE and school-based physical activity and health programming to inform relevant Ontario-based professionals’ work in this regard. As mentioned, even after expanding the boundaries of the scoping review beyond Ontario school-based HPE to include Ontario school-based physical activity and health initiatives, only seven works met the criteria (and, again, four of these related back to two programs/studies, meaning these works reported on only five separate initiatives). This number appears to be above or on par with the number of articles identified in other provinces/territories (as inferred from data logged in the previously mentioned Microsoft Excel document). The significance of this can be viewed in two ways. On the one hand, this figure can be seen as somewhat impressive when considered against the fact that Ontario has one of the lower provincial/territorial proportions of Indigenous peoples (i.e., 2.8% in 2016, compared with 16.0% in Manitoba or 18.3% in Saskatchewan; Statistics Canada, 2016). On the other hand, however, this figure can be considered somewhat limited when considered against the fact that Ontario has the largest Indigenous population in Canada, with 374,395 peoples self-identifying in the 2016 Census (Ontario Ministry of Indigenous Affairs, 2020). Either way, it is not just the quantity of research alone that is relevant in determining whether more research is needed. The following findings regarding the foci, intended audiences, populations, and school levels considered in the identified research help to make the need clear.

Apart from Petherick’s (2017) analysis of race and culture in the Ontario secondary school HPE curriculum, the articles collected in this scoping review were not about HPE, and were written for health and nutrition audiences, not (physical) education professionals. Although in some cases ‘learning’ was measured (e.g., nutritional knowledge from pre- to post-program intervention), it was health, not education, that was the focus in these cases. Furthermore, the disconnect between the programming reviewed in this investigation and the subject area of HPE is worth noting. Apart from Gates et al.’s (2016b) investigation in which the HPE teacher served as the coordinator of the after-school physical activity program being investigated, HPE is scarcely, if at all, mentioned in these articles. While three of these articles reported on programs delivered during class time, it is not clear if this was connected to or considered HPE.

The majority of the articles analyzed in this scoping review were focused on Indigenous children/youth and not on Indigenous traditions, cultures, and perspectives. The two exceptions would be: (a) Petherick’s (2017) analysis of race and culture within the Ontario secondary school HPE curriculum (although the focus on Indigeneity was an outcome, not an impetus of, the work); and (b) Crooks et al.’s (2016) mentoring program which, in addition to focusing on promoting Indigenous youths’ mental well-being, also focused on the development of their cultural identity. In other words, empirical HPE literature related to the second component of the *Ontario First Nation, Métis, and Inuit Education Policy Framework* (i.e., “All students in Ontario will have knowledge and appreciation of contemporary and traditional [First Nation, Métis, and Inuit] traditions, cultures, and perspectives” p. 7) is essentially non-existent. While this investigation focused only on the situation regarding empirical literature, the findings of Lorusso et al.’s (2019) investigation suggest this may also be the case when it comes to conceptual literature and teaching resources in Ontario and Canada more broadly. In Lorusso and colleagues’ broader search for Canadian resources of any type (i.e., empirical *and* conceptual, peer-reviewed *and* non-peer
reviewed) to inform their own response to the TRC and *Ontario First Nation, Métis, and Inuit Education Policy Framework* as HPE educators, they reported finding some helpful information regarding the support of Indigenous students in HPE, although primarily from provinces other than Ontario (e.g., Halas et al., 2012 focused on Manitoba, Torrance and Seehagen, 2012 focused on Alberta, and Robinson et al., 2016 focused on Nova Scotia, New Brunswick, and Prince Edward Island). They also, however, reported difficulty locating resources focused on supporting Indigenous and non-Indigenous students to learn about and appreciate contemporary and traditional Indigenous traditions, cultures, and perspectives in HPE (and some of the resources they did find were later determined to have limits in their appropriateness following examination using an Alberta Education (2005) evaluation framework).

The articles collected in this scoping review reported on studies that did not relate to a diversity of Indigenous populations. That is, most of the populations included in the seven articles collected in this scoping review related to three First Nation communities located in geographically remote regions of Northern Ontario. As 78% of First Nation communities in Ontario are located in the Northern part of the province, and one in four are considered remote (i.e., “accessible only by air year-round or by ice in the winter”; Ontario Ministry of Indigenous Affairs, 2020, para. 11), the focus on remote Northern communities is understandable. However, there are 133 different First Nation communities located in Ontario, and there are many Ontario cities with considerable Indigenous populations, with Thunder Bay being the Census Metropolitan Area with the highest proportion of Indigenous people in Canada (i.e., 12.7% of population; Ontario Ministry of Indigenous Affairs, 2020). These data suggest that research with a diversity of Ontario-based Indigenous communities in a diversity of locations is needed.

The articles collected in this scoping review reported on studies that focused primarily on the elementary school level. A predominant focus on elementary education is understandable for a number of reasons, including that HPE is mandatory throughout the elementary grades in Ontario and primarily taught by generalists, while HPE is only mandatory for one grade of secondary education in Ontario and primarily taught by specialists. However, there are important reasons why a focus on the secondary school level is also needed. One reason is that the Ontario secondary school completion rate of Indigenous peoples is 75% (and 45% for First Nation peoples living on-reserve), which is below the 93% rate of non-Indigenous peoples (Ontario Ministry of Indigenous Affairs, 2020). While closing this gap cannot be done without continued focus on the elementary level (i.e., to understand how well students are prepared for secondary education), it also cannot be done if there remains next to zero focus on the secondary level itself. One example of the need to focus on subject areas at the secondary level can be seen in the 2012 *Aboriginal Peoples Survey*. This survey found that Métis and First Nation peoples living off-reserve who did not complete secondary school were more likely than Métis and First Nation peoples living off-reserve who did complete secondary school to report that the courses available did not meet their needs (Bougie et al., 2013).

Ultimately, the findings of this scoping review signal the need for more context-specific research and resources to inform Ontario HPE teachers’ and professionals’ support of Indigenous children and youth and Indigenous traditions, cultures, and perspectives in HPE and school-based physical activity and health programming. While there is an existing emphasis on physical and, to a small degree, mental health programs/interventions for elementary-aged Indigenous children and youth in primarily remote Northern communities, research and resources that focus on the following are needed: the HPE context, particularly at the secondary school level, and that are written for educational audiences; a diversity of Indigenous populations in a diversity of locations
within the province; and Indigenous traditions, cultures, and perspectives. While an interpretation regarding the reason for these research gaps is beyond the scope of this investigation, it is worth noting here the findings of Douglas and Halas’ (2011) investigation into the demographic character (specifically gender and racial background) of instructors and researchers in faculties of kinesiology and physical education in Canada. Their findings led them to the following conclusion: “the predominance of Whites and cultures of whiteness [within these faculties] have had a significant influence on the character of… knowledge production… within the field of physical education” (p. 456).

Conclusion

Like many organizations in Canada, the Ophea team has made a commitment to respond to the TRC’s Calls to Action to advance reconciliation. Because we recognize that a common reaction to the TRC has been a desire to act but lack of clarity regarding where and/or how to begin (Lorusso et al., 2019), in this paper we have shared the details involved in the first few steps of the Ophea team’s ongoing processual response to the Calls to Action in hopes that they may aid others’ responses. To summarize, the initial steps in the Ophea team’s reconciliatory efforts included critically reflecting on their positionalities (i.e., who they are, where they come from, their intentions for engaging in reconciliation) while simultaneously learning about the TRC and Calls to Action and considering their application to HPE in Ontario. The following step in this commitment was developing an evidence-informed foundation for long-term organizational action through this scoping review. The challenge, as the Ophea team has learned through this work, is to develop such an action plan without much of an existing Ontario-specific empirical knowledge base.

Fortunately, Indigenous Canadian scholars have offered suggestions for how non-Indigenous peoples, like the majority of the Ophea executive, can respectfully support Indigenous research and thereby help to address the dearth of peer-reviewed empirical information. For example, in her 2009 book – *Indigenous methodologies: Characteristics, conversations, and contexts* – Nêhiyaw and Saulteaux scholar Margaret Kovach explains that such support of, or relationship with, Indigenous research starts with never-ending efforts like “decolonizing self and institution” (p. 169; i.e., ongoing commitment to critically examine personal and institutional beliefs and values about knowledge, whiteness, power, and so on) and “knowing the history” (p. 169; i.e., recognizing that many Indigenous peoples have had negative experiences with Western schooling and academia). Following such necessary preparatory work, which the Ophea team feels has characterized their efforts over the past three years, Kovach has suggested that non-Indigenous peoples might be ready to further their support by (among other efforts) continuing the relational work that is essential to building trusting partnering (rather than othering) relationships with Indigenous communities. Should a trusting partnering relationship between the Ophea team and an Indigenous community(ies) be established, such a relationship might entail together determining which of the research gaps/priorities identified in this research have relevance to that particular community’s priorities (which would involve careful listening and attending on the part of the Ophea team), with next steps for action to be determined together from there. Put another way, Kovach has pointed out that the overarching theme of “doing Indigenous research in a good way” (p. 141) is to conduct oneself in a way that reflects miyô-wîcêhtowin, a Cree term meaning good relations. If reconciliation is, as the TRC (2015b) described, about “coming to terms with the events of the past in a manner that overcomes conflict and establishes a respectful and healthy...”
relationship among people going forward” (p. 6), then the support of Indigenous research by non-Indigenous peoples in ways that reflect ‘good relations’ might be considered efforts toward reconciliation.

As with most, if not all reconciliation processes, engaging in these efforts will require considerable organizational resources. What the TRC and its Calls to Action have illuminated is that the need to create culturally responsive policies, programs, and educational materials in the HPE sector is overdue, especially in light of the myriad challenges Indigenous children and youth in schools face as a result of colonization (TRC, 2015a; TRC, 2015b). This scoping review not only underscores that need, but also points the way forward toward developing that knowledge—perhaps by starting with the people who know this context best, Indigenous peoples.

Finally, we return to the importance of understanding HPE from Indigenous points of view, which consider HPE as part of an interconnected whole, where being well means being well as an Indigenous person. Importantly, all of the articles we surveyed reinforce dominant views of HPE, whereby researchers analysed discrete aspects of HPE versus seeing it as an interconnected whole where, for instance, Indigenous people see language, land, and physical culture as the basis for good health, as opposed to a singular focus on biometric measures. This suggests the most meaningful and impactful policy and curricula will emphasize building relationships with local Indigenous nations to privilege their understandings of HPE. Herein lies the unrealized potential stemming from deep and thoughtful approaches to understanding and implementing the TRC, which we believe remains a crucial gateway for recognizing that fundamental changes in HPE are needed. While organizations like Ophea may not fully appreciate what those changes are, they are at least preparing themselves for helping to support the changes that lie ahead.

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