



**Exploring University-Based Physical Literacy Programming:  
Perspectives of Service Providers**

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## **Abstract**

Physical literacy (PL) has become a prominent concept in education and sport, particularly within Canada. While the term PL has been used for two decades, many researchers still operationalize the construct differently. The purpose of this study was to explore the experiences of those leading university-based PL programs in Canada. The objectives in this study were to gain insights into: (a) how university-service providers promote and understand university-based physical literacy programming, and (b) how to promote best practices around PL programming. Eight participants who were directly involved in PL programming at the post-secondary level participated in semi-structured one-on-one interviews. Data were analyzed using thematic analysis. Three main themes were identified: (a) divergent ideologies influences PL programming, (b) experiential and outcome-based education support PL programming, and (c) human resources are critical to PL programming. Participants identified that the ideological origins of those developing and leading the programs influence how PL programming is conceptualized and implemented. Different theoretical underpinnings of PL contribute to unique differences within different university-based PL programming.

*Key words:* physical literacy, youth, programming

## **Résumé**

La “littératie physique” occupe une place prépondérante en éducation et dans le domaine des sports, particulièrement au Canada. Même si cette expression est en usage depuis deux décennies, les chercheurs concrétisent ce concept différemment. Le but de cette étude est d’explorer les expériences des dirigeants de programmes de “littératie physique” au Canada. Les objectifs spécifiques portaient sur les thèmes suivants: (a) la promotion et la compréhension des programmes universitaires de “littératie physique démontrées par ces fournisseurs de service, (b) les modalités de promotion des meilleures pratiques en programmation de “littératie physique”. Huit dirigeants impliqués directement dans de tels programmes au niveau post secondaire ont été interviewés individuellement. Les données obtenues ont été analysées par le biais d’une analyse thématique. Trois thèmes ont été identifiés: (1) des ideologies différentes influencent les programmes (2) l’éducation expérientielle et basée sur les résultats influencent aussi ces programmes et (3) les ressources humaines sont cruciales à ces programmes. Les participants ont affirmé que l’idéologie véhiculée par les initiateurs de ces programmes influencent la façon don’t ils sont conceptualisés et mis en place. Les orientations théoriques différentes sur la “littératie physique” contribuent aux différences dans ces programmes universitaires.

*Mots clés:* “littératie physique”- jeunes – programme

## Introduction

Physical literacy (PL) is focused on promoting the holistic and healthy development of individuals (De Rossi, Matthews, Maclean, & Smith, 2012). The PL concept draws upon the foundational work of Britain's physical education and phenomenological scholar, Margaret Whitehead (2001, 2007, 2010). Whitehead first used the term "physical literacy" in 2001 to describe a monist view of the human condition where she argued embodiment is central to our existence. While the term PL has been in use for almost two decades, many consider it still an emerging concept or a "new kid on the block" (Tremblay & Lloyd, 2010). Although there is tremendous advocacy of PL by research groups, organizations, and government, there is still debate regarding the underlying philosophy of the phenomena of PL (Edwards, Bryant, Keegan, Morgan, & Jones, 2016).

PL has been adopted for different sectors in society (i.e., physical education, sport, health promotion) and within diverse settings around the world. For example, PL has been embraced by the field of physical education, especially within curriculum documents across Canadian provinces (Giblin, Collins, & Button, 2014); one such is in Ontario where PL is a foundational concept in the physical education curriculum that has an overall focus of healthy active living (Kilborn, Lorusso, & Francis, 2016; Jurbala, 2015). It has been claimed as an umbrella concept in the long-term-athlete-development (LTAD) model; a model that has become the cornerstone of sport (Canadian Sport for Life, 2015) and recreation (Pathways to Wellbeing, 2015) in Canada. As a result of the growth of the PL concept, many have grappled with how to define and understand the intricacies of PL (Corlett & Mandigo, 2012; De Rossi et al., 2012; Jurbala, 2015; Lewis, Lessard, & Schafer, 2014; Lloyd, 2011; Longmuir & Tremblay, 2016). In response, in 2015, PL leaders in Canada came together to attempt to develop and present a PL consensus statement at the international PL conference. They defined PL as "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities for life" (Canadian Sport for Life, 2015, para 1). While the consensus statement has focused on advancing the field of PL (Longmuir et al., 2015), researchers have endeavoured to understand effective PL programming.

Research has evaluated PL programs in schools (Caput-Jorguncia, Loncaric, & De Privitellio, 2009; Castelli, Conteio, Beighle, Carson, & Nicksic, 2014; Lloyd, 2016; McKee & Jennings, 2010; Wainwright, Goodway, Whitehead, Williams, & Kirk, 2016) and sport (Higgs, 2010; Mateus, Santos, Vaz, Gomes, & Leite, 2015; Balyi, Way, & Higgs, 2013); with a focus on assessing the validity and reliability of PL tools used for formal evaluation (Francis et al., 2016; Kriellaars, 2013). More recently, some have argued that more research is needed to explore the factors that support the implementation of PL programs (Longmuir & Tremblay, 2016). We would like to build upon this and argue that there is a need to understand the factors that support university-based PL programming in Canada—because universities play a significant role in educating and training future PL leaders through university-based PL programming.

The purpose of this study was to explore the understanding and practices of those leading university-based PL programs in Canada. The objectives in this study were to gain insights into: (a) how university-service providers promote and understand university-based physical literacy programming, and (b) how to promote best practices around PL programming.

## Methods

A qualitative exploratory research design was employed for this study. This research design offered the opportunity to gain new insight and in-depth and rich understandings, as well as new insights of the experiences and perspectives of the participants in an area of study that has limited empirical research (Lichtman, 2010; Ritchie & Lewis, 2003). Exploratory research allows for the clarification of a new research problem and to develop propositions and hypotheses for further research.

### Participants

Before recruitment began, ethical approval was obtained. To protect the anonymity of participants, pseudonyms were used and in-depth demographic information was omitted so that specific individuals and programs could not be identified. Inclusion criteria required participants to be directly involved or leading PL promotion at an English-speaking post-secondary institution. Participants were recruited through professional networks, university websites, and convenience and snowball sampling (Creswell, 2012). For participant recruitment, 16 individuals from across Canada were contacted. Some individuals did not respond, two provided alternative contacts with a deeper understanding of their institutions PL promotion, and two individuals declined to participate, as they felt unsure if they meet the inclusion criteria. Four female and four male participants fit the inclusion criteria from the following provinces across Canada: British Columbia (n=1), Alberta (n=3), Manitoba (n=2) and Ontario (n=2). Six participants were academics in kinesiology (n=2) and education (n=4), and two were university-hired consultants<sup>1</sup>. Participants had various years of experience in their roles: 0-5 years (n=1), 6-10 years (n=3), 11+ (n=3), and two others had an unknown amount of experience.

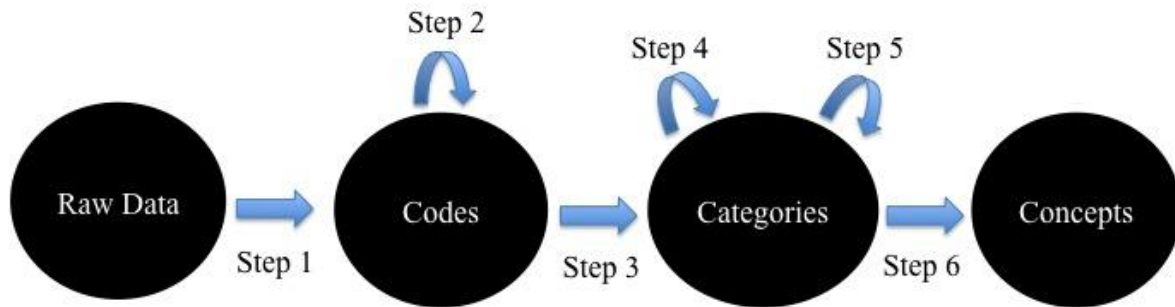
### Data Collection

Data were collected through one-on-one phone interviews as participants were geographically dispersed (Creswell, 2012). University websites, and promotional documents were used for data triangulation to ensure trustworthiness. A semi-structured interview style was used in which the use of open-ended, ethnographic style questions (Fontana & Frey, 2005) explored questions related to the types of PL promotion, including what programs were being offered and what PL meant to them at their institution. Interviews ranged between 30 to 60 minutes in duration, were audio-recorded, and transcribed verbatim (Lichtman, 2010). All of the data were uploaded into ATLAS.ti, to assist in the coding and organization of data.

Data were analyzed using thematic analysis. Thematic analysis is searching for codes that emerge from the primary data that are important in the description of phenomena. The coding process in thematic analysis focuses on the “implicit and explicit concepts within data” which creates pattern recognition within the data (Fereday & Muir Cochrane, 2006, p. 3). Two researchers independently analyzed the data using Lichtman’s (2010) three C’s approach, which is a six-step process (see Figure 1). This process included sorting the data into codes (n=60), then grouping into more specific categories (n=10), and finally establishing three main concepts or themes outlined below.

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<sup>1</sup> Consultants in this project are university-hired professionals working with faculty appointments overseeing PL programming. These individuals provided service in coordination with the university and its faculty and provided the service on-campus while using its resources.

**Figure 1.** Lichtman’s Six Steps for Conducting Data Analysis

### Results

In the exploration of university-based PL programming in Canada, three main themes were identified: (a) divergent ideologies influences PL programming, (b) experiential and outcome-based education support PL programming, and (c) human resources are critical to PL programming. These themes address how PL leaders are framing, developing, and offering unique PL programs within their universities across Canada.

#### **Divergent Ideologies Influences PL Programming**

The participants’ responses highlighted that the ideological origins of those developing and leading the programs have played a crucial role in how PL programs are being conceptualized, developed, and implemented (i.e., pedagogy and curriculum). For example, many of the participants differed in how they theorized, defined, and described PL; this ranged from a phenomenological perspective to no identified theoretical framework at all. Dianne talked about the phenomenological approach that she takes towards PL,

I really approach PL from some of the earlier work by Margaret Whitehead where she really talks about the embodied experience that comes from learning to move your body and reading and responding to environments and more of thinking about moving from a phenomenological experience and what it feels like to move your body and how to be able to come to relate to your body.

Like Dianne, Jerry uses a phenomenological lens and draws upon the work of Whitehead (2001). “We endorse [Whitehead’s] definition in terms of its embodied potential and its emphasis on the whole person; particularly in the socio-emotional psychosocial area.” Participants who incorporate the idea of phenomenological approach within their programming all highlighted that PL should encourage exploration of movement and create connections between embodiment and environment.

While most of the participants acknowledged Whitehead’s (2001) work, three participants specifically referred to the IPLA consensus statement (2014) as the foundation for their programs. For example, Lewis stated,

In terms of what PL means to us, we have evolved and continue to evolve when the terminology does in this country but we fully embraced the consensus statement to PL. Prior to that we mostly geared our program around the PHE

Canada definition. We used the PHE definition because the PHE definition is probably the most holistic prior to the consensus statement.

Although not all of the participants identified a specific ideological base, participants had strong opinions about PL. Those that identified PL as coming from a phenomenological perspective shared concerns about recent shifts in PL; suggesting that it has moved from a holistic approach to one that focuses predominantly on a physical development and sport skills approach. For example, Dianne said, “I don’t support the movement of PL that has become prescriptive and that individuals need to acquire certain skills to be able to excel in sport.” Similarly, Jerry stated, “Some have reduced PL down to a set of skills, we see it as much more holistic and integrated.” These participants spoke of development apart from the physical such as embodiment and spirituality.

Despite concerns, the majority of participants aligned PL with physical development; linking PL to developing fundamental movement skills (FMS). As Karl explained, “If we recognize those FMS of running, jumping, hopping... Then they become naturally a part of what we do everyday.” For many of the participants, PL was also seen as reinforcing a way to promote physical activity within an educational context. For example, Shaun said “We are using the term PL as a vehicle to drive physical health and education.”

Despite the fact that the participants employed different ideological underpinnings and definitions of what PL is, overall there was recognition amongst all the participants about the importance of PL. According to Shelly, “PL is organic, explorative, and explorative... It should be focused on creating positive experiences so that anyone can enjoy physical activity for life.” However, there is still a need for more research related to PL conceptualization among PL leaders within universities. Some of the participants voiced the need for clarity; as stated by Jerry,

I think that there are compartments of PL that are well researched and if we bring some of those puzzle pieces together, we might have a rough sketch of what PL is; but I think that there are some missing pieces and I think that the linkages between the different components are not well researched.

The pedagogical approaches outlined by the participants in the way they taught about PL varied between each university-based PL program. For example, participants spoke about how their PL programs were implemented through academic courses, curriculum, community programs, and research-driven activities. Interestingly, the pedagogical approaches chosen within each of these programs often linked back to the different ideologies of PL.

One of the major pedagogical approaches articulated by participants was the idea for PL programs to be about whole person development. Many participants used the word “holistic” to describe their PL program. Some of the participants spoke about the influence of the work of Whitehead and the consensus statement and the importance of a whole body approach. According to Pam, “we definitely talk about benefitting the whole person and taking a holistic approach but we also talk about building confidence in kids.”

A number of the participants talked about the importance of taking a lifespan approach in their PL program. The lifespan approach considers not only the physical outcomes but is also concerned with the social, emotional and cognitive outcomes of PL and physical activity. According to Karl, he teaches his students and leaders “the most valuable part about PL and engaging people in activities that promote PL is that it allows us to move throughout lifespan and continue to be active and fit.” Jerry teaches his students and leaders about the importance of the deeper understanding of the lifespan approach and why it is important. He said, “we frame

physical literacy as our base, so in terms of our courses, for example growth and development, so growth and development for what? Growth and development for physical literacy.”

### **Experiential and Outcome-Based Education Support PL Programming**

Participants highlighted how variable university-based PL programs are and how they are being uniquely implemented in different settings. Within this theme, several best practices around PL programming related to pedagogy and evaluation emerged.

Participants indicated that there has been an influx in the amount of PL curriculum being taught in university physical and health education teacher education programs. Many of them linked the investment of PL in course and program instruction to the importance of PL knowledge for their students. Shaun believes that PL should be a main focus of what is being taught to physical and health education teacher candidates: “PL pretty much needs to be the focus of education throughout university in teaching new teachers and have the understanding of PL permeate throughout kinesiology and physical education.”

One of the most common ways participants implemented PL programming was through academic courses, particularly through experiential education opportunities. As outlined by Lewis, “we believe that there should be a high level of experience, a lot of universities have drifted away from meaningful, hands-on, in the gym.” Lewis described their program as a “re-commitment to practicum experience” where students are given the opportunity to “take courses that are related to experiential learning, where it is hands-on physical activity training that connects theory to practice.” Lewis also said, “All of our courses are interwoven and we have intentional and purposeful scope and sequence that we have developed within the university that embeds PL from day one.” Teaching through hands-on experiential learning is something that Karl also emphasized. He said, “it is really set up so that students can gain an exposure in what it is like to work with real people and what it is like to work with protocols of assessment and observation.” Pam takes this approach as well; but she combines experiential education and classroom time to provide her students with the necessary information about implementing PL programs. She said,

We tell them what we do to get our program set up. We tell them that you need to be prepared, you need to know your team, you need to know your group of kids, make sure that you are putting out lots of equipment, and a variety of equipment, make sure that you are lesson planning, using your space, giving opportunity, and stressing how important it is to demonstrate your leadership.

This focus on providing students with information about PL and the tools about implementing PL programs was also expressed. According to Shaun, he “uses the term PL as a vehicle to drive physical health and education.” In his courses, Shaun said, “I will give them the tools for their tool box, defining PL and what it is, and then give them some teacher led strategies to deliver a physically literate environment.”

Some of the participants brought unique approaches to their PL implementation. In teaching about PL, Donna explained what she thinks is the most important part of teaching instructors and students, “there is definitely an emphasis on free unstructured play where you know the child is an expert in their own play and it is a child-led agenda.” The focus on the child’s development is self-exploration and the trainers are there to “extend the play not change the agenda.”



While participants spoke about how they implement their PL programs, they also talked about the need for evaluation of their programs and to implement outcome-based education. For example, Karl focused greatly on the use of assessment and evaluation in his program. He said,

We teach about the Test of Gross Motor Development (TGMD), PLAY assessment tool, and various other tools that have been used as a foundation of understanding of how to look at the FMS and how to assess them properly.

Some participants have implemented the use of tools to gather empirical research from their programs. For example, Pam said, “we are using the PLAY tool to assess their ability, to assess their FMS, and assess at the end to see if anything improved.”

While the use of evaluation tools is embraced by some academics, some participants feel these tools are a detriment to the holistic nature of PL. Jerry emphasized with the idea that PL should not be prescriptive and that all individuals develop PL differently so evaluation should not be the focus. Jerry explained “it is a lifelong journey and there is never a destination, you never arrive, you are always on a journey and it is very personal.”

### **Human Resources are Critical to PL Programming**

Participants spoke of what made their programs successful and areas that they felt they could improve. One of the major strengths identified by many participants was related to the relationships that universities have established with their communities. As expressed by Donna, “we have a strong community of people who really care about this vision and who are encompassed within the elements of PL.” Participants felt that strong community connections allowed for unique opportunities to teach about PL. Lewis said, “We are trying to create a model of community connection... that is what our mandate is, we are training the next generation of PL leaders to go out into the community and become an army of PL advocates.”

In addition to developing stronger community connections, some of the participants felt that the minimal financial commitment needed was a strength. Pam said, “I feel the reason that we are so successful is because we (our program) are free and I think that is important.” Another strength articulated by participants doing university-based PL programming is the focus on training PL leaders and student volunteers. As stated by Dianne, “All of the instructors go through a week long training program where they learn the fundamentals of the program philosophy, and all of the organizational structural components of a large program.” In the promotion of a successful program, Donna spoke about the importance of consistent leadership within their program:

It is about the relationships that you make within the university and the community, but it is the constants, like I am one of the constants and there are a number of faculty who are constants that are not going anywhere.

While there were numerous strengths identified by the participants in this study, there were also many barriers. One of the major barriers faced by most of the participants was the lack of funding available to implement and sustain PL programs. According to nearly all participants, the issue affecting their programs was obtaining consistent funding to provide proper equipment, training, and paid-staff positions to ensure consistency. As stated by Lewis,

The biggest challenge for us to have funding to be able to hire people, however we do have a lot of interest in our young people to be volunteers... but eventually we are going to want to hire people to facilitate and coordinate programming.

Jerry has also faced funding challenges: “Being able to establish and have the funding to be able to arrange everything administratively is a lot of detail.” The availability of funding to

support programs is a constant barrier for Donna as well; “it is a goal for the future to secure some regular funding and corporate sponsorship because it does get difficult in raising funds.”

Apart from the human resources needed to support long term funding of PL programming, other barriers discussed by the participants were the lack of research and lack of understanding around PL. According to Pam, she thought her program would benefit if there were more focus on research. She said, “What we do need is some sort of quantitative data that is showing the impact of what we are doing.” According to Jerry, for the success of PL programming there needs to be a deeper understanding of PL and its benefits. He said, “Just understanding what PL is and the evidence for it is something that we need to work on.”

The participants also spoke of some of the barriers that were specific to their own program. One of the challenges faced by Donna is the expansion of her successful program. She said, “We have been expanding fairly rapidly and I do not want to expand anymore in the near future, I would rather concentrate on quality and delivery... I want to see it remain sustainable.” Another challenge faced by Pam is the involvement of parents in a successful program. She said, “I think that one of our challenges is definitely trying to get that parental involvement and trying to get that word out to parents about how important it is to their children.”

### **Discussion**

Although the concept of PL has gained prominence in recent years (Edwards et al., 2016), physical literacy research is still in its infancy (Longmuir & Tremblay, 2016). To further understand the landscape of PL in Canada, this study provides insight into PL programming being offered by Canadian universities. As identified, many of the university-based PL programs have experienced success, but there continues to be a lack of consistency among university service providers on the core concepts surrounding PL.-The conceptualizations that were held by the participants were not drastically different but varied in their philosophical underpinnings. Edwards, Bryant, Keegan, Morgan, & Jones echoed this in a recent study (2016), which systematically evaluated the definitions and foundations of PL in current literature. The results of this systematic review found that the definitions adopted among research groups differed and that there is a lack of clarity regarding the underlying philosophical origins of PL.

In the original definition of PL, Whitehead (2001) provided a definition of PL that drew on an existential, monist, and phenomenological perspective. In her view, PL was about understanding and exploring our embodied selves (Jurbala, 2015). Whitehead (2001) introduced the concept of PL to “disrupt pedagogical practices in physical education that treat the body as a mere machine” (p. 108). While some conceptualizations have stayed true to Whitehead’s phenomenological perspective, some emerging conceptualizations have reverted back to the mechanistic approaches that privilege the physical, and see the body as machine and movement as quantifiable (Lloyd, 2016).

This study has provided unique insight into how conceptualizations of PL guide the development of university-based PL programs. While the participants hold the same long-term goal of promoting healthy active living, the route of achieving this goal is different. As mentioned by some of the participants, they draw from the work of Whitehead (2001), as it exposes a holistic experience, which allows for the construct of continual growth through experience across the lifespan (Lloyd, 2016). In this case, the purpose of PL is not to achieve a goal, but to build upon the understanding of one’s embodiment through connection to movement. The focus is on enhancing the quality of life by developing self-realization, self-confidence, and

positive self-esteem through the lived embodied experience (Whitehead, 2001). However, all participants did not universally express this approach. In fact, more participants expressed the idea of a mechanistic PL concept, with an emphasis on the “physical” and evaluation.

Recent work in PL has had a focus in the development of evaluation protocols that can be used by practitioners (Kriellaars, 2013; Passport for Life, 2013; Tremblay & Lloyd, 2011). However, some argue that the focus on evaluation in PL has moved it away from a holistic embodied experience to a compartmentalized approach. As expressed by Jurbala (2015), “the PL concept has been interpreted in ways that facilitate instrumental use but has diverged from original holistic conceptions” (p. 373). Although to move forward in the field of PL requires more empirical research, assessment and evaluation is seen as controversial among many practitioners. The focus on assessment and evaluation has some suggesting that there is a blurring of lines between PL, physical activity, and sport. According to Lloyd (2016), “more support is needed to... embrace the existential and phenomenological philosophy on which physical literacy is based” (p. 108). As expressed by some of the participants in this study, the holistic and innate movement should be at the forefront of research so the deeper philosophy of PL can be better understood and translated into practice.

Beyond conceptualization, participants highlighted that the one strength about their programs is the support from other faculty members within the department, key-stakeholders, and parents in advocating for PL development across the life course. The support for PL has been growing rapidly, and has become entrenched in sport groups and physical education despite the empirical evidence (Jurbala, 2015). The participants’ strengths in developing programs with support have been crucial in leading PL to where it is today. However, to ensure that PL continues to improve the issues of funding and sustainability will need to be addressed. As stated by Longmuir and Tremblay (2016), “there are more questions than answers” (p. 28) in PL research. PL academic leaders need to continue to foster opportunities to further research, as it will allow for growth in the development of PL programs and educated practice. It was also clear in this study that many challenges remain and that there continues to be contentious ideas furthering research in PL and PL programming. As stated by one of the participants, Jerry said,

I think that the on going tension politically, that PL is also being captured in some ways and being used in some ways as a term to further political agendas and I think that is unfortunate but that is the reality, and I think that is why we have various conceptualizations of PL out there and some are narrower than others and I think that some are problematically narrow and that as a result is really doing a disservice to PL.

While the concept of PL has gained momentum over the last two decades, there are still many gaps in the research. With an increased interest in this area, many are seeing the value in teaching about holistic physical activity throughout the lifespan. To ensure the successful integration of PL programs, further empirical research is needed to examine what is being done and what has been successful. The gaps that were encountered and seen in this study and are valuable for future studies related to PL pedagogy, PL interventions, and PL programming. Future research should examine PL pedagogy as it promotes efficacy and effectiveness in PL interventions within universities (Longmuir & Tremblay, 2016). This will help to understand the intervention approaches (i.e. university students, children) that are most likely to foster positive physical literacy development. There is also a need for more research that grapples with the underpinnings of PL to challenge academics and educators alike. Further research on the

development of the conceptual underpinnings of PL needs to include collaborative work between sectors to provide deeper understandings of PL.

There were two primary limitations that impacted the present study. First, the interviews were only considered and conducted in English, which limited the search cohort in a bilingual country. Second was the challenge of finding university-based PL programs in Canada. Some academic institutions did not offer PL programs, while others were influenced by the transparency of the definition of PL and did not wish to participate. The divergent philosophical ideologies associated with PL served as a barrier to participation, which affected the number of individuals willing to be interviewed. Although eight participants were recruited, a larger cohort of participants would have helped form a deeper understanding of university-based PL programming in Canada.

### **Conclusion**

Currently, some PL leaders across Canada are promoting PL development in their universities and in their communities. The approaches taken by PL faculty and leaders are providing the initial framework for others within other university settings and surrounding communities. However, given the important role universities play in delivering PL programming in Canada there is a need to understand how these programs are being delivered. This initial research has shown that PL programs within universities have had success and that these programs could be successful outside of the university setting. Ultimately, more future research needs to be completed on PL programming within and outside of universities, as the quantity is limited. As researchers generate more meaningful research in the field, a greater understanding of PL and PL programming will be determined.

## References

- Balyi, I., Way, R., & Higgs, C. (2013). *Long-term athlete development*. Champaign, IL: Human Kinetics.
- Canadian Sport for Life. (2015). *Physical literacy*. Retrieved from: <http://canadiansportforlife.ca/sites/default/files/Active%20for%20Life-Jan%202016-web.pdf>
- Canadian Parks and Recreation Association/Interprovincial Sport and Recreation Council (2015). *A framework for recreation in Canada: Pathways to wellbeing*. Ottawa: Canada.
- Caput-Jogunica, R., Loncaric, D., & De Privitellio, S. (2009). Extracurricular sports activities in preschool children: Impact on motor achievement and physical literacy. *Hrvat Sportskomed Vjesn*, 24, 82-87.
- Casteli, D., Centeio, E., Beighle, A., Carson, R., & Nicksic, H. (2014). Physical literacy and comprehensive school physical activity. *Preventive Medicine*, 66, 95-100. DOI: 10.1016/j.ypmed.2014.06.007
- Corlett, J. & Mandigo, J. (2013). A day in the life: Teaching physical literacy. *Physical and Health Education Canada*, 18-24.
- Creswell, J. (2012). *Qualitative inquiry and research design*. Thousand Oaks, CA: Sage Publications.
- De Rossi, P., Matthews, N., Maclean, M., & Smith, H. (2012). Building a repertoire: Exploring the role of active play in improving physical literacy in children. *Revista Universitaria De La Educacion Fisca Y El Deporte*, 5(5), 38-45. DOI: 190.64.86.34
- Edwards, L., Bryant, A., Keegan, R., Morgan, K., & Jones, A. (2016). Definitions, foundations, and associations of physical literacy: A systematic review. *Sports Medicine*, 47(1), 1-14. DOI: 10.1007/s40279-016-0560-7.
- Fereday, J. & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 80-83. DOI: 10.1177/160940690600500107.
- Fontana, A. & Frey, J. (2005). The interview: From neutral stance to political involvement. In N. Denzin, & Y. Lincoln (Eds.). *Sage handbook of qualitative research* (pp. 695-727). Thousand Oaks, CA: Sage Publications.
- Francis, C., Longmuir, P., Boyer, C., Andersen, L., Barnes, J., Boiarskaia, E.,... Tremblay, M. (2016). The Canadian assessment of physical literacy: Development of a model of children's capacity for a healthy, active lifestyle through the Delphi process. *Journal of Physical Activity and Health*, 13, 214-222. DOI:10.1123/jpah.2014-0597
- Giblin, S., Collins, D., & Button, C. (2014). Physical literacy: Importance, assessment and future directions. *Sports Medicine*, 44, 1177-1184. DOI: 10.1007/s40279-014-0205-7
- Higgs, C. (2010). Physical literacy – Two approaches, one concept. *Physical & Health Education Journal*, 76(1), 6-10.
- Jurbala, P. (2015). What is physical literacy, Really? *Quest*, 67, 367-383. DOI: 10.1080/00336297.2015.1084341
- Kilborn, M., Lorusso, J., & Francis, N. (2015). An analysis of Canadian physical education curricula. *European Physical Education Review*, 22(1), 23-46. DOI: 10.1177/1356336X15585909
- Kriellaars, D. (2013). *PLAY parent workbook*. Vancouver: Canadian Sport Centers.

- Lewis, B., Lessard, S., & Schaefer, L. (2014). Opening the door to Physical Literacy. *Physical and Health Education*, 79(4), 30-32.
- Lichtman, M. (2010). *Qualitative research in education: A user's guide*. Los Angeles, CA: Sage Publications.
- Lloyd, R. (2011). Awakening movement consciousness in the physical landscapes of literacy: Leaving, reading and being moved by one's trace. *Phenomenology & Practice*, 5(2), 73-95.
- Lloyd, R. (2016). Becoming physically literate for life: Embracing the functions, forms, feelings, and flows of alternative and mainstream physical activity. *Journal of Teaching in Physical Education*, 35, 107-116. DOI: 10.1123/jtpe.2015-0068.
- Longmuir, P. & Tremblay, M. (2016). Top 10 research questions related to physical literacy. *Research Quarterly for Exercise and Sport*, 87(1), 28-35. DOI: 10.1080/02701367.2016.1124671.
- Longmuir, P., Boyer, C., Lloyd, M., Yang, Y., Boiarskaia, E., Zhu, W., & Tremblay, M. (2015). The Canadian assessment of physical literacy: Methods for children in grades 4-6 (8-12). *BMO Public Health*, 15(1), 767-783. DOI: 10.1186/s12889-015-2106-6.
- Mateus, N., Santos, S., Vaz, L., Gomes, I., & Leite, N. (2015). The effect of physical literacy and differential learning program in motor, technical, and tactile basketball skills. *Revista De Psicologia Del Deporte*, 24(3), 73-76.
- McKee, M. & Jennings, C. (2010). Physical education in primary schools in Northern Ireland: A baseline survey of timetabled physical education. *Physical Education Matters*, 5(3), 13-16.
- Passport For Life (2013). *Physical literacy in Canada*. Retrieved from: <http://passportforlife.ca/physical-literacy-canada>
- Ritchie, J. & Lewis, J. (2003). *Qualitative research practice: A guide for social science students and researchers*. London, UK: Sage Publications.
- Tremblay, M. & Lloyd, M. (2010). Physical literacy measurement - the missing piece. *Physical and Health Education Journal*, 76(1), 26-30.
- Wainwright, N., Goodway, J., Whitehead, M., Williams, A., & Kirk, D. (2016). The foundation phase in Wales – a play-based curriculum that supports the development of physical literacy. *International Journal of Primary, Elementary, and Early Years Education*, 44(5), 3-13. DOI: 10.1080/03004279.2016.1176360.
- Whitehead, M. (2001). The concept of physical literacy. *European Journal of Physical Education*, 6, 127-138. DOI: 10.1080/1740898010060205
- Whitehead, M. (2007). Physical Literacy: Philosophical considerations in relation to developing a sense of self, universality, and propositional knowledge. *Sport, Ethics, and Philosophy*, 1(3), 281-298. DOI: 10.1080/17511320701676916.
- Whitehead, M. (2010). *Physical literacy: Throughout the life course*. London, UK: Routledge.