EXPLORING THE EXPERIENCES OF NOVA SCOTIAN YOUTH WITH MENTAL HEALTH CHALLENGES PARTICIPATING IN A PHYSICAL LITERACY PROGRAM: A PHENOMENOLOGICAL STUDY

by

Alexander Fulford

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts

at

Dalhousie University
Halifax, Nova Scotia
November 2024

Table of Contents

List of Tables

List of Figures

Abstract

Background: Physical literacy (**PL**) has been identified as the foundation to lifelong physical activity (**PA**) and a capability that is available to each individual no matter their age or physical endowment. Despite widespread evidence linking PL to positive emotions, enhanced confidence and self-esteem, resilience, motivation, and effective relationships, youth experiencing mental health disorders (**MHDs**) have been shown to have lower levels of PL than their peers and face unique barriers to PA participation. Concurrently, the existing PL literature has limited applicability for youth with MHDs. **Purpose**: The purpose of this phenomenological study was to explore the experiences of seven Nova Scotian youth (N=7) with mental health challenges (**MHCs**) participating in the Move2Improve (**M2I**) pilot program. The M2I program was a weekly 9-session community program based in Dartmouth (NS) designed to support the PL development of youth with MHCs. **Methods**: Using qualitative methods, which included observations, journals, and a focus group, this research provides in-depth insights into the population's unique experiences, while also offering valuable contributions to the emerging PL field. The overarching research question for this study was: *What are the lived experiences of Nova Scotian youth with MHCs participating in a PL program?* In order to answer the research question, I examined the following sub-questions: *What motivated the youth to participate in the program? How do participants describe their experiences of confidence and motivation from participating in the program? What does PL mean to participants before and after their lived experiences in the program?* Data was analysed using Colaizzi's (1978) seven-step phenomenological method. **Results**: Overall, the M2I program was perceived as both enjoyable and engaging. Results indicate that the integration of diverse physical activities, as well as the program's supportive and inclusive environment contributed to participants' positive experiences. Moreover, findings suggest that most participants experienced slight PL improvements and socio-emotional benefits. Interestingly, all participants joined the M2I program having never heard of PL before, highlighting their lack of exposure to the term. Practical implications and future directions are further discussed. While these results show promise, future PL research on children and youth with MHDs (formal diagnosis, accessing mental services, etc.) is warranted.

Keywords: physical activity, physical literacy, physical and health education, youth, mental health challenges, mental health disorders, phenomenological research

List of Abbreviations Used

CS4L	Canadian Sport for Life
FMS	Fundamental Movement Skills
ML	Movement Literacy
M2I	Move2Improve
M2P	Meant2Prevent
MHCs	Mental Health Challenges
MHDs	Mental Health Disorders
PA	Physical Activity
PHE	Physical and Health Education
PL	Physical Literacy
SEM	Social-Ecological Model

Acknowledgements

Thank you to my committee members Dr. Michelle Stone and Dr. Sherry Huybers for the constructive feedback and thought-provoking discussions. Safe to say, we all understand physical literacy a little better. To my supervisor, Dr. Son Truong, thank you for your guidance and encouragement over the last 3 years. Your time and effort throughout each phase of this project did not go unnoticed and was all greatly appreciated. To my partner, Alexis, thank you for all your love and support…thank you for taking this journey on with me; I would not have had it any other way!

Mom, this one's for you…

Chapter 1: Introduction

1.1 Background to the study

In recent years, physical literacy (**PL**) promotion has gained traction across a variety of sectors in Canada, including sport, recreation, physical and health education (**PHE**), and public health (Borduas et al., 2018; Stevens-Smith, 2016; Tremblay et al., 2018). First coined by Whitehead in 1993, PL is described as the foundation to lifelong physical activity (**PA**) participation and despite age or ability, a capability that is available to all (Ma et al., 2021; Tremblay et al., 2018; Whitehead, 2010). More specifically, PL has progressed into a multifaceted concept that encompasses a series of interconnected domains "focused on the holistic and healthy development of the individual" (Borduas et al., 2020, p. 1). These domains consist of the "affective (motivation and confidence), physical (physical competence), cognitive (knowledge and understanding), and behavioral (engagement in physical activities)" components of PL (Cornish et al., 2020, p. 2). Whitehead (2010) notes a few characteristics of a physically literate individual; this includes somebody who is confident in their PA abilities, has a positive attitude towards PA, and can move and interact with others in diverse PA settings. Accordingly, the development of PL takes place when individuals are engaged in a wide range of PA environments that are safe and rewarding (Cornish et al., 2020). Programs that target PL improvement take into consideration individual ability, PA knowledge, confidence, motivation and social interaction (Carl et al., 2022; Cornish et al., 2020).

Despite the growing body of research linking PL to positive emotions, enhanced confidence and self-esteem, resilience, intrinsic motivation for PA, and effective relationships (Jefferies et al., 2019; Ma et al., 2021; Melby et al., 2022; Warner et al., 2020; Whitehead, 2010), many youth experiencing health disparities are physically illiterate and report a lack of desire to be active (Bopp et al., 2019). Specifically, youth with mental health disorders (**MHDs**) have been found to have lower levels of PL than their peers (Fortnum et al., 2018). For example, they are more likely to display poor motor proficiency and experience low levels of PA, motivation, and confidence (Fortnum et al., 2018). In PA environments, youth with MHDs perceive themselves as being less physically competent and accepted by their peers, hindering their overall PL development (Fortnum et al., 2018). Furthermore, this population faces unique barriers to PA participation and community-based PA programs that are specific to their mental health symptoms, such as behavioural and sensory dysregulation, low motivation, medication side-effects, and difficulties with relationships (Hickingbotham et al., 2021; McCloughen et al., 2016; Parker et al., 2021). For example, anxiety and depressive symptoms are associated with decreased motivation to exercise and participate in sports (Hickingbotham et al., 2021).

Consequently, youth with MHDs are more susceptible to sedentary behaviours (i.e., television watching & video gaming), excess weight gain, and poor health management practices (i.e., inadequate sleep routines, unhealthy diets, & limited knowledge of healthcare services), further intensifying the symptoms of poor mental health (Belair et al., 2018; McCloughen et al., 2016). However, since the promotion of PL has been found to alleviate mental health symptoms (Ma et al., 2021), it is critically important that additional efforts are made to understand their PA experiences and help support their PL development (Bopp et al., 2019; Fortnum et al., 2018).

1.2 Move2Improve project

This research study was part of a larger program evaluation of the Move2Improve (**M2I**) intervention. The intervention was developed by an interdisciplinary partnership between health professionals and researchers in the School of Health and Human Performance at Dalhousie University and pediatric endocrinologists at the IWK Health Centre in Halifax, Nova Scotia. The

M2I intervention was funded by Sun Life and consisted of a multi-step process. First, a series of interviews were conducted with various health professionals in the Halifax Regional Municipality (**HRM**), including recreational therapists and pediatricians to assess the needs, interests, and barriers of the population. Additionally, these interviews allowed the M2I team to form recruitment partnerships with health professionals within the HRM. This phase was completed in November 2022. As a central tenet of the intervention was prioritizing the youth voice, the next phase of the project was a needs assessment with prospective participants and their parents. The main purpose of this needs assessment was to help inform the design of the PL program and begin its initial phases of recruitment, which was carried out using virtual focus groups with youth aged 12 to 16 (N=9) and parents of these youth (N=11). This phase included a total of four focus groups and was completed in March 2023.

Following the needs assessment, the first M2I pilot program was developed targeting youth aged 12 to 14 accessing mental health services through local health centres or experiencing mental health challenges (**MHCs**). The program began on February 9th, 2024 and was initially comprised of 10 weekly two-hour sessions up until April 12th, 2024 (see **Appendix A**). However, the Halifax Curling session (Session #8) was cancelled at the last-minute due a to lack of curling staff availability on Easter Friday (March 29th, 2024). Therefore, the M2I program ended up being a total of 9 two-hour sessions across 10 weeks. Drawing on input from the interviews and needs assessment, physical activities were selected by the M2I program leaders (two recreation therapists, one recreation therapist intern, and one physical educator), who supervised each session. Most sessions were held in the Decadium, a community gymnasium located in the Decathlon store (Mic Mac Mall, Dartmouth). However, similar to Warner et al. (2018), who developed a PL intervention for youth facing additional barriers to PA, program sessions were not limited to the same environment (i.e., gymnasium) and included opportunities for community field trips. For example, the M2I program leaders organized two distinct sessions at Shubie Park (Session #9) and Dartmouth North Community Centre (Session #7).

A total of seven youth participants were deemed eligible to join the M2I program and were deidentified using pseudonyms (see **Table 1**). The group size was intentionally limited to 6 to 12 participants to help foster a supportive environment and facilitate quality relationships (Arbour-Nicitopoulos et al., 2018). It is important to highlight that the M2I program was free of cost for all participants. Additionally, participants were eligible for a $75 gift card to either Decathlon or Sportchek if they attended more than half of the program's sessions. This program incentive was designed to motivate youth to complete the program, as well as to help support youth sustain their PA participation once the program concludes.

Through the development of partnerships with health professionals who participated in preliminary interviews to help inform the M2I program, youth participants were recruited from a wide range of sources; this included general pediatricians and recreation therapists at the IWK, along with IWK Health and Recreation Nova Scotia social media (i.e., Twitter & Facebook). M2I program posters were also put on display at local recreation centers and IWK clinics in the HRM area (see **Appendix B**). Registration to the program required a parent or guardian to fill out an online interest form, which contained questions related to their child and the program's inclusion criteria, such as their child's age, gender, town, and mental health challenge (see **Table 1**). Confirmed participants were then contacted by one of the M2I program leaders to finalize their placement in the program.

All seven M2I participants were between the ages of 12 and 14. While a formal mental illness diagnosis was not a program requirement, participants were either accessing community services to support their mental health or experiencing MHCs. These MHCs were extensive and incorporated challenges such as anxiety, depression, and low self-esteem, as well as socio-emotional issues such as difficulties in developing friendships and social exclusion (see **Table 1**). The emergence of these types of symptoms during early adolescence suggests that youth experiencing MHCs may be at a higher risk of developing a future MHD (Costello, 2016; Farris et al., 2019). These symptoms can also persist or intensify into adulthood (Farris et al., 2019), underscoring the importance of engaging this population in a PL program.

Table 1: *M2I Program Participants' Demographic Data (Pseudonyms Applied)*

Participant	Age	Gender	Town	MHCs (as shared by parents)
Lauryn	13	Girl	Halifax	ADHD, high anxiety, and periods of self-diagnosed depression
Amelia	12	Girl	Eastern Passage	Low confidence, experiences bullying
Cassidy	12	Girl	Dartmouth	Difficulty making friends
Alice	12	Girl	Dartmouth	Bouts of anxiety
Ben	13	Boy	Dartmouth	Anxiety
Travis	12	Boy	Cole Harbour	Low self-esteem
Hannah	13	Girl	Dartmouth	Bouts of anxiety

The inclusion criteria for the M2I program were purposefully kept broad for several reasons. First, the median age at onset for a majority of MHDs is beyond the age range of the program's target population (Solmi et al., 2022). Second, some MHDs reveal wider time gaps than others in regard to the onset of symptoms and receiving a diagnosis (Costello, 2016; Solmi et al., 2022). For example, certain MHDs like depression can display longer time gaps between the first symptoms and full diagnosis (Costello, 2016). This does not include the abundance of youth with MHCs who do not seek professional services (Herman et al., 2021). Lastly, targeting youth with MHCs as opposed to youth with MHDs allowed the recruitment process to be more flexible, while also removing any potential stigmatization of registering for the program.

Since youth with MHDs have been found to display poor motor proficiency and experience low levels of PA (Fortnum et al., 2018), the main purpose of the M2I program was to help support the PL development of youth with MHCs. Each M2I session was designed to be inclusive for all backgrounds and abilities, and geared towards promoting empowerment and positive social interactions, which are regarded as key influencers to PL development (Allan et al., 2017; Dudley et al., 2017). Throughout the program, participants were introduced to a wide array of physical activities. Specifically, each M2I session began with 15 minutes of supervised unstructured free play, where the youth had access to various equipment, including basketballs, volleyballs, bean bags, and table tennis rackets, as well as swing ball (also known as tether tennis or totem tennis) and archery kits.

Following a weekly check-in, youth participated in the session's main activity for a period of 60 to 75 minutes, depending on the respective session. Main activities included, but were not limited to: circus skills (juggling scarves and bean bags, flower sticks, and diabolo), capoeira (an Afro-Brazilian martial art that combines dance and Afro-Brazilian instruments), wall climbing, yoga, badminton, and a nature scavenger hunt (see **Appendix A**). The session at Dartmouth North Community Centre featured opportunities to bake (healthy eating) and play outside on the playground. Overall, the purpose of activity sampling was to provide participants with exposure to a range of pursuits. As suggested by Arbour-Nicitopoulos et al. (2018) and Murdoch and Whitehead (2010), activity sampling could help young people identify movements that interest them, which could then lead to sustained PA participation. Moreover, Whitehead

(2010) describes a physically literate individual as somebody who can “interact fluently with numerous and varied settings” (p. 13). Therefore, it was our goal to introduce physical activities across a broad range of movement settings, such as adventure, expressive, athletic, and fitness and health (Murdoch & Whitehead, 2010). Concurrently, to ensure the “breadth and balance” of movement experiences put forth by Murdoch and Whitehead (2010), the M2I program prioritized PA within different contexts: indoors, outdoors, alone, with others, and in both familiar and novel situations (p. 181).

Furthermore, each M2I session was supervised by the four M2I program leaders, who were responsible for booking locations, providing snacks, setting up equipment, conducting check-ins and debriefs, distributing worksheets, and assisting with instructions. More importantly, the program leaders worked to develop meaningful relationships with participants and ensured that their unique interests were taken into the program planning process. These strategies are recognized in the literature as being important for indirectly promoting PL and fostering positive youth development (Allan et al., 2017). In addition to promoting ample PA time, the program leaders integrated various opportunities for teaching and discussions that explored a multitude of topics, including PL, PA benefits, barriers, and experiences related to sleep, diet, and leisure. These topics were selected in accordance with the backgrounds and expertise of the program leaders. Participants also completed goal setting worksheets and were provided with a series of take-home information sheets. Depending on the week’s focus, M2I sessions were facilitated by either the program leaders or qualified community-based instructors (i.e., for capoeira, circus, and yoga). These partnerships with PA leaders in the community were a crucial aspect of the M2I program. Alongside sustaining participant engagement, the community-based instructors were able to share valuable knowledge concerning their activity's benefits, challenges, and future opportunities.

Lastly, the ultimate goal of the M2I intervention is to incorporate the refined PL program into the Meant2Prevent (**M2P**) resource hub. The M2P resource hub is a type 2 diabetes prevention initiative that provides resources for health professionals, parents and youth to access through their website. Evidence shows that MHDs and type 2 diabetes are often co-occurring in individuals (Robinson et al., 2018). This reciprocal relationship can be attributed to the complex association between physiological factors, including inflammation and oxidative stress, lifestyle factors, such as physical inactivity and a poor diet, and the effects of medications (Robinson et al., 2018). That being said, the focus of this research study was on designing, implementing, and assessing the first PL pilot program of the M2I intervention. This research study took place throughout the nine sessions of the first M2I pilot program.

1.3 Purpose of the study and research questions

The purpose of this phenomenological study was to explore the experiences of youth with MHCs participating in a PL recreation program using qualitative methods. Embodied phenomenology provides a description of lived experience, considering space, time, and the world as beings engage with it (Van Manen, 2014). Despite the limited qualitative research within the topic of PL (Edwards et al., 2018; Liu & Chen, 2021), implementing a phenomenological approach produced more in-depth insights into the unique experiences of the population (Creswell & Poth, 2018). Concurrently, it allowed for the utilization of data collection methods such as observations, participation journals, focus groups, and photo-elicitation, in order to thoroughly examine domains of PL that are typically understudied, including the affective elements (i.e., confidence and motivation) (Carl et al., 2022; Cornish et al., 2020; Liu & Chen, 2021) and the youth perspective of PL (Goss et al., 2022).

Thus, the overarching research question for this study was: *What are the lived experiences of Nova Scotian youth with MHCs participating in a PL program?* In order to answer the research question, I examined the following sub-questions: *What motivated the youth to participate in the program? How do participants describe their experiences of confidence and motivation from participating in the program? What does PL mean to participants before and after their lived experiences in the program?*

1.4 Significance of the study

While the development of PL is more relevant for vulnerable populations (Jefferies et al., 2019), such as youth with MHDs, who have been found to be less active than their peers (Fortnum et al., 2018) and may not be engaged in traditional sport activities (Hickingbotham et al., 2021), the current literature regarding PL has limited applicability for youth with MHDs (Fortnum et al., 2018). To date, there are few PL interventions that have targeted this population; the majority of literature explores PL in the context of youth with physical impairments (Arbour-Nicitopoulos et al., 2018; Brian et al., 2019; Clutterback et al., 2022; Dugas, 2016; St. John et al., 2021) or neurodevelopmental disorders (Dudley et al., 2016; Hassani et al., 2022; Pavlova et al., 2021). Other studies have prioritized quantitative methods in assessing discrete PL domains with this population, such as the use of standardized tests and evaluation surveys (Ekornas et al., 2010; Hill et al., 2017; Warner et al., 2020). However, measuring the domains of PL independently can go against its holistic philosophical foundations and "fails to account for the uniqueness (i.e., chronic disease) of each individual's development" (Bopp et al., 2019, p. 2). Specifically to this population, comparisons and measurements of abilities can also perpetuate feelings of negative perception and self-esteem (Whitehead, 2010), exacerbating the need for more qualitative research that explores youth experiences within the context of PL (Edwards et al., 2018).

1.5 Statement of positionality

The term positionality refers to the position that the researcher adopted within the study (Holmes, 2020). As a novice researcher, it is important to acknowledge how positionality can influence all stages of the research process (Holmes, 2020). As I conducted qualitative research using a constructivist lens, I am aware that knowledge is individually constructed and that the research process is a shared experience between the researcher and the participants (Bourke, 2014; Holmes, 2020). Therefore, it was essential to spend time in the same environment as my participants (Creswell, & Poth, 2018). With that being said, I attended all nine M2I sessions, as my main role throughout the program was as a participant observer. I spent most of the program engaging in the different activities and interacting with the youth. This involved asking participants questions and getting to know them better. Furthermore, positioning myself as a learner alongside participants gave me a unique perspective on the intricacies, challenges, and preferences of each PA. This helped to facilitate discussions and debriefs that were more authentic and relevant.

I am currently a physical educator (BEd) and qualified to teach both primary and secondary students. As a graduate student at Dalhousie University, I am interested in exploring the concept of PL and how it can be effectively fostered amongst different populations. I am aware that the values I have towards movement, sport, PL, and physical education may impact certain aspects of my research. Although complete objectivity is considered impossible, Holmes (2020) recommends researchers "strive to avoid obvious, conscious, or systematic bias and to be as neutral as possible" (p. 4). As such, it became increasingly important to engage in reflexive approaches throughout my research project. Berger (2015) refers to reflexivity as "the process of a continual internal dialogue and critical self-evaluation of researcher's positionality" (p. 220). The strategies that I used to maintain reflexivity included ongoing communication with my research supervisor, prolonged engagement and repeated discussions with the same participants, as well as member checking using a summary of the findings (Berger, 2015).

Chapter 2: Literature Review

2.1 Introduction: Why youth with MHDs need more PL support

Using a phenomenological approach, this thesis aimed to gain a deeper understanding of participants' PL experiences, as well as examine their constructions of the PL meaning. This knowledge will contribute to enhancing future PL programs targeting youth with MHCs and MHDs, such as the refined M2I program. This literature review was conducted using the following databases: Novanet, CINAHL Full Text, and SportDiscus. Using the search terms (PL AND youth or adolescents or young people or teen or young adults) and (PL AND mental health or mental illness or mental disorder or mental health challenge), many research articles were set aside for review. Articles that were published within the last 20 years (since 2004) and included specific reference to PL and/or youth with mental illness or challenge were deemed appropriate for this review. An exception to this was the landmark journal article by Whitehead (2001), which introduced the philosophical foundations of PL. The objective of this review was to examine the breadth of PL research and situate my study within the current PL literature. Specifically, this review will provide a detailed account of the different PL perspectives, domains, and intervention settings that are frequently discussed in the literature. Moreover, it will concentrate on studies that have employed qualitative methods to assess PL, as well as identify PL research gaps, specifically pertaining to youth with MHDs.

Youth with MHDs face unique barriers to PA and engagement in PA programs (Hickingbotham et al., 2021; McCloughen et al., 2016), which puts them at a greater risk of becoming physically illiterate (Fortnum et al., 2018). According to Whitehead (2010), physically illiterate individuals avoid structured and unstructured opportunities for PA, lack confidence in their PA abilities, and have low levels of motivation for PA involvement. Consequently, this can lead to sedentary behaviours, excess weight gain, substance abuse, compromised physical health, and the worsening of mental health symptoms (Belair et al., 2018; Malla et al., 2018; McCloughen et al., 2016; Preyde et al., 2018). While evidence reveals associations between developing PL and enhancing constructs of emotional well-being, such as resilience (Jefferies et al., 2019; Ma et al., 2021) and positive affect (Blain et al., 2020), Chapter 2 highlights the limited applicability that the current PL literature has for youth with MHCs and MHDs. Lastly, this review concludes by investigating the existing PL understandings of children and youth.

2.2 Approaches and foundations of PL development

In North America, the development of PL can be conceptualized by two distinct perspectives: the holistic approach and the performance-driven approach (Allan et al., 2017). Introduced by Margaret Whitehead in 1993, the holistic approach is commonly referred to as the "Whiteheadian" perspective and is the most prominent amongst the two (Allan et al., 2017; Durden-Myers et al., 2020; Whitehead, 2001). After spending many years working in the fields of PHE and sport and completing her Ph.D. on the implications of existentialism and phenomenology in PHE, Whitehead became increasingly concerned with the status of adolescents' PA levels and the PHE curricula in the UK (Robinson & Randall, 2017; Whitehead, 2010). More specifically, she noticed many students becoming sedentary after high school and PHE settings overemphasizing performance and athletics (Robinson & Randall, 2017). Thus, Whitehead developed the concept of PL to encourage new ways of thinking about movement and the body (Robinson & Randall, 2017).

Rooted in the philosophical writings of existentialism and phenomenology (Durden-Myers et al., 2020; Robinson & Randall, 2017), the holistic approach rejects the dualistic notion of the mind and body and is centered on the interactions between an individual and their environment (Allan et al., 2017). Accordingly, the holistic perspective of PL is less concerned with skill development and fitness outcomes (Liu & Chen, 2021). Instead, it emphasizes positive attitudes towards PA, confidence in one's unique abilities, and being able to move in a range of distinct environments (Liu & Chen, 2021; Robinson & Randall, 2017).

In comparison, Allan et al. (2017) describe the performance-driven approach as being "largely focused on physical skills and motor development" (p. 517). Nested in Canada's sport organization sector, this perspective is recognized as being highly applicable to athlete development, as it emphasizes fundamental movement skills (i.e., speed & balance) in basic sporting environments (on the ground and in the water) (Allan et al., 2017). For example, Canadian Sport for Life (**CS4L**) adopted a PL model in response to Canada's epidemic of childhood obesity (Higgs, 2010). Despite the model being predicated on the early works of Whitehead (Allan et al., 2017), the performance-driven approach is intended to promote "opportunities to achieve sporting excellence" (Higgs, 2010, p. 7). Altogether, these two distinct approaches allow PL to remain applicable in a wide range of settings (Allan et al., 2017).

2.2.1 Implementing the holistic approach in qualitative research

Despite both the holistic and performance-driven approaches having their respective limitations, Edwards et al. (2017) conducted a systematic review of PL literature and found that approximately 70% of the articles adopted a 'Whiteheadian' perspective. This is mainly due to the above approach including "a wider range of movement types/skills and psychosocial attributes" (Edwards et al., 2017, p. 122). In a more recent systematic review across 46 PL articles published between 2012 to 2020, Carl et al. (2022) found similar results revealing that 77% of the interventions adopted the holistic approach to understanding PL. More specifically, the holistic approach has been found to be more prominent within qualitative studies, where the dominant PL assessments were interviews, focus groups, and participant observations (Edwards et al., 2018). For example, 83% of the qualitative articles examining PL development used the 'Whiteheadian' perspective (Edwards et al., 2018). It is important to note that a majority of these qualitative studies focus on children under 12 years old (Edwards et al., 2018). Considering this population is readily accessible in the primary school system, Edwards et al. (2018) suggest the dominance of children in both qualitative and quantitative studies of PL is unsurprising. In addition to convenience, a child's early years are considered to be a critical stage for developing the foundations of PL, such as fundamental movement skills (**FMS**), positive perceptions of PA, and movement experiences in various environments (Higgs, 2010; Whitehead, 2010).

Nonetheless, given PL is a concept applicable to the full life course (Whitehead, 2010), this trend does highlight the need for more qualitative PL research with youth and young adults, respectively (Cornish et al., 2020; Edwards et al., 2018). To date, there have been only a few studies that have implemented qualitative research methods to explore PL with adolescents (i.e., youth 12 and older) (Farias et al., 2020; Lloyd, 2016; Shortt, 2019). For example, Farias et al. (2020) employed a longitudinal study to explore the retrospective experiences of a tenth-grade cohort (N=24) who participated in a year-long Sport Education PHE curriculum three years prior (i.e., in grade seven). More specifically, these researchers were interested in how the Sport Education program developed participants' PL and its lasting impact on their lives (Farias et al., 2020). The Sport Education curriculum was implemented in a K-12 school in Northern Portugal by a PHE teacher and consisted of four 'sport seasons' that included basketball, handball, football, and volleyball (Farias et al., 2020). Using retrospective surveys and semi-structured focus groups with the tenth-grade cohort (aged 15-17), Farias et al. (2020) found that the Sport Education program inspired future PA engagement and fostered students' PL development, particularly through enhanced PA attitudes, social interactions, confidence, and motivation. Notably, the work of Farias et al. (2020) also sheds light on the importance of follow-up assessments in the context of PL development and lifelong PA participation.

Furthermore, Lloyd (2016) examined the PL outcomes of students from grade one, five, seven, eight, and nine participating in a 'JungleSport' climbing program using participant observations, daily journal prompts and small group interviews. Situated in Ottawa, Canada, the 'JungleSport' program featured components of adventure-based learning, such as obstacle courses and vertical climbing challenges (Lloyd, 2016). While 153 students participated in the 'JungleSport' program, this article was limited to the in-depth phenomenological descriptions of two female climbers in grades seven and eight, respectively (Lloyd, 2016). Although it is difficult to generalize the findings of two individuals to a larger group of students, the experiences of these climbers revealed the significance of exploring movement beyond the bodily form (i.e., the body's physical and outer shape) (Lloyd, 2016). More specifically, by considering the feelings of the climbers and encouraging their access to imagination, participants felt more supported on their PL journey (Lloyd, 2016).

Alternatively, Shortt (2019) conducted structured interviews with 17 adolescents aged 14-17 with the purpose of examining their perceptions of PL. Participants were recruited from the United States using convenience sampling (Shortt, 2019). A majority of the participants were male (11/17) and involved in sports participation (12/17) (Shortt, 2019). When it comes to developing PL, Shortt (2019) found that adolescents tend to prefer PA activities that they perceived as being familiar, enjoyable, and competent in. Although beneficial to the development of future PL programs and assessments, this study was not based on the experiences of a specific program, accentuating the dearth of research in the topic. Accordingly, more qualitative research is needed that explores the experiences of adolescents (i.e., youth 12 and older) participating in a PL program.

2.3 Dominant PL domains in the literature

While some definitions of PL may vary in regard to their philosophical underpinnings, there is a consistent and overarching theme that "involves the integration of physical, psychosocial, and cognitive processes that benefit the healthy development of the whole person" (Feigenbaum & Rebullido, 2018, p. 90). With that said, the concise definition of PL by Whitehead (2010) will guide the scope of this study: "the motivation, confidence, physical competence, knowledge, and understanding to maintain PA throughout the life course" (pp. 12-13). From this definition, the International Physical Literacy Association (**IPLA**) adopted four interconnected domains to help conceptualize PL: the affective domain (motivation and confidence), the physical domain (physical competence), the cognitive domain (knowledge and understanding), and the behavioral domain (lifetime engagement) (Robinson & Randall, 2017; Tristani & Fraser-Thomas, 2017).

The affective domain refers to the intrinsic drive and willingness to participate in PA, as well as a positive sense of self and belief in one's own physical abilities (Robinson & Randall, 2017; Whitehead, 2010). The physical domain focuses on one's abilities to move with poise in a range of environments and develop movement skills for different intensities and durations (Robinson & Randall, 2017; Whitehead, 2010). The cognitive domain includes the knowledge of the health benefits, opportunities, and safety features of PA, as well as the understanding of what qualities influence movement and how to improve one's PL journey (Robinson & Randall, 2017; Whitehead, 2010). Lastly, the behavioral domain refers to individuals taking responsibility for their PA involvement and participating in various forms of PA throughout their life course

(Tristani & Fraser-Thomas, 2017; Whitehead, 2010). Despite these domains being separate for descriptive purposes, it is important to note that they are "experienced interdependently and holistically" (Cairney et al., 2019, p. 373).

2.3.1 Prioritizing the affective domain of PL

Although the four domains of PL are understood as being "irrevocably interrelated and interdependent," (Whitehead, 2010, p. 19), previous research reveals that there is an emphasis on the physical domain when exploring the outcomes of PA programs (Carl et al., 2022; Cornish et al., 2020; Edwards et al., 2018; Hyndman & Pill, 2018). For example, Hyndman and Pill (2018) found that a majority of the international PL-based literature was associated with concepts of the physical domain, as opposed to the other domains of PL. Moreover, a range of stakeholders working in recreation, physical activity, and health sectors in Ireland (N=1,241, 52% male) all rated the physical domain of PL higher than the affective and cognitive domains (Belton et al., 2022). This was completed using a PL questionnaire developed by the research team (Belton et al., 2022). Cornish et al. (2020) note that the overemphasis of the physical domain in the literature "suggests a privileged and ableist focus on an individual's physical prowess, rather than the holism described by Whitehead" (p. 16). Consequently, future research is needed to explore the understudied domains of PL, such as the affective domain (confidence and motivation) (Belton et al., 2022; Cornish et al., 2020; Liu & Chen. 2021).

This project contributed to this limited research by exploring participants' affective experiences throughout the M2I program. Given that the target population in this study may have faced unique barriers to PA and community-program participation due to lack of confidence and motivation (Hickingbotham et al., 2021; McCloughen et al., 2016), it was critical for the affective element to be thoroughly examined. For example, McCloughen et al. (2016) found that young adults (aged 16-24) with mental illnesses reported amotivation as one of the main factors contributing to their inability to initiate and sustain regular PA. In addition to amotivation, participants experienced poor self-worth and low perception of physical competence (McCloughen et al., 2016). This can be due to a range of factors, including lack of social support, symptoms related to mental health disorders, and medication side-effects (McCloughen et al., 2016). In particular, medication side-effects have been shown to negatively impact confidence and motivation for PA involvement (Hickingbotham et al., 2021; McCloughen et al., 2016). Examples of medication side-effects include daily headaches, leg pain, laziness, sedation, increase of appetite, and weight gain (McCloughen et al., 2016). While research exploring the affective domain of PL and youth with MHDs is limited (Fortnum et al., 2018), it is necessary going forward to support the development of PL and PA-based curricula for this population.

2.3.2 Qualitative assessments of PL's affective domain

Given that the affective domain of PL is typically understudied in the literature (Cornish et al., 2020; Edwards et al., 2018; Liu & Chen, 2021), it is important to examine previous qualitative assessments that have produced meaningful results. Edwards et al. (2018) conducted a systematic review of PL-based articles and found that qualitative methods allowed researchers to gain comprehensive insights into the affective and cognitive domains. Despite questioning the reliability of qualitative approaches in assessing the physical domain (i.e., physical competence), these researchers recommend implementing various methods for assessing the affective domain, such as interviews, focus groups, open-ended questionnaires, and portfolios (Edwards et al., 2018). For example, alongside a photo diary, De Rossi et al. (2012) used focus groups with children aged 10-11 (N=7) to explore the role that active play during PHE could have in improving PL. Through this unstructured and narrative approach, these researchers found that free play can help foster self-confidence and motivation for PA involvement (De Rossi et al., 2012). Similarly, Morgan et al. (2012) investigated the outcomes of PL in primary students aged 10-11 (N=6) following a PA program. This PA program was aimed at developing students' mastery and motivational levels (Morgan et al., 2012). Implementing a mixed-method research design, Morgan et al. (2012) used semi-structured interviews and sub-scales of the Intrinsic Motivation Inventory (**IMI**) to assess the impact of the program on the students' affective domain. Both data collection methods revealed improvements in students' self-confidence and enjoyment of PA (Morgan et al., 2012). These findings are significant, as this thesis explores similar constructs in youth aged 12-14.

Further, using a combination of participant observations and reflections, videotapes, and interviews, Kentel and Dobson (2007) explored the concept of movement literacy (**ML**) and the influence of play spaces on the ML in Kenyan primary students. While the definition of ML is consistent with Whitehead's (2001) conceptualization of PL, Kentel and Dobson (2007) preferred the term 'movement' in place of 'physical' when describing the holistic engagement with the world. Importantly, these researchers discovered that Kenyan children's unstructured outdoor play time was most critical to their ML development (Kentel & Dobson, 2007). For example, the playing fields enabled opportunities for creativity and sustained engagement (Kentel & Dobson, 2007). Their findings accentuate the value of movement and free play in the educational setting (Kentel & Dobson, 2007).

While the significance of these aforementioned studies (De Rossi et al., 2012; Kentel & Dobson, 2007; Morgan et al., 2012) is indisputable, Edwards et al. (2018) questions the suitability of focus groups for assessing the affective and cognitive domains in children under 12 years old. Due to the unpredictable nature of their thoughts and feelings, reliability can be a challenge using qualitative measures alone (Edwards et al., 2018). However, these concerns are less significant with individuals aged 12 and older (Barber, 2018; Edwards et al., 2018; Lloyd, 2016). As the vast majority of the qualitative PL literature is focused on youth in their early years (De Rossi et al., 2012; Morgan et al., 2012; Wainwright et al., 2018), further qualitative research exploring the affective domain of PL in youth 12 and older is required.

2.4 Brief overview of PL in Canada

Since being proposed by Margaret Whitehead in 1993, many Canadian sectors, including recreation, sport, and education have begun adopting PL as their core outcome (Tremblay et al., 2018; Robinson & Randall, 2017). For example, in order to mediate current health issues amongst young people, PHE Canada endorsed the notion of PL within PHE (Tristani & Fraser-Thomas, 2017; Robinson & Randall, 2017). Concurrently, CS4L developed a PL model that has been embraced by most Canadian sport organizations (Higgs, 2010; Robinson & Randall, 2017). However, despite growing efforts to support the development of PL in Canada, additional PL interventions are still warranted (Liu & Chen, 2021; Warner et al., 2021). According to Tristani and Fraser-Thomas (2017), Canada received a D+ PL score in ParticipACTION's Report Card (2016), revealing that a majority of children in Canada are not meeting minimum standards for PL development. More than 50% of primary students in Canada are considered physically illiterate, while only 7% of children and youth are taking a minimum of 12,000 steps per day (Tristani & Fraser-Thomas, 2017). Warner et al. (2021) suggest that these low PA levels are due to increased sedentary behaviour and lack of access to high-quality PA programs. The consequences of physical inactivity are well documented and include increased risks for obesity, MHDs, and cardiorespiratory and musculoskeletal issues (Bopp et al., 2019)

2.4.1 Promotion of PL for youth with MHCs

The consequences of physical inactivity are exacerbated for youth with MHDs, who are often less active and motivated than their peer counterparts (Fortnum et al., 2018; Hickingbotham et al., 2021), as well as traditionally excluded from PL programs (Arbour-Nicitopoulos et al., 2018). Consequently, it is unsurprising that these adolescents also have a greater prevalence of physical health issues, as they are more prone to sedentary lifestyles, high-caloric diets, chronic stress, substance abuse, and sleep disturbances (Malla et al., 2018; McCloughen et al., 2016; Preyde et al., 2018). However, there is a growing body of research highlighting the association between developing PL and improving socio-emotional health (Blain et al., 2020; Bopp et al., 2019; Cornish et al., 2020; Jefferies et al., 2019; Ma et al., 2021). For instance, PL was found to be a significant predictor of enhanced mental health (Ma et al., 2021), positive affect (Blain et al., 2020), and resilience (Jefferies et al., 2019) among healthy children and youth. Yet, to date, there is still a considerable gap in the PL literature targeting youth with MHCs or MHDs (Fortnum et al., 2018). Studies have explored the impact of PL programs on youth with MHDs using a broader scope of individuals (Arbour-Nicitopoulos et al., 2018; Coates, 2011; Warner et al., 2021). For example, Arbour-Nicitopoulos et al. (2018) and Coates (2011) targeted youth with medical conditions and disorders (**MCD**) and youth with special education needs (**SEN**) respectively; however, both samples included youth with emotional disorders (i.e., anxiety in Arbour-Nicitopoulos et al., 2018).

More generally, Warner et al. (2021) investigated the effects of a PL day camp intervention in Toronto, Ontario on youth (aged 6-10 years) facing increased barriers. Participants consisted of racialized youth, low-income youth, homeless youth, 2SLGBTQ youth, youth with disabilities, and youth in conflict with the law. The program featured a combination of FMS activities, sport-specific activities, and team-building activities, as well as field trips and time in nature. Each session was held from 8:30 AM to 4:00 PM. Despite the program being only two weeks, this study noted significant developments in youth PL, such as the increase in FMS and the improvement of self-perceptions towards PA (Warner et al., 2021). Therefore, to address this gap in the PL literature, my research project focused exclusively on the experiences of youth with MHCs participating in the M2I program (i.e., a PL intervention). To avoid ambiguity, M2I participants were not required to have a formal mental illness diagnosis; however, youth were either accessing community services to support their mental health and/or experiencing a mental health challenge (see **Table 1**). As physical inactivity and sedentary behaviours have been shown to worsen mental health symptoms (Belair et al., 2018), it was critically important that this population received additional attention and PL support.

2.5 Settings for PL interventions

As the ultimate goal of PL promotion is lifelong PA participation, PL interventions may occur in a variety of settings (Liu & Chen, 2021). This includes youth sport programs, PHE classes, and recreation and community environments (Edwards et al., 2018; Liu & Chen, 2021; Tremblay et al., 2018). However, despite the recent rise of PL promotion across various sectors in Canada, existing literature reveals that a majority of PL interventions are situated in PHE classes (Carl et al., 2022; Edwards et al., 2018). Given the philosophical underpinnings of PL viewing it as a "lifelong asset" (Whitehead, 2010, p. 12) and a "capability with intrinsic value" (Whitehead, 2010, p. 163), Edwards et al. (2018) consider the narrow focus of PL intervention settings to be problematic. Moving forward, these authors recommend implementing future PL research in different environments (Carl et al., 2022; Edwards et al., 2018). For example, Arbour-Nicitopoulos et al. (2018) developed and piloted a community-based PL program in

Toronto, Ontario emphasizing themes such as inclusivity, empowerment, fun, and teamwork. This program consisted of an initiation phase that introduced youth to a variety of different movement activities, followed by a pairing stage that connected youth to existing PA programs, in order to sustain their PL progress (Arbour-Nicitopoulos et al., 2018). Their positive results relating to high PA satisfaction and engagement illustrate the value of having more readily available community-based PL programs within Canadian cities (Arbour-Nicitopoulos et al., 2018).

2.5.1 Expanding PL intervention settings beyond the scope of PHE

Concurrently, Canadian scholars have questioned the role of PHE in developing PL, highlighting the disconnect between PHE curricula aims and student outcomes (Kilborn et al., 2016; Lloyd, 2016; Randall et al., 2014; Tristani & Fraser-Thomas, 2017). After conducting a descriptive analysis of Canada's provincial PHE curricula trends and themes, Kilborn et al. (2016) attribute Canada's alarming curricula dissonance to the perpetuation of "skill-based, performance-driven and competition-oriented" content (p. 34). Advocating for a wellness-oriented approach, Kilborn (2016) argues that "by focusing so much on sport, technique, efficiency, execution, and physical fitness, we actually encourage unhealthy, inactive lifestyles" (p. 132).

Similar to Kilborn (2016), McNamee and Timken (2017) view the overemphasis of team sports in PHE curricula as a disservice to school children, because it is often "at the expense of lifetime activities" (p. 8). Particularly for non-athletes, the purpose of sport skills and its relevance outside of school is being re-evaluated (Bracco et al., 2019; Clark et al., 2011; Kilborn, 2016; Timken & McNamee, 2012). For example, the findings of a U.S. study examining adult physical activity preferences suggest that traditional team sports play an insignificant role in fostering lifetime physical activities for children and adolescents (Ham et al., 2009).

More pertinent to Canadian youth, a survey conducted by the Canadian Fitness and Lifestyle Research Institute in 1998 revealed that none of the top ten physical activities high school graduates participated in were considered team sports (Randall et al., 2014). These findings are supported by results from the Canadian Community Health Survey (**CCHS**) examining the leisure-time physical activity (**LTPA**) amongst Canadian adolescents and young adults from 2007 to 2011 (Garriguet & Colley, 2014). Self-reported responses from adolescents consisted mostly of walking, swimming, cycling, and jogging (Garriguet & Colley, 2014). Considering the concept of PL applies to lifelong participation in PA (Whitehead, 2010), the above studies (Bracco et al., 2019; Garriguet & Colley, 2014; Ham et al., 2009; Randall et al., 2014) highlight the need for further PL interventions in community settings that accommodate long-term PL enhancement.

In addition to the lack of content applicability towards lifelong PA participation, it has also been well-documented that PHE experiences are not always positive and can often lead to feelings of disengagement (Bracco et al., 2019). A wide range of studies have explored the marginalization effects of the competitive and male oriented values that are traditionally embedded within PHE (Bailey et al., 2009; Bracco et al., 2019; Clark et al., 2011). For example, Clark et al. (2011) conducted semi-structured interviews with Canadian female adolescents to gain further insight into their PA experiences. The female participants perceived their physical abilities to be lesser than their male counterparts and deemed PA experiences outside of PHE as their most meaningful (Clark et al., 2011). Other studies suggest that girls are more likely to experience feelings of judgement and body image concerns in PHE class (Roset et al., 2020).

Consequently, it is unsurprising that girls tend to disengage from PHE (Bailey et al., 2009) and drop out of PA participation at a higher rate than boys (Whitehead, 2010).

Non-athletes share similar feelings of negativity, isolation, and distress within competitive sport environments (Beni et al., 2017; Kilborn, 2016; Roset et al., 2020). Kilborn (2016) describes their PHE experiences as “living in a lonely world of rejection, low self-esteem and frustration” (p. 142). These negative PHE experiences can lead to learned helplessness, activity avoidance, and negative self-concepts (Bailey et al., 2009). Whitehead (2010) notes that developing and sustaining PL is deeply influenced by past PA experiences. Critically, negative past experiences can severely hinder one’s PL development, especially relating to motivation, self-esteem, and confidence (Whitehead, 2010). Altogether, these findings accentuate the need for future PL research in different environments than PHE class (Edwards et al., 2018).

2.6 Understanding the concept of PL from a youth perspective

Exploring the understandings and perceptions of PL from different stakeholder perspectives has become increasingly visible in the PL literature (Belton et al., 2022; Borduas et al., 2018; Harvey & Pill, 2019; Tristani & Fraser-Thomas, 2017; June Yi et al., 2020). In order to help conceptualize PL and inform future PL programming, researchers have investigated the perspectives of PHE teachers (Harvey & Pill, 2019; Tristani & Fraser-Thomas, 2017), PL program leaders (Borduas et al., 2018), and community partners in PL-related fields, such as sport and recreation (Belton et al., 2022; June Yi et al., 2018). Specific to community and recreation programs in Canada, June Yi et al. (2018) conducted focus groups with community stakeholders to determine the key aspects of PL programming for children. Their findings identify suggestions and practical strategies for future community stakeholders to implement (June Yi et al., 2018). These include utilizing a participant-centered approach, collaborating with parents and guardians, and fostering welcoming environments (June Yi et al., 2018). A similar study was completed using one-on-one interviews with PL program leaders from different Canadian universities (Borduas et al., 2018). These participants discussed the importance of developing strong community partners and mitigating barriers for participation (Borduas et al., 2018). Both of these studies (Borduas et al., 2018; June Yi et al., 2018) highlight the momentum PL has recently gained in various Canadian sectors.

In spite of this, a youth perspective of PL remains an under-studied area in the field (Goss et al., 2022). While PL scholars (Allan et al., 2017; De Rossi et al., 2012) recommend that future research be directed to exploring the understandings, experiences, and perceptions of youth, few studies have taken this into consideration. To help inform the development of PL assessments in PHE class, Goss et al. (2022) included the voices of primary students (N= 96) aged 6 to 11 in a series of stakeholder focus groups. These researchers reported that incorporating the youth perspective "enabled new and important insight into young people's perceptions of PL and PL assessment" (Goss et al., 2022, p. 527). Additionally, Coates (2011) examined the PHE experiences of 30 primary students (aged 7 to 14) in the UK using a phenomenological approach. Participants were reported to have a range of different special education needs (**SENs**), including learning, communication, emotional, and behavioural challenges (Coates, 2011). Employing a combination of focus groups and interviews, students were asked to reflect on their experiences of PHE and its perceived benefits (Coates, 2011). The data was placed under a PL lens, where it was found that children with SENs were unable to grasp the notion of PL within the context of PHE (Coates, 2011). Rather, they perceived the main goals of PHE as improving physical fitness and losing weight (Coates, 2011).

However, it is important to note that none of the above studies (Coates, 2011; Goss et al., 2022) were completed within a Canadian context. Overall, there is limited research examining the PL understandings and perceptions of Canadian youth aged 12 to 14. To my knowledge, there are no studies that qualitatively explore the PL perspectives of Canadian youth, and more specifically, Canadian youth with MHCs. Critically, this study's findings can enable new insight into youth's PL experiences and conceptualizations of PL, as well as help inform future PL program planning and implementation for youth with MHCs.

2.7 Conclusion

PL is a universal capability that all human beings have the potential to achieve (Whitehead, 2010). In fact, many studies reveal the benefits of PL development in various populations, such as older adults (Campelo & Katz, 2020; Roetert & Ortega, 2019), low-income youth (Warner et al., 2021), youth with physical impairments (Arbour-Nicitopoulos et al., 2018; Brian et al., 2019; Clutterback et al., 2022; Dugas, 2016; St. John et al., 2021), and youth with neurodevelopmental disorders (Dudley et al., 2016; Hassani et al., 2022; Pavlova et al., 2021). Yet, few studies have targeted youth with MHCs or MHDs (Fortnum et al., 2018). Concurrently, a majority of PL literature is concentrated on assessing domains quantitatively (Edwards et al., 2018; Liu & Chen, 2021). These quantitative studies typically include large sample sizes and utilize methods such as standardized tests and performance measurements (see Belanger et al., 2016; Ekornas et al., 2010; Johnstone et al., 2017; Lee et al., 2018), which fail to account for each individual's unique PL journey (Bopp et al., 2019). Additionally, understanding PL as a lifelong capability that requires nurturing across various settings (Whitehead, 2010), evidence calls for future PL interventions to diversify their research settings beyond PHE classes (Edwards et al., 2018)

Recognizing the limited relevance that the current literature has for youth with MHDs (Fortnum et al., 2018), this thesis focused solely on the PL experiences of Nova Scotian youth with MHCs. Implementing a phenomenological approach allowed the primary researcher to gain thorough insights into the unique experiences of this population (Creswell & Poth, 2018; Crotty, 1998; Kupers, 2015). Despite the domains of PL being understood as "irrevocably interrelated and interdependent" (Whitehead, 2010, p. 19), existing research suggests that some PL domains are noticeably understudied, such as the affective domain (Carl et al., 2022; Cornish et al., 2020; Edwards et al., 2018; Hyndman & Pill, 2018). By utilizing data collection methods associated with phenomenological research, such as observations and a focus group (Van Manen, 2014; Yuksel & Yildirim, 2015), this study also ensured a comprehensive investigation of the affective domain (i.e., confidence and motivation).

Furthermore, in line with the recommendation of Allan et al. (2017), this thesis used qualitative methods to explore youth's perceptions and understandings of PL development. To date, the majority of literature has focused solely on the PL conceptualizations and perceptions of educators and community leaders (Belton et al., 2022; Borduas et al., 2018; Harvey & Pill, 2019; Tristani & Fraser-Thomas, 2017; June Yi et al., 2020). However, findings from youth participants can help inform future programming and PL understandings (Goss et al., 2022). This is particularly important for youth with MHDs, who face extended barriers to PA participation and require additional, as well as individualized support to develop PL (Hickingbotham et al., 2021). Specifically, findings from this thesis will help inform the refined M2I program and contribute evidence-based research to the M2P resource hub.

Chapter 3: Methodology

3.1 Introduction: Overview of methodology and methods

The purpose of this phenomenological research was to explore the experiences of youth participating in a PL program and examine their understandings of PL. Accordingly, the central research question for this study was: *What are the lived experiences of Nova Scotian youth with MHCs participating in a PL program?* The following sub-questions were also examined to help inform the research question: *What motivated the youth to participate in the program? How do participants describe their experiences of confidence and motivation from participating in the program? What does PL mean to participants before and after their lived experiences in the program?* Chapter 3 outlines the fundamental components of a qualitative research design, including the guiding epistemology, theoretical perspective, methodology, framework, and data collection methods. **Table 2** provides an overview of this study's research design. As its epistemological stance, this research will be grounded in a constructivist paradigm (Crotty, 1998). More specifically, Chapter 3 describes Merleau-Ponty's embodied phenomenology, which is a strand of phenomenology (Allen-Collinson, 2009), as well as its relevance to the study's constructs, such as PL, PA, and PHE. Phenomenological research will be used as the study's methodology (Crotty, 1998).

In phenomenological studies, the use of a theoretical framework can help conceptualize participants' experiences and maintain a general perspective of the study (Larsen & Adu, 2022). Therefore, the social-ecological model (**SEM**) will be applied throughout the research process to make sense of the topic and address the implications of the findings (Larsen & Adu, 2022). Moreover, this chapter summarizes the study's prospective data collection methods, which includes observations, participation journals, a focus group, and photo-elicitation. Each of these methods are supplemented with detailed rationales that justify their suitability for the research project. Lastly, this chapter concludes by enumerating the study's data analysis procedure.

Table 2: *Overview of Study's Research Design*

Epistemology (**3.2**)	Constructivism
Theoretical perspective (**3.3**)	Embodied phenomenology
Methodology (**3.4**)	Phenomenological research
Theoretical framework (**3.5**)	Social-ecological model
Data collection methods (**3.6**)	Observations, participation journals, focus group, photo-elicitation

3.2 Epistemology

Epistemology refers to the philosophical assumption that determines what constitutes knowledge and justifies how knowledge claims are valid (Creswell & Poth, 2018; Crotty, 1998). To ensure a strong research design, researchers are encouraged to select a paradigm that represents their epistemological beliefs (Levers, 2013). A paradigm is a "worldview used by a community of researchers to generate knowledge" (Levers, 2013, p. 3). This research project was informed by a constructivist paradigm. Constructivism is a paradigm that explores meaning making: how individuals engage with objects in the world and make sense of them (Crotty, 1998; Drisko, 2013). Constructivism highlights the importance of the interaction between subject and object (Crotty, 1998). Objects may include people, as well as interactions with the natural world (i.e., trees, mountains, sunset, etc.) (Crotty, 1998). As a philosopher who led the existential phenomenology movement, Maurice Merleau-Ponty posited that knowledge is constructed and not discovered (Crotty, 1998). This embraces the notion that objects are indeterminate and only become meaningful to an individual once "consciousness engages with them" (Crotty, 1998, p. 54). Thus, knowledge is considered to be relative and requires humans to become active interpreters of their engagement with "the social and physical environment, and of each other" (Drisko, 2013, p. 84).

Opposing positivism's ontological position of an absolute reality (Lincoln & Guba, 2013; Scotland, 2012), constructivists accept that there are multiple realities that can be understood from the individualistic experience (Drisko, 2013; Lincoln & Guba, 2013). Therefore, constructivism can be a valuable fit for exploring lived experiences and marginalized groups (Creswell & Poth, 2018; Drisko, 2013). In fact, Crotty (1998) mentions that constructivism and phenomenology are "so intertwined," as groups of people may experience the same phenomenon; yet they are still able to construct different meanings from it (p. 21). In this view, individuals are regarded as unique beings; their interpretations are seen as valid and worthy of respect (Crotty, 1998). Since constructivist researchers must depend upon the experiences and perspectives of their participants to co-construct relevant knowledge, the researcher and participants are given equal value to the research process (Drisko, 2013; Lincoln & Guba, 2013). Researchers within the constructivist paradigm emphasize equality, inclusiveness, and collaboration throughout the inquiry (Drisko, 2013). In order to gain valuable participant information, constructivist researchers focus on "specific contexts" in naturalistic environments where participants live and interact (Constantino, 2008; Creswell & Poth, 2018, p. 50). Data collection methods typically include participant observation and interviewing (Costantino, 2008), which are also common to phenomenological studies (Creswell & Poth, 2018; Yuksel & Yildirim, 2015).

3.3 Theoretical perspective

Phenomenology is rooted by the philosophical foundations of German mathematician Edmund Husserl, and "those who expanded on his views, such as Heidegger, Sartre, and

Merleau-Ponty" (Creswell & Poth, 2018, p. 109). The term originated from the Greek words "*phainomenon* (appearance) and *logos* (reason or word)" (Kupers, 2015, p. 9). Accordingly, phenomenology is the study of phenomena: the appearance of things that are perceived in our consciousness (Allen-Collinson, 2009; Kupers, 2015). As a response to positivism's "alleged objectivity of scientific knowledge" (Crotty, 1998, p. 37), phenomenology was proposed to further elucidate one's perceptions, feelings, thoughts, and bodily awareness related directly to engaging with a phenomenon (Kupers, 2015; Padilla-Diaz, 2015). It is dedicated to discovering and understanding the essence of human experience (Kupers, 2015). Despite all forms of phenomenology having the similar purpose of describing human experience, there are different variations and perspectives (Allen-Collinson, 2009; Kupers, 2015).

As the aim of this research study was to explore the lived experiences of youth participating in a PL intervention, focusing on an embodied phenomenological approach was deemed the most suitable. Embodied phenomenology provides a description of lived experience, considering space, time, and the world as beings engage with it (Van Manen, 2014). Inspired by the works of Merleau-Ponty, this phenomenological perspective interprets our relationship with the world through perception at a corporeal level (Van Manen, 2014). Compared to other perspectives, Merleau-Ponty places great recognition on the body and "sees it as the seat of human existence" (Carel, 2010, p. 36). For him, the world, mind, and body are "all fundamentally intertwined, inter-relating, and mutually influencing" (Allen-Collinson, 2009, p. 283). The body is viewed as a physical object (i.e., something that can be weighed and measured), but also as the source of "subjective feelings, perceptions, and sensations" (Carel, 2010, p. 37). Therefore, as our bodies interact with people and objects within different environments, it is understood as constantly perceiving the world (Carel, 2010; Van Manen, 2014).

3.3.1 The connection between embodied phenomenology and PL

The development of PL by Margaret Whitehead was influenced from the philosophical teachings of existentialists and phenomenologists (Whitehead, 2010). Having philosophical underpinnings that accentuate the importance of embodiment to human existence, PL is considered to be a human capability that stems from our "nature as embodied beings" (Whitehead, 2010, p.11). In line with this view, embodiment allows human beings to interact with their environment and experience "a wide range of human capabilities," such as cognitive, emotional, and physical development (Whitehead, 2010, p. 5). According to Whitehead (2001), our embodiment allows individuals to understand and make sense of the world through "two inseparable modes of contact" (p. 4). This includes our bodily actions through movement, as well as our perceptual sensitivities that respond to the demands of our environment (Whitehead, 2001). This way, embodiment, as well as PL is not limited to young people or high-performing athletes (Whitehead, 2010). In contrast, PL is defined as a human potential available to all; every one of us is on our own personal journey (Whitehead, 2010). Phenomenologists understand that everyone has a unique perspective toward an experience, aligning itself well with the philosophical assumptions of PL (Whitehead, 2010).

Concurrently, as individuals interact with different objects in their world, phenomenologists are concerned with how individuals make sense of phenomena (Whitehead, 2010). Phenomenologists such as Merleau-Ponty regard human existence as a "dialogue with our surroundings" (Whitehead, 2001, p. 4). Intentionality, a phenomenological term, refers to the persistent drive that humans have to interact with their environment (Whitehead, 2010). It allows us to perceive, respond to, and make sense of the world (Whitehead, 2010). Durden-Myers et al. (2020) describe intentionality as the "inseparable connectedness between subjects… and objects…in the world" (p. 11).

Similarly, PL values our ability to interact with different people in diverse environments (Whitehead, 2010). In fact, Whitehead (2010) proposes that our interactions with the world "lie at the heart of the value of physical literacy" (p. 54). This process is referred to as "reading the environment" (Whitehead, 2010, p. 53). Physically literate individuals should be able to move confidently in a wide range of environments, including in the woods, water, garden, gymnasium, on the grass, and on sand (Whitehead, 2010). Further, they are encouraged to experiment with a variety of equipment and resources that are available to them depending on the context of the environment (Whitehead, 2010). For example, using a rope to climb a tree, a net to catch a butterfly, or a stick to play hockey (Whitehead, 2010). As a result of intentionality, objects are given a particular meaning to the individual, as well as a way for them to relate to the object physically (Whitehead, 2010).

3.3.2 Embodied learning in PA and PHE programs

As mentioned earlier, the concept of embodiment allows human beings to experience themselves in the world and make sense of it through their actions and perceptions (Stolz, 2015; Whitehead, 2010). More importantly, when it comes to learning and PHE, it offers significant educational value (Stolz, 2015). Contrary to other modes of learning that seem to "ignore the body altogether or render the body problematic," PHE courses offer logical opportunities for embodied learning (Stolz, 2013, p. 953). Despite this, PHE scholars argue that a majority of PHE programs have been traditionally regarded as disembodied academic practices (Stolz, 2013). In detriment to other aspects of the individual, Kilborn et al. (2016) argue that Canadian PHE curricula and pedagogy produce experiences that focus entirely on the body. This is through the perpetuation of skill-based content, which often accentuates performance and competition (Kilborn et al., 2016). In doing so, this creates a learning milieu that treats the body like a machine-like entity (Tinning, 2010) that must be controlled and perfected for improving performance or physical appearance (Aartun et al., 2022; Stolz, 2013).

Consequently, this can foster negative experiences for certain individuals engaging in physical activity (Aartun et al., 2022). For example, it can further alienate those who feel ashamed about the appearance and/or ability of their body (Aartun et al., 2022). Merleau-Ponty would argue that this type of learning neglects the cognitive and affective domains of the perceptual experience and thus, prevents the individual from experiencing themselves as a whole being (Stolz, 2013). Instead, embodied learning recognizes the wholeness and connectedness of the individual being (Miller & Nigh, 2017; Stolz, 2015). It emphasizes our ability to engage and make sense of the world through "all three educational domains: the psychomotor, the cognitive and the affective" (Stolz, 2013, p. 951). Miller and Nigh (2017) compare embodied learning to holistic education, as it fully embraces the learning process. It involves pedagogical approaches that permit learners to connect their actions with their feelings, thoughts, and perceptions (Maivorsdotter & Lundvall, 2009; Stolz, 2015). While focusing on the body as the locus of interacting with the environment, it is important to note that embodied learning does *not* ignore the affective and cognitive aspects of learning (Maivorsdotter & Lundvall, 2009; Miller & Nigh, 2017; Stolz, 2013).

Therefore, embodied learning in PHE involves exploring the world through movement and gaining an understanding of how things are and relate to each other, as well as to themselves (Stolz, 2015). Merleau-Ponty stated that "the world is not something which I think, but what I live through" (Stolz, 2015, p. 481). As opposed to thinking or reading about it, embodied learning forces the learner to actively explore different environments, while also becoming mindful of their feelings, bodily responses, and perceptions (Stolz, 2013). More specifically, Aartun et al. (2022) found that embodied learning in PHE incorporates innovative and alternative forms of movement, such as dance, outdoor activities, and wheelchair basketball. This affords learners the opportunities to experience, examine, and discuss new sensations, preferences, strategies, and barriers (Aartun et al., 2022).

Concurrently, embodied PHE enables critical reflection that investigates the embodied experiences within spaces that are supportive, inclusive, and relevant to learners outside of school and/or the program (Aartun et al., 2022). For example, this can include having a group discussion about the influence of media body ideals and gender roles on certain physical activities (Aartun et al., 2022). These types of discussions can contribute to eliminating participation barriers and helping individuals progress through their PL journey (Whitehead, 2010). In order to develop inclusive spaces for embodied learning, Aartun et al. (2022) recommend that PA programs promote and embrace diversity, help students reflect on their thoughts and feelings, invite students to co-construct the curriculum, and facilitate activities outside the gymnasium that are not entirely focused on competition.

3.4 Methodology

Phenomenological research is a popular qualitative methodology used in social sciences, especially in sociology, psychology, and education (Creswell & Poth, 2018). Creswell and Poth (2018) define phenomenological research as the process of describing "the common meaning for several individuals of their lived experiences of a concept or phenomenon" (p. 109). In order to develop these universal descriptions, the main purpose of a phenomenological study is for qualitative researchers to gain in-depth understandings of the individuals' experience (Allen-Collinson, 2009; Creswell & Poth, 2018; Yuksel & Yildirim, 2015). As this study aimed to explore participants' lived experiences, as well as their constructions of the PL meaning, utilizing a phenomenological approach was deemed most appropriate for inquiry. It enabled the researcher to capture the unique PL experiences and perceptions of youth with MHCs. Consistent with the defining characteristics of phenomenological research, this study included seven youth participants, who have all experienced the phenomenon (i.e., the M2I program) (Creswell & Poth, 2018).

In order to thoroughly describe human experience, Allen-Collinson (2009) suggests implementing data collection methods that produce "highly detailed and in-depth descriptions of subjective human experiences" (p. 280). Therefore, this project utilized a range of methods, including observations, participation journals, a focus group, and the use of photo-elicitation. Concurrently, phenomenological approaches have been prominent within studies of physical education and sport (Allen-Collinson, 2009; Clegg & Butryn, 2012; Ward & Scott, 2020), leisure and recreation (Dashper & Brymer, 2019; Evans & Allen-Collinson, 2014; Sivan et al., 2020), as well as outdoor experiences (Allen-Collinson & Leledaki, 2015; Field et al., 2016; Lund et al., 2020). My project's phenomenon (i.e., the M2I program) incorporated each of these elements, highlighting the suitability for using a phenomenological approach.

3.4.1 Incorporating Merleau-Ponty's embodied phenomenology

A 'Merleau-Pontyian' perspective emphasizes the role of embodiment and perception during the lived experience (Kupers, 2015), making this phenomenological approach well-suited for the "in-depth portrayal of the corporeally grounded experience of sport and physical activity" (Allen-Collinson, 2009, p. 284). For example, embodied phenomenology has been used to explore a range of movements within diverse environments, such as yoga practice and breath control (Morley, 2001), parkour (Clegg & Butryn, 2012), dance (Purser, 2018), swimming (McNarry et al., 2021), and outdoor exercise (Allen-Collinson & Leledaki, 2015). These researchers have utilized phenomenological methods such as interviews and focus groups that explore aspects of bodily sensations (Allen-Collinson & Leledaki, 2015), emotions (Clegg & Butryn, 2012), interactive experiences (Clegg & Butryn, 2012), and Merleau-Ponty's conceptions of corporeal schema and habit (Purser, 2018; McNarry et al., 2021). According to Merleau-Ponty, the corporeal schema is a pre-reflective knowledge of the environment that is relative to our bodies (Purser, 2018). This bodily knowledge is developed through physical interactions with the environment (Purser, 2018). Concurrently, Merleau-Ponty understands habits as actions that are repeated and practiced to the point that they are "sedimented" into our corporeal schema (Purser, 2018, p. 324). As a result, habits have the capability of "permitting new ways of acting and understanding" (Crossley, 2001, p. 104).

Therefore, using this phenomenological approach allowed me to explore youth movement in a variety of settings. For example, Clegg and Butryn (2012) conducted interviews with questions emphasizing physical sensations, thoughts, and emotions to better understand the experiences of parkour and free running. Observations have also been used as a more indirect tool for gaining an in-depth understanding of participants' experiences (Kupers, 2015; Van Manen, 2014). They contribute to phenomenological research by helping the researcher establish participant rapport (Purser, 2018) and access the world of their participants (Van Manen, 2014). For example, in their embodied phenomenological analysis of competitive swimming, McNarry et al. (2021) completed over 300 hours of observations. Observation field notes were conducted at the swimming sessions and included information on session routines, specific incidences, what the participants did and how it affected them (McNarry et al., 2021).

Further, given the holistic nature of PL, the embodied phenomenological approach aligns itself well with the exploration of interrelated and interdependent concepts, such as physical competence, confidence, motivation, PA knowledge, and attitudes. It is important to note that PHE and PA programs have typically emphasized the physical dimensions of wellness at the expense of other dimensions, such as emotional, cognitive, and social well-being (Kilborn et al., 2016; Kirk, 2012; Munafo, 2016; Stolz, 2013). This argument is summarized by Stolz (2013), who explains that the body gets "portrayed as a biomechanical object that must be managed, maintained, conditioned and repaired for instrumental reasons such as improving performance or physical appearance" (p. 954). This form of Cartesian dualism and quantifying experiences as "just physical" or "just mental" prevents the individual from experiencing themselves as a whole being (Stolz, 2013, p. 950).

With that said, incorporating the embodied phenomenological approach enables researchers to criticize current practices of disembodiment, while also becoming more "bodily involved" in their studies (Kupers, 2015, p. 3). To fully understand and describe participants' experiences, Van Manen (2014) recommends researchers participate in their world. He goes on to discuss the importance of participant observations as a method of gaining insight into the experiences of young children (Van Manen, 2014). According to Van Manen (2014), the experiential nature of following, talking, and playing with children contributes valuable information to the traditional interview approach. Implementing this methodology allowed me to explore significant processes of the PL journey, such as confidence and motivation through discussions and informal conversations with youth participants.

3.5 Theoretical framework

While the main purpose of phenomenological studies is to understand participants' experiences of a specific phenomenon, theoretical frameworks can still play a significant role in the research process (Larsen & Adu, 2022). Phenomenological researchers are encouraged to implement a theoretical framework to help conceptualize participants' experiences and maintain a general perspective of the study (Larsen & Adu, 2022). More specifically, they have been used to narrow the study's scope, accentuate gaps in the research field, and connect findings to existing knowledge (Larsen & Adu, 2022). It is important to note that phenomenology invites researchers to "set aside all previous habits of thought and have a fresh look at things" (Crotty, 1998, p. 53). Due to the exploratory nature of phenomenological research (Creswell & Poth, 2018), Larsen and Adu (2022) advise researchers to not allow the theoretical framework to "fully dominate the research process" (p. 129). For example, the framework should not influence the analysis of participants' experiences (Larsen & Adu, 2022).

With that said, this research study utilized the social-ecological model (**SEM**) in assuming a set of roles outlined by Larsen and Adu (2022). First, it was employed as 'a standpoint' to provide readers with a lens for understanding the topic from a social-ecological perspective (Larsen & Adu, 2022). Throughout the research process, the SEM guided the researcher in understanding the complex and diverse factors that influence PA participation and well-being. Concurrently, it was used as 'a decipherer' to help make sense of the problem and address the implications of the findings (Larsen & Adu, 2022). Specifically, once data had been analyzed and themes were generated, the SEM provided a structure for helping the researcher identify participants' needs and discuss future recommendations.

3.5.1 The SEM

Originally attributed to the work of Bronfenbrenner (1977) (Lee & Park, 2021), the SEM offers a framework for understanding the complex interplay of individual and environmental factors that influence behaviour and well-being (Stokols, 1996). It is rooted under the core assumptions that define the environment as multifaceted, including physical, social, and cultural dimensions, and encompassing various levels ranging from individuals, and small groups to broader organizations, communities, and policies (Lee & Park, 2021; Stokols, 1992, 1996). For example, aspects of an individual's residence and workplace are nested within larger factors at the community and policy levels (Stokols, 1996). The SEM also recognizes the influence of personal attributes in this person-environment interaction, such as behaviour patterns, genetic heritage, and demographic characteristics (Lee & Park, 2021; Stokols, 1992, 1996). Thus, this model suggests that the compatibility of this interaction is highly predictive of one's behaviour and overall 'healthfulness' (i.e., physical health, mental and emotional well-being and social cohesion) (Stokols, 1992, 1996).

According to Stokols (1996), the SEM reflects an interdisciplinary approach to health research and focuses on "health-promotive environments," deeming it suitable for exploring a recreational PL program (p. 289). Critically, the SEM enables researchers to examine health and well-being comprehensively, as well as propose future actions that support effective community interventions (Stokols, 1996). A wide-range of PA research has utilized the SEM, including school-based interventions (Langille & Rodgers, 2010; Li & Rukavina, 2012; Solmon, 2015) and community-based interventions (Haggis et al., 2013; Haughton et al., 2015; Simon et al., 2014). As opposed to other theories that help explain PA behavior using individual and social factors, such as the Theory of Planned Behavior (**TPB**) and Self-Determination Theory (**SDT**), the SEM addresses environmental factors, in addition to individual and social factors (Lee & Park, 2021; Leung et al., 2021). Remaining consistent to the study's epistemology and theoretical perspective, the environment is an integral aspect of constructivism (Drisko, 2013) and embodied phenomenology (Van Manen, 2014). For example, constructivism is a paradigm that explores how individuals interpret their interactions with the social and physical environment (Crotty, 1998; Drisko, 2013).

Accordingly, the holistic nature of the SEM aligns itself well with PL (Roetert & Ortega, 2019). Whitehead (2010) defines PL as the interrelationships between personal attributes (i.e., motivation, confidence, physical competence) and environmental engagements (i.e., PA in a range of environments, positive communication with others). Further, she describes a physically literate person as someone who can "interact fluently with the environment" and develop "empathetic relationship with others" (Whitehead, 2010, pp. 13-14). Recognizing the influence that environmental factors have on PL development, Roetert and Ortega (2019) outline a set of ecological actions that support PL development for older adults at varying levels in the environment. For example, at the individual level, these researchers suggest educating older adults regarding the benefits of exercise (Roetert & Ortega, 2019). Alternatively, at the community level, they advocate for more PA programs expanding their scope to older adults (Roetert & Ortega, 2019).

3.6 Data collection methods

As PL is considered to be holistic, the use qualitative methods allowed for more in-depth insights into the unique experiences of youth with MHCs participating in a PL program. Whitehead (2010) suggests that progress of PL is considered to be relative to one's journey and although it may be slow, it will always have a positive impact on the individual. Therefore, rather than measuring and assessing PL constructs, which take on a different epistemological perspective (Chen, 2020), qualitative methods were deemed more appropriate to fully understand one's personalized PL journey. As low self-esteem is a symptom of many mental disorders, comparisons and the measurements of abilities can also perpetuate these negative perceptions (Whitehead, 2010). Therefore, comparisons with others, especially those without any disability, disorder, or complication should be insignificant to one's personal progress (Whitehead, 2010).

Thus, the outcomes of this study were less about measuring normalized statistics and standardized movement criteria, and more about exploring participants' thoughts and feelings throughout the M2I program related to PL development. Therefore, data collection methods included various sources, such as observations, participation journals, a focus group, and photo-elicitation (Creswell & Poth, 2018). Observations and focus groups are regarded as typical data collection techniques of a phenomenological study (Van Manen, 2014; Yuksel & Yildirim, 2015). The use of a visual method was included for several reasons. First, visual methods can be used to enhance traditional methods of research by enabling deeper responses, capturing more detail, and increasing rapport building (Glaw et al., 2017). Specifically, photo-elicitation is capable of evoking feelings and memories, allowing participants to reflect and create meaning (Glaw et al., 2017; Loeffler, 2004). Additionally, visual methods have been found to generate success among children and adolescents (Glaw et al., 2017; Kirova & Emme, 2006). For example, it has been found to reduce power dynamics between the researcher and the participants (Denford et al., 2019; Leonard & McKnight, 2015).

3.6.1 Observations

In qualitative research, observations are described as watching what people do, listening to what people say, and asking participants clear questions (Gillham, 2000). Since this phenomenological study was conducted during the M2I program, observing youth in different PA environments helped to reveal insights that were inaccessible through other data collection methods (Morgan et al., 2017). For example, instead of relying on what participants recalled or chose to report, observations during the M2I program provided valuable information on what youth were doing, how they were moving, and how they were interacting with each other (Morgan et al., 2017). Concurrently, observations were considered less invasive than video recordings in PA settings, making it a more appropriate method for children and adolescents (Edwards et al., 2018). For this phenomenological project, both structured observations and participant observations were utilized in each M2I session by the primary researcher. Structured observations are characterized as "watching from the outside in a careful and specific way" (Gillham, 2000, p. 46). Categories to observe included peer interactions, nonverbal behaviour, and descriptions of physical surroundings (Yin, 2009). Furthermore, observing movement, body language, gestures, and tone of voice were considered significant elements of Merleau-Ponty's phenomenology (Gibson & Hanes, 2003; Van Manen, 2014).

Participant observations involve "learning through exposure to or involvement in the day-to-day or routine activities of participants in the researcher setting" (Kawulich, 2005, p. 2). Assuming this particular role helped the primary researcher foster relationships with the participants (Kawulich, 2005); it also gave them a better understanding of the M2I program from the learner's perspective. Each M2I session was used by the primary researcher to ask questions, engage in natural conversations, and learn more about participant's program experiences (i.e., being a good listener and careful observer) (Gillham, 2000; Kawulich, 2005). Participant observations were recorded using field notes, which typically included basic descriptions, types of bodily movements, personal impressions, emergent ideas, and important reminders (Gillham, 2000). This study's observation guide is included in **Appendix C** and was designed to help the primary researcher record environmental descriptions, socio-emotional observations, movement types, session activities, casual conversations, and emergent ideas.

3.6.2 Participation journals

During the initial session (Session #1) and the midpoint session (Session #5), participants were also invited to answer a set of open-ended questions (see **Appendix D**). These questions were centered on participants' thoughts, feelings, and preferences towards PA, and more specifically, the M2I program. Open-ended questionnaires can be valuable for assessing the cognitive and affective domains of PL (Edwards et al., 2018). Throughout the program, these questionnaires were referred to as participation journals. Each participation journal took approximately 10 to 15 minutes for youth to complete. All questions were reviewed with participants by the primary researcher to ensure proper understanding. While participants were completing their journals, M2I program leaders were also available to answer any questions and to help with grammar if needed. The participation journals were not used for evaluation purposes. Instead, the main purpose of these journals was to learn more about the participants' experiences, as well as stimulate future group discussion in the focus group.

3.6.3 Semi-structured focus group

Focus groups are a qualitative data collection method, in which a moderator facilitates a discussion with a small group of participants (typically, six to ten), and "obtains information on their beliefs, attitudes, or motivations on a specific topic" (Linhorst, 2002, p. 209). They are considered a flexible process, as the moderator can explore open-ended questions with participants using varying degrees of control (Linhorst, 2002). Rooted in constructivism, focus groups are socially oriented and prioritize interaction with each other (Bokhorst-Heng &

Marshall, 2019). Participants are given a collaborative opportunity to share their individual experiences, as well as listen to the collective experiences of others (Bokhorst-Heng & Marshall, 2019; Wilkinson, 1999). While moderating the discussion, focus groups also offer a unique perspective to the researcher, as they can examine how participants interact (i.e., body language, gestures, tone of voice) and how participants express their feelings and perspectives (Gibson & Hanes, 2003; Van Manen, 2014; Wilkinson, 1999).

For my research project, a focus group was used in conjunction with photo-elicitation. The focus group was conducted during one of the final M2I sessions (Session #9) and lasted approximately 45 minutes. It was facilitated by the primary researcher and recorded using a tablet provided by Dalhousie University. All seven participants were present during the focus group. It is important to note that the facilitation of the focus group was similar to previous discussions that were held throughout the M2I program, which helped improve the comfort levels of participants. For example, at that point of the program, all participants were used to sitting in a circle, raising their hands to speak, and sharing personal details about their PA experiences. More importantly, mutual trust and respect had been developed between the participants and the primary researcher.

A focus group was selected for several reasons: first, it can be used to explore individuals' motivation and confidence towards PA participation, as well as to help understand their PA behaviors (Edwards et al., 2018). Second, it was deemed most suitable for research with adolescents (Bokhorst-Heng & Marshall, 2019; Linhorst, 2002). For example, focus groups have been shown to offer peer interaction and foster more opportunities for spontaneous responses (Bokhorst-Heng & Marshall, 2019). Moreover, compared to one-on-one interviews, focus groups are proven to reduce the power and control of the researcher (Wilkinson, 1999). Lastly, Wilkinson (1999) argues that focus groups are "naturalistic" and avoid the "artificiality of many other psychological methods" (Wilkinson, 1999, p. 225). Specifically, they involve natural processes of communication amongst participants, such as laughing, joking, and challenging one another (Wilkinson, 1999). Since participants in this research study already had existing relationships with one another (i.e., through participation in the M2I program), the familiarity of the audience and the environment (i.e., the Decadium) made it easier for youth to share their common experiences, as well as contradicting feelings and opinions (Wilkinson, 1999). The study's focus group guide is included in **Appendix E**. The focus group guide is separated into questions corresponding to the three main themes of interest: participants' overall experience, confidence and motivation, and perceptions of PL.

3.6.4 Photo-elicitation

Photo-elicitation is a widely known visual data collection method that has been utilized in various fields of qualitative research, including education, community health, and sociology (Glaw et al., 2017; Loeffler, 2004). Essentially, photo-elicitation is a collaborative approach that introduces photographs into an interview to generate ideas and discussion from participants (Glaw et al., 2017; Loeffler, 2004). The images can include existing photographs, photographs taken by the researcher, or photographs taken by the participants (Leonard & McKnight, 2015). The use of photographs has been found to enhance traditional research methods by enabling more detailed and thorough responses (Glaw et al., 2017). For example, photo-elicitation has the potential to foster new ideas and perspectives that may have initially been misunderstood or seemed unimportant (Leonard & McKnight, 2015). From a phenomenological approach, visual images can contribute to evoking memories and feelings of past experiences (Kirova & Emme, 2006). Specifically, the process has been found to "trigger sensual perceptual experiences"

(Sitvast & Springer, 2019, p. 3), which can be especially important when exploring participants' lived experiences in a PL program that featured different environments and movements.

When used in conjunction with interviews and focus groups, photo-elicitation has been shown to reduce power dynamics between the researcher and the participants (Denford et al., 2019; Leonard & McKnight, 2015), as well as increase rapport building (Glaw et al., 2017). This is typically due to the photographs serving as a third party and consequently, lessening the structure and discomfort that may arise in the interview process (Leonard & McKnight, 2015). This is especially important for research with children and adolescents, who may not feel comfortable maintaining eye contact, being put directly on the spot, or expressing their own opinions (Leonard & McKnight, 2015; Tachine et al., 2016). Specifically, photo-elicitation can help engage and empower adolescents throughout the interview process (Leonard & McKnight, 2015). It has also been revealed to promote confidence and opportunities for fun amongst young people (Denford et al., 2019).

In a systematic review of PL studies completed by Edwards et al. (2018), photo-elicitation was found to be highly suitable for children under 12. It is considered to be a self-reflective measure in assessing one's PL journey (Bopp et al., 2019). For example, De Rossi et al. (2012) used photo-elicitation in their focus groups to better understand the youth perspective of play and PL. The photos contributed to the unstructured approach of the research study, as well as gave children the opportunity to express their thoughts and opinions (De Rossi et al., 2012). In fact, it was noted that participants appreciated their roles in the study and the informal relationships that were developed (De Rossi et al., 2012). Furthermore, while exploring the perceptions of PL assessments in primary school children, Goss et al. (2022) introduced the concept of PL using existing images to represent each domain. This data collection method was successful in capturing the youth perspective of PL and PL assessment (Goss et al., 2022).

In line with the above studies (De Rossi et al., 2012; Goss et al., 2022), photo-elicitation was implemented during the focus group to help stimulate discussion on participants' experiences in the M2I program. A series of photographs were taken by the primary researcher throughout the entirety of the M2I program. Photographs were captured using a tablet provided by Dalhousie University and focused on portraying the essential characteristics and activities of each session. For example, this included the setting and materials of each session, as well as participants engaging in different movements and activities. The images were then edited, printed, and displayed to the participants in random order during the focus group (see **Appendix E**). As an icebreaker challenge, participants worked as a team to rearrange the photos in chronological order by program session before the focus group began.

Once the photos were displayed in the correct order, participants were given a few minutes to examine the photos and reflect on the M2I program. Throughout the focus group, participants were encouraged to use the photos to help them respond to certain questions. Overall, participants enjoyed looking through the photo collection and seeing themselves engage in the different physical activities. Specifically, the icebreaker challenge introduced an element of fun and laughter to the focus group. Concurrently, the photographs helped participants recall past feelings and experiences (Kirova & Emme, 2006), as well as generate more detailed and thorough responses (Glaw et al., 2017). Upon completion of the focus group, all photographs captured during the M2I program were securely destroyed. An exception to this was if a participant wanted to retain one of themselves as a M2I program memory.

3.7 Research participants

Consistent with the size recommendations for a phenomenological study by Creswell and Poth (2018), the sample for this research project consisted of seven youth (aged 12 to 14 years old) accessing mental health services or experiencing MHCs within the Halifax, Nova Scotia region. This age range was selected by the M2I project team based on literature highlighting this developmental stage as a period where PA participation tends to decline in Canada (Colley et al., 2011). Moreover, as revealed in Chapter 2, there is a need for more qualitative research exploring the PL experiences of youth 12 and older (Cornish et al., 2020; Edwards et al., 2018).

Participants for this study were the same youth recruited for the M2I program and were deidentified using pseudonyms (see **Table 3**). All members of the M21 program were eligible and agreed to participate in the research study (7/7); however, it is important to highlight that participation in the study was not a requirement to participate in the M21 program. It was clearly communicated to both parents/guardians (*hereafter referred to as parents*) and youth participants that participation in the research study was voluntary before the M2I program began. The primary researcher conducted telephone meetings of approximately 30 minutes with each parent who registered for the M2I program, in order to review the purpose and details of the research involvement. Following each telephone meeting, the primary researcher obtained both parental and youth consent to participate in the study. The primary researcher also obtained a separate set of consent forms from both parents and youth regarding the photo-taking process during the M2I program. Youth were still permitted to participate in the research study if they (*or their parents*) did not consent to having their photo taken. Of the seven research participants, two opted against having their photos captured during the M2I program.

Table 3: *Research Participants' Demographic Data (Pseudonyms Applied)*

Participant	Age	Gender	Town	MHCs (as shared by parents)
Lauryn	13	Girl	Halifax	ADHD, high anxiety, and periods of self-diagnosed depression
Amelia	12	Girl	Eastern Passage	Low confidence, experiences bullying
Cassidy	12	Girl	Dartmouth	Difficulty making friends
Alice	12	Girl	Dartmouth	Bouts of anxiety
Ben	13	Boy	Dartmouth	Anxiety
Travis	12	Boy	Cole Harbour	Low self-esteem
Hannah	13	Girl	Dartmouth	Bouts of anxiety

As participants for this study were recruited directly from participants of the M2I program, the study's recruitment methods and inclusion criteria were consistent with the M2I program (see **Section 1.2**). All confirmed members of the M2I program agreed to participate in the study (N=7). Participants received a $25 gift card during Session #9 to either Decathlon or Sportchek as a token of appreciation for sharing their experiences. This compensation recognized the time and effort youth dedicated to completing their participation journals and partaking in the focus group.

3.7.1 Ethical considerations for research with youth

Situated within a constructivist paradigm, children and adolescents are viewed as active social agents who are capable of influencing the world around them (Schelbe et al., 2015). This constructivist model of childhood positions young people as agents and learners who actively construct their social worlds (Truong & Mahon, 2012). Despite being traditionally excluded from the research process due to issues of maturity, reliability, and validity; young people have more recently been recognized as valuable research partners (Kirk, 2007; Schelbe et al., 2015). In a systematic review of studies examining the research participation of children and adolescents, it was found that a majority of participants reported positive experiences (Crane & Broome, 2017). For example, they enjoyed helping others learn something new, expressed feelings of empowerment, and were willing to participate in future studies (Crane & Broome, 2017). In PL studies specifically, De Rossi et al. (2012) discuss the advantages of including children's experiences, perceptions, and ideas. Following their focus groups, these researchers noted that their participants (aged 10 to 11) initiated different perspectives and "wanted to be recognized as experts in their life" (De Rossi et al., 2012, p. 44). Similarly, Goss et al. (2022) found that including the children's perspectives allowed for new insights into PL assessments.

With that said, research involving children and youth does present unique complexities, such as additional ethical and logistical challenges (Schelbe et al., 2015). As this phenomenological study focused on the experiences and perspectives of youth, it is critically important to outline how I attempted to mitigate these concerns. First, ethical approval was gained for the recruitment and participation in the M2I program through the IWK Research Ethics Board (**REB**). An additional amendment was gained through the IWK REB regarding participation in the proposed research study (**REB #1029139**). More specifically, verbal consent was obtained by the parents of each youth participant before the M2I program commenced (**Appendix F**). In addition to parental consent, participant assent was obtained using a supplemental form during Session #1 of the M2I program (**Appendix F**). According to Crane and Broome (2017), this method is supported by literature and policies for research with children and adolescents. Both parents and youth were informed about the purpose and details of the study in a manner that they clearly understood (Kirk, 2007). It was emphasized that participation in the study was voluntary and not a requirement of the M2I program. Further, parents and youth were made aware that they could choose to withdraw from the research study at any point and that any previously collected data would then be removed.

The process of participant assent was extended throughout the different phases of the study. While participants were able to withdraw from the study at any time, they also had the option to refuse participation in a certain aspect of the study (i.e., the photography component, a participation journal, or the focus group). For example, once the focus group began, participants were reminded that they were free to skip any question(s) that they chose to (Schelbe et al., 2015). In doing so, they were shown how to communicate this request (i.e., by saying 'next please,' 'pass,' or not raising their hand) (Schelbe et al., 2015). Schelbe et al. (2015) recommend that the researcher initiates brief check-ins throughout each stage of the research process. This routine was incorporated before distributing the journals and conducting the focus group. Prior to the focus group, youth participants received their $25 gift cards as a small token of appreciation. This compensation acknowledged the time and effort contributions of the participants. To ensure participants did not feel coerced into participating in the focus group, compensation was given before the start of the focus group to reinforce that youth were still able to withdraw at any time (Schelbe et al., 2015). However, it is also important to note that older children are capable of understanding the role of small compensation without feeling coerced (Crane & Broome, 2017).

Second, to protect confidentiality, all data was deidentified using pseudonyms and only members of the research team had access to private information, as outlined in the approved ethics protocol. Once completed, all participation journals were returned solely to the primary researcher. Despite focus groups being audio recorded for data analysis, it was made clear to the participants that only the primary researcher would have access to the audio recordings. Audio recordings were transcribed with participants' appropriate pseudonyms. During the data collection phase, all study records (i.e., field notes, participation journals, and focus group transcription) were secured on an encrypted file on the primary researcher's password-protected computer. Accessing digital information required the fingerprint of the primary researcher. All paper records were stored in a locked filing cabinet located in the primary researcher's office.

Prior to the start of the focus group, it was made clear to participants that information discussed during the group interview would remain confidential. As recommended by McCarry (2005) a 'respect ground rule' was created to ensure that participants respect each other's privacy and opinions. With that said, the primary researcher was morally and legally obligated to breach confidentiality if they felt like an adolescent was at risk of harm or abuse (McCarry, 2005; Schelbe et al., 2015). This caveat was clearly communicated to the participants during the focus group introduction, as well as to parents during the initial telephone meeting (Schelbe et al., 2015).

Lastly, several considerations were developed to negotiate the power imbalance between the primary researcher and youth participants. As mentioned above, a focus group was chosen over one-on-one interviews to reduce the power dynamic between the researcher and the youth (Kirk, 2007; McCarry, 2005; Wilkinson, 1999). The focus group integrated photo-elicitation to reduce power imbalances (Denford et al., 2019; Leonard & McKnight, 2015) and strengthen group rapport (Glaw et al., 2017). Participants were reminded that they were free to skip any question(s) during the focus group and were able to withdraw from the focus group at any time (Schelbe et al., 2015). Concurrently, the focus group was led by the primary researcher, who had spent the previous eight weeks developing rapport with each participant. The primary researcher made sure to emphasize during the participation journals and the focus group that they were not looking for "one right answer" and that participants were not being evaluated (Schelbe et al., 2015, p. 510).

3.7.2 Strengths and ensuring trustworthiness of the qualitative data

As building trust and rapport are seen as essential components to a focus group (Tachine et al., 2016), it was critically important that the focus group was led by the primary researcher, who was somebody the participants felt comfortable with. Throughout the M2I program, the primary researcher attended each session, facilitated multiple discussions, and was in consistent contact with participants' parents. Furthermore, the focus group was held during Session #9, meaning participants had spent the previous eight weeks socializing and engaging in different physical activities together. At this stage of the program, most youth had developed meaningful relationships with one another. Previous M2I sessions also revealed that participants were comfortable sharing their thoughts and feelings within a group setting.

Inspired by the Indigenous methodological approach of the "talking circle," a conversational method derived from "postcolonial Indigenous world views," all participants, including myself, were seated in a circle (Chilisa & Tsheko, 2014, p. 230). The circle is a symbol of equality amongst members, where principles such as respect, togetherness, and compassion are emphasized (Chilisa & Tsheko, 2014). Talking circles have been shown to build trust and develop confidence amongst adolescents (Chilisa & Tsheko, 2014). Concurrently, it is suggested that phenomenological interviews begin with "social conversation in order to create a relaxing and trusting atmosphere" (Yuksel & Yildirim, 2015, p. 10). Therefore, before commencing the focus group, the primary researcher facilitated a brief check-in with the group to ensure participants felt more at ease, which consisted of asking participants how they were doing and how their school week had been. This was further supported by the icebreaker and team-building challenge that focused on organizing the program photos in correct order.

To conclude, this study employed several strategies that ensured the trustworthiness of the data. First, it used a variety of different methods to collect and compare data from the same participants (i.e., observations, participation journals, a focus group, and photo-elicitation) (Yuksel & Yildirim, 2015). The use of triangulation in phenomenological research allows the researcher to gain deeper insights into the phenomenon (Peoples, 2021). Specifically, when combined with interviews and focus groups, photo-elicitation has been found to increase the rigour and depth of the study (Glaw et al., 2017). Second, data collection was conducted over a 10-week period during the M2I program with the same participants. Prolonged engagement and ongoing communication with participants contributes to a better understanding of their lived experiences and also helps limit potential misinterpretations (Peoples, 2021), which were particularly valuable during group discussions and the final focus group. Third, a statement of positionality was included to address validity concerns, as the researcher "describes their prejudgments and beliefs about the phenomenon" (Yuksel & Yildirim, 2015, p. 14).

Furthermore, I validated the initial findings by member checking with participants as part of Colaizzi's (1978) seven-step data analysis method (Sanders, 2003). As the data analysis method requires participants to review a summary of the findings and the generated themes, this step was only completed after the M2I program was finished. Therefore, the summary was formulated in plain language and sent to participants' parents through email, which was our primary means of communication throughout the M2I program. Parents were assigned a two-week feedback period to review the summary with their child and have them propose feedback as necessary by email. This process was clearly communicated to participants and their parents beforehand (see **Section 3.8** for additional details). Lastly, I kept organized records of my field notes, informal discussions with participants, participation journals, and the focus group transcript.

3.8 Data analysis procedure

In order to maintain philosophical congruence, this study adopted Colaizzi's (1978) seven-step phenomenological method of data analysis (Sanders, 2003). To acquire a general feeling of the experience, the first step involved organizing the data into simple forms and reading them over multiple times (Wojnar & Swanson, 2007). This included typing up the field notes and the participation journals, as well as transcribing the focus group recording. To gain a sense of each participant's experience, I made sure to listen to the recording multiple times (six times) immediately following the focus group (Sanders, 2003). Before proceeding to step two, I also reread the transcript six times and validated it with the original recording (Sanders, 2003). The second step consisted of extracting significant statements related directly to the M2I program experience for each participant (Phillips-Pula et al., 2011). Statements related to PL development were also noted. All extracted statements were organized in a table that identified each statement's source and location (Wirihana et al., 2018). I extracted these statements manually, in order to deepen my familiarity with the data (Sanders, 2003). As such, this step involved repeated examinations of all the simplified data from step one.

Subsequently, step three consisted of formulated general meanings for each significant statement in step two. Each significant statement was reviewed carefully to determine its meaning in relation to the phenomenon (Sanders, 2003). The question that I repeatedly asked myself during this process was "What does this tell me about their experience in the PL program" (Sanders, 2003). Formulated meanings were placed in its own column using the same table from step two. Step four involved generating overarching themes by clustering the formulated meanings that had similar terms or were related to one another (Wirihana et al., 2018). In this phase of the analysis, I ensured that I was always referring to "the original transcriptions for validation" and "not giving into the temptation to ignore data which did not fit" (Wojnar & Swanson, 2007, p. 176). Unlike other phenomenological analysis procedures, it is important to note that contradictory themes were not ignored (Phillips-Pula et al., 2011). Instead, they were considered during the following step when the experiences of the program were being outlined. To demonstrate a clear and systematic sequence of steps, another table was generated that outlined the development of formulated meanings (i.e., step three) into their constructed themes (i.e., step four).

The fifth step required the primary researcher to integrate the themes from step four into an exhaustive description of participants' experiences of the M2I program (i.e., the phenomenon being studied) (Phillips-Pula et al., 2011). This exhaustive description provided a thorough summary of the findings (Wirihana et al., 2018) that was reviewed by my research supervisor, who was also a M2I program leader. After multiple rounds of revisions, three themes were established and further elaborated upon. Considering the scope of the research project, this summary concentrated on participants' experiences in the M2I program and more specifically, their PL development and conceptualization of the PL meaning.

Step six involved removing extraneous information from the exhaustive description and reducing it to a statement that highlighted the essential structure and themes of the phenomenon (Phillips-Pula et al., 2011; Wirihana et al., 2018). Additionally, step six was significant, as it involved returning the statement to the participants and validating the accuracy of the findings with them (Wojnar & Swanson, 2007). I formulated the statement in plain language without the use of technical jargon. The main purpose of this summary was to outline the three constructed themes for the participants clearly and concisely. The statement was sent to participants' parents through email, which was our primary means of communication throughout the M2I program. To ensure that the summary accurately represented participants' experiences in the M2I program, I gave parents two weeks to read the statement over with their child and have them propose feedback as necessary by email. If I did not receive feedback from a participant after the two-week period, I assumed that the statement accurately depicted their program experiences. This process was clearly communicated to participants during the focus group (see **Appendix E**), as well as to parents through email. Lastly, step seven of this procedure was to incorporate any feedback from the participants into the final description of "the essence of the phenomenon" (Wojnar & Swanson, 2007, p. 176).

3.8.1 Bracketing

Husserl referred to bracketing as Epoche, a Greek term meaning to "stay away from or abstain" (Moustakis, 1994, p. 2). Epoche involves focusing on the research in brackets and setting aside our biases and preconceived assumptions about things (Moustakis, 1994). The objective of bracketing is for the researcher to simply allow the lived experience to be as it presents itself (Moustakis, 1994). Thus, the researcher does not take a position, as "nothing is supposed to be determined in advance" (Moustakis, 1994, p. 3). Although this notion has theoretical value, the process requires an unusual amount of concentration and effort (Moustakis, 1994). Further, Moustakis (1994) reveals that Epoche is "rarely perfectly achieved," as some experiences are "simply not bracketable" (p. 6).

As this research project was situated within the constructivism paradigm, the construction of knowledge relied on the collaboration between the researcher and the participants (Drisko, 2013; Lincoln & Guba, 2013). Thus, from this perspective, the researcher's beliefs and assumptions can help understand the topic being studied (Hopkins et al., 2017). Rather than eliminating them, Hopkins et al. (2017) argue that the researcher's "pre-understandings and subjectivity is not an undesired state" and can also be used to enhance the research process (p. 23). For example, my existing PL knowledge and background with various PA programs helped inform various informal discussions, the focus group guide, and the photo-elicitation selection. Additionally, my experience with teaching and facilitating youth groups strengthened the interactions that I had with the youth as a participant observer. Throughout the M2I program, I made sustained efforts to build relationships with participants and engage in different physical activities with them. Consequently, this bolstered several phases of the data collection process, such as the informal discussions and the focus group.

While I attempted to focus entirely on the youth perspective, I also recognized that there were assumptions around these PA programs when it came to PL development. For example, evidence suggests that PA programs targeting PL development will foster improvements in one or more of the four domains (Arbour-Nicitopoulos et al., 2018; Eveland-Sayers et al., 2018; Hassani et al., 2022; Morgan et al., 2013; Wainwright et al., 2018; Warner et al., 2018). Furthermore, PL development has previously been linked to enhanced mental health (Ma et al., 2021) and positive affect (Blain et al., 2020). With that said, researcher subjectivities and biases were managed through reflexivity and a statement of positionality (Hopkins et al., 2017). Reflexive practices included collecting detailed field notes of observations and discussions, member checking, and developing an initial statement concerning the phenomenon. The latter is a bridling technique suggested by Stutey et al. (2020) that encourages honest and transparent reflection. Prior to data collection, it required the primary researcher to reflect and write about their existing understandings of the topic and what they anticipate finding (Stutey et al., 2020).

Given my dual role throughout the M2I program as a participant observer, as well as a program leader facilitating informal discussions and the study's focus group, I also recognized the importance of maintaining an attitude of openness and curiosity (Hopkins et al., 2017). For example, I made intentional efforts to ask a variety of open-ended questions, listen carefully, engage in continuous reflection, and collaborate with participants (i.e., through movement, informal conversations, and weekly check-ins) throughout the 10-week data collection period. Accordingly, the following chapter represents the lived experiences of the seven participants in the M2I program.

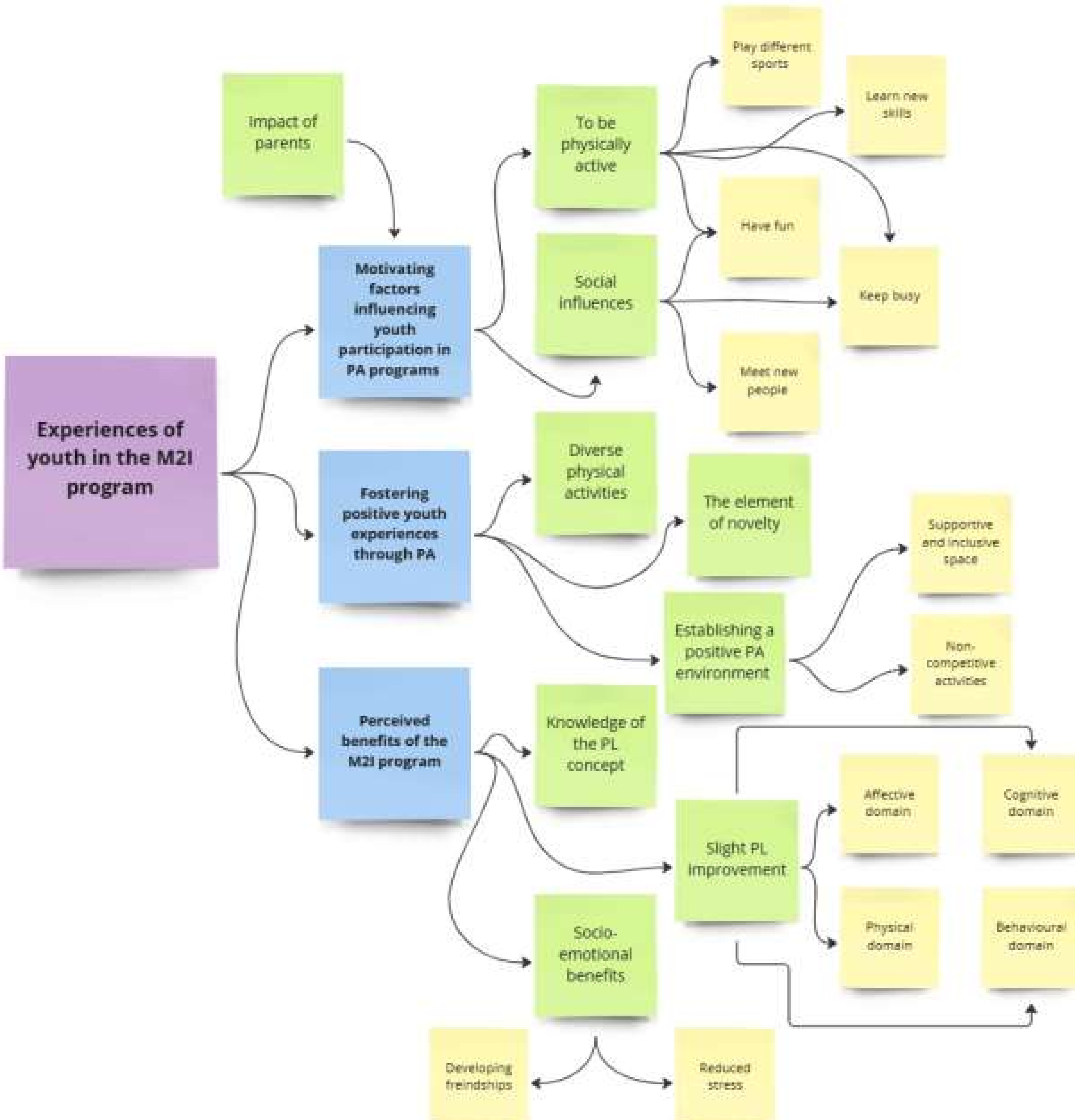
Chapter 4: Findings

4.1 Introduction: Experiences of youth with MHCs participating in the M2I program

Chapter 4 presents a detailed overview of the findings obtained from the data collected during the M2I program, which took place from February 9th, 2024 to April 19th, 2024 for a total of nine sessions. The data collection process utilized qualitative methods, which included detailed observations, participation journals, and a final focus group. Photo-elicitation was also used in conjunction with the focus group to help engage participants and stimulate further discussion. As a phenomenological research study, these findings represent the lived experiences of the seven Nova Scotian youth participating in the M2I program, while also addressing the study's central research question: *What are the lived experiences of Nova Scotian youth with MHCs participating in a PL program?*

Data was analyzed by the primary researcher with guidance from their research supervisor using Colaizzi's (1978) seven-step phenomenological method (see **Section 3.8**). The study's sub-questions were also used to guide the data analysis process: *What motivated the youth to participate in the program? How do participants describe their experiences of confidence and motivation from participating in the program? What does PL mean to participants before and after their lived experiences in the program?* The following three themes were generated to capture the essence of the participant experience: motivating factors influencing youth participation in PA programs, fostering positive youth experiences through PA, and perceived benefits of the M2I program. **Figure 1** provides a visual representation of the inductive theme generation process, with the three final themes highlighted in blue.

Figure 1: *Visual Representation of Final Themes*



4.2 Theme 1: Motivating factors influencing youth participation in PA programs

During the first M2I session, participants were asked to write down the factors influencing their decision to join the program in their participation journals. This question was then revisited verbally during the final focus group. It was evident youth that were motivated to participate in the M2I program due to various factors. As shown in **Table 4**, most participants joined the M2I program to be physically active: this encompassed motivators such as playing different sports, having fun, and learning new skills. Other participants noted social influences, including to meet new people and keep busy on a Friday night. While individual motivators were significant, participants also discussed the impact of their parents. All youth felt like their parents played an integral role in either registering them in the M2I program or motivating them to sustain attendance:

> My mom signed me up for it because she knew I wanted to do different sports. But when I was little, I would always quit them. So she signed me up because I was actually looking to do something now. She didn't ask me but when I came home she told me I was going to this program, and I was like 'yay!' and then I started yelling. [Amelia]

> My mom always says that when you sign up for something, you need to see it through. So some input from my mom. [Hannah]

Table 4: *Participants' Motivating Factors for Joining the M2I Program*

Motivating factor	Lauryn	Amelia	Cassidy	Alice	Ben	Travis	Hannah
Meet new people (3/7)	**X**	**X**					**X**
Play different sports (5/7)	**X**		**X**		**X**	**X**	**X**
Have fun (2/7)		**X**				**X**	
Keep busy (3/7)		**X**	**X**	**X**			
Learn new skills (3/7)		**X**	**X**				**X**
Parental influence (7/7)	**X**	**X**	**X**	**X**	**X**	**X**	**X**

4.3 Theme 2: Fostering positive youth experiences through PA- '*It was definitely different, but fun'*

Overall, the M2I program facilitated positive PA experiences for youth participants. Throughout the nine PA sessions, youth had several opportunities to discuss their thoughts and feelings towards the program. During the midpoint of the program, youth completed a participation journal that included questions regarding their most enjoyable aspects and potential areas for improvements. Their collective experiences were further examined during the focus group. The findings revealed that all participants found the M2I program to be engaging and enjoyable. This was illustrated by participants' comments about their favorite sessions, as well as their lack of future suggestions. For example, most participants chose not to offer any program suggestions. Both Alice and Travis indicated that they would make 'no changes' to the program. Hannah shared that their favorite session was Session #7 (i.e., baking and playing in the park) because it was 'so fun,' while Lauryn felt like they enjoyed 'everything' about the program and had 'no suggestions to make it better.' These positive youth PA experiences were achieved through the diversification of physical activities, integrating elements of novelty, and establishing a positive PA environment.

4.3.1 Opportunities for diverse forms of physical activities

Throughout the M2I program, attendance and participation levels for each participant remained high. All participants attended at least six of the nine PA sessions, with three participants attending every session. These high engagement levels can be attributed to the M2I program's sampling of different activities each session. Each session featured an objective and main activity that were distinct from another (see **Appendix A**). Most participants enjoyed the program's unique activities such as circus skills, capoeira, yoga, archery, and wall climbing, as opposed to the sports and physical activities that they typically engage in. This was highlighted during the focus group when participants were asked about what made the M2I program unique:

> This program was kind of similar to a program I did a couple years ago. That was based on all ball stuff (football, basketball, soccer); but this was not, we did things like archery, wall climbing, and baking. It was definitely different, but fun. [Hannah]

> I only went to one program like this but there we focused on the most basic sports. Here we had a chance to play sports that I did not even know were sports, like wall climbing and circus skills. I really enjoyed that. [Alice]

> I really like the sports in this program. They are different compared to what I usually would do. [Lauryn]

In line with its purpose, Hannah acknowledged the role of activity sampling in the M2I program for potentially 'getting into something afterwards.'

4.3.2 The element of novelty

Based on their experiences in the M2I program, youth discussed a range of activity preferences. Most participants alluded to the novelty element as their favorite aspect of the M2I program. A majority of sessions featured a main activity that most participants had never tried. Ben and Travis identified juggling and wall climbing respectively as their most memorable activities because it was their 'first time trying them.' Similarly, Hannah stated that their favorite session was visiting the Community Centre, as it was 'just different and they had never been inside there before.' According to Cassidy and Amelia, 'trying new things' was a significant motivating factor in sustaining their program participation. In Session #3 specifically, capoeira was introduced to all participants for the first time. Capoeira afforded youth the opportunity to explore a variety of diverse and creative movements (i.e., handstands, spinning, kicks, etc.), while also incorporating the use of Afro-Brazilian instruments. Both Amelia and Alice enjoyed the novel experience of connecting movement with music:

> I really liked Session #3 (capoeira) because I liked playing the instruments because I was in control of my movements. [Amelia]

> I liked being in charge of the music in capoeira. I like music. [Alice]

Some participants preferred activities for other reasons. In contrast to the element of novelty, one participant (Lauryn) indicated that their favorite activity was wall climbing because it was 'familiar to them.' Cassidy referenced yoga as their favorite activity due to the 'element of challenge' and how it was a 'good balance between not being too easy or too difficult.' This element of challenge was further elucidated by Cassidy's account of their wall climbing experience:

> I felt most motivated during the wall climbing. Every time I was on the wall, I was like 'just one more higher' 'just one more higher,' which eventually led me to the top of the wall. I mean, it was hard, but I wanted to do well. [Cassidy]

4.3.3 Importance of a positive PA environment

Participants' experiences were further enhanced by the M2I program's supportive and collaborative environment. Each M2I session provided youth with opportunities to discuss their feelings and move their bodies in a non-judgemental space. As they interacted with different apparatuses, youth were encouraged to make mistakes and reminded not to compare themselves to their peers. Concurrently, most program activities were designed for participants to collaborate together, as opposed to compete against each other. Some participants appreciated these characteristics of the program. For example, Cassidy expressed how much they enjoyed that the program was 'small' and 'not competitive.' The supportive nature of the M2I program allowed Cassidy to try wall climbing, despite initially being 'scared to.' It also empowered youth to showcase their physical skills in an inclusive space. For example, at the end of both the circus and capoeira sessions, participants were given the opportunity to perform their new skills in front of the group. Lauryn shared how programs 'like this' helped them improve their 'confidence to do physical activities in front of people.'

4.3.4 Future considerations for the M2I program

While the M2I program experiences were predominantly positive, a few participants shared some areas that the program could improve on. The suggestions were relatively minor, yet still important to consider in the future planning process, in order to keep ensuring positive experiences. In terms of scheduling, Ben did not enjoy the time of the program (i.e., 5-7pm), while Cassidy felt like Friday nights were 'sometimes hard to commit to' because of other obligations. Specific to the program activities, Lauryn discussed how the activity sampling made it difficult to keep practicing their skills. Cassidy suggested the inclusion of more ‘running and tag’ games.

4.4 Theme 3: Perceived benefits of the M2I program- ‘*Exercise is not only about the way you look, but it’s also for your mental and physical well-being*’

The perceived benefits of the M2I program were examined using qualitative data gathered directly from youth participants. During the program’s midpoint session, youth noted improvements and changes they may have experienced in their journals. Throughout the focus group, youth were asked various questions concerning the program’s impact on their PL development, as well as their general well-being. This participant-centered approach revealed program outcomes associated with the comprehension of the PL concept, slight PL improvements, and socio-emotional benefits.

4.4.1 Comprehension of the PL term

All participants began the M2I program unaware of what PL meant. During the first session, PL was introduced as a concept that would be discussed throughout the program. Participants were unable to describe PL in their own words and stated that they had never heard of the term before. During the midpoint session, the PL concept was explained to participants in further detail. For example, PL was described as the overarching purpose of the M2I program. The M2I facilitator elaborated on the interconnected domains (i.e., building blocks) of PL and how the concept represents a personalized journey for each participant. PL was then re-introduced to participants during the final focus group, along with a PL handout (see **Appendix G**). By the end of the M2I program, some participants gained a preliminary understanding of what PL means. Cassidy highlighted in the focus group how being physically active extends beyond the acquisition of physical skills:

> I feel like when you're learning any sport, for example, soccer, you wouldn't just want to learn how to kick, you would want to learn safety rules, how you can practice it on a daily basis, how you can connect it to real life problem solving.

Alice acknowledged that their PHE classes 'definitely' focus on physical skills, but can place greater emphasis on the development of affective and behavioural skills. When asked how community programs and PHE classes can better support youth PL development, Alice referenced the diversification of physical activities. Cassidy mentioned playing in 'different places,' such as in a field or at a park.

4.4.2 PL improvements: Affective domain

For most participants, PL enhancements were linked to the affective domain, one's confidence and motivation to participate in PA. At the end of the M2I program, various youth discussed gaining confidence in their own PA abilities:

> I feel more confident in my yoga abilities. This program has helped build my confidence to do physical activities in front of people. [Lauryn]

> The program boosts my confidence in my abilities. [Alice]

Other participants left the M2I program with heightened motivation to remain physically active. For example, Cassidy shared how they are 'more willing to be active on Fridays' even if the activity is 'just walking or taking the dog out.' Ben mentioned that they have begun looking into future opportunities for wall climbing. Concurrently, all participants were eligible to receive the program incentive (i.e., a $75 gift card to Decathlon or Sportchek). When participants received their gift cards in the final session, they were excited to discuss the various ways they could use them. This discussion was centered around future opportunities for PA, including the purchase of a swimsuit and goggles, rollerblades, swingball equipment, and an archery set. These comments offered promising insights into participants' increased motivation for PA.

4.4.3 PL improvements: Cognitive domain

Throughout the M2I program, participants gained fundamental knowledge related to PL's cognitive domain. The cognitive domain pertained to participants' knowledge of PA benefits, PA opportunities, and safety considerations. For example, all participants experienced the diversity of PA and learned more about PA benefits, as well as its connection to sleep, diet, and emotional well-being. Most M2I sessions included a handout and debrief that discussed the specific activity's benefits and future opportunities. The M2I program helped both Amelia and Cassidy discover the broad scope of PA opportunities:

> I enjoyed circus skills because I didn't know it was a real sport. It didn't take a lot of practice or training; you were able to play right away. [Amelia]

> I feel like the program has introduced me to different ways of moving. [Cassidy]

At the start of the M2I program, participants had limited knowledge about the breadth of PA and movement. For most participants, PA was commonly used as a synonym for 'sport.' This was illustrated in the language used in their first participation journal. Despite being promoted as a 'PA program,' many participants reported joining the M2I program to 'play different sports' or because they 'like to play sports.' When the PL concept was first introduced to participants in a session discussion, the M2I facilitator emphasized that PA 'included' sport, but was not 'limited' to sport. Yet, most participants were still unable to differentiate between the two. For example, in the same discussion, one participant mentioned being less active in the summer because they preferred winter sports over summer ones.

However, as participants engaged in different physical activities and weekly discussions throughout the program, some youth developed more comprehensive understandings of PA and movement. In the final focus group, both Cassidy and Alice felt like the M2I program helped them understand the value of movement. More specifically, Cassidy mentioned that they were 'happy' to learn about the connection between PA and 'healthy living.' While the relationship between PA and healthy living (i.e., sleep, diet, stress, etc.) was difficult for youth to conceptualize and articulate, Cassidy highlighted an important connection during the focus group:

> Something I did like was Session #7 (active play and baking) and learning about healthy habits and physical activity. It took me a while to understand but exercise is not only about the way you look, but it's also for your mental and physical well-being. [Cassidy]

Lauryn articulated the importance of 'not caring' what people think or what your body looks like during PA. When participants were asked about their future PA engagement outside of the program, there was also less reference to sports. Some youth were able to conceptualize that PA engagement extends beyond team sports. For example, Lauryn expressed being excited to 'go on the stair climber' at their gym, while Alice felt more confident to play on the climbing bars. Cassidy was looking forward to 'walking' and 'taking the dog out.' There were also instances throughout the program where participants were surprised by how much physical exertion some activities required, such as wall climbing and circus skills. Travis mentioned that they could not 'feel their arms' after wall climbing. Alice enjoyed circus skills because it allowed them to activate muscles they were not used to moving.

4.4.4 PL improvements: Physical domain

The M2I program introduced participants to a range of different movements and physical skills through activity sampling. Each session featured an objective and main activity that were distinct from another (see **Appendix A**). Moreover, the beginning of each session (i.e., the first 15 minutes) was designated for free play, which allowed participants to further practice their skills in an unstructured environment. Free play opportunities were purposefully implemented to promote youth autonomy and social interactions. As a result, some participants reported improvements in their physical skills and movement patterns, important elements comprising PL's physical domain. Travis acknowledged learning new juggling skills and felt excited to 'show people.' Both Alice and Amelia experienced enhancements in their archery skills. For example, in the focus group, Alice indicated that they 'definitely' improved their target accuracy, while Amelia described their rapid learning progression:

> I feel like I improved my archery skills. When I first tried it, I wasn't even able to get it on the target board. But now, I have been able to hit different circles on the board, like 8 or 9. [Amelia]

In contrast, Lauryn shared that it was difficult to recognize any skill improvements due to the M2I program's activity sampling (i.e., only doing activities once).

4.4.5 PL improvements: Behavioural domain

PL's behavioural domain refers to individuals taking responsibility for their PA involvement and participating in various forms throughout their life course. In the context of this domain, some participants shared that the M2I program helped increase their PA participation. Travis noted being more physically active since the program started. Despite not feeling like their PA habits changed 'that much,' Lauryn acknowledged integrating more 'yoga and some of the stretches' into their workout routine. Cassidy mentioned that yoga was a PA that they could ‘potentially incorporate’ into their life. Other participants did not observe substantial increases to their PA levels. For example, Ben stated that they have not experienced any changes, apart from the physical activities that they do ‘here’ during the M2I program.

With that said, participant engagement levels remained high throughout the M2I program. All youth actively participated in each M2I session, suggesting an overall increase in their PA levels since the M2I program started. This was illustrated by Hannah’s explanation regarding her consistent attendance:

> The program is really fun, and I get a lot of physical activity in. I keep coming back to be physically active, otherwise I’d be at home watching television. [Hannah]

Concurrently, PA engagement levels were observed to be consistent throughout the M2I program, despite youth experiencing challenges at varying times. In the focus group, participants were asked to share some of the challenges that they faced during the M2I program, which included lack of motivation and patience for PA, moments of self-doubt and peer comparison, as well as having sore body parts. For example, Amelia described an instance during wall climbing where they felt like ‘everyone was doing so much better’ than them, while Cassidy experienced difficulties during circus skills due to their ‘clumsiness.’ Both Alice and Lauryn commented how much wall climbing ‘hurt their hands.’

However, in the face of these challenges, participants managed to display a high degree of resilience and take responsibility of their own PA engagement. Youth overcame their personal challenges independently without it impacting their participation or effort in the respective activity. For example, when PA challenges were experienced, Alice shared how they ‘just kept on trying,’ while Amelia was able to ‘just ignore’ their negative thoughts. This was further accentuated by the following youth responses to a focus group question about how they overcame personal challenges:

> I feel like I struggled with some of the circus skills because I am a bit clumsy and some of the activities took a lot of patience. But towards the end, I saw it as more of a learning and rewarding experience. [Cassidy]

> I was getting really mad during one of the circus activities because the plate kept falling off the stick and it was always so close to staying on but then would fall and I was like 'just stay on.' I was actually getting really mad during that session. I was able to control my emotions by asking the circus instructor again how to do it and being a little more patient with it and then I ended up getting it. [Lauryn]

When discussing PL's behavioural domain, youth being able to overcome challenges and take responsibility for their ongoing PA participation is a necessary component to lifelong PA engagement. With that said, the four PL domains do not account specifically for enhancements related to one's social and emotional well-being. However, these progressions are indirectly linked to PL and critical in promoting confidence, motivation, and future PA engagement.

4.4.6 Socio-emotional benefits

While the M2I program's main objective was to help support youth PL, participants experienced benefits that extended beyond the domains of PL. Many youth identified the social element as a key contributor to their positive experience. Throughout the nine-session program, participants developed meaningful friendships with each other. These relationships played a critical role in fostering participants' confidence and motivation to be physically active:

> I do feel a little more confident, but I still think it will be difficult to continue outside the program. Because in this program, I feel like I've met people. Outside of it, I feel like I wouldn't know. I wouldn't know people. [Alice]

> The things that keep me coming back are the new activities each week and getting to see my friend. [Cassidy]

As the M2I program progressed, youth became comfortable playing with each other, as well as engaging in weekly collective discussions. These discussions explored a multitude of topics, including PA preferences, challenges, and experiences related to sleep, diet, and leisure. Throughout these discussions, participants communicated with each other respectfully, engaged in active listening, and gained valuable insights into each other's diverse experiences.

Furthermore, certain M2I sessions helped some participants manage their stress and emotions. In the focus group, both Lauryn and Cassidy shared the positive experiences they had with yoga. After the yoga session, Lauryn felt 'really good' and described their mood as 'less stressed and more calm.' Similarly, the yoga and wall climbing sessions helped Cassidy to stay mindful and grounded. Cassidy provided further elaboration on this experience:

> I felt very relaxed after yoga because my mind wasn't drifting off. Because all my thoughts start to come up and that is not always good. I was very concentrated and focused on the poses. Same with wall climbing. It was a challenge, which made me want to focus even more to achieve it. [Cassidy]

Interestingly, Cassidy's narrative underlines the plethora of benefits that PA can stimulate, as well as the significance of activity sampling in affording these diverse opportunities.

4.5 Conclusion

The findings presented in this chapter discuss the lived experiences of seven Nova Scotian youth participating in the M2I program. Throughout the M2I program, qualitative methods were used to gain a comprehensive understanding of these experiences. More specifically, this study explored participants' experiences of confidence and motivation during the M2I program, their PL development, as well as their knowledge of the PL concept. Data analysis was conducted using Colaizzi's (1978) phenomenological method, which identified three key themes shaping participants' experiences in the M2I program: motivating factors influencing youth participation in PA programs, fostering positive youth experiences through PA, and perceived benefits of the M2I program. These findings showed that youth were motivated to participate in the M2I program to be physically active and meet new people. The influence of parents was another pivotal aspect of program engagement, which highlights the importance of a child's family members in regard to their PL development.

Overall, youth experiences in the M2I program were predominantly positive. The M2I program was described by youth as both engaging and enjoyable. These positive experiences were attributed to the M2I program's integration of diverse, novel, and challenging physical activities. Participants also appreciated the supportive, collaborative, and inclusive nature of the PA environment, where youth were encouraged to discuss their feelings, try their best, and not compare themselves to others. The perceived benefits of the M2I program were examined using qualitative data gathered directly from youth participants, as opposed to the use of pre-and post-evaluations or standardized testing. This allowed youth to discuss their unique PA experiences in an open and honest manner. Concurrently, these methods empowered youth to take responsibility for their own PL journey.

At the end of the M2I program, participants discussed experiences linked to the comprehension of the PL concept, slight PL improvements, and socio-emotional benefits. All participants joined the M2I program having never heard of PL before. However, the M2I program helped some participants gain a preliminary understanding of what the concept means and its significance to lifelong PA. Furthermore, the majority of youth reported slight developments in their PL, noting improvements in one or more of its domains. Despite the primary focus of this research being on the affective domain, the fact that various benefits were discussed sheds light on the interconnected nature of the PL domains. Interestingly, when faced with challenges throughout the M2I program, participants demonstrated resilience in sustaining their PA participation. For example, they were able to control their emotions, ignore negative thoughts, as well as maintain patience with themselves, all of which are critical for fostering lifelong PA engagement. Lastly, many youth also indicated experiencing benefits related to their socio-emotional well-being, which included developing friendships and experiencing reduced stress levels. The numerous perceived benefits of the M2I program highlights the value of diverse and accessible community-based PL programs within Canada.

Chapter 5: Discussion

5.1 Introduction: Interpretation of the research findings

Chapter 5 offers an in-depth analysis and discussion of the study's findings, which includes the following three themes presented in Chapter 4: motivating factors influencing youth participation in PA programs, fostering positive youth experiences through PA, and perceived benefits of the M2I program. These findings are examined in further detail alongside relevant literature. Before engaging in the writing process, discussion areas for each theme were reviewed multiple times by the primary researcher and their supervisor. Guided by the SEM, this chapter provides additional insights into the PL program experiences of youth with MHCs (*RQ1*), as well as the role of key environmental players, such as parents, PHE teachers, and community program leaders. Lastly, taking into consideration the study's findings and analysis, Chapter 5 concludes with a series of practical implications and future research directions.

5.2 The diversity of youth motivators associated with PA participation

As shown in **Table 4**, participants were motivated to join the M2I program due to various factors. Most participants (6/7) indicated joining the M2I program to be physically active, which included playing different sports, learning new skills, and having fun. Participants also acknowledged social influences (5/7), which encompassed meeting new people and keeping busy on a Friday night as significant factors in their program participation. It is worth noting that many of the youth (5/7) identified more than two motivators for joining the M2I program. Despite the M2I program being solely advertised as a 'PA program,' it is evident that participants were hoping to gain additional benefits from a community program. The array of motivators linked to PA benefits, having fun, and socialization is consistent with previous literature on PA and youth motivation (Brockman et al., 2011; Duffey et al., 2021; Martins et al., 2021). In a systematic review of qualitative studies examining the PA facilitators and barriers of adolescents (aged 13 to 18), Martins et al. (2021) found that the most frequently mentioned facilitators were ‘having fun,’ ‘favourable PA attitudes,’ and the ‘influence of friends.’ Similar findings were concluded by Brockman et al. (2011), where ‘socializing’ and ‘preventing boredom’ were included as primary motivators for PA amongst school children (aged 10 to 11) in Bristol, United Kingdom.

Other studies shed further light on the importance of social influences for youth PA participation, as well as PA retention (Duffey et al., 2021; Howie et al., 2018). From a socio-ecological perspective, which positions the individual within various levels of the environment ranging from small groups to broader organizations, communities, and policies (Lee & Park, 2021; Stokols, 1992, 1996), a recent systematic-review reveals that the most commonly cited PA facilitators by adolescent girls (aged 10 to 19) at the interpersonal level included ‘peer support,’ ‘teacher support,’ and ‘opportunities to socialize’ (Duffey et al., 2021). Duffey et al. (2021) conclude that some adolescent girls (aged 10 to 19) may prefer physical activities that differ from competitive sports and provide social opportunities, as well as the autonomy to make choices. Moving forward, to enhance participation and retention rates, community PA programs should focus on developing supportive PA environments that promote positive social engagement and alternative physical activities.

5.2.1 Prioritizing the social environment during the M2I program

In line with other community PL programs (Arbour-Nicitopoulos et al., 2018; Graham et al., 2024; Warner et al., 2021; Wright et al., 2023), the M2I program made sure to establish a supportive and inclusive PA environment that was conducive to social interaction and relationship building. For example, the M2I program was purposefully limited to a small group (Arbour-Nicitopoulos et al., 2018) and was held in a welcoming, and community-based facility

(Arbour-Nicitopoulos et al., 2018; Warner et al., 2023). Specifically, the Decadium was considered by M2I program leaders to be a bright, private, and intimate gymnasium space. It was also located in a familiar setting (i.e., a public mall), as opposed to a fitness centre or traditional university gymnasium, which may have elicited feelings of intimidation or anxiety for youth who are unfamiliar with those settings. Furthermore, each M2I session integrated opportunities to socialize through introductory 'free play,' snack times, and group discussions. Within an overall structured PA program, these unstructured opportunities helped participants develop friendships and their sense of autonomy.

Lastly, consistent with Arbour-Nicitopoulos et al. (2018) and Nezondet et al. (2023), main activities were designed to promote collaboration and enjoyment, as opposed to intense competition and evaluation. Guided by the principles of PL, it was emphasized to all participants that they were on their "own personal physical literacy journey" and would obtain benefits from their individual progression (Whitehead, 2010, p. 38). For example, participants did not undergo any form of skill evaluation or standardized testing to assess their performance. In fact, to effectively nurture their movement potential, participants were encouraged to try their best and make mistakes throughout the M2I program. This process-oriented approach empowered youth to engage in activities that they had never tried (i.e., circus skills, capoeira, wall climbing, etc.) or may have been initially scared to (i.e., Cassidy in wall climbing). Although certain sessions incorporated varying degrees of competition (i.e., keeping score, introducing a challenge, etc.), it was never that activity's primary focus. Future PL programs are encouraged to utilize these collaborative and process-oriented approaches.

5.2.2 Parents as key influencers of their children's PL development

Interestingly, all participants (7/7) identified their parents as having an integral role in either their program registration or retention (see **Table 4**). Many participants discussed how their parents learned about the M2I program and proposed the option of registering to them. Once the M2I program began, some parents were also responsible for motivating their children and helping them maintain consistent attendance. In line with emerging research that has identified parents as ‘gate keepers’ to children’s PL development (Houser et al., 2022; Simpson et al., 2024), these findings highlight the considerable influence that parents have on their children’s PL. Parents facilitate children’s PA participation by taking on various roles, ranging from supporter (i.e., encouragement to participate, cheering from the sidelines) to provider (i.e., transportation, cost of activity, equipment) to team coach or manager (Duffey et al., 2021; Howie et al., 2018). Concurrently, scholars suggest that the PA behaviours of parents (or lack thereof) may have predictive effects on their children’s PA behaviours (Garriguet et al., 2017; Hesketh et al., 2017; Petersen et al., 2020).

Despite being a common misconception, Whitehead (2013) emphasizes that childrens’ PL development is not limited to the school and PHE environment; instead, it requires the support of significant others, including parents, coaches, and community members. Considering the SEM, a child’s PA behaviours are largely influenced by their parents and home environment (Hesketh et al., 2017). For example, while participants in the M2I program were entering their teenage years (aged 12 to 14) and seeking greater autonomy, they were also still heavily dependent on their parents’ motivation and resources (equipment, transportation, etc.). Previous literature shows that Canadian parents themselves believe that they have the primary responsibility for developing their child’s PL (aged 0 to 16) (Houser et al., 2022). Therefore, it is critically important that children and youth receive ample support and opportunities from their parents to be physically active. This is especially pertinent for youth at developmental stages (i.e., early adolescence) who are attempting to manage their changing bodies and becoming more influenced by cultural expectations (Whitehead, 2010).

However, recognizing that parents face their own set of challenges (i.e., time, cost, child safety, limited PL knowledge, etc.) (Bassett-Gunter et al., 2017; Simpson et al., 2024), community PA programs can serve as a significant source of support. For example, they can advocate for decreased program costs and provide greater PL knowledge and resources to parents (Houser et al., 2022). Previous PL programs have implemented strategies designed to mitigate barriers for parents, including eliminating registration fees (Graham et al., 2024; Warner et al., 2021) and offering more flexible scheduling (Arbour-Nicitopoulos et al., 2018). Moreover, PL scholars have discussed the need for programs to involve family members, and parents specifically (June Yi et al., 2020); this can be through the co-participation of PA (see Farmer et al., 2020; Ha et al., 2021) or separate educational workshops (see Nezondet et al., 2023; Wright et al., 2023). Workshops targeting parents can focus on the importance of PL, the benefits of PA, and strategies to help support children's PA participation (Wright et al., 2023).

It is worth noting that the M2I program originally planned to organize a 'family day' for its final session (see **Appendix A**), where parents and siblings of participants were invited to participate in a nature walk and campfire. However, in addition to low parental response rates, youth participants also expressed a disinterest in having their parents and/or siblings attend during a discussion in Session #6. A possible explanation for this could be the cohort age (i.e., early adolescence stage), which is often linked to an inherent drive for independence. Concurrently, by this stage of the M2I program, participants had already established strong rapport with each other and may have felt comfortable being without their parents and/or siblings. While M2I program leaders ultimately decided to limit the final session to participants only based on participant input and emphasis on a collaborative decision-making process, increased efforts to engage parents within future PL programming are recommended.

5.3 Opportunities for community programs to improve children's PL

Recent evidence reveals the extensive benefits of PL interventions in supporting children and adolescents' PA engagement (Bremer et al., 2020; Eveland-Sayers et al., 2022; Nezondet et al., 2023; Warner et al., 2021; Wright et al., 2023). As the purpose of this phenomenological study was to describe the lived experiences of participants in the M2I program, PL domains were not assessed individually for each participant. Instead, this study utilized qualitative methods, such as participation journals (i.e., open-ended questions) and a final focus group to explore the experiences of youth with MHCs participating in a community PL program. For example, participants had the opportunity to reflect on their involvement in the program, as well as share their thoughts and feelings concerning their own personal PL journey. Consequently, employing these qualitative methods helped capture the unique PA experiences and challenges of youth with MHCs (Bopp et al., 2018). It also enabled the primary researcher to ask specific questions (see **Appendix D, Part 2**), in order to gain comprehensive insights into participants' experiences of confidence and motivation (Edwards et al., 2018).

While the study's primary objective was not focused on evaluating the effects of the M2I program on participants' PL development, it offers promising insights into the benefits of community-based PL programs. By investigating the program experiences of M2I participants, a number of benefits were identified by participants throughout data collection. Specifically, these findings suggest that most participants experienced slight improvements in more than one PL domain. For example, once the M2I program was finished, several participants shared how they gained confidence in their own PA abilities and intend to remain physically active. Other participants discussed improving their physical skills (i.e., archery, wall climbing, & juggling), as well as learning more about PA benefits and future opportunities. These slight improvements are consistent with other PL programs documented in the literature (Nezondet et al., 2023; Warner et al., 2021; Wright et al., 2023). However, it should be emphasized that this data was collected at the time of the M2I program with a sample of only seven participants. It would be valuable to examine how these improvements are sustained over time using follow-up interviews with participants or questionnaires with parents.

5.3.1 Recognizing the social benefits associated with PL development

Unlike similar community programs in the PL field (Arbour-Nicitopoulos et al., 2018; Warner et al., 2021; Wright et al., 2023), this research sheds light on the M2I program's impact on participants' social well-being. As opposed to limiting the study's focus to PL development, adopting an open phenomenological approach allowed the primary researcher to obtain a wider range of data. For example, participants felt comfortable discussing program challenges and additional benefits beyond the scope of PL domains. Throughout the M2I program, most participants developed meaningful friendships with each other. In fact, some participants referenced the social element as their favourite part of the M2I program. An explanation for this could be the program's small group size (i.e., seven participants), which proved to be beneficial for youth with MHCs. However, it could also be attributed to the program's purposeful integration of unstructured play each session. The unstructured play opportunities encouraged youth to interact with each other through both physical activities and informal conversations. Similar to Warner et al.'s (2021) PL program, the M2I program leaders also played vital roles during these unstructured periods, including helping with supervision and equipment set-up, as well as participating in PA games alongside youth.

Despite there being no 'social domain' in the dominant International Physical Literacy Association (**IPLA**) definition, emerging research highlights its connection to PL development

(Belton et al., 2022; Cairney et al., 2019). To help inform the development of a consensus statement in Ireland, Belton et al. (2022) explored the PL understandings of 1,241 stakeholders (i.e., coaches, PHE teachers, PA researchers, etc.) from across the island. Findings from this study accentuate the social benefits associated with PL development, including gaining "social skills, relating to others, participating in society in a meaningful way, and becoming a better citizen" (Belton et al., 2022, p. 11). Concurrently, these scholars call for more attention and research brought to the social component of PL (Belton et al., 2022).

Taking into consideration Whitehead's (2010) conceptualization of the term, the social outcomes of PL development is unsurprising. According to Whitehead (2010), these benefits emerge from the fundamental nature of embodiment, which affords human beings the potential to interact with their environment and develop capabilities, such as movement control and awareness, self-confidence, and emotional competence. As a result, Whitehead (2010) argues that physically literate individuals are in a better position to express different emotions, communicate with others, and develop empathetic relationships. In light of the promising findings of the M2I program, as well as the extensive PL benefits described in Whitehead (2010), it is imperative that community programs remain accessible and continue to prioritize PL. Furthermore, given the limited applicability the current PL literature has for youth with MHDs (Fortnum et al., 2018), future PL interventions that target various populations are warranted. From a socio-ecological perspective, these interventions could help bolster the health and well-being of youth with MHCs and MHDs at a community level.

5.4 Activity sampling during the M2I program: Strengths and future considerations

As outlined in the recruitment poster (**Appendix A**) and detailed session schedule (**Appendix B**), the M2I program was characterized by the sampling of diverse physical activities each week. The purpose of activity sampling was to provide participants with exposure to a range of pursuits, in order for youth to identify with interests that may lead to sustained participation (Allan et al., 2017; Arbour-Nicitopoulos et al., 2018; Warner et al., 2021). Activity sampling has been successfully embedded within other PL programs (see Kwan et al., 2019; Warner et al., 2021). For a nine-session pilot program, it was also regarded by M2I program leaders as the most effective way to ensure inclusion of all backgrounds and abilities, as well as integrate essential community partners. Concurrently, from a theoretical perspective, activity sampling aligned well with PL for a number of reasons. First, it introduced youth to a range of movement skills that were transferable to other activities (Dudley et al., 2017). Second, it afforded youth opportunities to interact with varied PA environments (Whitehead, 2010). Lastly, the diverse activities allowed program leaders to address a broad range of benefits and opportunities pertaining to PA participation through discussions and handouts.

Overall, it was evident that most participants responded positively to the activity sampling. For example, consistent attendance and PA engagement levels were observed throughout the M2I program. In accordance with the findings of Arbour-Nicitopoulos et al. (2018), many M2I participants also reported high levels of program satisfaction. A key factor in this could be attributed to the program's sampling of diverse activities (see **Section 4.3.1**). More significantly, the selected activities were described as being different to what participants normally did, which typically consisted of traditional team sports (i.e., soccer, basketball, football, etc.). However, this is unsurprising, as a recent investigation of PHE programs in Atlantic Canada (New Brunswick, Newfoundland and Labrador, Nova Scotia, and Prince Edward Island) suggests that a majority of curricula content is dominated by traditional sport experiences (Randall et al., 2014).

In light of this, these findings lend support to Canadian scholars advocating for more balanced approaches to PHE content (Kilborn et al., 2016; Randall et al., 2014; Robinson & Randall, 2016). Consistent with Domville et al. (2019), evidence from the M2I program reveals that youth are interested in participating in diverse physical activities. Over the course of the M2I program, participants enjoyed engaging in a wide range of physical activities, including those that were entirely novel to the group, such as circus skills and capoeira. Therefore, it is critically important for children and youth receive ample opportunities to engage in various physical activities through PHE and community-based PA programs. Houser and Kriellaars (2023) identify key practices of a PL enriched curriculum that includes exposure to diverse movement opportunities (i.e., circus skills, swimming, parkour, dancing, etc.) extending beyond the traditional sport-centric approach. Similarly, Robinson et al. (2021) argue for the integration of more alternative environment activities into the PHE curricula, which refers to activities that occur outside of the gymnasium, such as hiking, kayaking, wall climbing, and ice skating.

Although youth valued the activity sampling component of the M2I program, there was one participant who identified a potential shortcoming. When discussing improvements in physical skills and movement patterns, Lauryn expressed that it was difficult to recognize any skill development participating in activities only once. Considering the M2I program's limited duration (i.e., nine sessions), participants were unable to practice their skills after the activity's respective session, which may have impacted their PL development. In a similar context, Kwan et al. (2019) evaluated the effectiveness of a 12-week PL program (one hour session per week) targeting first-year university students that implemented the sampling of nontraditional activities and novel movements on land, air, and water. By the end of the 12-week program, these researchers observed improvements in students' confidence, motivation, and knowledge (Kwan et al., 2019). However, interestingly enough, they also found no significant changes in motor competence (Kwan et al., 2019). Therefore, future PL programs introducing diverse physical activities and novel skills may want to consider offering more than one session per activity. While the M2I was merely a nine-week pilot program, participants could have benefited from additional sessions and longer engagement with the activities, specifically in the context of confidence and motor competence.

Furthermore, Lauryn's comment provides additional insight into the main purpose of activity sampling during the M2I program. Similar to Kwan et al. (2019), despite it being at the expense of skill development and specialization, the activity sampling approach was intended to expose participants to a wide range of physical activities within various settings. From a PL perspective, the objective was to afford youth opportunities to actively interact with different environments and carefully nurture their movement potential, in hopes that they continue PA participation outside of the M2I program (Whitehead, 2010). However, further research is needed to explore the longer-term effects of activity sampling on PL development, as its sustainability remains uncertain. For example, existing PL programs utilizing the activity sampling approach do not incorporate follow-up assessments weeks or months after program completion (see Kwan et al., 2019; Warner et al., 2021). Considering PL as a personal journey and lifelong asset (Whitehead, 2010), researchers are encouraged to consider the impact of a PL intervention across multiple time points.

It is worth noting that Arbour-Nicitopoulos et al. (2018) employed a case study describing the implementation of a multifaceted PL program, which included a movement skill development phase ('QuickStart') and an additional phase that connected participants to existing community-based PA programs ('Give it a Try'). With only 33% of children moving onto the

‘Give it a Try’ phase, findings from this case study suggest that an activity sampling phase may not translate well to participation in future community programs (Arbour-Nicitopoulos et al., 2018). While PA participation is not limited to enrollment in a community program, the results are nonetheless concerning. Arbour-Nicitopoulos et al. (2018) recommend a more formal process to facilitate the transition between the two phases, as well as greater support from program leaders. Moving forward, PL programs should prioritize collaboration with existing community programs (i.e., through vouchers, information handouts, guest speakers, etc.) and ensure that future PA opportunities are being consistently communicated to participants and their parents. Such measures will ensure appropriate attention is directed towards improvements related to PL’s cognitive domain.

5.5 Children’s lack of exposure to the PL term

All participants (7/7) began the M2I program unaware of what PL meant. Specifically, they were unable to describe the meaning in their own words and shared that they had never heard of the concept before. The burgeoning popularity of PL within the Canadian PHE sector has been well-documented in the literature (Houser & Kriellaars, 2023; Robinson et al., 2018; Tremblay et al., 2018). While there is no national PHE curriculum in Canada (Kilborn et al., 2016), PL development is recognized as an overarching goal across several of Canada’s provincial curricula (Houser et al., 2022). For example, ‘PL development’ is identified as a primary aim in the introduction of Nova Scotia’s PHE curriculum document (grades 1 to 9) (Nova Scotia Physical Education P-9 Guide, 2014). The concept is also defined and referenced in other subsequent sections of the document (Nova Scotia Physical Education P-9 Guide, 2014). Moreover, PL is defined in various documents from the Nova Scotia PA Framework Resource Page (2024), including *Why Outdoor Play Matters for Children (Recreation Nova Scotia)*, *Let’s Get Moving (Government of Canada)*, *Let’s Get Moving (Government of Nova Scotia)*, and

Welcoming and Engaging School Physical Education Opportunities for Girls (PHE Canada). Therefore, the fact that not one participant had heard of the term is somewhat alarming. Taking into account the cohort's age group (12 to 14), it was anticipated that participants would have at least been introduced to certain elements of the concept throughout their years involved in Nova Scotia's PHE curriculum.

Despite its increased prevalence within Canadian PHE settings, scholars have questioned the PL understandings of parents (Houser et al., 2022), as well as PHE teachers and specialists (Robinson et al., 2018; Stoddart & Humbert, 2017). For example, research conducted by Houser et al. (2022) revealed that 80% of Canadian parents (N=364) had never heard of the PL concept before. More notably, Robinson et al. (2018) concluded that lead PHE teachers within Canada (N=12) were largely unable to articulate the totality of the PL concept, with some participants completely misunderstanding its foundational principles. However, there is a paucity of literature examining the PL knowledge and understanding of Canadian children and youth. By incorporating a youth perspective, this research contributes a valuable dimension to the growing body of PL literature. Considering all participants reported never hearing of the term, these findings suggest that Nova Scotian youth are currently receiving a lack of exposure to the PL concept through PHE classes, as well as alternative avenues such as community and youth sport programs.

There are several possible explanations for participants' lack of PL exposure and knowledge. First, it may be due to the study's small sample size, as the M2I program consisted of only seven participants from similar regions (see **Table 1**). Certain participants may have also been unable to recall hearing or learning about the term. Further research exploring the youth perspective using larger samples and across various schools in the province is warranted.

Second, specific to PHE, teachers may not feel comfortable introducing and discussing a concept that they do not completely understand themselves. For example, Stoddart and Humbert (2017) report that many Canadian PHE teachers (generalists and specialists) do not fully comprehend the PL concept. In fact, nearly 60% of PHE teachers (N=106) defined PL solely in terms of its physical domain (i.e., developing physical competence and fundamental movement skills) (Stoddart & Humbert, 2017). While concerning, this finding is not entirely surprising, as new Canadian PHE teachers have expressed challenges embracing the PL concept due to an insufficient focus during teacher education and lack of a clear definition (Tristani & Fraser-Thomas, 2017). Echoing Tristani and Fraser-Thomas (2017), formal teacher education programs must ensure strong theoretical knowledge is being delivered around the PL concept. To avoid the oversimplification of the term, incoming PHE teachers must be well-versed in PL's philosophical underpinnings (Robinson et al., 2018). Moving forward, this will allow for more PHE teachers to recognize their role in nurturing students' movement potential and developing programs that are not only inclusive, enjoyable, and rich in experiences, but also foster intrinsic motivation, self-confidence, and self-responsibility.

Alternatively, it is possible that certain PHE teachers possess a comprehensive understanding of PL and use it to inform their PHE curriculum; however, they may choose not to explicitly introduce the concept to their students due to its complexity. Coates (2011) reveals that children may not fully comprehend the true purpose of PHE and its broader connection to PL. Instead, they perceive PHE as an opportunity to improve physical fitness (i.e., getting fit and losing weight) (Coates, 2011). Therefore, failing to introduce and describe key elements of the PL concept would be a disservice to the students and their PHE experience. While I am not arguing for PHE teachers to go into depth about PL's philosophical foundations (i.e., monism, existentialism, and phenomenology), it is imperative that students learn about the concept, its various building blocks, its connection to well-being, and how it will guide the PHE curriculum. More importantly, students should be made aware that PL represents a personalized journey and a capability that all can develop and experience the benefits. For children and youth considered non-sporty and/or experiencing barriers to PA, this reconceptualization of movement may help shift their perceptions and future behaviours.

As discussed in **Section 3.5**, the SEM was employed as a 'standpoint' to help understand the topic from a social-ecological perspective (Larsen & Adu, 2022). The SEM conceptualizes the environment as multifaceted, including physical, social, and cultural dimensions, and encompassing various levels from individuals, and small groups to broader organizations, communities, and policies (Lee & Park, 2021; Stokols, 1992, 1996). Accordingly, this chapter outlines the influence of various ecological factors on the PL and general 'healthfulness' (i.e., physical health, mental and emotional well-being and social cohesion) (Stokols, 1992, 1996) of youth aged 12 to 14 with MHCs. For example, the findings recognize the critical roles of parents, coaches, and PHE teachers in facilitating childrens' PA participation as supporters (encouragement to participate, fostering self-confidence, role modeling) and providers (i.e., transportation, cost of activity, equipment). This study highlights the value of community PL programs that are diverse and accessible, as well as PHE curricula that are balanced and promote a wide range of experiences.

In addition to environmental factors, this chapter draws attention to the development of PA knowledge, attitudes, and skills at an individual level. For example, it emphasizes the importance of educating children and youth about PL, the benefits and challenges of PA, and future PA opportunities. Lastly, this research reveals the interplay between environmental conditions and individual well-being, as both the physical (i.e., the Decadium, multiple locations, various equipment) and social (i.e., small group size, high staff-to-youth ratio, ample opportunities for socialization) dimensions of the M2I program helped foster participants' positive experiences.

5.6 Limitations of the research

While focus groups have been recognized as an appealing tool for data collection amongst youth, concerns have been raised with the method (Bokhorst-Heng & Marshall, 2019). For example, Bokhorst-Heng and Marshall (2019) reveal that youth responses are often limited to a few words and are more susceptible to "socially acceptable responding" (p. 151). As a result, instead of a collaborative experience, the focus group becomes "no more than individual didactic interviews in a group setting" (Bokhorst-Heng & Marshall, 2019, p. 151). Tachine et al. (2016) also discuss the possibilities of youth that are introverted remaining silent and other youth not feeling comfortable expressing alternative opinions in the group. While the primary researcher ensured that all participants had an opportunity to share their thoughts and feelings during the focus group, there were a few participants who expanded more on their responses. For example, there was one participant who chose to pass on a majority of the questions and was consequently, limited to a few words. Similarly, given the sample's age range (12 to 14), the quality and quantity of participation journal responses also varied based on writing skills. For example, there were a few participants who did not elaborate on the responses to their journal questions beyond 'yes and no.'

Moreover, due to the time constraints of my master's research, the recruitment phase for the M2I program lasted only for approximately three weeks. This condensed time frame was a contributing factor to why M2I program leaders decided to expand recruitment avenues and ultimately target youth with MHCs, as opposed to youth exclusively with MHDs. In a similar vein, as this research study was conducted during the first M2I pilot program, data collection was limited to the program's nine PA sessions (i.e., 18 hours). From a phenomenological perspective, additional M2I sessions would have allowed for increased engagement with participants and numerous focus groups. Lastly, the results of this research study were limited to the program experiences of seven youth with MHCs from Halifax, Nova Scotia. Given the relatively small sample size (N=7), it is difficult to generalize these findings to youth from other regions in Canada and/or who may be experiencing other symptoms or complications related to their mental health.

5.7 Practical implications and future directions

While this research was limited to the M2I program experiences of seven participants with MHCs, it offers valuable insights relevant to community and PHE programming, as well as future research inquiry. From a PA programming standpoint, these findings highlight the importance of a positive and inclusive environment, as well as the integration of diverse physical activities. Both of these factors contributed to participants' positive experiences during the M2I program. Specifically, the M2I program was intentionally limited to a small group to facilitate social interaction and relationship building (Arbour-Nicitopoulos et al., 2018). Each M2I session integrated an opportunity for snack time and free play to promote further social engagement. As opposed to the traditional school gymnasium, the M2I program was held in a welcoming and community-based facility (i.e., Decathlon's Decadium) and included a high staff-to-youth ratio with well-trained program leaders from interdisciplinary backgrounds (Warner et al., 2021).

Recognizing that participants were "more than just bodies to be trained," the Decadium was established as a safe space for participants to share their feelings and engage in numerous discussions concerning PA preferences, challenges, benefits, and opportunities (Haydn-Davies, 2010, p. 166). For example, each M2I session included an introductory check-in and concluding debrief. Concurrently, participants were introduced to the PL term, as the primary researcher described key aspects of the concept using a poster and handout. Moving forward, to improve youth awareness and knowledge of PL, it is recommended that PHE teachers and other PL program leaders make deliberate efforts to introduce and explain the concept.

In terms of content area, the M2I program featured a wide range of physical activities that included circus skills, capoeira, wall climbing, yoga, badminton, archery, and a nature walk. Most participants reported enjoying the activity sampling, highlighting its novelty and uniqueness compared to other traditional PA programs that emphasize 'ball sports.' These findings lend support to Canadian researchers calling for more balanced content within PHE curricula (Kilborn et al., 2016; Randall et al., 2014; Robinson & Randall, 2016). Murdoch and Whitehead (2010) stress that childrens PL development will depend upon their experience of a "broad and balanced range" of movement patterns, such as adventure, expressive, athletic, competitive, fitness and health, and interactional forms (p. 180). Therefore, practitioners using PL development as a curriculum goal must be prepared to facilitate structured physical activities that align with these varying movement forms (Murdoch & Whitehead, 2010).

Despite the M2I program's promising results across nine sessions, participants could have benefitted from prolonged engagement with certain activities (i.e., circus skills, capoeira, and wall climbing). Regarding PL program development, Whitehead (2010) argues that in addition to a broad range of PA experiences, individuals require sufficient time to interact within these environments. Future PL programs utilizing an activity sampling approach may want to consider offering more than one session per activity, specifically when introducing diverse and potentially novel movements.

Guided by a PL framework, the M2I program offered two sessions outside of the Decadium to promote knowledge of local PA opportunities and engagement across various environments. For example, one session was held at a community recreation center and included a healthy baking activity, alongside time for outdoor play (i.e., playground climbing and tag). Another session was held at Shubie Park, an urban park featuring historic canals and diverse walking trails. During this session, participants completed a nature walk, which was followed by a debrief around a campfire. Overall, both sessions incorporated opportunities for outdoor PA and team building. PL practitioners should consider prioritizing these elements during future program development, as they ensure the promotion of PA within different contexts (i.e., physical and social) (Murdoch & Whitehead, 2010).

Furthermore, scholars have identified parents as significant players in their childrens' PL development (Houser et al., 2022; Simpson et al., 2024; Whitehead, 2010). Consequently, recent PL interventions targeting children and youth have purposefully incorporated a parental component (Nezondet et al., 2023; Wright et al., 2023). For example, Wright et al. (2023) implemented a series of educational workshops with parents of participants that focused on developing their PL knowledge and offering practical strategies to support their children's PL journey. While the M2I program was unable to organize a 'family session,' future PL programs are encouraged to involve parents throughout various phases of the program.

From a research perspective, these findings provide new insights into the growing body of PL literature. To the best of my knowledge, this is the first qualitative study to investigate a PL intervention targeting Canadian youth 12 to 14 with MHCs. Recognizing PL as a lifelong asset and capability that is attainable to all (Whitehead, 2010), it is critically important that future PL research and interventions prioritize a broad range of perspectives. Due to the scope of the study, the M2I program focused on youth with MHCs (i.e., experiencing challenges to mental health). However, additional PL research on children and youth with MHDs (i.e., formal diagnosis, accessing mental health services, etc.) is warranted.

Furthermore, it is important to note that these findings represent the first pilot trial of the M2I program. Moving forward, in hopes of delivering more consistent and improved versions of the M2I program, it would be interesting to examine the impact of a longer intervention (i.e., over 12 weeks). Based off these findings, future M2I programs would also consider slightly more participants (i.e., approximately 10 to 12), as well as a follow-up assessment with youth and/or their parents. Lastly, this research sheds light on the PL awareness and knowledge (or lack thereof) of Nova Scotian youth. While the study's sample size was small (N=7), it was surprising to learn that none of the participants had even heard of the term, especially considering its prominence within the NS PHE curriculum (Nova Scotia Physical Education P-9 Guide, 2014). Further exploration is needed using larger samples across various schools in the province.

5.8 Conclusion

To conclude, this chapter provides a comprehensive analysis of the research study's findings, which were outlined by the following three themes in the previous chapter: motivating factors influencing youth participation in PA programs, fostering positive youth experiences through PA, and perceived benefits of the M2I program. These findings are elaborated on using pertinent literature in the field. In addition to identifying parents as key influencers to their children's PL development, Chapter 5 examines the wide range of youth motivators associated with PA participation, such as learning new skills, having fun, and socializing. Moreover, it highlights the importance of integrating diverse movement forms and physical activities into the PHE curricula, specifically those that extend beyond traditional team sports. Lastly, this chapter sheds light on the lack of awareness and knowledge that Nova Scotian youth have regarding the PL concept, as well as possible explanations for this concern.

Chapter 6: Thesis Conclusion

6.1 Summary of research project

PL has been identified as the foundation to lifelong PA and a capability that is available to each individual no matter their age or physical endowment (Whitehead, 2010). Considering the concept's multifaceted and inclusive nature, it is unsurprising that PL promotion has gained widespread popularity across various sectors in Canada, including sport, recreation, and PHE (Borduas et al., 2018; Tremblay et al., 2018). For example, PL development is recognized as an overarching goal within several provincial PHE curricula (Houser et al., 2022), while community PL interventions have become increasingly prevalent (see Arbour-Nicitopoulos et al., 2018; Graham et al., 2024; Warner et al., 2021).

Despite notable evidence linking PL to increased PA engagement, positive self-esteem, resilience, as well enhanced confidence and motivation for PA (Ma et al., 2021; Melby et al., 2022; Warner et al., 2020; Whitehead, 2010), many youth experiencing MHDs have been shown to have lower PL levels than their peers (Fortnum et al., 2018). Concurrently, existing PL literature has focused primarily on typically developing populations and has limited applicability for youth with MHCs and MHDS (Fortnum et al., 2018). Chapter 2 offers additional support to this finding, revealing that few PL interventions have targeted Canadian youth with MHCs or MHDs. Therefore, the purpose of this phenomenological study was to explore the experiences of youth with MHCs participating in the M2I program, a nine-session community-based PL program based in Halifax, Nova Scotia. To recap, the overarching research question for this study was: *What are the lived experiences of Nova Scotian youth with MHCs participating in a PL program?* In order to answer the research question, I examined the following sub-questions: *What motivated the youth to participate in the program? How do participants describe their* *experiences of confidence and motivation from participating in the program? What does PL mean to participants before and after their lived experiences in the program?*

Whitehead (2010) conceptualizes PL as a personal journey, where progress is unique to each individual, as opposed to attaining a specific level of physical competence. Taking this into account, Whitehead (2010) further argues that there is no place for comparisons with others, especially for those facing additional barriers to PA participation. Therefore, utilizing qualitative research was deemed most appropriate in capturing participants' unique experiences of the M2I program. Despite the limited qualitative research in the PL field (Edwards et al., 2018; Liu & Chen, 2021), implementing a phenomenological approach allowed the primary researcher to gain comprehensive insights through various data collection methods, including observations, participation journals, a focus group, and photo-elicitation. To my knowledge, this was the first qualitative study to investigate a PL intervention targeting Canadian youth 12 to 14 with MHCs.

Research participants were the same individuals recruited for the M2I program and consisted of seven Nova Scotian youth (aged 12 to 14) experiencing MHCs (N=7). These MHCs included challenges such as anxiety, depression, and low self-esteem, as well as socio-emotional issues such as difficulties in developing friendships and social exclusion. Registration to the M2I program required parents to fill out an online interest form, which contained questions related to the program's inclusion criteria. Following the registration process, parents were then contacted by the primary researcher to discuss the purpose and details of research involvement: all confirmed members of the M2I program agreed to participate in the research component (7/7). The M2I program officially took place from February 9th, 2024 to April 19th, 2024 for a total of nine two-hour PA sessions. Led by qualified program leaders and community instructors, the M2I program consisted of sampling diverse physical activities each week, including circus skills, capoeira, wall climbing, yoga, and badminton. Guided by a PL framework, the M2I program also integrated community field trips and discussions pertaining to PA benefits, challenges, and future opportunities, as well as healthy living.

At the end of the M2I program, data was analysed by the primary researcher using Colaizzi's (1978) seven-step phenomenological method, which helped generate the project's final three themes: motivating factors influencing youth participation in PA programs, fostering positive youth experiences through PA, and perceived benefits of the M2I program. To summarize, participants were motivated to join the M2I program for a myriad of reasons, including to be active, learn different skills, and meet new people. Interestingly, all participants mentioned the influence of their parents in either registering them or motivating them to sustain program attendance. From a socio-ecological perspective, this finding sheds light on the role parents have as significant players in their child's PL development (Whitehead, 2010).

Overall, the M2I program was perceived by participants as both enjoyable and engaging. Attendance and engagement levels remained high throughout the entirety of the M2I program. Results indicate that this can be attributed to the program's integration of diverse and potentially novel physical activities, as well as its supportive and inclusive PA environment. Moving forward, it is recommended that PHE teachers and other PA practitioners facilitate diverse physical activities that align with varying movement forms (Murdoch & Whitehead, 2010). Additionally, they must ensure they are establishing PA environments where individuals can learn and progress (Vickerman & DePauw, 2010). Concurrently, these findings suggest that by the end of the M2I program, most participants experienced improvements in one or more PL domain. While this may be promising, future PL research with this population should involve larger sample sizes and follow-up assessments.

Lastly, given PL's burgeoning popularity within the Canadian PHE curricula, it was surprising to learn that not one M2I participant had heard of the concept before. **Section 5.5** elaborates on possible explanations for participants' lack of PL awareness, which includes the small sample size, potential recall concerns, and the limited understanding by PHE teachers. Whitehead (2010) reminds readers that the PL concept offers support and value to the PHE field. It allows PHE practitioners to articulate clear goals and helps inform the development of inclusive PA programs that prioritize individual progress, as well as diverse movements, activities, and opportunities (Whitehead, 2010). Concurrently, recognizing that the development of PL is in each individual's best interest (Whitehead, 2010), it is also imperative for students and/or participants learn more about this capability. For example, students should be informed about the broad scope of PA opportunities and begin challenging preconceived notions that PA may 'not be for them' or is reserved for the physically talented. Moving forward, gaining this PL knowledge may encourage individuals to take responsibility for their own PA participation and lifelong PL journey.

6.2 Final thoughts

After experiencing several delays during the initial planning stages, it was an immense privilege to help lead the first M2I pilot program and support the program's early development. Whitehead (2010) states that all individuals have the potential to develop PL and reap its wide-ranging benefits. As the primary researcher and one of four program leaders, I had the opportunity to observe some of these benefits firsthand. Here are a few moments that resonate with me: the openness and curiosity that participants brought to the novel activities, specifically circus skills and capoeira; participants laughing together and chasing each other in the outdoor playground; and participants exchanging numbers during the concluding campfire.

While the pilot program was only nine sessions, the combination of these findings and supplemental parental feedback offer promising opportunities for the M2I program moving forward. Ultimately, I can only hope that this thesis encourages the development of future PL programs that are accessible and target various populations, such as youth with MHDs. To conclude, I would like to dedicate this thesis to the seven participants of the M2I program. Thank you for reminding me why I took on this project in the first place.

References

Aartun, I., Walseth, K., Standal, O. F., & Kirk, D. (2022). Pedagogies of embodiment in physical education – a literature review. *Sport, Education, and Society, 27*(1), 1-13.

Allan, V., Turnnidge, J., & Cote, J. (2017). Evaluating approaches to physical literacy through the lens of positive youth development. *Quest, 69*(4), 515-530.

Allen-Collinson, J. (2009). Sporting embodiment: sports studies and the (continuing) promise of phenomenology. *Qualitative Research in Sport and Exercise, 1*(3), 279-296.

Allen-Collinson, J., Leledaki, L. (2015). Sensing the outdoors: a visual and haptic phenomenology of outdoor exercise embodiment. *Leisure Studies 34*(4), 457-470.

Arbour-Nicitopoulos, K. P., Boross-Harmer, A., Leo, J., Allison, A., Bremner, R., Taverna, F., Sora, D., & Wright, F. V. (2018). Igniting Fitness Possibilities: a case study of an inclusive community-based physical literacy program for children and youth. *Leisure/Loisir, 42*(1), 69-92.

Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., Sandford, R., & BERA Physical Education and Sport Pedagogy Special Interest Group. (2009). The educational benefits claimed for physical education and school sport: an academic review. *Research Papers in Education, 24*(1), 1-27.

Barber, W. (2018). Inclusive and accessible physical education: rethinking ability and disability in pre-service teacher education. *Sport, Education, and Society, 23*(6), 520-532.

Basset-Gunter, R., Rhodes, R., Sweet, S., Tristani, L., & Soltani, Y. (2017). Parent support for children's physical activity: a qualitative investigation of barriers and strategies. *Research Quarterly for Exercise and Sport, 88*(3), 282-292.

Belair, M., Kohen, D. E., Kingsbury, M., & Colman, I. (2018). Relationship between leisure time physical activity, sedentary behavior and symptoms of depression and anxiety: evidence from a population-based sample of Canadian adolescents. *BMJ Open, 8*, 1-8.

Belanger, M., Humbert, L., Vatanparast, H., Ward, S., Muhajarine, N., Chow, A. F., Engler-Stringer, R., Donovan, D., Carrier, N., & Leis, A. (2016). A multilevel intervention to increase physical activity and improve healthy eating and physical literacy among young children (ages 3-5) attending early childcare centres: the Healthy Start-Départ Santé cluster randomised controlled trial study protocol. *BMC Public Health, 16*(313), 1-10.

Belton, S., Connolly, S., Peers, C., Goss, H., Murphy, M., Murtagh, E., Kavanagh, J., Corr, M., Ferguson, K., & O'Brien, W. (2022). Are all domains created equal? An exploration of stakeholder views on the concept of physical literacy. *BMC Public Health, 22*(501), 1-15.

Beni, S., Fletcher, T., & Ni Chroinin, D. (2017). Meaningful experiences in physical education and youth sport: a review of the literature. *Quest, 69*(3), 291-312.

Berger, R. (2015). Now I see it, now I don't: researcher's position and reflexivity in qualitative research. *Qualitative Research, 15*(2), 219–234.

Blain, D. O., Curran, T., & Standage, M. (2020). Psychological and behavioral correlates of early adolescents' physical literacy. *Journal of Teaching in Physical Education, 40*(1), 157-165.

Bokhorst-Heng, W., & Marshall, K. K. (2019). Informing research (practices) through pedagogical theory: focus groups with adolescents, *International Journal of Research & Method in Education, 42*(2), 148-162.

Bopp, T., Stellefson, M., Weatherall, B., & Spratt, S. (2019). Promoting physical literacy for disadvantaged youth living with chronic disease. *American Journal of Health Education, 50*(3), 153-158.

Borduas, C., Cameron, E., June Yi, K., Kilborn, M., McGowan, E., Buote, R., Loucks-Atkinson, A., Sullivan, A., Patey, M., & Loeffler, T. A. (2018). Exploring university-based physical literacy programming: perspectives of service providers. *PHEnex Journal, 9*(2), 1-11.

Bourke, B. (2014). Positionality: reflecting on the research process. *The Qualitative Report, 19*(33), 1-9.

Bracco, E., Lodewyk, K., & Morrison, H. (2019). A case study of disengaged adolescent girls' experiences with teaching games for understanding in physical education. *Curriculum Studies in Health and Physical Education, 10*(3), 207-225.

Bremer, E., Graham, J. D., & Cairney, J. (2020). Outcomes and feasibility of a 12-week physical literacy intervention for children in an afterschool program. *International Journal of Environmental Research and Public Health, 17*(9), 3129.

Brian, A., De Meester, A., Klavina, A., Irwin M. J., Taunton, S., Pennell, A., & Lieberman, L. J. (2019). Exploring children/adolescents with visual impairments' physical literacy: a preliminary investigation of autonomous motivation. *Journal of Teaching in Physical Education, 38*(2), 155-161.

Brockman, R., Jago, R., & Fox, K. R. (2011). Children's active play: self-reported motivators, barriers and facilitators. *BMC Public Health, 11*(461), 1-7.

Brymer, E., Cuddihy, T. F., & Sharma-Brymer, V. (2010). The role of nature-based experiences in the development and maintenance of wellness. *Asia-Pacific Journal of Health, Sport, and Physical Education, 1*(2), 21-27.

Cairney, J., Dudley, D., Kwan, M., Bulten, R., & Kriellaars, D. (2019). Physical literacy, physical activity, and health: toward an evidence-informed conceptual model. *Sports Medicine, 49*, 371-383.

Campelo, A. M., & Katz, L. (2020). Older adults' perceptions of the usefulness of technologies for engaging in physical activity: using focus groups to explore physical literacy. *International Journal of Environmental Research and Public Health, 17*(4), 1-14.

Carel, H. (2011). Phenomenology and its application in medicine. *Theoretical Medicine and Bioethics*, *32*(1), 33-46.

Carl, J., Barrat, J., Wanner, P., Topfer, C., Cairney, J., & Pfeifer, K. (2022). The effectiveness of physical literacy interventions: a systematic review with meta-analysis. *Sports Medicine, 52*, 2965-2999.

Chen, A. (2020). A clash of fundamental assumptions: can/should we measure physical literacy? *Journal of Sport and Health Science, 9*(2), 149-151.

Chilisa, B., & Tsheko, G. N. (2014). Mixed methods in Indigenous research: building relationships for sustainable intervention outcomes. *Journal of Mixed Methods Research, 8*(3), 222–233.

Clark, M. I., Spence, J. C., & Holt, N. L. (2011). In the shoes of young adolescent girls: understanding physical activity experiences through interpretive description. *Qualitative Research in Sport, Exercise, and Health, 3*(2), 193-210.

Clegg, J. L., & Burtryn, T. M. (2012). An existential phenomenological examination of parkour and free running. *Qualitative Research in Sport, Exercise, and Health, 4*(3), 320-340.

Clutterbuck, G. L., Auld, M. L., & Johnston, L. M. (2022). Sports Stars: a practitioner-led, peer-group sports intervention for ambulant, school-aged children with cerebral palsy. Parent and physiotherapist perspectives. *Disability and Rehabilitation, 44*(6), 956-965.

Coates, J. (2011). Physically fit or physically literate? How children with special educational needs understand physical education. *European Physical Education Review, 17*(2), 167–181.

Colley, R. C., Garriguet, D., Janssen, I., Craigh, C. L., Clarke, J., & Tremblay, M. S. (2011). Physical activity of Canadian children and youth: accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. *Health Reports (Statistics Canada), 22*(1), 1-9.

Cornish, K., Fox, G., Fyfe, T., Koopmans, E., Pousette, A., & Pelletier, C. A. (2020). Understanding physical literacy in the context of health: a rapid scoping review. *BMC Public Health, 20*(1569), 1-19.

Costantino, T. (2008). Constructivism. In Given, M. (Ed), *The sage encyclopedia of qualitative research methods*. (pp. 116-121). Thousand Oaks, CA: Sage.

Costello, E. J. (2016). Early detection and prevention of mental health problems: developmental epidemiology and systems of support. *Journal of Clinical Child & Adolescent Psychology, 45*(6), 710-717.

Crane, S., & Broome, M. E. (2017). Understanding ethical issues of research participation from the perspective of participating children and adolescents: a systematic review. *Worldviews on Evidence-Based Nursing, 14*(3), 200–209.

Creswell, J., & Poth, C. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Thousand Oaks, CA: Sage.

Crossley, N. (2001). The phenomenological habitus and its construction. *Theory and Society, 30*(10), 81-120.

Crotty, M. (1998). *The foundations of social research*. Sage Publishing.

Dashper, K., & Brymer, E. (2019). An ecological-phenomenological perspective on multispecies leisure and the horse-human relationship in events. *Leisure Studies, 38*(3), 394-407.

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 Educación Física y el Deporte, 5*(5), 38-45.

Denford, S., Hill, D. M., Mackintosh, K. A., McNarry, M. A., Barker, A. R., Williams, C. A., & A Strategic Research Centre of the UK Cystic Fibrosis Trust. (2019). Using photo-elicitation to explore perceptions of physical activity among young people with cystic fibrosis. *BMC Pulmonary Medicine, 19*(220), 1-13.

Domville, M., Watson, P. M., Richardson, D., & Graves, L. E. F. (2019). Children's perceptions of factors that influence PE enjoyment: a qualitative investigation. *Physical Education and Sport Pedagogy, 24*(3), 207-219.

Drisko, J. W. (2013). Constructivist Research in Social Work. In A.E. Fortune, W. J. Reid & R.L Miller Jr. (Eds), *Qualitative Research in Social Work (2nd Edition)* (pp. 81-106). Columbia University Press.

Dudley, D., Cairney, J., Wainwright, N., Kriellaars, D., & Mitchell, D. (2017). Critical considerations for physical literacy policy in public health, recreation, sport, and education agencies. *Quest,* 1-17.

Dudley, D., Kriellaars, D., & Cairney, J. (2016). Physical literacy assessment and its potential for identification and treatment of children with neuro-developmental behavioral intellectual disorders. *Current Developmental Disorders Reports, 3*, 195-199.

Duffey, K., Barbosa, A., Whiting, S., Mendes, R., Aguirre, I. Y., Tcymbal, A., Abu-Omar, K., Gelius, P., & Breda, J. (2021). Barriers and facilitators of physical activity participation in adolescent girls: a systematic review of systematic reviews. *Frontiers in Public Health, 9*, 1-14.

Dugas, E. (2016). *Leveling the playing field: Assessing physical literacy in children and youth with physical disabilities*. (Unpublished master's dissertation). Brock University, Ontario, Canada.

Durden-Myers, E. J., Meloche, E. S., & Dhillon, K. K. (2020). The embodied nature of physical literacy: interconnectedness of lived experience and meaning. *Journal of Physical Education, Recreation, & Dance, 91*(3), 8-16.

Edwards, L. C., Bryant, A. S., Keegan, R. J., Morgan, K., & Jones, A. M. (2017). Definitions, foundations, and associations of physical literacy: a systematic review. *Sports Medicine, 47*, 113-126.

Edwards, L. C., Bryant, A. S., Keegan, R. J., Morgan, K., Cooper, S. M., & Jones, A. M. (2018). 'Measuring' physical literacy and related constructs: a systematic review of empirical findings. *Sports Medicine, 48*, 659-682.

Ekornås, B., Lundervold, T., Tjus, T., & Heimann, M. (2010). Anxiety disorders in 8-11-year-old children: motor skill performance and self-perception of competence. *Scandinavian Journal of Psychology, 51*(3), 271–277.

Evans, A. B., & Allen-Collinson, J. (2014). From 'just a swimmer' to a 'swimmer mother': women's embodied experiences of recreational aquatic activity with pre-school children. *Leisure Studies, 35*(2), 141-156.

Eveland-Sayers, B. M., Dotterweich, A. R., Chroust, A. J., Daugherty, A. D., & Boynewicz, K. L. (2022). Relationships between BMI and self-perception of adequacy in and enjoyment of physical activity in youth following a physical literacy intervention. *The Sport Journal*, 1-13.

Farias, C., Wallhead, T., & Mesquita, I. (2020). "The project changed my life": sport education's transformative potential on student physical literacy. *Research Quarterly for Exercise and Sport*, *91*(2), 263-278.

Farmer, O., Cahill, K., & O'Brien, W. (2020). Gaelic4Girls—the effectiveness of a 10-week multicomponent community sports-based physical activity intervention for 8 to 12-year-old girls. *International Journal of Environmental Research and Public Health, 17*(18), 6928.

Farris, M. S., MacQueen, G., Goldstein, B. I., Wang, J., Kennedy, S. H., Bray, S., Lebel, C., & Addington, J. (2019). Treatment history of youth at-risk for serious mental illness. *The Canadian Journal of Psychiatry, 64*(2), 145-154.

Field, S. C., Lauzon, L. L., & Meldrum, J. T. (2016). A phenomenology of outdoor education leader experiences. *Journal of Experiential Learning, 39*, 31-44.

Fourtnum, K., Furzer, B., Reid, S., Jackson, B., & Elliot, C. (2018). The physical literacy of children with behavioral and emotional mental health disorders: a scoping review. *Mental Health and Physical Activity, 15*, 95-131.

Garriguet, D., & Colley, R. C. (2014). A comparison of self-reported leisure-time physical activity and measured moderate-to-vigorous physical activity in adolescents and adults. *Health Reports (Statistics Canada), 25*(7), 3-11.

Garriguet, D., Colley, R., & Bushnik, T. (2017). Parent-child association in physical activity and sedentary behaviour. *Health Reports (Statistics Canada), 28*(6), 3-11.

Gibson, S. K., & Hanes, L. A. (2003). The contribution of phenomenology to HRD research. *Human Resource Development Review, 2*(2), 181-205.

Gillham, B. (2000). *Case study research methods*. London and New York: Continuum.

Glaw, X., Inder, K., Kable, A., & Hazelton, M. (2017). Visual methodologies in qualitative research: autophotography and photo elicitation applied to mental health research. *International Journal of Qualitative Methods, 16*, 1-8.

Goss, H. R., Shearer, C., Knowles, Z. R., Boddy, L. M., Durden-Myers, E. J., & Foweather, L. (2022). Stakeholder perceptions of physical literacy assessment in primary school children. *Physical Education and Sport Pedagogy, 27*(5), 515-530.

Graham, J. D., Babij, S., Bedard, C., Bremer, E., Powell, A., Arbour-Nicitopoulos, K. P., Kwan, M. Y. W., & Cairney, J. (2024). An evaluation of the Sharing Dance public school program on physical literacy. *Journal of Dance Medicine & Science*, 1-9.

Ha, A. S., Lonsdale, C., Luban, D. R, Ng, F. F., & Ng, J. Y. Y. (2021). Improving children's fundamental movement skills through a family-based physical activity program: results from the "Active 1 + FUN" randomized controlled trial. *International Journal of Behavioral Nutrition and Physical Activity, 18*(99), 1-12.

Haggis, C., Sims-Gould, J., Winters, M., Gutteridge, K., & McKay, H. (2013). Sustained impact of community-based physical activity interventions: key elements for success. *BMC Public Health, 13*, 892–899.

Ham, S. A., Kruger, J., & Tudor-Locke, C. (2009). Participation by US adults in sports, exercise, and recreational physical activities. *Journal of Physical Activity and Health, 6*(1), 6-14.

Harvey, S., & Pill, S. (2019). Exploring physical education teachers 'everyday understandings' of physical literacy. *Sport, Education, and Society, 24*(8), 841-854.

Hassani, F., Sheikh, M., & Shahrbanian, S. (2022). The physical literacy and children with autism. *Early Child Development and Care, 192*(3), 470-480.

Haughton, J., Ayala, G. X., Burke, K. H., Elder, J. P., Montanez, J., & Arredondo, E. M. (2015). Community health workers promoting physical activity targeting multiple levels of the social ecological model. *The Journal of Ambulatory Care Management, 38*(4), 309-320.

Haydn-Davies, D. (2010). *Physical literacy and learning and teaching approaches* (M. Whitehead, Ed.). Routledge.

Herman, K. C., Reinke, W. M., Thompson, A. M., Hawley, K. M., Wallis, K., Stormont, M., & Peters, C. (2021). A public health approach to reducing the societal prevalence and burden of youth mental health problems: introduction to the special issue. *School Psychology Review, 50*(1), 8-16.

Hesketh, K. R., Lakshman, R., & van Sluijs, E. M. F. (2017). Barriers and facilitators to young children's physical activity and sedentary behaviour: a systematic review and synthesis of qualitative literature. *Obesity Reviews, 18*, 987-1017.

Hickingbotham, M. R., Wong, C. J., & Bowling, A. B. (2021). Barriers and facilitators to physical education, sport, and physical activity program participation among children and adolescents with psychiatric disorders: a systematic review. *Translational Behavioral Medicine, 11*, 1739-1750.

Higgs, C. (2010). Physical literacy: two approaches, one concept. *Physical and Health Education Journal, 76*, 6-10.

Hill, E., Pratt, M., Kanji, Z., & Bartoli, A. J. (2017). Motor and coordination difficulties in children with emotional and behavioral difficulties. *Emotional & Behavioural Difficulties, 22*(4), 293–302.

Holmes, A. G. D. (2020). Researcher positionality - a consideration of its influence and place in qualitative research - a new researcher guide. *Shanlax International Journal of Education, 8*(4), 1-10.

Hopkins, R. M., Regehr, G., & Pratt, D. D. (2017). A framework for negotiating positionality in phenomenological research. *Medical Teacher, 39*(1), 20-25.

Houser, N. E., Humbert, L., & Sulz, L. D. (2022). Parents and physical literacy: knowledge, perceptions, and responsibilities. *PHEnex Journal, 13*(1), 1-15.

Houser, N., & Kriellaars, D. (2023). "Where was this when I was in physical education?" Physical literacy enriched pedagogy in a quality physical education context. *Frontiers in Sports and Active Living. 5*, 1-11.

Howie, E. K., Daniels, B. T., & Guagliano, J. M. (2018). Promoting physical activity through youth sports programs: it's social. *American Journal of Lifestyle Medicine, 14*(1), 78-88.

Hyndman, B., & Pill, S. (2018). What's in a concept? A Leximancer text mining analysis of physical literacy across the international. *European Physical Education Review, 24*(3), 292-313.

Jefferies, P., Ungar, M., Aubertin, P., & Kriellaars, D. (2019). Physical literacy and resilience in children and youth. *Frontiers in Public Health, 7,* 1-7.

Johnstone, A., Hughes, A. R., Janssen, X., & Reilly, J. J. (2017). Pragmatic evaluation of the Go2Play Active Play intervention on physical activity and fundamental movement skills in children. *Preventative Medicine Reports, 7*, 58-63.

June Yi, K., Cameron, E., Patey, M., Loucks-Atkinson, A., Loeffler, T. A., McGowan, E., Sullivan, A. M., Borduas, C., & Buote, R. (2018). University-based physical literacy programming for children: Canadian community stakeholders' recommendations. *Health Promotion International, 34*, 992–1001.

Kawulich, B. B. (2005). Participant observation as a data collection method. *Qualitative Social Research, 6*(2), 1-28.

Kentel, J. A., & Dobson, T. M. (2007). Beyond myopic visions of education: Revisiting movement literacy. *Physical Education and Sport Pedagogy, 12*(2), 145-162.

Kilborn, M. (2016). *A curriculum of wellness: Reconceptualizing physical education*. New York, NY: Peter Lang Publishing.

Kilborn, M., Lorusso, J., & Francis, N. (2016). An analysis of Canadian physical education curricula. *European Physical Education Review, 22*, 23-46.

Kirk, D. (2012). Physical education futures: Can we reform physical education in the early 21st century? *Ejournal de la recherche sur l'intervention en education physique et sport, 27*, 1-10.

Kirk, S. (2007). Methodological and ethical issues in conducting qualitative research with children and young people: a literature review. *International Journal of Nursing Studies, 44*, 1250–1260.

Kirova, A., & Emme, M. (2006). Using photography as a means of phenomenological seeing: "doing phenomenology" with immigrant children. *Indo-Pacific Journal of Phenomenology, 6*, 1-12.

Kupers, W. (2015). *Phenomenology of the embodied organization: The contribution of Merleau-Ponty for organizational studies and practice*. Palgrave Macmillan.

Kwan, M. Y. W., Graham, J. D., Bedard, C., Bremer, E., Healey, C., & Cairney, J. (2019). Examining the effectiveness of a pilot physical literacy–based intervention targeting first-year university students: the PLUS program. *SAGE Open, 9*(2), 1-9.

Langille, J. D., & Rodgers, W. M. (2010). Exploring the influence of a social ecological model on school-based physical activity. *Health Education & Behavior, 37*(6), 879-894.

Larsen, H. G., & Adu, P. (2022). *The Theoretical framework in phenomenological research: Development and application*. Routledge.

Lee, J., Alpous, A., Yusuf, W., Cardarelli, S., Rhodenizer, T., Shaw-Swettenham, K., Adams, R., & Longmuir, P. E. (2018). Y Kids Academy program increases knowledge of healthy living in young adolescents. *Exercise Medicine, 2*(10), 1-10.

Lee, Y., & Park, S. (2021). Understanding of physical activity in social ecological perspective: application of multilevel model. *Frontiers in Psychology, 12*, 1-18.

Leonard, M., & McKnight, M. (2015). Look and tell: using photo-elicitation methods with teenagers. *Children's Geographies, 13*(6), 629-642.

Leung, K., Ou, K., Chung, P., & Thøgersen-Ntoumani, C. (2021). Older adults' perceptions toward walking: a qualitative studying using a social ecological model. *International Journal of Environmental Research and Public Health, 18*(7686), 1-19.

Levers, M. D. (2013). Philosophical paradigms, grounded theory, and perspectives on emergence. *SAGE Open*, 1-6.

Li, W., & Rukavina, P. (2012). Including overweight and obese students in physical education: a social ecological constraint model. *Research Quarterly for Exercise and Sport, 83*, 570–578.

Lincoln, Y. S., & Duba, E. G. (2013). *The Constructivist Credo*. Left Coast Press Inc.

Linhorst, D. M. (2002). A review of the use and potential of focus groups in social work research. *Qualitative Social Work, 1*(2), 208-228.

Liu, Y., & Chen, S. (2021). Physical literacy in children and adolescents: definitions, assessments, and interventions. *European Physical Education Review, 27*(1), 96-112.

Lloyd, R. J. (2016). Becoming physically literate for life: embracing the functions, forms, feeling and flows of alternative and mainstream physical activity. *Journal of Teaching in Physical Education, 35*(2), 107-116.

Loeffler, T. A. (2004). A photo elicitation study of the meanings of outdoor adventure experiences. *Journal of Leisure Research, 36*(4), 536-556.

Ma, R., Liu, T., Raymond Sum, K. W., Gao, T., Li, M., Choi, S. M., Huang, Y., & Xiang, W. (2021). Relationship among physical literacy, mental health, and resilience in college students. *Frontiers in Psychiatry, 12*, 1-8.

Maivorsdotter, N., & Lundvall, S. (2009). Aesthetic experience as an aspect of embodied learning: stories from physical education student teachers. *Sport, Education, and Society, 14*(3), 265-279.

Malla, A., Shah, J., Iyer, S., Boksa, P., Joober, R., Andersson, N., Lal, S., & Fuhrer, R. (2018). Youth mental health should be a top priority for health care in Canada. *The Canadian Journal of Psychiatry, 63*(4), 216-222.

Martins, J., Costa, J., Sarmento, H., Marques, A., Farias, C., Onofre, M., & Valeiro, M. G. (2021). Adolescents' perspectives on the barriers and facilitators of physical activity: an updated systematic review of qualitative studies. *International Journal of Environmental Research and Public Health, 18*(9), 4954.

Melby, P. S., Nielsen, G., Brond, J. C., Tremblay, M. S., Bentsen, P., & Elsborg, P. (2022). Associations between children's physical literacy and well-being: is physical activity a mediator? *BMC Public Health, 22*(1267), 1-13.

McCarry, M. (2005). Conducting social research with young people: ethical considerations. In T. Skinner, M. Hester, & E. Malos (Eds.), *Researching Gender Violence* (pp. 87-104).

McCloughen, A., Foster, K., Kerley, D., Delgado, C., & Turnell, A. (2016). Physical health and well-being: experiences and perspectives of young adult mental health consumers. *International Journal of Mental Health Nursing, 25*, 299-307.

McNamee, J., & Timken, G. (2017). Outdoor pursuits in physical education: lessons from the trenches. *Journal of Physical Education, Recreation & Dance, 88*(3), 8-15.

McNarry, G., Allen-Collinson, J., & Evans, A. B. (2021). 'Doing' competitive swimming: exploring the skilled practices of the competitive swimming lifeworld. *International Review for the Sociology of Sport, 56*(1), 3-19.

Miller, J. P., & Nigh, K. (Eds.). (2017). *Holistic Education and Embodied Learning*. Information Age Publishing.

Morgan, K., Bryant, A., & Heath-Diffey, F. (2013). The effects of a collaborative mastery intervention programme on physical literacy in primary PE. *Journal of the International Council of Sport Science and Physical Education, Bulletin 65*, 141-155.

Morgan, S. J., Pullon, S. R., Macdonald, L. M., McKinlay, E. M., & Gray, B. V. (2017). Case study observational research: a framework for conducting case study research where observation data are the focus. *Qualitative Health Research, 27*(7), 1060–1068.

Morley, J. (2001). Inspiration and expiration: yoga practice through Merleau-Ponty's phenomenology of the body. *Philosophy East and West, 51*(1), 73-82.

Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage.

Munafo, C. (2016). The role of the social constructivism in physical education. *International Journal of Science Culture and Sport, 4*(4), 489-497.

Murdoch, E., & Whitehead, M. (2010). *Physical literacy, fostering the attributes and curriculum planning* (M. Whitehead, Ed.). Routledge.

Nezondet, C., Gandrieau, J., Bourrelier, J., Nguyen, P., & Zunquin, G. (2023). The effectiveness of a physical literacy-based intervention for increasing physical activity levels and improving health indicators in overweight and obese adolescents (CAPACITES 64). *Children, 10*(6), 956.

Nova Scotia Department of Education. (2014). *Physical Education Primary-9 Guide*. Physical Education | Education & Early Childhood Development (novascotia.ca)

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N, J. (2017). Thematic analysis: striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*, 1-13.

Padilla-Diaz, M. (2015). Phenomenology in educational qualitative research: philosophy as science or philosophical science? *International Journal of Educational Excellence, 1*(2), 101-110.

Parker, A. G., Trott, E., Bourke, M., Pogrmilovic, B. J., Dadswell, K., Craike, M., McLean, S. A., Dash, S., & Pascoe, M. (2021). Young people's attitudes towards integrating physical activity as part of mental health treatment: a cross-sectional study in youth mental health services. *Early Intervention in Psychiatry, 16*, 518-526.

Pavlova, I., Bodnar, I., Hamade, A., Mosler, D., Małolepszy, E., & Drozdek-Małolepsza, T. (2021). Relation between quality of life and physical literacy of young adolescents with Autism Spectrum Disorder. *International Journal of Special Education, 36*(2), 13-26.

Peoples, K. (2021). *How to write a phenomenological dissertation: A step-by-step guide*. SAGE Publications.

Petersen, T. L., Moller, L. B., Brond, J. C., Jepsen, R., & Grontved, A. (2020). Association between parent and child physical activity: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity, 17*(67), 1-16.

Phillips-Pula, L., Strunk, J., & Pickler, R. H. (2011). Understanding phenomenological approaches to data analysis. *Journal of Pediatric Health Care, 25*(1), 67–71.

Physical activity framework resource page. (2024, July 19). Nova Scotia Curriculum. Retrieved September 9, 2024, from Physical Activity Framework Resource Page | Education & Early Childhood Development (novascotia.ca)

Preyde, M., Tran, A., Parekh, S., & Heintzman, J. (2018). The health and well-being of children and adolescents accessing in-patient psychiatry: A brief report. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 27*(3), 191-196.

Purser, A. (2018). 'Getting it into the body': understanding skill acquisition through Merleau-Ponty and the embodied practice of dance. *Qualitative Research in Sport, Exercise, and Health, 10*(3), 318-332.

Randall, L., Robinson, D. B. & Fletcher, T. (2014). A descriptive profile of physical education teachers and programs in Atlantic Canada. *McGill Journal of Education / Revue des sciences de l'éducation de McGill, 49*(1), 41–66.

Robinson, D. B., & Randall, L. (2016). Smooth sailing or stormy seas? Atlantic Canadian physical educators on the state and future of physical education. *Canadian Journal of Education, 39*(1), 1-31.

Robinson, D. B., & Randall, L. (2017). Marking physical literacy or missing the mark on physical literacy? A conceptual critique of Canada's physical literacy assessment instruments. *Measurement in Physical Education and Exercise Science, 21*(1), 40-55.

Robinson, D. B., Hall, N., da Costa, J., & Bradford, B. (2021). Alternative environment activities on both sides of the Atlantic: a Canada-Ireland consideration and comparison. *European Physical Education Review, 27*(3), 703-723.

Robinson, D. B., Randall, L., & Barrett, J. (2018). Physical literacy (mis)understandings: what do leading physical education teachers know about physical literacy? *Journal of Teaching in Physical Education, 37*, 288-298.

Robinson, D. J., Coons, M., Haensel, H., Vallis, M., & Yale, J. F. (2018). Diabetes and mental health. *Canadian Journal of Diabetes, 42*, S130-S141.

Roetert, E. P., & Ortega, C. (2019). Physical literacy for the older adult. *Strength and Conditioning Journal, 41*(2), 89-99.

Roset, L., Green, K., & Thurston, M. (2020). Norwegian youngsters' perceptions of physical education: exploring the implications for mental health. *Sport, Education and Society, 25*(6), 618-630.

Schelbe, L., Chanmugam, A., Moses, T., Saltsburg. S., Williams, L. R., & Letendre, J. (2015). Youth participation in qualitative research: challenges and possibilities. *Qualitative Social Work, 14*(4), 504–521.

Scotland, J. (2012). Exploring the philosophical underpinnings of research: relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching, 5*(9), 9-16.

Shortt, C. (2019). *Two studies conceptualizing physical literacy for assessment of high school students in the United States* (Doctoral Dissertation). Retrieved from https://scholarcommons.sc.edu/etd/5658.

Simon, C., Kellou, N., Dugas, J., Platat, C., Copin, N., Schweitzer, B., Hausser, F., Bergouignan, A., Lefai, E., & Blanc, S. (2014). A socio-ecological approach promoting physical activity and limiting sedentary behavior in adolescence showed weight benefits maintained 2.5 years after intervention cessation. *International Journal of Obesity, 38*, 936-943.

Simpson, A., Jackson, B., Thornton, A. L., Rosenberg, M., Ward, B., Roberts, P., Derbyshire, A., & Budden, T. (2024). Parents on the concept of physical literacy: what do they know, what do they do, and what do they want? *Journal of Sport and Exercise Psychology, 46*(2), 100-110.

Sitvast, J. E., & Springer, W. (2019). The use of photography in perceiving a sense of life: a phenomenological and existential approach in mental health care. *Nursing Philosophy*, 1-9.

Sivan, A., Chiu Wan Tam, V., Po Kwan Siu, G., & Stebbins, R. A. (2020). Adolescents' self-exploration in leisure experience. *Leisure/Loisir, 44*(4), 441-468.

Smith, B. A. (1999). Ethical and methodologic benefits of using a reflexive journal in hermeneutic-phenomenological research. *Journal of Nursing Scholarship, 31*(4), 359-363.

Solmi, M., Radua, J., Olivola, M., Croce, E., Soardo, L., Salazar de Pablo, G., Shin, J. I., Kirkbride, J. B., Jones, P., Kim, J. H., Kim, J. Y., Carvalho, A. F., Seeman, M. V., Correll, C. U., & Fusar-Poli, P. (2022). Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies. *Molecular Psychiatry, 27*, 281-295.

Solmon, M. A. (2015). Optimizing the role of physical education in promoting physical activity: a social-ecological approach. *Research Quarterly for Exercise and Sport, 86*, 329-337.

St. John, L., Dudley, D., & Cairney, J. (2021). A longitudinal examination of enjoyment of physical education in children with developmental coordination disorder through a physical literacy lens. *Prospects, 50*, 127-139.

Stevens-Smith, D. A. (2016). Physical literacy: getting kids active for life. *Strategies: A Journal for Physical and Sport Educators, 29*(5), 3-9.

Stoddart, A. L., & Humbert, L. (2017). Physical literacy is…? What teachers really know. *PHEnex Journal, 8*(3), 1-18.

Stokols, D. (1992). Establishing and maintaining healthy environments. Toward a social ecology of health promotion. *The American Psychologist, 47*(1), 6-22.

Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion, 10*(4), 282-298.

Stolz, S. A. (2013). Phenomenology and physical education. *Educational Philosophy and Theory, 45*(9), 949-962.

Stolz, S. A. (2015). Embodied learning. *Educational Philosophy and Theory, 47*(5), 474-487.

Stutey, D. M., Givens, J., Cureton, J. L., & Henderson, A. J. (2020). The practice of bridling: maintaining openness in phenomenological research. *Journal of Humanistic Counseling, 59*, 144-156.

Tachine, A. R., Yellow Bird, E., & Cabrera, N. L. (2016). Sharing Circles: an Indigenous methodological approach for researching with groups of Indigenous peoples. *International Review of Qualitative Research, 9*(3), 277–295.

Timken. G., & McNamee, J. (2012). New perspectives for teaching physical education: preservice teachers' reflection on outdoor and adventure education. *Journal of Teaching in Physical Education, 31*, 21-38.

Tinning, R. (2010). *Pedagogy and human movement: Theory, practice, research*. Routledge.

Tremblay, M. S., Costas-Bradstreet, C., Barnes, J. D., Bartlett, B., Dampier, D., Lalonde, C., Leidl, R., Longmuir, P., McKee, M., Patton, R., Way, R., & Yessis, J. (2018). Canada's physical literacy consensus statement: process and outcome. *BMC Public Health, 18*, 1-18.

Tristani, L., & Fraser-Thomas, J. (2017). Implementing physical literacy: exploring new teachers' early experiences in health and physical education. *Revue phénEPS-PHEnexJournal, 9*(1), 1-20.

Truong, S., & Mahon, M. (2012). Through the lens of participatory photography: engaging Thai children in research about their community play centre. *International Journal of Play, 1*(1), 75-90.

Van Manen, M. (2014). *Phenomenology of practice: Meaning-giving methods in phenomenological research and writing.* Taylor & Francis.

Vickerman, P., & DePauw, K. (2010). *Physical literacy, fostering the attributes and curriculum planning* (M. Whitehead, Ed.). Routledge.

Wainwright, N., Goodway, J., Whitehead, M., Williams, A., & Kirk, D. (2018). Laying the foundations for physical literacy in Wales: the contribution of the Foundation Phase to the development of physical literacy. *Physical Education and Sport Pedagogy, 23*(4), 431-444.

Ward, G., & Scott, D. (2020). Lived experience of undergraduate physical education students studying gymnastics and dance education. *Sport, Education, and Society, 25*(2), 212-229.

Warner, M., Robinson, J., Heal, B., Lloyd, J., Mandigo, J., Lennox, B., & Huyer, L. D. (2021). Increasing physical literacy in youth: a two-week Sport for Development program for children aged 6-10. *Prospects, 50,* 165-182.

Whitehead, M. (2001). The concept of physical literacy. *European Journal of Physical Education, 6*(2), 127-138.

Whitehead, M. (2013). Definition of physical literacy and clarification of related issues. *ICSSPE Journal of Sport Science and Physical Education, 65*, 29-34.

Whitehead, M. (Ed.). (2010). *Physical literacy throughout the life course*. Routledge.

Wilkinson, S. (1999). Focus groups: a feminist method. *Psychology of Women Quarterly, 23*, 221-244.

Wirihana, L., Welch, A., Williamson, M., Christensen, M., Bakon, S., & Craft, J. (2018). Using Colaizzi's method of data analysis to explore the experiences of nurse academics teaching on satellite campuses. *Nurse Researcher, 25*(4), 30-34.

Wojnar, D. M., & Swanson, K. M. (2007). Phenomenology: an exploration. *Journal of Holistic Nursing, 25*(3), 172-180.

Wright, K. E., Jackson, B., Licari, M. K., Dimmock, J. A., & Furzer, B. J. (2023). Thriving families: the feasibility and preliminary efficacy of a multi-component physical literacy program for children with neurodevelopmental, emotional, or behavioural problems. *Mental Health and Physical Activity, 25*, 100558.

Yin, R. (2009). *Case study research: Design and methods (4th ed.)*. Thousand Oaks, CA: Sage.

Yuksel, P., & Yildirim, S. (2015). Theoretical frameworks, methods, and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry, 6*(1), 1-20.

Appendix A: Detailed schedule of the M2I program

Move2Improve

What? **M2I** is a free 10-week physical activity program designed for youth aged 12 to 14 who are accessing services to support their mental health. In this program, youth will try different activities to develop new skills and confidence in a fun and inclusive environment.

Where? **Decathlon Decadium** located in the Mic Mac Mall, Dartmouth. **Google Maps Link** There is an outside entrance into Decathlon near Old Navy and Entrance #3. The Decadium activity space is located inside Decathlon.

When? **Fridays, 5 to 7 pm.**

First Session (Feb. 9th):

- Parents/guardians, please join us for the **first 10 minutes** for introductions and to discuss drop-off and pick-up protocol.

What to Bring Each Session:

- Comfortable clothing, indoor sneakers, water bottle

****Healthy snacks & water provided each week****

Session Details

1: Intros and Team Building (February 9th):
- Get to know each other, talk about goals, and play some fun games and free play.

2: Circus Skills (February 16th):
- Explore different ways to move and have fun with **Halifax Circus**.

3: Martial Arts (February 23rd):
- Martial arts are a great way to strengthen the body and mind. In this session, we will try **Capoeira (Brazilian Martial Art & Dance)** in a fun and playful environment.

4: Yoga for Youth (March 1st):
- **Yoga** is a fun way to build strength, flexibility, balance, and focus!

5: Indoor Wall Climbing (March 8th):
- Have fun getting off the ground and learn the basics to **wall climbing** and **bouldering**.

**Session schedules may change if needed. We will update you on the remaining sessions (6-10) as soon as possible. We hope you'll be able to join us for the final Family Day on April 12.

IWK Health

DALHOUSIE UNIVERSITY

Contact Information
514-944-8170
alexander.fulford@dal.ca

Session Details (To be confirmed)

The second half will be planned with input from youth. Please let us know if you see any challenges with the different locations)

6: Indoor Wall Climbing (March 15th):

- Have fun getting off the ground and learn the basics of bouldering at the **Decadium**.

7: Healthy Eating and Sleeping (March 22nd):

- This session will be held in the community kitchen at the **Dartmouth North Community Centre (105 Highfield Park Drive)**

8: Fun on the Ice with Curling (March 29th):

- Moving and sliding on the ice at the **Halifax Curling Club (948 South Bland Street)**

9: Active Games (April 5th):

- Youth will help choose and plan an activity/outing for this session at the **Decadium**.

10: Family Nature Walk and/or Campfire (April 12th):

- Family are invited to join us for a nature walk and campfire at the **Fairbanks Centre and Shubie Park (54 Locks Road)**

IWK Health

DALHOUSIE UNIVERSITY

Contact Information
514-944-8170
alexander.fulford@dal.ca

Appendix B: M2I recruitment poster

MOVE2IMPROVE

NEW **FREE** PHYSICAL ACTIVITY PROGRAM IN DARTMOUTH

INVITING YOUTH TO A NEW PHYSICAL ACTIVITY PROGRAM

- Are you between **12 to 14 years old** living in HRM?
- Are you interested in trying out different types of physical activities in a **fun and inclusive** environment?
- This program is for youth who are accessing services through the IWK, schools, youth centres, or other community programs to **support their mental health**.
- In this program, you will get to try different activities, like circus skills, wall climbing, yoga, martial arts, active games, and more! This will help you develop new skills and confidence to support your physical activity and mental health.

PROGRAM INFORMATION

- Starting February 9th, 2024 (**10 weekly sessions**)
- **When?** Fridays, 5-7pm
- **Where?** Decathlon Decadium (Mic Mac Mall, Dartmouth)
- **Why M2I?** Recreation and physical activity help promote positive mental health and wellbeing for youth. The goal of this program is to help youth with mental health challenges become more active. **Note:** Youth who complete this program will receive a **$75 physical activity voucher**.
- **In addition, there is an opportunity to **participate in a study** on youth's experiences in the M2I program.**
- **Parents/guardians:** To sign-up your child and/or to receive more info, scan the QR code here: Registration closes **February 6th, by 12pm**.

SCAN ME

CONTACT US FOR MORE INFO
514-944-8170
alexander.fulford@dal.ca

IWK Health

DALHOUSIE UNIVERSITY
Health and Human Performance

Appendix C: Observation guide used for data collection

Observation guide

Date and session #:

Location:

Start and finish times:

Primary facilitator, activity leaders:

Attendance:

Description of PA environment (space, surroundings, material available, equipment provided):

Socio-emotional observations (peer-peer interactions, peer-instructor interactions, level of engagement, body language, nonverbal behaviour, types of emotions they may be showing, tone of voice):

Movement observations (what are participants doing, how they are moving, how they negotiate equipment/objects):

Observations of session introduction (session purpose, discussion topics, participant comments, body language, thoughts, feelings):

Observations of session debrief (discussion topics, participant comments, body language, thoughts, feelings):

Findings and emerging ideas from informal research:

Emergent ideas/themes from session and important reminders:

Appendix D: Participation journals

Participation journal #1 (Session 1):

Initial journal (**Session #1**)

You will have approximately 15 minutes at the end of the session to complete the questions to the best of your ability. Remember, there are no right or wrong answers. We just want to learn more about your views and experiences. The completed journals will be returned to the primary researcher, and we'll have an opportunity to discuss and share as a group in our next session (i.e., Session #2). Journals will be deidentified using made-up names (i.e., pseudonyms).

1. Can you tell me some of the reasons why you signed up for this recreation program?

2. What are you hoping to get out of this recreation program (i.e., meet new people, learn new physical activity skills, keep busy, etc.)?

3. How often do you usually participate in physical activity per week? Which types and where (i.e., at school, outside, at home, at the gym, etc.)?

4. In general, how does physical activity make you feel? Does it remind you of positive or negative feelings/experiences?

5. What are your biggest challenges when participating in physical activity?

6. Have you ever heard of physical literacy before? If ***yes***, where have you heard of it? Can you try to put it in your own words? Remember, there are no wrong answers.

Participation journal #2 (Session 5):

Participation journal #2 (**Session #5**)

You will have approximately 15 minutes at the end of the session to complete the questions to the best of your ability. Remember, there are no right or wrong answers. We just want to learn more about your views and experiences. The completed journals will be returned to the primary researcher, and we'll have an opportunity to discuss and share as a group in our next session (i.e., Session #3). Journals will be deidentified using made-up names (i.e., pseudonyms).

Name (first name):

1. How do you feel about the program so far?

2. Describe some of your favourite parts of the program. Is there anything that you think is unique about the program?

3. Are there things that you do **not** like about the program? Do you have any suggestions to make this program better?

4. Can you tell me more about some of the things that keep you coming back (i.e., the activities, to see friends, your parents, etc.)?

5. Since joining the program, have you experienced any positive changes as part of the program? If *yes*, what are they?

6. Since joining the program, have you experienced any negative changes as part of the program? If *yes*, what are they?

7. Since joining this program, have you participated in more physical activities at home, at school, or during your free time? Do you feel more confident in your abilities to participate in physical activities outside of the program?

Appendix E: Focus group guide

Semi-structured focus group guide (facilitated during Session 9):

<u>Part 1: Relating to participants' overall experience:</u>

The first set of questions will be about your overall experience in the M2I program. Specifically, I am interested in learning about what you enjoyed about the program, what parts stood out for you, and some of the challenges you may have experienced, and overcome.

> *Photos will be shown to the participants representing the different activities and characteristics that the program incorporated. Working together, participants will be asked to rearrange the photos in the correct order that displays the M2I program timeline. Once the photos are placed in a timeline fashion, participants will have the opportunity to examine the different photos taken throughout the program. The photos will also be used throughout the focus group to help participants look back on their experiences in the program.*

1. Now that we're near the end of the program, I want everybody to take a few minutes and select a photo that represents their favourite part of the program. The photo can represent your favourite part of the program even if it doesn't show it. (*Or if there isn't any photo, you can describe what that photo would be – PROMPT*).

- Which photo did you select? What does this photo mean to you?
- Why was this your favourite part?**
- How did this experience make you feel?

2. Was this program different than other physical activity programs that you have experienced? Why?

- What stood out for you about the program?**
- What would you tell a friend were the best parts of the program?

3. There are a few parts to this next question. I would like you to think about if you think you made any improvements or changes throughout the program:

- The first part is, do you feel like you made any physical changes or improvements, like learning/improving different skills or being more physically active (this could be during your leisure time or on weekends)?**
- The second is, do you feel like you made changes or improvements socially or how you interact with others in a group? (for example, talking to more people, playing with different people, or sharing some of your thoughts as a group/stepping out of your comfort zone).
- Lastly, do you feel like you made any changes or improvements to your emotional wellbeing (better mood, less stressed, more positive feelings, more motivated to be physically active, more sleep to feel better in the day/energized, or more confidence to interact with people, etc.)?

4. Did anybody have any challenges, if so, what were they?

- o Were they challenges related to your physical abilities (body)?
- o Related to your internal factors (mind)? (concentration, motivation, confidence, attention).
- o How did these experiences (challenges) make you feel?
- o If you had challenges, how did you overcome them?

Part 2: Relating to participants' confidence and motivation:

For the next set of questions, I am interested in knowing about what made you join the program, and what kept you coming back to it. I am also interested in knowing more about some of the things that you learned, and whether you feel like you've made improvements throughout the program related to your confidence and motivation (a PL domain).

1. Initially, what made you decide to join the program (register for the program)?

- o Now that we are almost done the program, can somebody tell me more about the things/or people that kept them coming back?**
- o Was there a certain point in the program when you wanted to stop coming? Why was this? And what made you continue?

2. Take a moment to reflect on when in the program (can be a session or an activity) you felt most engaged, interested, and/or motivated for? *Feel free to use a photo to help answer this*.

- o Why do you think this was?

3. Now that the program is almost done, does anybody feel more confident in their abilities to participate in physical activities outside of the program? If yes, why? **

- o Does anyone feel motivated to try new things (or to keep on participating in some of the physical activities we did)?**

Part 3: Relating to participants' perceptions of PL:

The next phase of questions will be a little different and focus on how youth (like yourself) understand the meaning of PL. Remember, in your first participation journal, you answered a question on PL. I want to expand on that question and learn more about where you have heard it (if you have heard of it), what it means to you, and how programs can do a better job supporting your PL development. Remember, there are no wrong answers, and I am not looking for an answer in particular. I am just curious to learn more about your perspective of the concept.

I will take a few moments to re-explain to participants what PL means and its main building blocks:

> *Participants will be informed that this program was targeting physical literacy development. Participants will be advised that the main goal of physical literacy is lifelong physical activity and that it includes 4 interconnected domains. These domains will be briefly identified and described with the help of the M2I images (**see handout below**). Lastly, participants will be told that physical literacy is an outcome/goal of many*

physical activity, physical education, and sport programs in Canada. Keeping this in mind, participants will be asked the following questions:

1. Do you feel like participating in this program has helped you understand the importance of movement and how we can move our bodies in different ways to keep active? If yes, how? **

2. Do you think there is a difference between focusing on what our bodies look like versus focusing on what they can do (*when it comes to movement and physical activity*)?

3. Why do you think it is important to make sure we try to improve on each of the PL building blocks (as opposed to just one) if we want to continue to be active outside of the program?

4. In your experience, do you feel like PA programs you have attended (i.e., think of your PHE class, sport programs, other PA programs) are succeeding in developing PL for youth like yourself? Why or why not?

- o In your experience, do you feel like certain areas (building blocks) require more attention?
- o Going forward, what can PA programs, or physical education teachers do better to help develop youth develop their PL?

Concluding statement:

Those are all the questions I have for you today. I want to thank everybody for their time, cooperation, and effort. I will take some time to go over these responses and do my best to summarize the collective experience from the group. Once I am done this, I will be sure to email everybody a summary of the main points that were discussed. This summary will include an overall description of your group's experience in the program; it will **not** be limited to one person. Instead, it will capture the experience that was shared by the entire group. With that being said, remember that your voice, and opinions are important to me: if you feel like my summary is missing something important that was discussed today, please contact me within **two weeks** to let me know. After two weeks, I will go ahead with this summary for my project. Remember that your name will not be included. Please know that this discussion will be important for improving the M21 program, as well as contributing to what we know about physical activity programs for youth. Thank you all again.

Appendix F: Consent and assent forms

Consent form (parents):

Hello, my name is Alex Fulford and I am part of the Move2Improve program team and the primary investigator of the study being conducted during the program. I see that you have signed your child up for the Move2Improve program and are interested in learning more about their participation in the research study. **Is this a good time for you? If not, I can call back at a more convenient time.**

I am a qualified Physical Education Teacher, and this research is part of my master's degree, which I am completing at Dalhousie University under the supervision of Dr. Truong, who is a professor in the School of Health and Human Performance. This study will take place during the Move2Improve program sessions: the program will be based at Decathlon Dartmouth (21 Micmac Blvd, Dartmouth), which has a gym space that is available free of charge to community groups. Participants will participate in a range of physical activities led by qualified instructors, including wall climbing, yoga, circus skills, martial arts, and games and fitness activities. It is expected that a few sessions will be held at community spaces, including an indoor climbing wall or at a local park (e.g., Adventure Earth Centre Shubenacadie Park) for a nature hike or canoeing. The study is free of cost and all study activities will take place during the program sessions. Please note that choosing whether or not your child takes part in this research is voluntary. They do not need to participate in this study in order to join the Move2Improve program. Also, I will not use any real names in the research. A made-up name will be used for anyone who participates in the study. If possible, I would like to take about 10 minutes to explain what participation in the study will involve. I will also explain the potential benefits and risks of participation, and how confidentiality will be upheld. Following this, if you are interested in having your child participate, I will ask you to provide verbal permission for your child to participate in the study. Is this okay? Feel free to ask me questions at anytime.

The purpose of this study is to understand youth experiences in the Move2Improve pilot program. I want to learn more about their experiences related to confidence and motivation to be physically active. I also want to learn what they know about physical literacy, which is a popular term used in physical education and sport. Generally, it means how comfortable and confident people feel during physical activity.

The study will take place during the Move2Improve sessions so they will not be asked to attend any extra sessions. The study will involve three key activities:

First, I will take observations of the participants' experiences in the program. This means I will take notes about their participation in the different activities. This could include what types of activities they're doing, how they respond and interact with each other, and the discussions they might have about the physical activities.

Second, I will ask them to write two short participation journals. These will be like activity sheets with open ended questions for them to answer. They will be asked to do this once at the start of the program and once near the midway point. I estimate that each journal will take approximately 10 to 15 minutes to complete. Generally, each question should be answered using 2 to 3 sentences, but there is not a minimum or maximum length.

Third, I will invite study participants to join a group interview that will take place during the final session of the program. I estimate this will take approximately 45 to 60 minutes. The group interview will include open-ended questions about their experience in the program, what they learned, and what they liked and didn't like. I will also show photographs that I have taken during the sessions to help encourage discussion. These photographs will be taken by me (the PI) throughout the sessions to capture the important aspects of the program. These photographs will **only** be used to add a visual aid to the group interview. Following the group interview, **all photographs will be deleted**. These pictures will not be published or sent to an outside source. Throughout the program, all photographs will be kept confidential and only the research team will have access to them. Please know that your child can still participate in the study (for example, participation in observations, journals, and group interview) without you giving their consent to having their photos taken. This means, I will not take any photographs of them.

While there may not be direct benefits from participating in the study, the participants may enjoy talking about their experiences in the program. The findings from this study will be valuable in guiding the development of other physical activity programs for young people and help to understand how we can build their confidence and motivation. The results will also be used to improve the Move2Improve program as it continues to develop. The findings may also help to understand more about what motivates young people to be physically active and what barriers they face.

The potential risks of participating in this study are minimal. Participants will be asked to complete 2 participation journals and participate in a concluding group interview. They may choose how they respond to questions or may pass at any time. However, it is possible that they may experience emotional or psychological distress while asked to talk about their experiences. To reduce these risks, youth will be reminded that they do not have to take part in the study if they do not want to. If they do decide to participate, they can withdraw from it at anytime. Additionally, during the group interview, we will make sure it is a safe and supportive environment for everyone. Participants will be reminded to respect each other's privacy and not repeat anything that they hear. If they do not feel comfortable answering a certain question, they can simply choose to 'pass' on it.

As a sign of appreciation for your child's time and effort, they will receive a small gift card of 25$ from either Amazon, Walmart, or Chapters before the concluding group interview. As this study will be taking place during the Move2Improve program sessions, a qualified recreation therapist with experience in the mental health field will always be present. This includes during completion of participation journals and the group interview. If a participant experiences distress during the group interview, the recreation therapist will be present to respond appropriately. It is important to note that both the primary investigator and supervising investigator have experience working with children and adolescents. Additionally, youth participants will be provided with contact sheets for additional support for mental health concerns at the start of the Move2Improve program that they can refer to at any point during research activities.

Your child's name and personal information will be kept completely confidential. It will not be published anywhere or shared with anyone outside of the research team. Data collected from observations and journals will be de-identified using made-up names to make sure your child's identity is protected. The group interview will be recorded, but only for the purpose of analyzing the data. The audio recording and transcriptions will be stored securely in an encrypted file on a computer that only the researcher can access with a password. All other information shared in the group interview will be treated as confidential information.

Note: **confidentiality will be breached if primary researcher feels like an adolescent is at risk of harm or abuse. In such cases, parent/guardian will be contacted immediately**. We will use the made-up names in our written and computer records so that the research information we have about your child contains no real names. Only I and my supervisor will have access to the study's data. To maintain the security of electronic records, they will be stored in an encrypted file on the researcher's computer, which is password-protected. Any physical records, such as paper documents will be kept securely in a locked filing cabinet located in the researcher's office. Once the study is over, research data will be de-identified and stored on the primary researcher's password-protected computer for a minimum of 10 years as per IWK guidelines.

Conflicts of interest/possible profit for commercialization: There are no conflicts of interest or possible profit for commercialization associated with this research study. This means that I do not have any personal or financial relationships that could influence the findings or conclusions of this study. This research will be conducted with confidentiality and integrity.

Do you have any further questions about the research study?

Is this something that you are interested in having your child participate in? Please note, that this would be your verbal consent for study participation. __________

Do you give consent to having your child audio recorded during the group interview? Their identity and other personal information would remain anonymous. ______

Do you give consent to having your child's photo taken during the Move2Improve program for the purpose of the group interview? Please know that your child can still participate in the study without you giving their consent to having their photos taken. ____________

If **yes**:

- Complete consent checklist (Appendix J)
- If you have any other questions please contact me at 514-944-8170 or through my email at alexander.fulford@dal.ca

Parent/guardian name: ______________________________

Participant (youth) name: ______________________________

Date: ______________________________

Time: ______________________________

PI name: ______________________________

PI signature: ______________________________

Participant assent form (youth)

Project title: Exploring the experiences of youth participating in a new recreation program to support physical activity.

Primary researcher: Alexander Fulford (Graduate student at Dalhousie University)

Supervisor: Dr. Son Truong (Associate professor at Dalhousie University)

Why are we doing this study?

You are being asked to join a study to learn more about your experience in the Move2Improve program. We are asking anyone who signs-up for the Move2Improve program if they would like to join the study. We want to learn more about what you like, what you would improve, and what you learned in the program. We also want to learn what will help you to be more active in your daily life.

Alex is a student at Dalhousie University and will be doing this study to complete his program.

What is a research study?

A research study is carried out by researchers to answer questions, gather information, and learn new things about a topic. Depending on the topic, research studies can look very different and include activities like filling out surveys or talking in an interview. They give whoever is participating a chance to share their thoughts and opinions, which can help researchers find answers to their questions.

What will happen during the study?

The study will take place at the same time as the Move2Improve program, which will be held at Decathlon Dartmouth's gym space. Throughout the Move2Improve program, you will take part in different physical activities, including climbing, yoga, circus skills, martial arts, and other fitness games. Each session will be led by a qualified teacher. A few sessions may be held outside the gym, in places like a climbing wall or a park in the community.

Alex will be at all the sessions, and being in the study means, we will:

1. **Observe**. This means watch to see how you are participating in the different activities. This is not to evaluate you in any way. It is just to learn more about your experience in the program. We may also ask questions sometimes to learn about what you are doing, and how you are feeling when you participate in the different activities.
2. **Take photos** of the different activities. Alex will only take photos of you if you agree to it. The photos will only be shown in the group when we talk about the different activities we did. No one else will see the photos and at the end, they will be deleted.
3. Ask you to **answer some questions in a journal** about why you joined the program and what you want to get out of it. There will be 2 sets of journal questions. Each set should

take about 10 to 15 minutes to finish. You only have to answer the questions you want to and can write as much or as little as you like.

4. Ask you to **join a group discussion at our last session**. We will ask you to share your thoughts and ideas about the program. This will take about 45 to 60 minutes. As a way to thank you for your time and effort, you will receive a 25$ gift card (from either Amazon, Walmart, or Chapters) before the start of the group discussion.

Are there any good things or bad things about this study?

You may like sharing your ideas about the program with us. The things we learn from you will help us make this program better in the future. Your ideas may also help us to change the way they do things so we can develop better programs like this one. We do not think there are any risks or bad things about this study. It is possible that there are questions or activities that you don't want to do. If there are ever any questions you don't want to answer or activities that you don't want to do, you can skip them and tell one of the leaders. Your well-being is our main concern. Remember, you can choose to stop participating at anytime.

Who will know about what I did in this study?

No one except the researchers will know you are taking part in this study unless you want to tell them. Your name and other study forms will only be seen by the people involved in this study. Your parent/guardian also knows about this study and has given permission for you to be a part of it.

Do I have to be in this study?

You do not have to be in this study. No one will be mad at you, and it will not affect how you are treated during the program. If you don't want to be in this study, tell us. Even if you say yes now, you can change your mind later. Being in this study is totally up to you.

What if I have questions?

You can ask questions about the study any time, now or later. You can talk to your parent/guardian about things in the study you don't understand. You can also ask Alex, the primary researcher. You can call him at (514) 944-8170 or email him at (alexander.fulford@dal.ca).

I, ____________________________________ (Name of participant in print), want to be part of this research study.

I, ____________________________________ (Name of participant in print), give you permission to take my photograph during the physical activity program for the purpose of the group interview.

Participant signature: ______________________________

Email: ______________________________

PI signature: ________________________

Date: ___________________________

Appendix G: PL handout (focus group)

PHYSICAL LITERACY

4 building blocks for lifelong physical activtiy participation:

PHYSICAL

Learning and practicing different movement skills and patterns, in order to move and participate in a range of environments

COGNITIVE

Learning the knowledge of physical activity benefits, opportunities, and safety considerations; understanding how to influence and improve movement

AFFECTIVE

Motivation and willingness to participate in physical activity; as well as the confidence in one's own abilities to try new activities

BEHAVIOURAL

Taking responsibility of one's PA involvement, participating in various forms of physical activities throughout life

Tips to keep improving your physical literacy:

Be open to joining new programs (community, school, sport, exercise); Use active modes of transportation (walking, biking, skateboarding); Take advantage of opportunities for outdoor play (playing at the park, riding your bike); Learn more about resources in your community (youth nights, family events, local parks/swimming pools); Learn more about your interests (what do you like/not like to do?); Practice goal setting (goals that are realistic and personalized)